

This is a preliminary transcript of a Committee Hearing. It has not yet been subject to a review process to ensure that the statements within are appropriately attributed to the witness or member of Congress who made them, to determine whether there are any inconsistencies between the statements within and what was actually said at the proceeding, or to make any other corrections to ensure the accuracy of the record.

1 {York Stenographic Services, Inc

2 HIF114.030

3 HEARING ON THE AMERICAN CLEAN ENERGY AND SECURITY ACT OF 2009

4 (DAY 4)

5 FRIDAY, APRIL 24, 2009

6 House of Representatives,

7 Subcommittee on Energy and Environment

8 Committee on Energy and Commerce

9 Washington, D.C.

10 The subcommittee met, pursuant to call, at 10:20 a.m.,
11 in Room 2123 of the Rayburn House Office Building, Hon.
12 Edward J. Markey (chairman) presiding.

13 Present: Representatives Markey, Inslee, Butterfield,
14 McNerney, Welch, Dingell, Harman, Baldwin, Waxman (ex
15 officio), Christensen, Sutton, Upton, Pitts, Walden, Burgess,
16 Scalise, Barton (ex officio), Radanovich, and Blackburn.

17 Staff Present: Matt Weiner, Special Assistant; Melissa
18 Bez, Professional Staff; Earley Green, Chief Clerk; Sharon

19 Davis, Legislative Clerk; Caren Anchman, Communications
20 Associate; Karen Lightfoot, Communications Director; Mitch
21 Smiley, Special Assistant; Matt Eisenberg, Special Assistant;
22 Alex Barron, Professional Staff; Alexandra Teitz, Senior
23 Counsel; John Jimison, Senior Counsel; Ben Hengst, Senior
24 Policy Analyst; Phil Barrett, Staff Director; Kristin
25 Amerling, General Counsel; and Greg Dotson, Chief Counsel,
26 Environment and Energy.

|
27 Mr. {Markey.} Good morning, and welcome to this
28 historically important hearing.

29 When people look at Vice President Al Gore, they think
30 of an award winning movie, ``An Inconvenient Truth''. I
31 think, however, of a different movie, ``Back to the Future''.
32 Thirty years ago, I sat in this same room with Al Gore, who
33 left this committee to become an outstanding Vice President
34 and to win an Oscar and a Nobel Prize for, imagine this, a
35 documentary on climate change.

36 And with Henry Waxman and John Dingell and I, who, while
37 we are kind of like Peter Pan, we stayed behind and debated a
38 new generation, as others went off. But this is our Back to
39 the Future moment, except today, we gather at a time when the
40 Good Earth is calling us to energy Independence Day, and that
41 goal should not take us From Here to Eternity.

42 Long before greenhouse gases and global warming became a
43 subject of daily discussions, Al Gore, Henry Waxman, John
44 Dingell, and I debated ways to improve the Clean Air Act.
45 Vice President Gore was a leader of the debate in the 1980s,
46 and now, the whole world knows that he has long been a
47 visionary. It is sometimes said that a prophet is someone
48 who is right but too soon. Al Gore is an example of someone
49 who not only was right early, very early, in fact, but who

50 dedicated his life to educating our country, so that they,
51 too, saw the threat he foresaw decades ago.

52 I am equally pleased to welcome Senator John Warner to
53 our committee. Late last year, I was fortunate to be at a
54 dinner honoring John Warner for his outstanding career in
55 public life. His speech that night confirmed for me that
56 John Warner is an outstanding leader, who is committed to our
57 national security and our environmental security. He has
58 given great service to his state and our country, as someone
59 who stood for what he saw as the right policy, and did not
60 bend to the politics of the day. His leadership on climate
61 change legislation was the culmination of a great career, and
62 we are indeed honored to have him here with us today.

63 So, we welcome you both to our committee, and I don't
64 know if you have any welcoming comments.

65 [The prepared statement of Mr. Markey follows:]

66 ***** COMMITTEE INSERT *****

|
67 Mr. {Markey.} Let me turn to the full committee
68 chairman, Mr. Waxman, if you would like to--

69 The {Chairman.} Well, thank you very much, Mr.
70 Chairman, and thank you for all those references to the
71 movies that are made in my district.

72 And I won't try to top you with any film references, but
73 I think it is a great honor to welcome our two witnesses this
74 morning. They are very distinguished gentleman. Senator
75 Warner, who has had an illustrious career in serving his
76 country in many capacities. And Vice President Gore, we are
77 always pleased to see and welcome back to the committee on
78 which he served in the beginning of his Congressional career.
79 He has gone on to do great things, and has become a spokesman
80 for an issue that is very important to our deliberations.

81 Thank you both for being here.

82 Mr. {Markey.} Thank you, Chairman. Let me recognize
83 Fred Upton, the Ranking Member of the subcommittee.

84 Mr. {Upton.} Well, thank you. We welcome you
85 gentlemen. This is, obviously, a timely issue. This is the
86 third day of where we have had more than 60 witnesses this
87 week. This is a day that we are not in session with votes on
88 the House floor. I would ask unanimous consent that members
89 not on this subcommittee have an opportunity to ask questions

90 following the regular order of the subcommittee members, if I
91 might.

92 Mr. {Markey.} Without objection, so ordered.

93 Mr. {Upton.} We welcome your testimony, and we hope
94 that you can be here a good part of the day to answer our
95 many good questions.

96 Welcome, both of you.

97 Mr. {Markey.} Would the Ranking Member of the full
98 committee like to--

99 Mr. {Barton.} Simply to echo your introduction and Mr.
100 Waxman's introduction, since you talked about Back to the
101 Future, one of our questions that Dr. Burgess is going to ask
102 the Vice President is if he is the inventor of the flux
103 capacitor? But we welcome both of you gentlemen.

104 Mr. {Markey.} We thank the gentlemen very much.

105 Now, we turn to our extremely distinguished panel. We
106 welcome you back, Vice President Gore. Whenever you are
107 ready, please begin.

|
108 ^STATEMENTS OF HONORABLE ALBERT GORE, JR., FORMER VICE
109 PRESIDENT OF THE UNITED STATES; AND HONORABLE JOHN WARNER,
110 FORMER UNITED STATES SENATOR

|
111 ^STATEMENT OF ALBERT GORE, JR.

112 } Mr. {Gore.} Well, thank you, Chairman Markey and Mr.
113 Upton, Chairman Waxman and Congressman Barton, Chairman
114 Emeritus John Dingell.

115 I was telling Senator Warner in the cloakroom here that
116 it was one of the greatest honors of my life to be a member
117 of this committee, and my principal mentor in the Congress
118 was John Dingell, and I told Senator Warner that just about
119 everything I learned about the legislative process came from
120 John Dingell, and it is with great emotion that I come back
121 to this hearing room, and members of the committee, members
122 of the subcommittee, members of the full committee, it is an
123 honor to be able to appear before you here today.

124 Mr. {Markey.} Could you move the microphone in just a
125 little bit closer, please?

126 Mr. {Gore.} Sure.

127 Mr. {Markey.} Thank you.

128 Mr. {Gore.} It is also my great honor to testify with

129 my friend and former colleague in the Senate, John Warner. I
130 served on the Armed Services Committee under his
131 chairmanship, and his long record of service to the Senate
132 and the country is truly remarkable.

133 Senator Warner has consistently looked with a steady
134 gaze past the politics of the day, to thoughtfully and
135 intensely focus on the national interest. His approach
136 really reminds me of another great American from another era,
137 the great Senator Arthur Vandenberg from Michigan, who helped
138 to create the United Nations and NATO and the Marshall Plan.
139 He understood that our Nation, when faced with great peril,
140 must rise above partisanship to meet the challenge.

141 Mr. {Markey.} Mr. Vice President, can you push that
142 button. Is the microphone--

143 Mr. {Gore.} There we go.

144 Mr. {Markey.} There. Good. Thank you.

145 Mr. {Gore.} You want me to repeat all of my words about
146 Senator Warner?

147 I believe that we have arrived at another such moment.
148 Our country is at risk on three fronts. The economic crisis
149 is clear. Our national security remains at risk, so long as
150 we remain dangerously dependent on flows of foreign oil from
151 reserves owned by sovereign states that are vulnerable to
152 disruption. The rate of new discoveries, as members of this

153 committee know, is falling, even as demand elsewhere in the
154 world is rising.

155 Most importantly, of course, we are, along with the rest
156 of humanity, facing the dire and growing threat of the
157 climate crisis. It is at the very heart of those threats
158 that this committee and this Congress must direct its focus.
159 I am here today to lend my support to what I believe to be
160 one of the most important pieces of legislation ever
161 introduced in the Congress. I believe this legislation has
162 the moral significance equivalent to that of the civil rights
163 legislation of the 1960s and the Marshall Plan of the late
164 1940s. By repowering America with a transition to a clean
165 energy economy, and ending our dangerous overreliance on
166 carbon-based fuels, which is, after all, the common thread
167 running through all three of these crises, this bill will
168 simultaneously address the climate crisis, the economic
169 crisis, and the national security threats that stem from our
170 dependence on foreign oil.

171 We cannot afford to wait any longer for this transition.
172 Each day that we continue with the status quo sees more of
173 our fellow Americans struggling to provide for their
174 families. Each day that we continue on our current path,
175 America loses more of its competitive edge, and each day that
176 we wait, we increase the risk that we will leave our children

177 and grandchildren an irreparably damaged planet. Passage of
178 this legislation will restore America's leadership of the
179 world and begin, at long last, to solve the climate crisis,
180 and it is truly a moral imperative. Moreover, the scientific
181 evidence of how serious this climate crisis is becoming
182 continues to amass week after week.

183 Let me share with you just a few recent examples. The
184 Arctic is warming at an unprecedented rate. New research,
185 which draws upon recently declassified data collected by U.S.
186 nuclear submarines traveling under the Arctic icecap for the
187 last 50 years, have given us for the first time a three-
188 dimensional view of the icecap, and researchers at the Naval
189 Postgraduate School have told us that the entire Arctic
190 icecap, which for most of the last three million years has
191 covered an area the size of the lower 48 States, may
192 completely and totally disappear in summer in as little as
193 five years.

194 Almost half of the ice in the Arctic cap has already
195 melted during the last 20 years. The dark ocean, once
196 uncovered, absorbs 90 percent of the solar heat that used to
197 bounce off the highly reflective ice. As a direct
198 consequence, some of the vast amounts of frozen carbon in the
199 permafrost in the land surrounding the Arctic Ocean are
200 beginning to be released as methane, as the frozen tundra

201 thaws, threatening a doubling of global warming pollution in
202 the atmosphere unless we take action quickly.

203 Melting of the Greenland ice sheet has reached a new
204 record, which was a staggering 60 percent above the previous
205 high in 1998. The most recent eleven summers there have all
206 experienced melting greater than the average of the past 35
207 year time series. Glacial earthquakes have been increasing
208 on Greenland as the melt water tunnels down through the ice
209 to the bedrock below. Were the Greenland ice sheet to melt,
210 crack up, and slip into the North Atlantic, sea level
211 worldwide would rise almost 20 feet.

212 We already know that the Antarctic peninsula is warming
213 at three to five times the global average rate. At the time
214 when I participated in one of the first hearings on global
215 warming on this committee in the 1970s, a researcher warned
216 that an early alarm bell that this crisis was reaching
217 emergency proportions would be if we saw the breakup of large
218 ice sheets on the Antarctic peninsula. That is why the
219 Larsen--and this warming has already caused the Larsen B ice
220 shelf, which was the size of Rhode Island, to collapse.
221 Several other ice shelves have also collapsed in the last 20
222 years. Another large shelf, the Wilkins ice shelf, which is
223 roughly the size of Northern Ireland, is now beginning to
224 disintegrate right before our very eyes.

225 A recent study in the journal Science has now confirmed
226 that the entire West Antarctic ice sheet is warming.
227 Scientists have told us that if it were to collapse and slide
228 into the sea, we would experience global sea level rise of
229 another 20 feet. Each meter of sea level increase leads to
230 100 million climate refugees. Recent studies have shown that
231 many coastal areas in the United States are at risk,
232 particularly Southern Florida and Southern Louisiana.

233 Also, carbon dioxide pollution is now changing the very
234 chemistry of the world ocean. Ocean acidification is already
235 underway and is accelerating. A recent paper published in
236 Science described how the seawater off the coast of Northern
237 California has now already, for some periods of the year,
238 become so acidic from CO₂ that it is actually corrosive. To
239 give some sense of perspective, for the last 44 million
240 years, the average pH has been 8.2, and the scientists at
241 Scripps have now measured levels off the north coast of
242 California and Oregon at a pH of 7.75. Now, the lower the
243 pH, the more acidic the ocean water.

244 Coral polyps that make reefs, and everything in the
245 ocean that makes a shell, are now beginning to suffer from a
246 kind of osteoporosis, because the acidification levels have
247 reached the state that it begins to dissolve the shells as
248 they are formed. Salmon have now disappeared off the coast

249 of California. Researchers are now working to determine the
250 cause, and whether or not this is due to acidity and the
251 relationship between acidity and the so-called ``dead zones''
252 of extreme oxygen depletion that now stretch from the West
253 Coast of North America, Central America, and South America,
254 almost all the way across the Pacific, in a wedge that
255 stretches to the West. The health and productivity of the
256 entire ocean is now at risk.

257 The Union of Forest Research Organizations, with 14
258 international collaborating partners, have reported that
259 forests may lose their carbon regulating service, and that
260 ``it could be lost entirely if the Earth heats up 2.5 degrees
261 Centigrade.'' Throughout the American West, tree deaths are
262 now at record levels, with the records being broken year
263 after year. That is the reason why Canada's vast forest has
264 now become a net contributor of CO2 to the atmosphere, rather
265 than absorbing it. The Amazon, the forests of Central
266 Africa, Siberia, and Indonesia, are all now at risk.

267 This year, a number of groups, ranging from the National
268 Audubon Society to the Department of Interior, released the
269 U.S. State of the Birds Report, showing that nearly a third
270 of the Nation's 800 bird species are now endangered,
271 threatened, or in significant decline, due to habitat loss,
272 invasive species, and other threats, including climate

273 change, the major shift attributed to the climate crisis
274 related to the migratory patterns, and a large, consistent
275 shift northward among a vast range of bird species in the
276 United States.

277 Some of the most intriguing new research is in the area
278 of extreme weather events and rainfall. A recent study by
279 German scientists in the publication *Climate Change*, projects
280 that extreme precipitation will increase significantly in
281 regions that are already experiencing extreme rainfall.
282 Manmade global warming has already increased the moisture
283 content of the air throughout the world, causing bigger
284 downpours. Each additional degree of temperature causes
285 another 7 percent increase in the moisture content of the
286 world's air, and leads to even larger downpours when storm
287 conditions trigger heavy rains and snows.

288 To bring an example of this home, 2009 saw the eighth
289 ten year flood of Fargo, North Dakota since 1989. Last year,
290 in Iowa, Cedar Rapids was hit by a flood that significantly
291 exceeded the 500 year floodplain. All time flood records are
292 being broken in regions throughout the world. Conversely,
293 those regions that are presently dry are projected to become
294 much drier, because higher average higher temperatures also
295 evaporate the soil moisture.

296 The American West and the Southeast have been

297 experiencing prolonged, severe drought and historic water
298 shortages. In a study published in January 2008 in Science,
299 scientists from the Scripps Institute estimated that 60
300 percent of the changes in the water cycle in the American
301 West are due to increased atmospheric, manmade greenhouse
302 gases. It predicts that although Western states are already
303 struggling to supply water for farms and cities, more severe
304 climatic changes will strain the system even more.
305 Agriculture in our largest farm state, California, is at high
306 risk.

307 Australia has been experiencing what many there call a
308 thousand year drought, along with record high temperatures.
309 Some cities had 110 degrees for four straight days two months
310 ago. And then, of course, they had the mega-fires that
311 caused so much death and destruction.

312 Federal officials from our own National Interagency Fire
313 Center report that we have seen twice as many wildfires
314 during the first three months of this year, compared to the
315 same period last year. Due to the worsening drought, the
316 outlook for more record fires, especially in Texas, Florida,
317 and California, is not good.

318 A number of new studies continue to show that climate
319 change is increasing the intensity of hurricanes. Although
320 we cannot attribute any particular storm to global warming,

321 we can certainly look at the trend. Dr. Greg Holland, from
322 the National Center for Atmospheric Research, says that we
323 have already experienced a 300 to 400 percent increase in
324 Category 5 storms in the past ten years in the United States.
325 Last August, hundreds of thousands of people had to evacuate
326 as Hurricane Gustav hit the Gulf Coast, and then, of course,
327 there is the destruction of Galveston and areas of New
328 Orleans, where the residents are still recovering.

329 The same is happening in the rest of the world. Last
330 year, Cyclone Nargis killed 20,000 people in Myanmar, and
331 caused the suffering of tens of thousands more. For these,
332 and many, many other reasons, now is the time to act. And
333 luckily, positive change is on the way.

334 In February, when the Congress voted to pass the
335 stimulus bill, it laid the groundwork for critical
336 investments in energy efficiency, renewables, a Unified
337 National Smart Grid, and an historic transition to clean
338 cars. This was a crucial down payment that will create
339 millions of new jobs, hasten our economic recovery,
340 strengthen our national security, and begin solving the
341 climate crisis.

342 But now, we must take another step together, and pass
343 the American Clean Energy and Security Act. Chairman Waxman
344 and Chairman Markey have pulled together the best ideas in

345 the Congress, to begin solving the climate crisis, while
346 increasing our energy independence, and stimulating our
347 economic recovery.

348 Let me highlight just a few items in the bill that I
349 believe to be of particular importance. First, it promotes
350 the rapid introduction of the clean and renewable
351 technologies that will create new, good, sustainable jobs,
352 and reduce our reliance on carbon-based fuels. It is time to
353 close the carbon loophole, and begin the steep reductions
354 that we need to make in the pollution that causes global
355 warning.

356 Second, it helps us use energy more efficiently and
357 transmit it over a secure, modernized, digital smart grid
358 system. Of course, this move to repower America must also
359 include adequate provisions to assist those Americans who
360 would face a hardship. For example, we must recognize and
361 protect those who have toiled in dangerous conditions to
362 bring us our present energy supply. I believe we ought to
363 guarantee good jobs for any coalminer displaced by impacts on
364 the coal industry.

365 And this bill also focuses on intensive R&D to explore
366 carbon capture and sequestration, to determine whether and
367 where it can be a key part of the solution. I have always
368 strongly supported intensive R&D on carbon capture and

369 sequestration and demonstration projects, and I am happy that
370 at long last, this committee has found a way to do that.

371 Our country cannot afford more of the status quo, more
372 gasoline price instability, more job losses, more outsourcing
373 of factories, more years of sending \$2 billion every 24 years
374 to foreign countries for oil, and our soldiers and their
375 families cannot take another ten years of repeated troop
376 deployments to regions that just happen to have large oil
377 supplies. Moreover, the best way to secure a global
378 agreement that guarantees that other nations will also reduce
379 their global warming pollution is for our country to lead the
380 world in meeting this historic challenge.

381 The United States of America is the world's leader. We
382 are the only Nation in the world that can lead. Once we find
383 and reestablish the moral courage to take on this issue, the
384 rest of the world will come along. Now is the time to act,
385 before the world gathers in Copenhagen this December to solve
386 this crisis. Not next year, this year.

387 I strongly urge bipartisan support of this crucial
388 legislation.

389 Thank you, Mr. Chairman.

390 [The prepared statement of Mr. Gore follows:]

391 ***** INSERT 1 *****

|
392 Mr. {Markey.} Thank you, Mr. Vice President, very much.
393 And now, we turn to welcome our other distinguished American,
394 Senator John Warner. Thank you, sir.

|
395 ^STATEMENT OF JOHN WARNER

396 } Mr. {Warner.} Thank you, Chairman Waxman, Chairman
397 Markey, and our good friend, Chairman Dingell, and the
398 distinguished Ranking Members, Mr. Upton, Mr. Barton.

399 It is really a privilege to come back to the Congress in
400 the retired status. I assure you that I checked the
401 applicable laws and so forth, and I am delivering a statement
402 this morning consistent with those regulations, which I shall
403 follow carefully.

404 But I want to say a word about the fine gentleman on my
405 left. We breakfasted together this morning, just as if we
406 were still in the Senate together. Talked about the many men
407 and women that mentored us in our legislative careers, and I
408 just want to say to you, my dear friend, you have had an
409 extraordinary public service career, and you are charging
410 ahead as strongly today as you have ever done in the history
411 of that career. And as you said, our parents are rather
412 proud of both of us. So, I thank you, and I thank those in
413 this room that I have served and worked with these years, and
414 for the gracious statements.

415 This is serious business, very, very serious business.
416 Having served 30 years in the other body, I have seen the

417 panorama of legislative challenges in that period, and
418 indeed, prior thereto, I served for five years in the
419 Pentagon, in the Department of Defense, and testified before
420 the Congress. But this particular moment in our history is
421 critical, and future generations will look back at this day
422 and tomorrow and in the future, and see what we did, and
423 maybe, what we didn't do. So, I thank the leadership, both
424 the Democrats and Republicans of this committee, for taking
425 the initiative, and the members to make it work.

426 I think, also, the committee should pause to express its
427 appreciation to the extraordinary number of organizations,
428 largely the ones I work with today are the nonprofits, but
429 indeed, the corporate and business center, sectors of our
430 country, have come together, and I think there is a good,
431 strong, constructive dialogue going on.

432 Unfortunately, we are greeted, the Vice President and I
433 were talking this morning, by articles like the one in the
434 New York Times this morning, but let us hope that is behind
435 us, and that as Members of Congress, and as witnesses, we
436 come here and speak the absolute truth, and if I may
437 underline, speak in such a way that all levels of America can
438 understand what the challenges are before us, the complexity,
439 the long, rough road ahead to reach those goals, that
440 hopefully this legislation will establish, and that my

441 beloved Senate will join in a conference, and we will get a
442 law.

443 All too often, I have watched and each of us have, the
444 advertisements today. And they oversimplify the problem. I
445 mean, you see very attractive actors and actresses get out
446 and say well, clean coal technology is just around the
447 corner. We know it is not around the corner. They talk
448 about well, wind power, wind and solar are vital parts of
449 working a way out of this situation, but each of those
450 requires substantial planning, engineering, tax subsidies,
451 support.

452 Take, for instance, we are talking about the smart grid.
453 It looks to be a quicker approach to begin to correct things
454 with that smart grid, but to do it, we are going to have to
455 work through condemnation laws, to get the land over which
456 those grids have got to travel, particularly, to convey the
457 energy from the very valuable and abundant source of wind.

458 I saw the other day where, in California, the solar
459 panels are using an extraordinary amount of water, so when
460 you go into one situation, you have got to figure out what it
461 affects adversely in the other. So, this is a tough road
462 ahead of us, and I am glad the leadership of this House of
463 Representatives has tackled it and going to move forward.

464 The Vice President very carefully carried a lot of the

465 factual material here this morning, and I won't try and
466 repeat it. I would ask unanimous consent my entire statement
467 go in.

468 Mr. {Markey.} Without objection.

469 Mr. {Warner.} Because I want to move through, somewhat
470 swiftly, so we can take the questions, and actually hear from
471 the membership. Since I have retired or left the Senate, I
472 have continued to work in this area, and will continue to do
473 so, because I feel very strongly committed.

474 I was privileged, for 14 months in the Senate, to join
475 with my very good friend, Joseph Lieberman, an extraordinary,
476 courageous legislator, in putting together our bill, and with
477 the support of our chairman, Senator Boxer, and a lean, but
478 nevertheless majority of the Senate, I was the only
479 Republican that cast a vote to get that bill out. And I
480 don't say that in any derogatory sense towards my colleagues.
481 I respect their views, but I think, as we go along, and one
482 of the things that, as I go back and wish we had done, was to
483 give a little territory to get that bill through, and we
484 didn't perhaps give enough territory to begin to get at least
485 a greater deliberation than the few days on the Senate floor,
486 to have laid a stronger foundation for this committee and
487 other elements of the Congress to cover this subject.

488 I want to talk about that foundation. In my judgment,

489 this subject of climate change, the future of energy, and our
490 national security are all interwoven very closely, and I hope
491 that the Congress recognizes that they have got to build
492 their legislation on a foundation with three legs on it: the
493 energy leg, the global climate change leg, and the national
494 security leg.

495 And it is that national security that I want to dwell on
496 here for a few minutes, because I think that is the most
497 significant contribution I can make. I want to credit many
498 national security experts who have expressed their concerns,
499 most of which I share. Many senior retired officers, and I
500 say with a sense of humility, I have had an opportunity, many
501 years in the Pentagon, many years in the Congress on the
502 Armed Services Committee, to work with the same officers
503 today who are retired. They don't have a political bone in
504 their system. They are only speaking out in terms of their
505 projection of the responsibilities for the Armed Forces of
506 the United States, as this global situation appears to
507 worsen. And I will address the specifics on that.

508 But I want to take, I don't often like to take quotes,
509 but this one, I think, is worthy of your attention. One
510 extraordinary soldier, one I worked with, and you did, too,
511 Mr. Vice President, the former Chief of Staff of the United
512 States Army, General Gordon Sullivan, who chaired the

513 Military Advisory Board on the Center for Naval Analysis--
514 that Center has done a lot of valuable work in this area--
515 succinctly framed the situation as follows: ``The Cold
516 War''-- and he is referencing, of course, our, the former
517 Soviet Union--``the Cold War was a specter, but climate
518 change is inevitable. If we keep on with business as usual,
519 we will reach a point where some of the worst effects are
520 inevitable. Back then, the challenge was to stop a
521 particular action. Now, the challenge is to inspire a
522 particular action. We have to act if we are to avoid the
523 worst of the effects.''

524 If I may, I was hoping that Chairman Dingell would be
525 here today, I want to go back and, just a brief personal
526 recollection. I grew up during the Great Depression, and
527 then, the years of World War II. I was privileged to, in the
528 last year of the War, wear the uniform of a young sailor,
529 when my distinguished colleague, Chairman Dingell, was really
530 in the thick of the fighting. Well, you are now.

531 Our generation was referred to as the Greatest
532 Generation, but the thing about it is, and I don't want to be
533 too prosaic, but I think back, of the inspiration that it
534 took to get through those periods in American history. Went
535 back and read that wonderful speech given by Franklin D.
536 Roosevelt in his first inaugural. ``The only thing we have

537 to fear is fear itself.''

538 There is a very substantial element of fear attached to
539 this subject. Now, we are, as a Nation, together with other
540 nations in the world, facing one of the most unprecedented
541 and difficult economic situations ever in history. We also
542 have our brave men and women of the Armed Forces fighting two
543 wars. And the question is raised, is this the time to
544 challenge an issue of this magnitude, which has ramifications
545 of cost to everyone here in this country, and is going to
546 require sacrifices? And I say to you, as my distinguished
547 colleague said, yes, it is the time.

548 I witnessed personally the Nation survive those trials
549 of the Depression and the War, and it emerge and redevelop
550 itself, and become a stronger Nation, stronger than any of us
551 ever imagined we could achieve in the late '40s and '50s. We
552 can do that again, but it is going to take your leadership.
553 We will do it again. We have to, because every day that goes
554 by increases the cost, as I understand it, involved in this
555 situation.

556 Let me say that one thing that we have got going for us
557 as legislators, is that there is a desire among a broad
558 cross-section of the American people to do something. They
559 want it done. They don't understand all of the complexity
560 and all the technical things, but instinctively, they are

561 saying we are with you. But the duty we have is to be honest
562 with them, tell them it is going to be a burden, and tell
563 them it is going to take time. I mean, clean coal
564 technology, which is so important to my state, Virginia, and
565 I have looked into this question of capture and
566 sequestration, and transfer and sequestration.

567 That is going to take big bucks and a lot of time to
568 perfect it, so I say to you most respectfully, as I look back
569 at the legislation that we put forward in the Senate, we had
570 in there provisions, and I used to characterize it, is that
571 the President of the United States is the engineer driving
572 this big train. He had the throttle to push, he had the
573 brake to slow down. In order to allow our power sector, our
574 engineering sector, transportation sector, manufacturing
575 sector, to do the job that I think in their heart
576 instinctively they want to do, we have got to give them the
577 assurance that the timetables we establish have got to be
578 such that they can keep pace with their responsibility to
579 meet the needs of the citizens today, and at the same time,
580 engage in the research and development of the solutions that
581 we have, but do it in a timely fashion.

582 The most challenging thing for this committee in this
583 legislation is to devise that language, to give the
584 President, and the President has stepped forward, and shown a

585 measure of strong leadership on this subject, and a
586 willingness to work with the Congress, but we have got to
587 devise that language that enables the President, indeed the
588 people in this country, to do the work that has got to be
589 done in such a way that we don't put on the burden that they
590 have to bear before the technology has been done and the
591 infrastructure installed for them to continue.

592 I mean, in the coal industry, if we move too swiftly,
593 coal is likely to switch to natural gas. Now, natural gas,
594 people think is, you listen to some of them, it is fewer, but
595 it has 50 percent of the greenhouse carbon and so forth, am I
596 not correct, as does coal, and we don't have identified yet
597 the sources of gas to meet the demand if the power industry
598 suddenly were forced, as a matter of necessity, so as not to
599 violate the law, to shift to gas.

600 So, give to the President the language, I wrote it in
601 the previous bill, and I hope that you can even do a better
602 job, to give the President the authority to correct certain
603 situations if this country cannot meet its obligations under
604 the law.

605 So, if I were in the Senate today, I would be doing one
606 other thing, and that is, I would be working to try and
607 incorporate language, I hope in both bodies, that would
608 recognize the enormous benefit of bringing to the table, you

609 had commerce, you had energy, you had transportation at this
610 table, but bring to the table the defense sector, the
611 Department of Defense, the intelligence community, and
612 certain elements of the infrastructure in the private sector
613 that support our defense, and let them express their views.
614 Let them be charged by the Congress in this legislation for
615 the accountability to do their share to reach these goals,
616 because as the Vice President recited, the effects of climate
617 change, and I am not here to argue the science, but
618 certainly, the reality, he spoke about the Arctic, the
619 Antarctic and the North Pole and so forth. We were talking
620 about those submarines, and how they had to do the scientific
621 work to determine the thickness of the ice, and how that
622 database, which was begun in 1958, now shows you how much
623 that has shrunk over a period of time.

624 But it is the members of the military that will be
625 called upon to help those nations who, as a consequence of
626 the erratic nature of climate change, could be losing their
627 sovereignty, suffering mass migrations, political
628 instability, creating a vacuum. So, many of these nations
629 are now on the verge of political collapse, and this push
630 from a climatic condition could shove them over where they
631 lose their sovereignty. Somalia is an example of that with
632 the drought, on that littoral of Africa.

633 We have got to be sure that we are doing everything to
634 alleviate these situations, because we are the only country
635 that has the military capability, particularly the lift
636 capability, the transportation capability, to get there in a
637 timely way, and do what we can in a humanitarian way to
638 alleviate the suffering that is occasioned by these
639 situations.

640 Stability in the world is absolutely critical, and we
641 are called upon, as you said, Mr. Vice President, we are the
642 leader, we are the one that has the strongest of the
643 militaries, and we will be called upon. To the extent that
644 our military has to perform missions occasioned by climatic
645 conditions or others, is the extent to which they have less
646 ability to do missions elsewhere, so there is a direct cause
647 and effect between what our military are called upon to do,
648 to do our normal role of protecting freedom in the world, and
649 to meet these situations. Whether it is crop failures or
650 famine, disease, mass migration of people across borders,
651 destruction of the vital infrastructure, all of these things
652 can lead to failed nations and instability.

653 So, I just want to conclude by saying we are the best
654 equipped. We are prepared. The United States has always
655 been of a soft heart, to help those less fortunate than
656 ourselves, and this poses a real problem.

657 I go back to one other admiral. I served with him when
658 he was NATO Commander, NATO South. And he said, as part of
659 the Military Advisory Board, national security and the threat
660 of climate change, he said, this is Admiral Joseph Lopez, I
661 think Joe has only voted. I don't know if he has ever done
662 anything in the political world. I have known him that well.
663 And he said: ``You have a very real change in natural
664 systems that are most likely to happen in regions of the
665 world that are already fertile ground for extremism.'' That
666 sums it up, and delaying action on this just raises costs,
667 leaves us less prepared to try to alleviate the stress that
668 we have put on our military.

669 So, I strongly urge that you look at the possibility of
670 injecting in this record somewhere the views of our
671 departments, and hopefully, language which will hold them
672 accountable, and make them as much a partner as the other
673 departments and agencies of our government. And I am sure my
674 good friend Congressman Ike Skelton, can work with you to see
675 that happens.

676 Thank you very much.

677 [The prepared statement of Mr. Warner follows:]

678 ***** INSERT 2 *****

|
679 Mr. {Markey.} Thank you, Senator, very much.

680 And now, we will turn to questions from the committee,
681 and the chair will recognize himself, and let me ask you
682 this, Vice President Gore.

683 We are in an economic recession right now. Our energy
684 policies in the past have not protected us against price
685 spikes, or the impact on our economy, our national security.
686 Could you talk a little bit about what your view is with
687 regard to how the legislation pending before this committee
688 could actually have a positive impact upon the workers of our
689 country, in the long run?

690 Mr. {Gore.} Mr. Chairman, thank you.

691 I believe that one part of the answer to the economic
692 crisis is to create jobs with public investments in
693 infrastructure. Economists across the spectrum, from liberal
694 to moderate to conservative, all agree that these are the
695 unusual circumstances where both sides say yes, we need to
696 have public investment to get the economy moving more quickly
697 again. And all sides agree that the best short-term
698 investments to create jobs quickly is in infrastructure.

699 The focus on green infrastructure, to lay the foundation
700 for our 21st century economy, is the logical place to make
701 those investments. Prior to the current era, the largest

702 surge in economic growth and productivity was the Industrial
703 Revolution. Historians say that one among many reasons for
704 the onset of the Industrial Revolution was the perception in
705 England and Scotland, where it began, that they were running
706 out of trees, and so, that gave them an extra impetus to go
707 for the coal, and the new steam engine and the other devices
708 ran on coal.

709 Now, it is obvious that we are either at or near peak
710 oil, especially for, people argue about this, but the
711 affordable light, sweet oil, of course there is more of this
712 heavy, dirty oil that is very high priced, and that is a
713 different story altogether. But we are at or near the peak
714 for the oil that dominates the market today.

715 As the rate of new discoveries declines, the secular
716 demand in places like China and India is rising. If we
717 didn't have a global recession today, the oil price would be
718 truly at all time record levels. For the last 35 years,
719 since the fall of 1973, when President Richard Nixon
720 responded to the Arab OPEC oil embargo by saying we have got
721 to have, become energy independent, we have been on a
722 rollercoaster, with the price going up, delivering body blows
723 to our economy, and just as we summon the political will to
724 do something about it, the price collapses again, and that
725 political will dissipates.

726 As President Obama put it, we have gone from shock to
727 trance. But this rollercoaster is headed toward a crash, and
728 we are in the front car. So, when you talk about energy
729 prices, remember last summer, and what happened then. And
730 remember what is going to happen as the global economy
731 recovers, and the price skyrockets again, what are you all
732 going to say to your constituents about what you can do then?
733 Well, you can say well, we don't have any control over OPEC.
734 We don't have any control over the world oil markets.

735 Well, this bill makes it clear that we do have some
736 control over OPEC. We can form a bipartisan national will to
737 shake off the trance and keep our eyes on the ball, and
738 protect the American people from the skyrocketing prices that
739 are in our future if we just do the same old thing, and
740 expect the same old results.

741 So, we can create jobs by putting people to work,
742 building the Unified National Smart Grid, building the solar
743 panels, building the windmills, building the geothermal
744 installations, insulating homes, changing out the heating and
745 lighting systems. And those jobs can't be outsourced. They
746 are here, right here, and as the work is done, it makes our
747 country stronger, and positions us to lead the world in this
748 new energy revolution.

749 Mr. {Markey.} Okay. Thank you. My time has expired.

750 I am going to turn and recognized the Ranking Member, Mr.
751 Upton.

752 Mr. {Upton.} Thank you, Mr. Chairman. I want to ask
753 two questions.

754 I will ask them in somewhat rapid fire, and let both of
755 you respond, but it may take me a minute to finish the first
756 one. All of us here want to reduce emissions, and we want to
757 reduce emissions without losing jobs, and we want to do it in
758 such a way that the costs will not impact our Nation's
759 capability to be competitive with other countries overseas.
760 But we know that the most contentious issue is cap and trade,
761 which may of the panelists, the last two days, have said, in
762 fact, it would increase costs. Last year, Senator Warner,
763 you knew well your bill failed to get the necessary votes to
764 pass with cloture. Another 12 that voted for that said that
765 they would vote no on final passage in a letter, including my
766 two Senators, Senator Debbie Stabenow and Carl Levin.

767 This month, April, by almost a two to one margin, the
768 Senate rejected cap and trade as part of reconciliation,
769 which of course, would have required only 50 votes instead of
770 60. You have seen the headlines. This from last week in the
771 Washington Post, India rejects calls for emission cuts. The
772 same has been broadcast as it relates to China. And I would
773 note that it is pretty interesting to me that some of the

774 same folks in the Congress who were opposed to entry of the
775 WTO of China, because the conditions on China weren't tough
776 enough, now are in favor of, in fact, believing that the WTO
777 will have the framework to provide for the tariffs on goods
778 produced in China.

779 But there is a legitimate fear that there is going to be
780 serious leakage of jobs to China and India, and frankly, my
781 state can't afford to lose any more. We have lost 150,000
782 jobs in Michigan this year already. If somehow, cap and
783 trade defied all the odds and got to the President's desk,
784 legal challenges probably taking years will start, not
785 knowing how many jobs will depart, as it relates to WTO.

786 As it impacts the planet, by the way, the steelworkers
787 have indicated that they emit only 1.4 tons of carbon for
788 every ton of steel produced in the U.S., versus about 4 tons
789 of carbon per ton in China. What would be wrong with the WTO
790 taking up the cap and trade debate, and requiring all member
791 nations to, in fact, have a plank, an enforcement plank, as
792 part of their participation in WTO, so that we know in
793 advance whether or not they would comply or not, and would be
794 in agreement?

795 The second question that I have is, doesn't nuclear have
796 to be part of this equation? Senator Gore, when you
797 testified, or Vice President Gore, when you testified before

798 this committee in the last Congress, many of us noted that
799 there wasn't a word in your book, or a scene which would have
800 been worth a thousand words, right, a picture, in the movie
801 about nuclear. EPA's own analysis said that in order to meet
802 the targets set in this bill, there has to be a 200 percent
803 increase in nuclear. The President has called for doubling
804 or tripling renewables. Shouldn't we be doing the same thing
805 with nuclear?

806 Mr. {Warner.} I will be very brief.

807 On the nuclear, I am proud to say I was part of a Navy
808 that ran ships all over the world with those plants. We had
809 the best safety record, still have it. Nuclear power is
810 safe. It is relegated to the sidelines because of the cost
811 and lack of the industrial base, and fear. We have got to do
812 a frontal assault, and explain the safety is there, that it
813 is zero greenhouse emissions, but the cost initially is
814 pretty heavy, and we have got to encourage the Congress to
815 put forth the tax provisions, the guarantees, and other
816 legislation is needed to jumpstart this industry. I couldn't
817 agree with you more the need to have nuclear power as a part
818 of it.

819 As to the WTO, we recognize that greenhouse emissions
820 know no border. They come from all the countries, and if we
821 in the United States and other countries begin to take up and

822 burden our taxpayers with costs to achieve some reduction,
823 and the others go full-bore in the opposite direction, they
824 will just cancel out our efforts. The WTO provides a forum
825 in which we can begin to induce, particularly for China and
826 India, to come and join. I somehow hope there is a sense of
827 consciousness in those governments that they are duty bound
828 to step up this time, at the fourth time international
829 conference in Copenhagen, and begin to pull on the oar with
830 the rest of us.

831 Mr. {Gore.} Thank you, Congressman Upton.

832 First of all, I am glad you cited the steelworkers,
833 because the steelworkers have formally endorsed this. They
834 are strongly in support of this legislation and the cap and
835 trade approach generally.

836 Secondly, you mentioned India and China. I think it is
837 important to have that discussion, and while they are often
838 lumped together, in my view, they are actually very
839 different, as they relate to the challenge of the climate
840 crisis. Partway through this century, India will surpass
841 China in population, and at some point, may rival China in
842 industrial power.

843 But the reality today and for the near term future is
844 very different. China is one of the two largest emitters,
845 along with us. India really is not. It is growing, but the

846 significance of China is way larger than that of India, where
847 this crisis is concerned. And while it is true the headline
848 you quoted, with respect to India. I gave my slideshow in
849 the Indian parliament. I have met with them and their
850 leaders numerous times, and I can tell you, there is a lot of
851 movement in India. But the position you quoted, at present,
852 is correct.

853 With China, it is a little bit different. They are now
854 actively moving. They have far larger investments in green
855 infrastructure than the United States does, even after the
856 stimulus bill, even after this bill is adopted. They see the
857 future. They have, by far, the largest solar installations.
858 They are moving on every single front, and there have been
859 active discussions between Beijing and the provincial
860 governments about internal reduction targets, a kind of
861 regional cap, region by region, in China. And they have left
862 the door open to a very different approach at the meeting in
863 December, compared to what they have done in the past.

864 Just last week, the head of the International Energy
865 Agency, in consultation with Chinese authorities, issued a
866 report showing why it is absolutely essential for China to
867 reduce their CO2 emissions. So, I think that if the United
868 States takes the lead, I think it is very likely we will see
869 a very different response from China this time.

870 Now, on the WTO issue that you mentioned, there are
871 provisions in this bill that accomplish substantially the
872 result that you talk about in your question, and there are
873 those who say a nondiscriminatory approach, taken by a
874 country that has established limitations on carbon, if it is
875 applied evenhandedly, might well survive in the WTO. I
876 wouldn't leave it up to them to come to an answer, because it
877 might be like the Doha Round. It might be endless.

878 I think we can't turn it over to the WTO. I think we
879 have got to be in charge of our own destiny, and then, if it
880 has an international dimension, where we say okay, we have
881 got to even this out, if some Country X doesn't have any
882 limitations, we will find a legal way to even that out. This
883 bill puts in place mechanisms to go down that road, if it
884 becomes necessary. So, I think that is excellent.

885 Now, finally, the nuclear discussion would take more
886 time. I don't want to impose on the time restrictions here.
887 But I will give you a brief answer. I am anti-nuclear. I am
888 skeptical that will play a much larger role than it does now.
889 And I won't go through all the reasons. Let us assume, for
890 the moment, that we solve the nuclear waste storage problem.
891 Let us assume that we solve the problem of accidents by the
892 people who are operating these reactors. They are all one-
893 offs. There is not a single one that is like another one, so

894 they are a little bit vulnerable. But let us assume that we
895 can solve that.

896 For the eight years I was in the White House, every
897 single nuclear weapons proliferation problem we had to deal
898 with was connected to a reactor problem, and though the
899 technologies are somewhat different, if you are a dictator in
900 a country that has a reactor program, and you have got a team
901 of scientists and engineers capable of managing that and a
902 fuel cycle, you can force them to work secretly at night to
903 build you nuclear weapons. That is what North Korea did.
904 That is what Iran is trying to do. That is what has happened
905 elsewhere.

906 So, in some of these unstable regions, if we modeled the
907 behavior to put these nuclear reactors everywhere in the
908 world, we would rue that day. We would also run out of fuel
909 pretty quickly, and have to go to these other cycles that
910 enrich the fuel even more, which would make the weapons
911 problem much, much worse.

912 But the final issue is cost. There is not a single
913 engineering or construction firm anywhere in this country who
914 can give you an accurate cost projection for what it takes to
915 build a nuclear reactor, not a single one. And the utilities
916 are scared of those overruns.

917 And there is another issue. Along with the expense,

918 they only come in one size, extra large, because the
919 economies of scale for the foreseeable decades ahead mandate
920 a very large size. I know that there are research projects
921 on smaller reactors. They are at least 15, 20 years away. I
922 hope they get one.

923 But here is the problem that the current generation of
924 reactors poses. The utility managers face an uncertain
925 future on demand projection. You had a witness earlier this
926 week who pointed out what the projections for energy use in
927 the 1970s were, and how high they went, and what the actual
928 results were. I remember in the Tennessee Valley, TVA, in
929 response to demand projections showing an annualized
930 compounded 7 percent increase in electricity demand, started
931 20 some odd reactors, and then after that embargo that I
932 mentioned earlier, oil prices shot up, coal prices ought not
933 be tied to oil, but they are, because of the substitution,
934 and then electricity prices went up. That 7 percent figure
935 went down to 1 percent, and most of those reactors had to be
936 canceled, and that is the real reason why there weren't any
937 orders after 1973. It is the expense, and the lack of
938 flexibility. If you are looking 15 years out, in a time
939 which like the 1970s, once again has a lot of uncertainty
940 about what the future demand is going to be, and what the
941 future price is going to be, you want more flexibility,

942 smaller increments.

943 That is why for each of the last two years, the largest
944 new increments for electricity generation in the United
945 States were wind, because they are going for these smaller
946 increments that give them more flexibility. So, again, I am
947 not opposed to nuclear. I think it ought to compete in the
948 marketplace. I do think that for all of those reasons, it is
949 likely to play only a small increased role from what it does
950 now.

951 Mr. {Markey.} The gentleman's time has expired. The
952 chair recognizes the chairman of the full committee, Henry
953 Waxman.

954 The {Chairman.} Thank you, Mr. Chairman. To Vice
955 President Gore and Senator Warner, I thank you for your
956 testimony, and for your leadership on the energy and the
957 global warming issues.

958 Two days ago, we had testimony from a group called the
959 United States Climate Action Partnership. It is a coalition
960 of industry and environmental leaders, and their testimony
961 was remarkable, because instead of corporate CEOs and
962 environmental leaders opposing each other, which is what
963 usually happens when we deal with environmental bills, they
964 were united in calling for strong, effective energy and
965 climate legislation.

966 And your testimony today is remarkable in a similar way.
967 You come from opposing political parties, yet you are united
968 in calling for enactment of market-based controls on carbon
969 emissions. To succeed, we are going to have to bridge
970 differences between environmentalists and industry, Democrats
971 and Republicans, and your testimony shows that we can do
972 that.

973 In my conversation with my colleagues, I often here from
974 Members who tell me they want to do something, but they are
975 worried about their districts and what will happen in the
976 transition to a clean energy economy. They are concerned
977 about meeting the costs of this transition.

978 How would each of you answer Members of Congress who
979 raise those concerns? They are legitimate concerns. What
980 would you tell them, Mr. Gore and Mr. Warner?

981 Mr. {Warner.} I would give a short answer. I was
982 privileged to be in the Senate when we did the Clean Air Act,
983 second round, the Clean Air Act, and I watched that unfold.
984 I was privileged to work with George Mitchell, Pat Moynihan,
985 John Chafee. They were the three, the triumvirate, the
986 three, they were sort of the Four Horsemen. And it was
987 strong leadership from the top down in the Senate.

988 When the bill came to the floor out of the committee, we
989 recognized that it was bogged down. George Mitchell then

990 undertook around the clock, to see Members individually,
991 singly, and so forth, to try and work through their
992 constituencies, which oftentimes is different, as we well
993 know, in different portions of the country. But it was that
994 strong leadership that got it done, and you ought to go back
995 and research some of the rhetoric and the press at that time.
996 They thought the sky was going to fall in if that Clean Air
997 Act were passed.

998 Well, what is the result? Energy and the clean air did
999 survive. The industrial base formulated a means to do it,
1000 and are doing it far below the original cost projections.
1001 So, I would just say we have to muster the courage, and point
1002 to those chapters in history when the Congress has led
1003 forcefully and achieved it, and this time, I think
1004 fortunately, the President is going to be a strong ally.

1005 Mr. {Gore.} I think that the cost of energy will come
1006 down when we make this transition to renewable energy. Look
1007 at electric cars, for example. The internal combustion
1008 engine, for most of the time it has been used, has had an
1009 efficiency of about 15 percent. An electric motor has an
1010 efficiency of about 90 percent. You can run an electric car
1011 on the equivalent of \$1 a gallon gasoline.

1012 How do we get from here to there? We have to make the
1013 investments, and make the adjustments in the energy

1014 marketplace to accomplish this transition. We have two paths
1015 that we can pick. One is to keep on being hostage to OPEC,
1016 even as we know this marketplace is leading to sky high
1017 prices, as the oil reserves begin to deplete, and as the
1018 demand rises. Or we can decide we are going to control our
1019 own destiny, and put in place this infrastructure that will
1020 allow us to give the American people lower energy prices.

1021 Now, what is the cost of the transition? The latest and
1022 most, what I regard as the most authoritative estimate of the
1023 cost of the transition, is about \$0.30 per day. As you said,
1024 Mr. Chairman, the cost of a postage stamp. And that doesn't
1025 even take into account the savings that the same household
1026 paying that \$0.30 a day can make if they take advantage of
1027 the other provisions that will allow them to insulate and
1028 change out the windows and lighting, and have sharp decreases
1029 in their energy consumption.

1030 The {Chairman.} Well, I think you are making a very
1031 valid point. We do have regional differences. We represent
1032 different parts of the country and different constituencies,
1033 but we have a national interest to figure out how to get this
1034 done, and to recognize that we have to reconcile these
1035 concerns, that are very legitimate.

1036 I think the two of you illustrate that. As we heard
1037 from the USCAP the other day, we have got to keep working at

1038 it. I remember that Clean Air Act reauthorization. We
1039 worked hard on this committee, and under the leadership of
1040 Chairman Dingell, we got a bill out 41 to 1 out of committee,
1041 and the first cap and trade program was in that legislation
1042 to deal with the acid rain problem. Industry told us it
1043 would cost billions of dollars, and instead, it was a tenth
1044 of what they predicted. So, I think we need to push things
1045 forward, do it in a responsible way, try to bring everybody
1046 along with us, because we all have a national concern,
1047 international concern, as we address our regional ones as
1048 well.

1049 Thank you, Mr. Chairman.

1050 Mr. {Markey.} Thank the gentleman. The chair
1051 recognizes the gentleman from Texas, the ranking member of
1052 the full committee, Mr. Barton.

1053 Mr. {Barton.} Thank you, Mr. Chairman. I want to point
1054 out, since we keep talking about the Clean Air Act,
1055 amendments of 1990, that I was on the committee, and I was
1056 one of those Republicans who voted with Chairman Dingell. In
1057 fact, I was a cosponsor of the bill, and I know most people
1058 think I have gone over to the dark side now, but at least in
1059 my early years in the Congress, I was in the light. And I
1060 think I still am, in some regards.

1061 I want to point out, before I ask my question, that we

1062 have Lord Monckton in the audience. Republicans had asked
1063 that he be allowed to testify today, and that wasn't
1064 possible. He did testify earlier, as Mr. Markey has pointed
1065 out, but we appreciate you coming over from London to at
1066 least observe the hearing.

1067 I was somewhat taken aback, Mr. Vice President, by your
1068 listing of current environmental problems attributed to
1069 global warming. You did miss a few, though. The Dallas
1070 Cowboys have not won a playoff game in ten years. You didn't
1071 mention that. And you also, as Mr. Markey pointed out to me,
1072 the Boston, the New England Patriots didn't make it to the
1073 Super Bowl. I would add those to the list of problems that
1074 you enumerated.

1075 I do want to directly go to one of the problems that you
1076 talked about. You talked about CO2 concentrations rising in
1077 the oceans, and the effect that that is, or could be having.
1078 I have a book here, called CO2, Global Warming and Coral
1079 Reefs, by Dr. Craig Idso, I-d-s-o, who has a magazine that he
1080 publishes each month called CO2 Science, and I am going to
1081 read the summary from the book, and I will put it in the
1082 record. ``The rising CO2 content of the atmosphere may
1083 induce changes in ocean chemistry pH that could slightly
1084 reduce coral calcification rates, but potential positive
1085 effects of hydrospheric CO2 enrichment may more than

1086 compensate for this modest negative phenomenon. Theoretical
1087 predictions indicate that coral calcification rates should
1088 decline as a result of increasing CO2 concentrations by as
1089 much as 40 percent by the year 2100. However, real world
1090 observations indicate that elevated CO2 and elevated
1091 temperatures are having just the opposite effect. In light
1092 of the above observations, and in conjunction with all the
1093 material presented, it is clear that climate alarmist claims
1094 of impending marine species extinctions, due to increases in
1095 both temperature and atmospheric CO2 concentration are not
1096 only not supported by real world evidence. They are actually
1097 refuted by it.''

1098 Now, I just put that into the record, to point out that
1099 some of the phenomena that you indicate are obviously
1100 occurring. You know, if they are occurring, they are
1101 occurring, but to lay that at the feet of global warming is
1102 not substantiated by the science, and some of these alarmist
1103 predictions are just that. They are predictions. They will
1104 not be fact.

1105 Now, let us get to some things that are fact. We know
1106 that the United States each year creates manmade CO2
1107 emissions in the neighborhood of 7 billion metric tons, 7
1108 billion. If you cost that manmade CO2 at \$100 a ton, which
1109 most of the experts who have looked at the cap and trade

1110 system say that the tons cost is going to be between \$100 and
1111 \$200 billion, if you take the \$100 a ton number, that is \$700
1112 billion a year. Now, my friend Mr. Markey and Mr. Waxman are
1113 engaging in some trading right now. They are trying to give
1114 free allowances to perhaps get votes. I won't say they are
1115 doing that, but it appears to me that they are doing that.
1116 So, they are going to give some allowances away. Let us say
1117 they give 3.5 billion tons of allowances away. That still
1118 means that there is going to be 3.5 billions of tons that
1119 have to be costed.

1120 Let us say that we take the EPA estimate, that it is
1121 only \$20 a ton, not \$100. I think it is going to be a lot
1122 more than \$20, but we will take the EPA number. That is
1123 still, if they give away half the allowances, and they only
1124 cost \$20 a ton, that number is \$70 billion a year. How in
1125 the world can we have a cap and trade system that doesn't
1126 cost jobs and doesn't cost the economy, even if it is only
1127 half the tons at \$20 a ton?

1128 Mr. {Gore.} Congressman Barton, I want to address your,
1129 the point that you made about the science. I don't question
1130 your sincerity for one moment.

1131 Mr. {Barton.} And I don't question yours, so we are
1132 equal on that.

1133 Mr. {Gore.} Thank you. I believe that it is important

1134 to look at the sources of the science that we rely on. With
1135 all due respect, I believe that you have relied on people you
1136 have trusted, who have given you bad information. I don't
1137 blame the investors who trusted Bernie Madoff, but he gave
1138 them bad information. And--

1139 Mr. {Barton.} I have never talked to Bernie Madoff.

1140 Mr. {Gore.} I am not saying that you have. But he gave
1141 them bad information, and committed a massive fraud that
1142 ended up hurting, most of all, the people who trusted him.

1143 Senator Warner made reference in his opening statement
1144 to the story on the front page of the New York Times this
1145 morning. Absolutely incredible. The largest corporate
1146 carbon polluters in America, 14 years ago, asked their own
1147 people to conduct a review of all this science, and their own
1148 people told them what the international scientific community
1149 is saying is correct. There is no legitimate basis for
1150 denying it.

1151 Then, these large polluters committed a massive fraud
1152 far larger than Bernie Madoff's fraud. They are the Bernie
1153 Madoffs of global warming. They ordered the censoring and
1154 removal of the scientific review that they themselves
1155 conducted, and like Bernie Madoff, they lied to the people
1156 who trusted them in order to make money. And the CEO--

1157 Mr. {Barton.} Mr. Vice President--

1158 Mr. {Gore.} --of the largest, if I could just finish my
1159 response, Congressman.

1160 Mr. {Barton.} Well, I don't--look, I will stipulate
1161 that CO2 concentrations are going up. There is no debate
1162 about that. There are about 380 parts per million, and they
1163 are going to rise in the neighborhood of 500 parts per
1164 million in the next 50 to 100 years. I will stipulate that.
1165 Now, the consequences of that, and whether that is because of
1166 manmade CO2, I think are debatable, and I don't know about
1167 this scientific peer review that you just talked about, but
1168 if somebody lied about something 14 years ago, I am sure Mr.
1169 Waxman and Mr. Markey will conduct an investigation and
1170 oversight hearing into that.

1171 My question to you was about the cost of the allowance
1172 system. How are we going to pay for it, and how many jobs
1173 are we going to lose? Now, if you have got information about
1174 something that happened 14 years ago, I am sure, again, our
1175 chairman and subcommittee chairman, Mr. Stupak, who is the
1176 Oversight Subcommittee chairman, we will look at it. But
1177 answer my question about the cost, please.

1178 Mr. {Gore.} Yeah, it is on the front page of the New
1179 York Times today, by Andrew Revkin.

1180 The leading corporate carbon polluters themselves
1181 conducted a review of the science and found that it is valid,

1182 and to the point you made a moment ago, they verified in
1183 their own studies that manmade global warming is raising
1184 temperatures and causing this crisis.

1185 Mr. {Barton.} I don't think that can be proven.

1186 Mr. {Gore.} Like Bernie Madoff, they lied about it in
1187 order to make money, and they themselves profited. The CEO
1188 of the largest got a onetime payment of \$400 million. Now,
1189 again, those who have trusted them and believed them are due
1190 an apology. These corporations ought to apologize to the
1191 American people for conducting a massive fraud for the last
1192 14 years.

1193 Mr. {Markey.} The gentleman's time--

1194 Mr. {Barton.} My time has expired, Mr. Chairman.

1195 Mr. {Markey.} The gentleman's time has expired. The
1196 chair recognizes the Chairman Emeritus of the committee, the
1197 gentleman from Michigan, Mr. Dingell.

1198 Mr. {Dingell.} Mr. Chairman, thank you for holding this
1199 hearing. Thank you for recognizing me. You have made me
1200 very happy today. I get to welcome back two very dear
1201 friends, great public servants, real patriots, men of
1202 distinction and ability, wonderful leaders. My old friend
1203 John Warner, who lived down the street from me, and who has
1204 shown himself to be a man of extraordinary courtesy and
1205 decency in all of his activities. My very special friend

1206 Albert Gore, whose father and my father and families were
1207 friends for many years, who served with distinction on this
1208 committee, and I want to say we had a lot of fun here working
1209 on the same questions in earlier days that we are today. And
1210 I want to say how proud I am to see him back, and to thank
1211 him for being here with us today.

1212 Gentlemen, when I was at Kyoto, the Chinese, I asked
1213 them, I said now, you are not going to be covered by this
1214 agreement. They said no. And they said, I said when will
1215 you be covered? They said well, we are a developing country,
1216 so we are not going to be, we are not going to ever be
1217 covered by it. And they indicated that they really didn't
1218 intend to be covered by it.

1219 So, now, we have got ourselves in a situation where we
1220 are going to go forward, and I think we have to go forward,
1221 but the question is how are we, if we go forward, are we
1222 going to see that we don't carry the burdens of the whole
1223 situation? Kyoto gave us the situation where the Eastern
1224 Europeans were out, because they were former Communists, and
1225 they were excluded. The Europeans all had rightly excluded
1226 themselves from coverage. The developing nations were
1227 excluded. And when I looked around the room to see who was
1228 going to be covered by this proposition, I found it was only
1229 one country, the United States.

1230 Now, how do we see to it that these other countries do
1231 things, that we are going to do and that we agree have to be
1232 done, and that we are not the only country who is going to
1233 suffer the economic penalties of going forward on this, while
1234 these other folks ride on our back?

1235 Mr. {Gore.} Congressman Dingell, thank you for your
1236 kind words.

1237 Mr. {Dingell.} I meant them.

1238 Mr. {Gore.} Senator Warner--I know, and I appreciate
1239 it. Senator Warner mentioned your work, others did on the
1240 Clean Air Act. I want to also recall that you were the
1241 principal author of the National Environmental Policy Act,
1242 and in the same year that was passed, the first, the original
1243 Clean Air Act was carried by Ed Muskie, and our good friend
1244 Howard Baker, my fellow Tennessean. It passed 425 to 4 on
1245 the House floor, and because of the bipartisan leadership in
1246 the Senate, I believe it passed unanimously, and I think, I
1247 would just express the hope that we can find our way back to
1248 that kind of bipartisanship.

1249 Now, on your question. I believe that the provisions in
1250 this bill put in place a mechanism for dealing with any
1251 recalcitrant nation that does not go along, and I believe we
1252 have the legal authority under the WTO to do that. But
1253 before we ever get to that stage, I honestly believe that

1254 when the United States leads the way, we are going to see a
1255 big shift with a momentum toward a truly global agreement.
1256 We talked a little bit about India and China earlier. There
1257 was a story and a study last week showing, according to one
1258 scientist, 75 percent of all the ice and snow in the
1259 Himalayas could be gone in a decade, partly because of global
1260 warming and the black--

1261 Mr. {Dingell.} I want to make it clear, I don't quarrel
1262 with the--

1263 Mr. {Gore.} I know you don't, sir.

1264 Mr. {Dingell.} You and I know each other for a long
1265 time, and I am concerned that other folks are going to skin
1266 us.

1267 Mr. {Gore.} Yeah.

1268 Mr. {Dingell.} We are going to do the things, and they
1269 are going to derive the benefits, and we are going to spend
1270 the money, and we are going to lose the jobs. Now, how do we
1271 protect our people, and how do we see that we provide
1272 protection for the trade exposed industries?

1273 Mr. {Gore.} Right.

1274 Mr. {Dingell.} And I am not satisfied that this bill
1275 has an adequate protection for our workers and our industries
1276 in those area, particularly given the attitudes of other
1277 countries, which expect us to carry the load, while they get

1278 a free ride.

1279 Mr. {Gore.} Well, just to briefly finish the point,
1280 because it is in direct response to that question. I was
1281 citing that particular science study as an illustration of
1282 why I believe that China in particular is moving much closer
1283 to joining a global agreement. And I believe that if the
1284 United States leads, we will get a global agreement that
1285 avoids the problems that you are talking about.

1286 Were it not to unfold in that way, I believe that we
1287 would have the means to protect against the problems that you
1288 worry about rightly, and I believe that we should afford
1289 ourselves of that protection, and use those tools.

1290 Mr. {Dingell.} Now, let me get to one more question,
1291 because the time is running out.

1292 We have a choice between, we have got to finance this,
1293 and we have got to enforce it. Cap and trade is one
1294 mechanism. Energy tax is another. Every economist says that
1295 a carbon tax is a better, more efficient, fairer way of doing
1296 it. The Europeans have had two, and maybe three, fine
1297 failures in their application of cap and trade. How do we
1298 avoid the mistakes that they made, and how do we come up with
1299 something that gets us the best?

1300 Nobody in this country realizes that cap and trade is a
1301 tax, and it is a great big one. And so, I want to get a bill

1302 that works. How do we choose the best course, cap and trade,
1303 carbon tax? At times, my dear friend Albert, you have been
1304 an advocate of a carbon tax as the better way to go. How do
1305 we address this problem?

1306 Mr. {Gore.} Well, I have, for 20 years, supported a CO2
1307 tax that is given back to the people, so that it is revenue
1308 neutral, but accomplishes the desired effect, but I have
1309 never proposed it as a substitute for cap and trade. I am in
1310 favor of both.

1311 And a number of the countries around the world that have
1312 done the best job of addressing the climate crisis and
1313 strengthening their economies, have in fact put both in
1314 place. But I believe that the cap and trade approach is the
1315 essential first step, partly because it is the only basis
1316 upon which we can envision a truly global agreement, because
1317 it is very difficult to imagine a harmonized global tax.

1318 Mr. {Dingell.} I apologize, my dear friend, for
1319 interrupting you, but how do we avoid the mistakes that the
1320 Europeans made? They screwed it up twice real good. How do
1321 we avoid those? How do we get a program that really carries
1322 out our responsibility and our trust to the American people?

1323 Mr. {Gore.} I know Senator Warner wants to make a
1324 comment, but just briefly, I think by learning from the
1325 mistakes that they made, as they themselves have learned from

1326 their own mistakes.

1327 Mr. {Dingell.} I am not satisfied--

1328 Mr. {Gore.} Their initial allocation was off. They
1329 have gone back and made significant changes. I think that it
1330 is beginning to work very effectively there, and country by
1331 country, we are seeing the results there. So, I think we can
1332 learn from what they have already learned.

1333 Mr. {Warner.} Just a brief reply on the issue of China.
1334 You put your finger on, the man on the street out here is
1335 asking us that very same question. And my response would be
1336 as follows. Because of our inability to reconcile
1337 differences in the last international round, the United
1338 States gave cover, they gave protection to China and India,
1339 to stand back behind us and say they are not going to go, we
1340 are not going to go.

1341 That is why I urge this committee, in its deliberations,
1342 you may not achieve all that you set out to do in this very
1343 courageous bill thus far, but as we say, get a beachhead on
1344 this issue in this Congress, because it is only going to get
1345 more complicated and tougher for successive Congresses. Lay
1346 the beachhead, and let us hope that we can build on that
1347 foundation, and go forward in the coming years and achieve
1348 totality of our goals.

1349 Mr. {Markey.} Thank you, Senator, very much. The

1350 gentleman's time has expired. The chair recognizes the
1351 gentleman from Pennsylvania, Mr. Pitts.

1352 Mr. {Pitts.} Thank you, Mr. Chairman. Welcome, Mr.
1353 Vice President and Senator. Since we don't have the
1354 allocation language yet. It hasn't been released. Whether
1355 it is auction or allocation of free credits or carbon tax, do
1356 you think that Congress and the American business community,
1357 and the American people would benefit from a complete and
1358 open hearing on this allocation language once it is released,
1359 whatever it might be? Should we have open, transparent
1360 hearings on this before we act?

1361 Mr. {Gore.} I mean, I support the leadership of the
1362 committee and its approach to gathering information, and that
1363 would be my answer.

1364 Mr. {Pitts.} Okay. Senator Warner.

1365 Mr. {Warner.} Well, I would join my colleague on that
1366 point. I mean, I think transparency is more vital with this
1367 legislation than anything I have seen in recent times,
1368 because--

1369 Mr. {Pitts.} So, we should have a hearing if--once we
1370 have the language--

1371 Mr. {Warner.} Well, I am presumptuous to come over
1372 here, as a member of the former body, and tell you how to go
1373 about your business.

1374 Mr. {Pitts.} All right.

1375 Mr. {Warner.} I just strongly urge you to do something
1376 in this Congress. Now, the cap and trade is tough. It is a
1377 tough issue, but we don't want to appear that we are using
1378 cap and trade as a means to just tax those who can pay to
1379 distribute it all over.

1380 Mr. {Pitts.} Okay. Thank you, Senator.

1381 Mr. {Warner.} Thank you.

1382 Mr. {Pitts.} Mr. Vice President, I did not hear your
1383 answer to Mr. Barton's question. What is the cost of this
1384 bill to every American family?

1385 Mr. {Gore.} Well, the study that I think that is most
1386 authoritative, before taking into account the savings in
1387 their energy use that this bill will occasion, is around
1388 \$0.30 a day. But again, let me emphasize that I think there
1389 will be actual reductions. And the reason is actually very
1390 simple. During the days of very cheap energy earlier in the
1391 century, we developed patterns that led to huge amounts of
1392 waste in energy that we all began to just kind of take for
1393 granted. And with the better engineering and the better
1394 science, the retrofitting and installation of more efficient
1395 ways of using energy really allow sharp reductions.

1396 In the State of California, which adopted some of the
1397 provisions that are similar to those in this bill, for the

1398 last 30 years, there has been a zero increase in energy use
1399 per capita, but while the economy has grown in California,
1400 GDP by 80 percent over the same period of time.

1401 Mr. {Pitts.} Okay. Is that \$0.30 per family per day,
1402 or per person?

1403 Mr. {Gore.} I believe it is per household.

1404 Mr. {Pitts.} Per household.

1405 Mr. {Gore.} Yes.

1406 Mr. {Pitts.} And do you concur with that, Senator
1407 Warner?

1408 Mr. {Gore.} About a postage stamp per day, but again, I
1409 think that much more than that will be saved by implementing
1410 the other provisions of the bill.

1411 Mr. {Pitts.} And can you supply us with the study, or
1412 the reference to the study?

1413 Mr. {Gore.} I believe that it is the EPA study that was
1414 produced two days ago, three days ago.

1415 Mr. {Pitts.} All right. Thank you.

1416 Mr. {Gore.} And I believe it has been presented to the
1417 committee.

1418 Mr. {Pitts.} Thank you. William Nordhaus, one of the
1419 most distinguished experts on the economics of climate
1420 change, has pointed out that the Kyoto Protocol would have
1421 imposed disproportionately large costs on the U.S., yet it

1422 would have had almost no effect on global temperatures. In
1423 large part, the lack of results stem from the refusal of
1424 China and India to adopt firm, binding caps on their domestic
1425 emission. How do you explain the statements of China and
1426 India, that they made at Bali, demanding that the developed
1427 world pay them for any greenhouse reduction costs that they
1428 incur? They have demanded that the developed world pay them
1429 for any greenhouse gas reductions that they make.

1430 Mr. {Gore.} Well, the rhetoric between the developed
1431 and the developing countries has been in a rut for years and
1432 decades. The reality of the world today is that China has
1433 moved a long way. China is ready to move at Copenhagen. I
1434 think you have got a very different situation with China
1435 today.

1436 Mr. {Pitts.} So, you do not feel that this principle of
1437 income transfers to the developing countries is valid.

1438 Mr. {Gore.} I think that technology assistance and
1439 adaptation, I think adaptation to the impacts of climate
1440 change is particularly important, and I think the way it is
1441 addressed in this bill is excellent.

1442 Mr. {Warner.} I associate myself with the comments of
1443 my colleague here. We just dismiss that type of argument out
1444 of hand. I think world condemnation of China and India will
1445 come about shortly, if there is some foundation in fact, and

1446 I believe it is, of the EPA finding that this is detrimental
1447 to health, those two nations ought to be high on the areas
1448 where that health is going to be affected, and this may
1449 change their thinking.

1450 Mr. {Pitts.} Thank you, Mr. Chairman. Yield back.

1451 Mr. {Markey.} The gentleman's time has expired. The
1452 chair recognizes the gentleman from Washington State, Mr.
1453 Inslee.

1454 Mr. {Inslee.} Thank you. Mr. Vice President, I hope
1455 you will convey our thanks to Tipper Gore for her work on
1456 this cause as well. I have got two questions today.

1457 First, I want to ask about a position a relatively well
1458 known individual has taken at one time about a cap and trade
1459 position. I just want to read a question and an answer, a
1460 quote from February 15, 2007. This former Congressman was
1461 asked in 2000: ``Candidate George Bush pledged mandatory
1462 carbon caps. It was a campaign pledge. What did you think
1463 of it at the time? Were you for that?'' This former
1464 Congressman answered: ``I think if you have mandatory carbon
1465 caps, combined with a trading system much like what we did
1466 with sulfur, and if you have a tax incentive program for
1467 investing in the solution, that there is a package there that
1468 is very, very good. And frankly, it is something I would
1469 strongly support.''

1470 This action plan is essentially what we are doing in
1471 this bill, of a carbon cap, a trading system, and incentives
1472 for the development of entrepreneurship. This former
1473 Congressman went on to say that caps with a trading system on
1474 sulfur has worked brilliantly, because it brought free market
1475 attitudes, entrepreneurship, and technology, and made it very
1476 profitable to have less sulfur. So people said wow, it is
1477 worth my time and effort.

1478 Now, that former Congressman who said that on February
1479 15, 2007 was former Congressman Newt Gingrich, who will
1480 shortly come into this room and testify that this bill is a
1481 combination of bubonic plague and Ebola virus for the U.S.
1482 economy.

1483 Is there any scientific reason, of which you are aware,
1484 that would make a carbon cap system, of the type we have
1485 proposed, productive economically, and a wise move on
1486 February 15, 2007, and today, unfathomably destructive?

1487 Mr. {Gore.} I think I will try to dance around that
1488 question.

1489 Mr. {Inslee.} You are entitled to, as a former Vice
1490 President. You have that right. We will take that as a
1491 rhetorical question, and--

1492 Mr. {Gore.} Well, see, I think that one of the great
1493 questions here, for those of us who believe in capitalism and

1494 the power of the marketplace, is why don't we use this great
1495 tool to solve the biggest crisis we are facing? CO2 is
1496 invisible, tasteless, and odorless, and more importantly, it
1497 is not registered on the accounting ledgers. It has no price
1498 associated with it. So, the old aphorism, out of sight, out
1499 of mind, applies. As a consequence, we in this world, today,
1500 will put 70 million tons of it into the thin shell of
1501 atmosphere surrounding the planet.

1502 Scientists have known for 150 years that CO2 traps heat,
1503 and for 100 years, have worried that a massive increase would
1504 trap so much heat that it would cause big changes. And for
1505 the last 25 years, we have had the preeminent scientific
1506 organization in the world, the 3,000 best scientists in the
1507 world, from 113 countries, have issued four unanimous reports
1508 saying we have got to deal with it.

1509 So, how are we going to deal with it? The best way to
1510 deal with it is to use the marketplace.

1511 Mr. {Inslee.} Mr. Vice President, I want to ask you
1512 about, in a local impact, how that would work. I was
1513 happening to talk a guy who runs Taylor Shellfish. They have
1514 an oyster farm in Puget Sound, really reputable business for
1515 a long time. They can't grow oyster seed now in Puget Sound
1516 the last couple of years, and there is a very strong
1517 suspicion it is associated with the acidification of the

1518 ocean, which you educated us about.

1519 By the way, the NOAA research is that this is happening
1520 in the West Coast United States, probably twice as fast,
1521 which is now 30 percent worse than preindustrial times, there
1522 is new research on this. He could lose his business as a
1523 result of a policy of inaction, which some are suggesting
1524 here, that we should not act. And many of us believe that
1525 the costs of inaction here are much greater than the cost of
1526 action, that we will reduce the cost to the U.S. economy by
1527 actually acting. And I have got a lot of business in my
1528 district, like right across the right, Sapphire Energy. They
1529 are doing algae-based biofuels, Infinia Energy, doing
1530 Stirling Engine solar. We can grow the economy and avoid the
1531 devastation a lot of these businesses, like the Taylor Oyster
1532 Farm may have. Is that a fair projection of what the future
1533 could be?

1534 Mr. {Gore.} Well, I think it is, and it is a challenge
1535 to the moral imagination, to deal with the scope and scale of
1536 these changes. The idea that the entire world ocean would
1537 grow so acidic that everything that makes a shell will be
1538 unable to do so, unless we take action, is just astounding.
1539 And at the base of the food chain are these tiny little
1540 critters that have very thin shells. They are already being
1541 affected. If the base of the food chain is affected, then

1542 everything up the food chain is affected.

1543 The coral reefs are already under stress, great stress.

1544 A study just came out showing the Great Barrier Reef of

1545 Australia, the largest reef system in the world, thousands of

1546 miles, will be functionally dead by 2050 without action.

1547 Now, it is a combination of the warming water temperatures

1548 and the acidification, but yes. No, I think you are right on

1549 target. We need to address this.

1550 Mr. {Inslee.} Thank you.

1551 Mr. {Gore.} And thank you, Congressman Inslee, for your

1552 outstanding leadership and initiative on this issue over the

1553 years.

1554 Mr. {Markey.} The gentleman's time has expired. The

1555 chair recognizes the gentleman from Oregon, Mr. Walden.

1556 Mr. {Walden.} Thank you very much, Mr. Chairman, Mr.

1557 Vice President, Senator. It is good to have you before the

1558 committee.

1559 I wanted to just note that Mr. Vice President, your

1560 reference to \$0.30 a day comes from an EPA study, I believe.

1561 Unfortunately, that EPA study also assumes 150 percent growth

1562 in nuclear power in order to achieve that \$0.30 a day, and

1563 that nuclear part is not in this bill.

1564 I know there is concern about worker retraining. Mr.

1565 Vice President, you have said you wanted every coal worker

1566 who lost his job to get a job. Unfortunately, the worker
1567 transition piece in this bill, all we have is in parentheses,
1568 to be supplied, page 568 of the bill. And I have asked every
1569 other witness this, have you each read the bill in its
1570 entirety? Can I get a yes or no?

1571 Mr. {Gore.} Congressman, I have read all 648 pages of
1572 this bill. It took me two transcontinental flights on United
1573 Airlines to finish it.

1574 Mr. {Walden.} And I get another one at 2:00. Senator
1575 Warner, have you read the bill?

1576 Mr. {Warner.} The answer is no, I have not.

1577 Mr. {Walden.} All right. Let us, then let us go on to
1578 a couple of points, because--

1579 Mr. {Warner.} I am trying to--

1580 Mr. {Walden.} Mr. Vice President, because you talked
1581 about an issue that is dear to my heart, and I have raised it
1582 at every hearing I have participated in, and that is the
1583 health of America's forests. I come from a district with 11
1584 National Forests in it, with 20 percent unemployment in some
1585 of these counties, because nothing is happening meaningful in
1586 these forests. I am a big advocate of biomass. Do you
1587 support, yes or no, because we are tight on time, biomass
1588 from federal forests as a renewable energy source?

1589 Mr. {Gore.} You know, I think the protection of the

1590 federal forest is important, and Congressman, as a matter of
1591 curiosity, are you seeing the tree death in your forests from
1592 the--

1593 Mr. {Walden.} Yes.

1594 Mr. {Gore.} --beetles and the drying?

1595 Mr. {Walden.} In fact, this is from 1989. Tanner Gulch
1596 fire. It wiped out Spring Chinook Salmon Run in Oregon's
1597 Upper Grande Ronde River. This is an overchoked forest,
1598 although it looks fairly healthy from this picture. In
1599 California federal forests, here is what happens after you
1600 treat it and get it in, sorry. I am sorry. Here is what
1601 happens when you treat it, and try and manage it for old
1602 growth. This is the Malheur National Forest. It is out in
1603 Harney County. They have 20 percent unemployment right now.
1604 This is what happens when you don't treat it, and it burns.

1605 Mr. {Gore.} When you say treat it--

1606 Mr. {Walden.} Get in and manage it the way the
1607 biologists believe it should be managed. We have a 79 year
1608 backlog at the rate we are treating right now, to get these
1609 forests into balance, to deal with the climate change that
1610 you outlined. And the Forest Service, as you know, has done
1611 terrific research work over the years, trying to figure out
1612 climate change, and what needs to be done as management in
1613 these forests.

1614 That Malheur National Forest I referenced, they are at
1615 least 25 years out, based on the limited amount of acreage.
1616 We had investors that were ready to go into that county with
1617 20 percent unemployment, and do woody biomass production of
1618 renewable energy, and they cannot even get certainty from the
1619 forest of supply.

1620 This legislation, on page 8, says woody biomass is not
1621 renewable if it comes off federal ground, period. Beyond
1622 that, the way it is written, I have had private land
1623 foresters tell me, even off their private land, it would shut
1624 down biomass facilities if you followed this.

1625 Does that make any sense to you?

1626 Mr. {Gore.} Yeah, sure. Yeah. No, I understand
1627 exactly what you are saying.

1628 Mr. {Walden.} Do you agree with shutting it down? Do
1629 you agree with this language?

1630 Mr. {Gore.} I don't have a lot of confidence, based on
1631 what has happened in the past, when something, you know, I
1632 think that if you and I could sit down and talk about every
1633 little detail of which tree and so forth. You know, in
1634 Canada, they have this kind, a management approach.

1635 Mr. {Walden.} Right.

1636 Mr. {Gore.} And yet, their forests are being
1637 devastated.

1638 Mr. {Walden.} And why is that?

1639 Mr. {Gore.} It is primarily because the warmer
1640 temperatures are allowing that--

1641 Mr. {Walden.} Okay. So, doesn't that--

1642 Mr. {Gore.} If I could finish my--you asked me a
1643 question. If I could finish my answer. It is primarily,
1644 according to them, because the warmer temperatures--

1645 Mr. {Walden.} Right.

1646 Mr. {Gore.} --due to manmade global warming, are
1647 causing the pine beetles and bark beetles to--

1648 Mr. {Walden.} Right.

1649 Mr. {Gore.} --go on the rampage--

1650 Mr. {Walden.} Right.

1651 Mr. {Gore.} And they have lost many billions of dollars
1652 of--

1653 Mr. {Walden.} Right.

1654 Mr. {Gore.} And when they die and get dry in the higher
1655 temperatures, they are vulnerable to fire--

1656 Mr. {Walden.} Right.

1657 Mr. {Gore.} --and we have had all time record forest
1658 fires.

1659 Mr. {Walden.} So, doesn't that speak to managing those
1660 forests, to thin them out, when you know you are going to
1661 have drought, to open up the stands, get them back in balance

1662 with nature, and to be able to--the thing I am fighting here
1663 is, when you take--

1664 Mr. {Gore.} No.

1665 Mr. {Walden.} --that material out, to do exactly what
1666 Canada is doing, to do exactly what needs to happen on the
1667 Fremont-Winema National Forests, where you have more than
1668 200,000 acres of federal forestland that is exactly that way,
1669 bug-infested lodge pole pine, when that material comes out,
1670 why in the Devil do we say it is not renewable, and can't be
1671 turned into pucks like this, to help reduce carbon from coal?
1672 This could be put in a coal plant in my district, if they
1673 could get enough of this made. This comes out of Canada, by
1674 the way. They are doing that. Why do we preclude it in this
1675 bill?

1676 Mr. {Gore.} Well, I think the record of what has
1677 happened when it has been opened up in the past has given a
1678 lot of people pause, and diminished their confidence that it
1679 could be managed in a way that resembles the right result,
1680 but--

1681 Mr. {Walden.} Now, as you know, Mr. Vice President,
1682 every forest has a management plan, and every activity on
1683 that forest requires full NEPA. Mr. Chairman.

1684 Mr. {Markey.} I am just tapping you to just, I am not
1685 gaveling you, I am just tapping to let you know that you are

1686 past.

1687 Mr. {Walden.} Because a lot of these answers have gone
1688 on for twelve minutes after the five. I guess the point here
1689 is every activity on a federal forest already is covered by
1690 NEPA, isn't it? Every management activity.

1691 Mr. {Gore.} I don't think those provisions of NEPA have
1692 been effective in preventing some of the abuses that occurred
1693 during some times in the past.

1694 Mr. {Walden.} I will tell you this. I will close. Why
1695 don't you come out, and I will take you to the Malheur
1696 National Forest. And together, we will walk in these stands,
1697 or the Winema, Fremont-Winema National Forests, and we will
1698 meet with the professionals. Or up in the Wallowa-Whitman,
1699 where they are heating the school with biomass. Or the
1700 Harney County--apparently, I am out of time.

1701 Mr. {Gore.} I appreciate your invitation, Congressman.
1702 I have been to the forests of Oregon. I would love to come
1703 back. I was active in forming the Forest Plan of 1994 for
1704 the Pacific Northwest.

1705 Mr. {Walden.} The Northwest Forest Plan.

1706 Mr. {Gore.} Yeah.

1707 Mr. {Walden.} Which has its own set of issues being
1708 implemented.

1709 Mr. {Gore.} Yeah, but it has been largely a great

1710 success.

1711 Mr. {Walden.} I dispute that.

1712 Mr. {Gore.} Well--

1713 Mr. {Markey.} The gentleman's time has expired. The
1714 chair recognizes the gentleman from North Carolina, Mr.
1715 Butterfield.

1716 Mr. {Butterfield.} Thank you very much, Mr. Chairman.
1717 Let me also thank both of you for your testimony today, and
1718 for your extraordinary service to our country.

1719 Let me try to go in a little different direction if I
1720 can, and this time goes very quickly, as you can imagine.
1721 But I represent a very low income district in Eastern North
1722 Carolina, Greenville, Rocky Mount, Elizabeth City, very low
1723 income district. We are the fourth from the bottom in the
1724 United States of America, in terms of median family income.
1725 I think the income is like \$30,400 per year. And so we are,
1726 essentially, a poor district.

1727 And so, I am obviously concerned about the costs of this
1728 legislation, and what it will do to low income families, not
1729 just for electricity, but for everything that we consume,
1730 plastics and rubber, and food and the like. And so, my
1731 question to you is, Mr. Gore, what do I tell a single parent,
1732 for example, in my district, with two children, two young
1733 children, making \$8 an hour? What can I say to reassure her

1734 that she will be able to afford the cost of this legislation?

1735 And it may be \$0.30 a day, it may end up being much more
1736 than that. I hope that you are right, and that the, those on
1737 the other side of the aisle are wrong, but if it happens to
1738 be expensive, my families, my low income families, cannot
1739 absorb the cost of this legislation. I need some help with
1740 that.

1741 Mr. {Gore.} Well, I think other provisions of this bill
1742 can lead to reductions in the cost for that family. And as
1743 we saw in Hurricane--

1744 Mr. {Butterfield.} But not immediate reductions.

1745 Mr. {Gore.} Well, it depends on how quickly they are
1746 implemented, and how they are taken advantage of. And let me
1747 say that, as we saw with Hurricane Katrina, low income
1748 families are often the most likely the suffer the harmful
1749 consequences if we do not address the global warming issue.
1750 And the new job creation that comes from the green energy
1751 jobs that are being created, are going to benefit the same
1752 communities of low income families.

1753 Mr. {Butterfield.} Well, that is very difficult to
1754 explain to a low income family that is already in the
1755 deficit, in deficit spending. It is very difficult, and we
1756 need to do a better job in crafting this legislation, to make
1757 sure that we have an economic offset, some type of assistance

1758 for low income families, to make sure that they do not pay an
1759 inordinate price for this legislation.

1760 Senator Warner, as you can see from the ebb and flow of
1761 the testimony today, there are some who criticize this
1762 legislation as a measure that will result in fewer American
1763 jobs and fewer investment opportunities. You talked a few
1764 minutes ago about creating a beachhead. I know what that
1765 means in military language, but how can we develop a
1766 political beachhead to make sure that the American people
1767 understand this, and to make sure that the element of fear
1768 does not dominate this conversation?

1769 Mr. {Warner.} I shared the burdens you have, of talking
1770 to my people when I was leading the effort in the Senate. It
1771 was a brand new concept, and we couldn't establish clear cost
1772 parameters. But I would say to that wonderful family, the
1773 cost today, hopefully, will result in an America that they
1774 pass on to their children that they can enjoy, as did their
1775 parents.

1776 I do believe, and I say this respectfully, Mr. Chairman,
1777 and when we worked on our bill, I tried to resist a lot of
1778 the efforts, good intentioned, to take such funds that were
1779 going to be developed by the cap and trade concept, and
1780 spread them around in areas other than directly for the goals
1781 of increasing our energy, clean energy output. I think if

1782 you begin to try and utilize this bill as another means by
1783 which to take care of well deserving families and well
1784 deserving causes, you are going to lose public support.

1785 They will pay if they are confident that the dollars in
1786 this bill go towards the goal of clean energy, cost effective
1787 energy, and improved health.

1788 Mr. {Butterfield.} So, you would not support the
1789 concept of offsetting the economic impact on low income
1790 families.

1791 Mr. {Warner.} Well, there may be other ways to do it
1792 than this piece of legislation. If we make this, I would
1793 say, when I talk to my colleagues, a welfare bill, I don't
1794 think the public is going to begin to support it.

1795 Mr. {Butterfield.} On the question of the loss of jobs,
1796 the--

1797 Mr. {Warner.} The loss of jobs--

1798 Mr. {Butterfield.} Does taking action on this
1799 legislation come at the expense of American jobs?

1800 Mr. {Warner.} No, I think quite the contrary. There,
1801 authoritative polling that shows that the American public
1802 looks at this bill as a means to increase the number of jobs,
1803 as well as help improve health conditions, and they are quite
1804 anxious to see that it will help our national security.

1805 Mr. {Butterfield.} Thank you. Mr. Chairman, I yield

1806 back.

1807 Mr. {Markey.} The gentleman's time has expired. The
1808 chair recognizes the gentleman from Texas, Mr. Burgess.

1809 Mr. {Burgess.} I thank the chairman. I appreciate both
1810 witnesses being with us today. I appreciate your willingness
1811 to hear from members of the subcommittee.

1812 Vice President Gore, when you were here in our
1813 subcommittee, maybe it has been two years ago, as you were
1814 leaving, I recall the statement was made that, about a carbon
1815 tax that would just replace the existing payroll tax and
1816 income tax, and there is a, certainly Tom Friedman writing in
1817 the New York Times a couple of weeks ago, asked the very same
1818 question. Would we not be better, rather than trying to play
1819 hide the ball with cap and trade, would we not be better just
1820 being honest with the American people, and saying we are
1821 going to tax energy? We are going to tax carbon.

1822 And perhaps to the extent that we tried to make that
1823 revenue neutral by replacing the payroll tax, replacing at
1824 least a portion of the income tax with this new carbon tax,
1825 would that not be a straightforward way for us to go about
1826 this, rather than us try to pick winners and loser?

1827 Mr. {Gore.} As I said earlier, Congressman, thank you
1828 for your question, as I said earlier, I have supported a
1829 revenue neutral CO2 tax, with the money given back. It could

1830 be given back to the people in a variety of different ways.
1831 But I do not support it to the exclusion of cap and trade. I
1832 think that cap and trade is the essential first step in order
1833 to use the market forces to address this problem, and to
1834 secure a global agreement around that principle, which
1835 already has broad support throughout the world.

1836 Mr. {Burgess.} And I actually would dispute that
1837 concept, but here is part of our problem. I absolutely agree
1838 with both of you about the economic factors. There is no
1839 question that the energy, cost of energy, the burden of
1840 energy costs on our families has been significant, and it
1841 will be significant again in the future. So, finding ways to
1842 deliver energy at a reasonable cost is important, and I--no
1843 argument with that.

1844 No argument about the security question. Our good
1845 friend, Boone Pickens, said it so eloquently last summer,
1846 that we are funding both sides of the War on Terror. People
1847 get that. Our trade deficit that has been so high recently,
1848 people get the negative impact that that has on our economy,
1849 and I think one of you even references peak oil to some
1850 degree. At some point, oil likely is going to be a finite
1851 resource, and looking for other sources. Absolute agreement
1852 to that point.

1853 But we always, then, come down to arguing about, did

1854 global warming cause Katrina? Did global warming cause the
1855 death of a polar bear? And there are going to be arguments
1856 on both sides. Why not just leave that aside? Why not focus
1857 on the security? Why not focus on the economy? Why do we
1858 have to be in a position of picking winners and losers?

1859 We have just watched a financial meltdown in this
1860 country the likes of which hasn't been seen in some time.
1861 Now, if people like credit default swaps, they are really
1862 going to like the carbon swaps that are going to occur, and
1863 the carbon futures swaps. We spent a full day in this
1864 committee last summer, talking about the manipulation of the
1865 energy futures market in oil. We are going to create, I
1866 fear, another such system that people who are, have an
1867 inclination to react dishonestly to systems, are going to
1868 actually have a new opportunity. Is that not a problem?

1869 Mr. {Gore.} Well, let me look at your analogy in a
1870 slightly different way. There were warnings that the credit
1871 default swaps and the subprime mortgages, and the other
1872 activities that caused the financial crisis were going to
1873 bring us ruin if we didn't address them, and nothing was done
1874 about it. If I could finish my answer.

1875 There are warnings now of a far worse catastrophe, and
1876 they are coming from a unified IPCC representing the global
1877 scientific community, and if nothing were to be done about

1878 it, the results would be far worse. Now, let us look at the
1879 subprime mortgages. I remember the days when you made a down
1880 payment and proved you could make the monthly payments. And
1881 the risk, we were told the risk was washed away by
1882 securitizing them and lumping them together, and that
1883 assumption collapsed.

1884 We now have several trillion dollars of subprime carbon
1885 assets, whose value is based on an assumption that it is
1886 perfectly okay to put 70 million tons of that pollution up
1887 there every 24 hours--

1888 Mr. {Burgess.} And this is what--

1889 Mr. {Gore.} So, the reason, in answering your first
1890 question.

1891 Mr. {Burgess.} I am going to have to interrupt you.

1892 Mr. {Gore.} Why we--why can't we ignore it--

1893 Mr. {Burgess.} I am going to run out of time.

1894 Mr. {Gore.} --because it is the biggest crisis we have
1895 ever faced.

1896 Mr. {Burgess.} And no one who has come before this
1897 committee from a scientific basis can show us the smoking gun
1898 that mankind is causing this to happen. There are, you can
1899 create relationships between the number of sunspots and the
1900 partisan makeup of the Senate. Anything can be proven, if
1901 you are willing to take the time to have the numbers.

1902 Mr. {Gore.} Congressman Burgess.

1903 Mr. {Burgess.} Let me just go to another point, because
1904 it was a terribly important--

1905 Mr. {Gore.} Could I respond to that?

1906 Mr. {Burgess.} No, I need to make this point. Dr. Apt,
1907 who was with us yesterday, and he said it so eloquently, that
1908 we have to focus on reducing carbon dioxide, rather than
1909 trying to pick winners and losers in this. If we will focus
1910 on what is the reasonable thing to do, whether we want to
1911 focus on security, whether we want to focus on the economy,
1912 or we can spend a lot more time arguing about the science of
1913 climate change.

1914 When we construct this bill, and Senator Lieberman, or
1915 Senator Warner said it so well, when we construct this bill,
1916 we have to have the flexibility that we give people credit
1917 for doing the energy efficiency things that we want them to
1918 do. We give people credit for creating the newer
1919 technologies that we want them to do, rather than us pick
1920 every jot and tittle of winners and loser in the bill, which
1921 is unfortunately the draft that we have in front of us.

1922 I will yield back, Mr. Chairman, thank you.

1923 Mr. {Markey.} Vice President?

1924 Mr. {Warner.} Could I have just a minute, less than a
1925 minute? I think a carbon tax is very simple, very

1926 understandable, but I think it would bring the bill down. I
1927 don't think you will get the votes to support it. The
1928 inherent advantages--

1929 Mr. {Burgess.} And just for the record, I would not
1930 support a carbon tax.

1931 Mr. {Warner.} Yeah, well, all right. The inherent, I
1932 think inherently, in a cap and trade system that can be
1933 devised, is the incentive for the industrial base of this
1934 country, the technological base, to solve the problems and to
1935 go forward. It also, if we have a bill, it begins to enable
1936 that same base to do its long range planning. The power
1937 industry has to look forward 10, 12, 15 years out, as to
1938 their requirements, and if we keep hanging over this, global
1939 warming thing over their head, they can't make their orderly
1940 planning. We have got to get the beachhead. We have got to
1941 tell them here is what we are trying to do, and can you do
1942 it, if we give you this flexibility and this support. And
1943 they did it in clean air. They can do it in this.

1944 Mr. {Markey.} The gentleman's time has expired.

1945 Mr. {Burgess.} I would just make the point, this bill
1946 does not have the flexibility inherent in the language as it
1947 is before us today.

1948 Mr. {Markey.} The gentleman's time has expired. The
1949 recognizes the gentleman from California, Mr. McNerney.

1950 Mr. {McNerney.} Thank you, Mr. Chairman. First of all,
1951 I would like to ask the committee, with unanimous consent,
1952 that I be allowed to submit comments for the record on behalf
1953 of the National Association of Realtors.

1954 [The information follows:]

1955 ***** COMMITTEE INSERT *****

|
1956 Mr. {Markey.} Without objection, so included.

1957 Mr. {McNerney.} Thank you. Mr. Gore, I have to, Vice
1958 President Gore, I have to just admire how you have been
1959 willing to put your personal reputation on the line year
1960 after year, for something that you truly believe in, despite
1961 the most vicious attacks on your character, that are totally
1962 without merit. And that takes a great amount of bravery, and
1963 I have the greatest amount of respect for you for doing that.

1964 Mr. {Gore.} Thank you, sir.

1965 Mr. {McNerney.} Well, you have been pretty explicit
1966 about the economic rollercoaster that we have been on, due to
1967 energy instability, the price instability of energies. Do
1968 you believe, that I believe, like I believe, that by
1969 increasing energy efficiency, and finding new sources of
1970 energy, that we can get ahead of the energy cost problem, and
1971 ultimately, pay less for energy, for better results with the
1972 cap and trade system, which will also create jobs, and
1973 stabilize the economy, and get rid of that rollercoaster?

1974 Mr. {Gore.} I certainly do agree with that. I think
1975 that if we made up our minds to lead this transition, we
1976 would benefit not only with millions of new jobs, but also,
1977 with lower energy costs and a much more productive economy.
1978 I don't think there is any question about it. The only

1979 question is whether we are going to lead the world, or
1980 whether we are going to follow those who provide leadership
1981 elsewhere. If we lead, we get the jobs. We get the
1982 technologies to sell elsewhere, and we get the productivity
1983 gains. That is the role I think we ought to adopt.

1984 Mr. {McNerney.} Thank you, Vice President. Senator, do
1985 you want to respond to that?

1986 Mr. Gore, you mentioned the smart grid as a part of the
1987 solution to reducing our carbon emissions. Can you explain
1988 the connection there? I think it is something that a lot of
1989 people don't quite understand.

1990 Mr. {Gore.} Yeah. The phrase smart grid is confusing
1991 to some, because in many parts of the world, it is used to
1992 describe the distribution of energy, and the use of smart
1993 meters that give homeowners and business owners a better way
1994 to reduce the wasteful use of energy, and use efficiency and
1995 conservation more effectively.

1996 But maybe we ought to call it a supergrid. That is what
1997 the Europeans call one of their proposals, because it
1998 essentially has two components. It makes it possible to
1999 transmit over high technology lines, over a long distance,
2000 renewable electricity from the areas with high sunlight, in
2001 the desert, for example, to the cities where it is used. And
2002 from the wind corridor, that my friend Boone Pickens talks

2003 about a lot, running up north and south along the High Plains
2004 and the Mountain States, and take that electricity to the
2005 cities where it is used, and from the geothermal areas. That
2006 is the first part, long distance, low loss transmission, from
2007 areas that don't have a lot of people, but do have a lot of
2008 renewable resources, to the places where it can be used.

2009 The second feature of it involves the use of data
2010 processing, chips, a very cheap but very powerful and
2011 effective information technologies, to empower the end users
2012 to use less and get more, and to sell electricity back into
2013 the grid, if they put photovoltaic cells on their roof, or
2014 use small wind, or other forms of what is called distributed
2015 power generation.

2016 Mr. {McNerney.} Thank you. That was a fairly detailed
2017 discussion.

2018 Do you have any comments about the value of using a
2019 Green Bank, in terms of making the transition easier for the
2020 American people, or for the individuals and families in our
2021 country?

2022 Mr. {Gore.} Well, that is not in the draft of this
2023 legislation, and I want to reiterate and make it clear that I
2024 support this legislation, but I am familiar with the proposal
2025 that my friend of 50 years, Reed Hunt, has put together, with
2026 others, called a Green Bank. I think it is a very

2027 imaginative, very excellent idea, and I commend it to your
2028 attention.

2029 Mr. {McNerney.} Well, thank you. You know, your list
2030 of impacts due to global warming was fairly sobering. And if
2031 we are marching along that path, it is fairly risky. Do you
2032 think that that is, do you think we are sort of on a steady
2033 state, or do you think we are accelerating our march down
2034 that path?

2035 Mr. {Gore.} Well, we are presently accelerating in a
2036 direction toward a precipice. We still have time to change
2037 course, and I will answer in a way that is also relevant to
2038 the answer. The time ran out on the exchange that I was
2039 having with Congressman Burgess.

2040 Mr. {McNerney.} Feel free to end, to respond to that
2041 earlier question.

2042 Mr. {Gore.} Not too long from now, the next generation
2043 is going to look back at the beginning years of this century,
2044 and ask one of two questions. Either they will ask what were
2045 you thinking? Didn't you hear the scientists? Why did you
2046 prefer to listen to some outlier quack that got money from
2047 these carbon polluters that were engaged in a massive fraud?
2048 Why didn't you listen to the global scientific community?
2049 Just because you didn't have access to the scientific studies
2050 of the carbon polluters themselves, because they hid them, is

2051 no excuse. What were you thinking? Why did you let this
2052 happen?

2053 Or they will ask a second question, the one I want them
2054 to ask. How did you find the moral courage to look past the
2055 short term controversies of the day, and rise to solve a
2056 crisis that so many said was inconvenient to address? Thank
2057 you.

2058 Senator Warner's generation won a war in the Pacific and
2059 in Europe simultaneously, and then put down the Marshall Plan
2060 and the United Nations and the post-War recovery. It wasn't
2061 very convenient for them to do, but they did it because our
2062 national security was at stake. Our national security is at
2063 stake now, and it is a challenge that this Congress must rise
2064 to.

2065 I don't know how to say it. I wish I could find the
2066 words, to get past the partisan divide that both sides have
2067 contributed to, but I really wish I could find the words to,
2068 that would unlock this. It shouldn't be partisan. It should
2069 be something we do together in our national interest. The
2070 next generations are calling out to us.

2071 Mr. {Markey.} The gentleman's time has expired. The
2072 chair recognizes the gentleman from Louisiana, Mr. Scalise.

2073 Mr. {Scalise.} Thank you, Mr. Chairman.

2074 As we debate what I agree is a very important piece of

2075 legislation, a piece of legislation, in my opinion, and many
2076 others would have very detrimental effects on our economy if
2077 it was implemented the way it has been drafted. We have been
2078 trying to get a quantifiable grasp on the cost of this bill,
2079 how much it would actually cost American families, how many
2080 jobs would be created and lost, and we have, number one, on
2081 the science side, we have had very divergent views. We have
2082 had dozens of experts come over the last few days and
2083 testify, giving very different opinions on the science.

2084 On the economics of it, we have not had the same kind of
2085 divergence. In fact, most economists and experts that have
2086 testified on the cost acknowledge, in fact, I will refer to
2087 President Obama's own budget, that was just passed two weeks
2088 ago. If you go to page 119 of the President's budget, he is
2089 anticipating generating \$646 billion in new tax revenue from
2090 this bill. So, clearly, the President expects this bill to
2091 generate \$646 billion in new taxes, that even his own Budget
2092 Director has said would be passed onto consumers.

2093 Senator Warner, we had seen numbers on the Lieberman-
2094 Warner Bill, the President's Budget Director today, he was
2095 the head of CBO last year, when he testified on your bill, he
2096 said it would have cost consumers about \$1,300 a year more in
2097 their average utility bills, in addition to everything else
2098 they buy that is related to electricity, gasoline, food,

2099 anything else.

2100 Can you, and then Senator Gore, talk to the numbers that
2101 the Congressional Budget Office, and now, the President's
2102 Budget Director, gave to your bill, and how that would relate
2103 to this bill, in terms of the cost to American families, of
2104 implementing a cap and trade energy tax?

2105 Mr. {Warner.} I would say that the work done by the
2106 Budget Office on the bill that I was privileged to be working
2107 with, is a good foundation, and that you can, I think many of
2108 the assumptions would carry over to this legislation.

2109 But Congressman, we have got to make a start. If we are
2110 looking for absolute certainty, we are never going to get a
2111 bill. We have to start the learning curve, start the
2112 process, and then build on it. And that is why I strongly
2113 urge that you incorporate language, to give to the Chief
2114 Executive Officer of this country the authority to move in
2115 when he believes that corrections have to be made.

2116 Mr. {Scalise.} And of course, we don't see that in
2117 this, and I am sorry to interrupt, but I know my time is
2118 limited. Vice President Gore.

2119 Mr. {Gore.} Congressman, you began by denying that
2120 there is a consensus on the science. There is a consensus on
2121 the science.

2122 Mr. {Scalise.} Well, you mustn't have been listening to

2123 our testimony that we have had for the last few days with
2124 dozens of experts that have come in, who have given
2125 completely different views. So, I would--

2126 Mr. {Gore.} Well, there--

2127 Mr. {Scalise.} I would encourage you to go back and
2128 look at the testimony this committee has heard.

2129 Mr. {Gore.} There are people who still believe that the
2130 Moon landing was staged on a movie lot in Arizona.

2131 Mr. {Scalise.} And neither of us are one of those, and
2132 I know you like giving those cute anecdotes. This is not a
2133 cutesy issue. We are talking about--

2134 Mr. {Gore.} No. That--

2135 Mr. {Scalise.} --export millions of jobs out of our
2136 economy, out of our country, and testimony has been given
2137 just to those numbers. And so, we are talking about a
2138 serious consequence that there would be on this country, and
2139 the carbon leakage that would occur, where the carbon would
2140 be emitted, but it would be emitted in China, in India, and
2141 the jobs would go to China and India. And that has been
2142 testified before this committee in the last few days as well.

2143 Mr. {Gore.} Man--

2144 Mr. {Scalise.} Would you testify about the actual cost.
2145 Do you want--

2146 Mr. {Gore.} Man--

2147 Mr. {Scalise.} --to testify about the cost?

2148 Mr. {Gore.} Manmade global warming pollution causes
2149 global warming. That is not a cutesy issue. It is not an
2150 open issue.

2151 Mr. {Scalise.} And it is your opinion. Obviously, you
2152 have stated it many times.

2153 Mr. {Gore.} It is the opinion of--

2154 Mr. {Scalise.} Would you talk to the cost?

2155 Mr. {Gore.} --the global scientific community, and more
2156 importantly--

2157 Mr. {Scalise.} And not in unanimity. There are others
2158 on the other side.

2159 Mr. {Gore.} More importantly, Congressman, that opinion
2160 is the opinion of the scientific studies conducted by the
2161 largest carbon polluters 14 years ago, who have lied to you,
2162 and who have lied to the American people for 14 years.

2163 Mr. {Scalise.} And you talk about carbon--and I have
2164 got-- I am running out of time. We talk about carbon
2165 polluters. You talk about them. It is my understanding that
2166 back in 1997, when you were Vice President, Enron's CEO, Ken
2167 Lay, was involved in discussions with you at the White House,
2168 about helping develop this type of policy, this trading
2169 scheme. Is that accurate, is it inaccurate? It has been
2170 reported.

2171 Mr. {Gore.} I don't know. But I met with Ken Lay, as
2172 lots of people did, before anybody knew that he was a crook.

2173 Mr. {Scalise.} Right. And clearly, you can see why so
2174 many of us are concerned about this type of cap and trade
2175 energy tax, that would be literally turning over this
2176 country's energy economy--

2177 Mr. {Gore.} I didn't know him well enough to call him
2178 Kenny Boy.

2179 Mr. {Scalise.} Well--but you knew him well enough to
2180 help him devise this trading scheme, and obviously, we know
2181 what Enron and these big guys on Wall Street, like Goldman
2182 Sachs, and I know you have got interests with Goldman Sachs.

2183 Mr. {Gore.} No.

2184 Mr. {Scalise.} These people--well, it is--that has been
2185 reported. Is that not accurate?

2186 Mr. {Gore.} No, I wish I did. I don't.

2187 Mr. {Scalise.} With executives from, you are partnered
2188 in companies with executives from Goldman Sachs. Well, if
2189 you are not. Either way, Enron clearly had an interest in
2190 doing this. When they were around, we saw what they did, and
2191 when you see the types of people involved in wanting to set
2192 up this kind of scheme, you can see why so many of us are
2193 concerned about turning--

2194 Mr. {Gore.} Are you--

2195 Mr. {Scalise.} --our energy economy over to a scheme
2196 that was devised by companies like Enron and some of these
2197 Wall Street firms--

2198 Mr. {Gore.} Well, that--I mean--

2199 Mr. {Scalise.} --that have wrecked our financial
2200 economy.

2201 Mr. {Gore.} I don't really know if you want me to
2202 respond to that. I guess what you are trying to say, you are
2203 trying to state that there is some kind of--

2204 Mr. {Scalise.} I mean, clearly, there would be big
2205 winners and big losers.

2206 Mr. {Gore.} You are trying to say that there is some
2207 kind of--

2208 Mr. {Markey.} Mr. Scalise, please allow the Vice
2209 President to answer.

2210 Mr. {Gore.} --guilt by association. Is that your--

2211 Mr. {Scalise.} Not association. I am saying that there
2212 are going to be big winners and big losers in this bill, and
2213 that has been discussed by everybody talking. Big winners
2214 and big losers, but some of the big winners are some of the
2215 very financial experts that helped destroy our financial
2216 marketplace, and I think that should be noted, that companies
2217 like Enron helped come up with this trading scheme that we
2218 are going to vote, in cap and trade.

2219 Mr. {Gore.} Enron didn't create this proposal in any
2220 way, shape, or form. That is a false accusation.

2221 Mr. {Scalise.} Well, the details are not in this bill.
2222 The details are not in this bill, and I would suggest that
2223 they are.

2224 Mr. {Warner.} Mr. Chairman, I do need a few minutes. I
2225 really have had a marvelous opportunity to work with many,
2226 many interested parties across this country on this subject,
2227 including corporate America and the business community. And
2228 I hope that those following this hearing don't get the views
2229 that the wrongdoing by what I hope is a very small minority
2230 should not be brushed across the whole spectrum.

2231 Indeed, if we are going to solve this problem, we have
2232 got to rely on the corporate America, the financial America,
2233 the technical America, to work our way out within the
2234 constraints and directions of the legislation. But I find
2235 that there is far, in the majority, most people are trying to
2236 responsibly come up with solutions to this problem.

2237 Mr. {Scalise.} And here is an alternative. The
2238 American Energy Act, which was filed last year--

2239 Mr. {Markey.} The gentleman's time--

2240 Mr. {Scalise.} --which I still think is a better
2241 alternative--

2242 Mr. {Markey.} The gentleman's time--

2243 Mr. {Scalise.} --to cap and trade is still out there.

2244 Mr. {Markey.} The gentleman's time has expired, and for
2245 the record--

2246 Mr. {Scalise.} I yield back.

2247 Mr. {Markey.} For the record, the proposal that we are
2248 considering has had the CEO of General Electric, of Alcoa, of
2249 Rio Tinto, of corporations across the country, who have
2250 testified in conjunction with major environmental groups.
2251 That is the proposal that we are considering.

2252 The chair recognizes the gentleman from Vermont, Mr.
2253 Welch.

2254 Mr. {Welch.} Thank you, Mr. Chairman. Thank you,
2255 Senator. Thank you, Mr. Vice President.

2256 I am a new member of this committee, and as I have
2257 listened to the questions of my colleagues on both sides, I
2258 have come to the conclusion that there are those of us who, I
2259 think, basically take the view that you have advocated, that
2260 we have to act, and then, some of the opposition comes from
2261 folks who don't believe it is necessary. They essentially
2262 deny the existence of the problem. But there are many good
2263 faith questions about what the impact will be on jobs, the
2264 dislocation, the economy. People like Mr. Burgess, Mr.
2265 Walden, have asked that questions that, frankly, I think
2266 those of us who are advocates have the burden of doing our

2267 best to answer.

2268 But at times, it sometimes seems as though those
2269 concerns become not so much addressed to solve the problem,
2270 but to avoid action. And Senator, I am going to ask you,
2271 based on your 30 years of service in the United States
2272 Senate, having to find common ground with people on the other
2273 side of the aisle, what advice do you have to those of us who
2274 share your view that this is a bill that has to be passed?
2275 How do we find a way to reach agreement with the good faith
2276 objections that come from people who don't agree with us
2277 quite yet?

2278 Mr. {Warner.} Well, that has been the history of our
2279 Congress since its very inception. We are admired by the
2280 world for many reasons, and one is that we have the longest
2281 continuously surviving form of government, and it provides
2282 for healthy debate. It provides, to the extent possible, for
2283 full debate.

2284 Unfortunately, our chamber, the Senate, now has had less
2285 and less debate, because of resorting to certain rules which
2286 are on the book, created by ourselves, but it is important
2287 that the views of those in opposition be heard, respected,
2288 because I think most people are conscientious, who object to
2289 this. But we have got to find a way. You cannot just
2290 accept, throw up your hands. We can't do it. We just must

2291 do it.

2292 Maybe you are not going to, and I hope you get as much
2293 as you think you can, but you are not going to get the whole
2294 loaf. You are going to get a part of it, but you will have
2295 sent the signal across America that the Congress is ready to
2296 move forward on this issue, and that will get the attention
2297 here at home, and that will get the attention of the world.

2298 Mr. {Welch.} Thank you, and Mr. Gore, I want to ask you
2299 your thoughts on a couple of approaches that I think make
2300 sense to take, in order to try to build some of these
2301 bridges.

2302 One is efficiency. You have talked about that. My
2303 view, and I have some aspects in this bill, that say we start
2304 addressing this by efficiency. It is within our control. We
2305 have got a provision in the bill, a small one, but important
2306 one, to allow homeowners to get tax credits, businesses to
2307 get tax credits and incentives, for saving. The more they
2308 save, the more of an incentive they get. It is the local
2309 jobs that you spoke about. I would hope that that would be a
2310 way of finding some common ground.

2311 And a second issue may be to incorporate into this
2312 legislation a monitoring device to basically ask these
2313 questions every three months or six months, about what is, in
2314 fact, the job impact, because those are fair questions.

2315 And I want to get your advice and thoughts about
2316 suggestions you might have to try to provide some legitimate
2317 reassurance to legitimate questions that are raised about
2318 dislocation and economic impact.

2319 Mr. {Gore.} Yeah. Well, I think the provisions of the
2320 bill in the current draft adequately and imaginatively
2321 address that question. I think there would be potentially
2322 massive job losses, if we did not adopt this legislation,
2323 because if we just continue on with business as usual,
2324 ignoring the warnings, and then, just sit and wait until the
2325 oil prices go sky high again, that is what would cause the
2326 massive job losses.

2327 I think that the creation of jobs by this bill will far,
2328 far outstrip any losses that would be associated with it. I
2329 genuinely believe that.

2330 Mr. {Welch.} Okay. And what do you think about having
2331 in the bill some provision to actually try to monitor that,
2332 some referee that is actually looking at the data, what is
2333 the impact of each provision of the bill, and providing, as
2334 we go along, some data that hopefully is credible?

2335 Mr. {Gore.} Well, that sounds like a good idea to me.
2336 I know that there are provisions in the legislation now that
2337 require regular reports and regular analyses of several
2338 matters, some of which do relate to this. If they need to be

2339 fine-tuned, then maybe that is a good thing.

2340 Mr. {Welch.} Okay. Thank you very much. Senator.

2341 Mr. {Warner.} While I haven't read the whole bill, I
2342 have studied those portions I felt that would be addressed
2343 today, and particularly, the area of national security.

2344 So, I think you should monitor. In order to give the
2345 President the guidelines as to move forward with the throttle
2346 or pull back on the throttle.

2347 Mr. {Welch.} Okay. Mr. Chairman, I will yield back,
2348 but I just want to tell the Vice President that my office in
2349 1404 Longworth, I believe was your dad's, that is what they
2350 were saying, when he was in Congress.

2351 Mr. {Gore.} Oh, that is great. I didn't know that.

2352 Mr. {Welch.} And I am living in an apartment that you
2353 may be familiar with, it is the Tennessee Apartment in the
2354 Methodist House with Congressman Cooper.

2355 Mr. {Gore.} Oh, great.

2356 Mr. {Welch.} And I don't know if you left anything
2357 behind, but we will check.

2358 Mr. {Gore.} Not that I know of, but thank you.

2359 Mr. {Markey.} Okay. The gentleman's time has expired.
2360 The chair recognizes the gentlelady from Wisconsin, Ms.
2361 Baldwin.

2362 Ms. {Baldwin.} Thank you, Mr. Chairman, and thank you

2363 to our witnesses, Mr. Vice President, Senator Warner. It is
2364 an honor to have you here, and we appreciate your knowledge
2365 and insights on this issue.

2366 Our Nation's security, our planet's sustainability, and
2367 our children's future really do hang in the balance at this
2368 moment. And the world is watching our every step. They are
2369 looking to us, with the largest economy, the greatest
2370 innovations, the richest resources, to bring leadership and
2371 commitment to this issue, and to Copenhagen and beyond. I
2372 believe we absolutely cannot show up to Copenhagen empty-
2373 handed.

2374 Mr. Vice President, I know you have met with leaders
2375 from all over the globe on this issue and many others. And
2376 so, I would like you to speak, in perhaps a little bit of a
2377 crystal ball, looking into the future, how would the world
2378 respond to our bringing the policies in this bill to the
2379 table in Copenhagen, and how would the world react if we fail
2380 to act, and we don't have those policies to bring to the
2381 negotiating table in Copenhagen?

2382 Mr. {Gore.} I think the enactment of this legislation
2383 and the adoption of a position by the Obama Administration,
2384 that was in keeping with this legislation, would be met with
2385 great relief and approval, although I must tell you that the
2386 reductions in this legislation and those proposed by the

2387 Obama Administration are far short of what would cause
2388 cheering and celebration in the rest of the world, because so
2389 many other parts of the world have already gone much farther.

2390 But I think that it would be met with a sigh of relief.
2391 I think there would be, I think it would lead to a major
2392 shift by countries around the world, and would lead to an
2393 agreement that would put in place a mechanism for solving the
2394 climate crisis.

2395 Were this legislation not to pass, and if the
2396 Administration went to this global negotiation without this
2397 legislation, then I think we might well see a slow motion
2398 collapse of the negotiation, much as the Doha Round has all
2399 but collapsed. And I think that would be awful to
2400 contemplate.

2401 I have no idea how the world could regroup and come up
2402 with some other approach, without wasting decades, and of
2403 course, as many of you are well aware, some of the leading
2404 scientists in the world have said for some time now that we
2405 may be within a decade or so of crossing a tipping point
2406 beyond which this could unravel on us.

2407 I mentioned in my opening statement that the
2408 disappearance of the ice in the Arctic is already leading to
2409 methane releases from the thawing tundra. If that were to
2410 accelerate, it would be one of several tipping points that we

2411 really ought to avoid crossing.

2412 Ms. {Baldwin.} Well, I have fairly recent recollections
2413 of the December 2007 round in Bali, where one negotiator, I
2414 think it was from Papua, New Guinea, was famously quoted as
2415 saying to the U.S., we look to your leadership, we yearn for
2416 your leadership, but if you are not going to lead, please get
2417 out of the way. And I do not want to see any sort of repeat
2418 of that type of thing on the world stage.

2419 Now, I want to relate to your struggle a few moments
2420 ago, to come up with the right words to define this moment,
2421 because we are talking and asking questions based on the
2422 concerns that our current constituents raise with us about
2423 this measure. And I wonder, what if the future generations
2424 had a voice, and if people living in our districts in 2080 or
2425 2090 could speak to us now, what would they be saying? And I
2426 think we would be acting fairly hastily, if indeed, we could
2427 hear their voices as we hear our constituents today.

2428 I will give you one piece of poetry, actually, that I
2429 think brings it out pretty well, by a fellow named Drew
2430 Dellinger. He says: ``It's 3:23 in the morning, and I am
2431 awake, because my great great grandchildren won't let me
2432 sleep. My great great grandchildren ask me in my dreams,
2433 what did you do when the planet was plundered? What did you
2434 do when the Earth was unraveling?''

2435 And with that, I want to ask Senator Warner if--

2436 Mr. {Markey.} If you could ask one quick question.

2437 Ms. {Baldwin.} I had heard an anecdote, and I wanted to
2438 hear from you if it was true, that you came to your position
2439 on climate change, and your leadership role, at the urging of
2440 your grandchildren. Is that correct?

2441 Mr. {Warner.} Yes, that is quite true, in many ways.
2442 But I also, the gentleman that came from forest country, I
2443 went out in 1943, of course, that was before you were born,
2444 and worked in the forest as a firefighter and a trailblazer.
2445 And those were pristine forests. A couple of years ago, I
2446 was out there in the same region. I asked the Forest Service
2447 to take me in. I didn't know where I was. I couldn't
2448 recognize it any. We drank out of the streams. We swam in
2449 the streams. We enjoyed the pristine forests. It is gone.

2450 So, my children and grandchildren hold me accountable,
2451 and indeed, my own personal experiences were a factor. But
2452 it came always back to national security, as I am urging this
2453 committee to incorporate.

2454 Mr. {Markey.} The gentlelady's time has expired, and
2455 all questions from the subcommittee members has now expired.
2456 Now, consistent with a prior unanimous consent request to
2457 allow members of the full committee, who are not members of
2458 the subcommittee, to ask questions of our two witnesses, we

2459 will proceed to recognize those members.

2460 However, I want them to know that I am going to rigidly
2461 employ the five minute rule with those four members, and I
2462 urge you, if you want an answer from the witnesses, not to
2463 have a five minute statement with a question at the five
2464 minute point, because you will not be receiving an answer,
2465 because we have Speaker Gingrich waiting for us in the
2466 anteroom, and each of you will be given five minutes, so
2467 please try to give the witnesses time to answer your question
2468 in the five minute time period.

2469 We will begin by recognizing the gentleman from
2470 California, Mr. Radanovich.

2471 Mr. {Radanovich.} Thank you, Chairman Markey, and I
2472 want to welcome Mr. Vice President and Senator to the
2473 committee hearing.

2474 I was born and raised in the Sierra Nevada Mountains in
2475 California, right next to Yosemite, and I just, this debate,
2476 listening to this debate is very interesting, but I am very
2477 intimate with forest policy, forest management practices in
2478 the Sierra Nevada Mountains, very intimately involved with
2479 the California drought and what is going on out there. And I
2480 can tell you that the things that more adversely affect
2481 California's water supply and forest management practices in
2482 California is environmental alarmism, and it has resulted in

2483 some very bad management of our national forests. Has led to
2484 fuel buildups, more intense fires, that leave the area more
2485 devastated.

2486 In the San Joaquin, in the water supply in California,
2487 it is due to three different lawsuits that have restricted
2488 water deliveries for agriculture for a delta smelt, a
2489 worthless little worm in the delta that needs to go the way
2490 of the dinosaur, you know, and they have shut pumps down and
2491 restricted water deliveries to California over that thing,
2492 when what is eating it is a striped bass, which is a non-
2493 native species in the delta, and yet, the collaboration
2494 between environmentalists and sport fishermen have led to the
2495 dealing with the truth of the situation in the delta. As a
2496 result of that, there are zero water deliveries to my
2497 farmers. It is costing 40,000 to 60,000 jobs this year, and
2498 a \$6 billion hit to our economy.

2499 That is not global warming. That is not global warming
2500 that is causing problems in our forests. It is the result of
2501 bad policy, because of environmental alarmism. And I think
2502 that the current debate over global warming and cap and trade
2503 is another result of environmental alarmism. And I want to,
2504 you know, there is a couple of transitions we have made in
2505 the history of the country.

2506 We had the light bulb came up, and we had either to move

2507 from candle power to light bulbs. We had cars. Finally,
2508 Henry Ford came up with the car. We needed to move from
2509 horses to cars. Hell, even when we went to the Moon, we had
2510 a Moon to shoot for. But you are saying on fossil fuels, and
2511 setting up a scheme, frankly, that is causing to leave fossil
2512 fuels for an unidentified replacement. And the notion that
2513 you can do that on renewable energies, and the technology
2514 that we have right now, to me is disingenuous. The fact that
2515 you can rely on this transition with solar and wind energy,
2516 and enhance the economy, and reduce our reliance on foreign
2517 fuels, that to me is the biggest fraud that is being
2518 perpetrated in this country right now.

2519 I think that there is ample evidence that the planet is
2520 warming. I think it is debatable whether it is manmade,
2521 caused. I think that if you want, if you are even concerned
2522 about the world coming to an end, there is nothing that we
2523 can do to prevent that from happening, and that kind of
2524 alarmism.

2525 My problem is that you can't make this transition
2526 without breaking the back of the economy of the United
2527 States, unless you have a new fuel that you can jump to. I
2528 would much rather spend billions of dollars that you are
2529 planning on spending, identifying a new energy source, and
2530 then let us identify that, and then we can make the

2531 transition to the new energy source. But I have got to tell
2532 you, your notion that this planet is going to fry in 30
2533 years. This Congress doesn't know what is going to happen in
2534 a week, let alone 30, 40 years.

2535 I think if you, that the way to address this problem is
2536 to put our efforts behind identifying a reliable replacement
2537 for fossil fuels, and you have not identified it so far, and
2538 any transition that you think you are going to make is going
2539 to be so heavily subsidized that you are going to bankrupt
2540 this country on this notion of cap and trade.

2541 I am--no. I am all for efficiencies. We have air
2542 problems in California, renewable energies, things that keep
2543 the air clean out there, but unless you come up with a
2544 replacement to fossil fuels, you are not going to be able to
2545 make that transition, and I think that aside from the sky is
2546 falling, we are going to be dead in 30 years and the planet
2547 is going to burn up. I think the reasonable approach to this
2548 problem is innovation, efficiency, a robust economy, which
2549 you will destroy with cap and trade, and moving toward a new
2550 energy source that we can all start to rely on--

2551 Mr. {Markey.} The gentleman's time has expired.

2552 Mr. {Radanovich.} Thank you very much, Mr. Chairman. I
2553 have said what I want to say.

2554 Mr. {Markey.} I know you have, but I think I am going

2555 to modify my earlier statements.

2556 Mr. {Gore.} Could I respond briefly.

2557 Mr. {Markey.} And allow the witnesses--no further
2558 interventions by the members after five minutes will be
2559 allowed. Mr. Vice Present.

2560 Mr. {Gore.} Congressman, I think we actually do have an
2561 excellent idea of where the renewable energy can come from.
2562 The very best--

2563 Mr. {Radanovich.} If you would like--explain to
2564 Congress--if you are going to bankrupt this country.

2565 Mr. {Markey.} The gentleman's time has expired.

2566 Mr. {Radanovich.} So--I should be able to respond.

2567 Mr. {Markey.} If the gentleman is going--you did not
2568 give him time within your five minutes, which was the request
2569 which I made of the gentleman, is now being given this time
2570 under a unanimous consent request. The Vice President sought
2571 several times to gain your attention to answer your question
2572 within that five minute period.

2573 You did not choose to recognize him.

2574 Mr. {Radanovich.} If he would give, then--

2575 Mr. {Markey.} The Vice President is now--

2576 Mr. {Radanovich.} If he would, then, give me the
2577 benefit of explaining the costs of this--

2578 Mr. {Markey.} The Vice President is now--

2579 Mr. {Radanovich.} --program to the American people,
2580 then I will--

2581 Mr. {Markey.} --going to answer your question.

2582 Mr. {Radanovich.} --then I would love to hear that
2583 response from the Vice President. Thank you, sir.

2584 Mr. {Markey.} The Vice President is going to answer
2585 your question. Thank you.

2586 Mr. {Gore.} I will just say briefly that I think we do
2587 know pretty well exactly what the sources of renewable energy
2588 can be. And the cost is coming down almost as rapidly as in
2589 the early days of computer chips, when you got that Moore's
2590 Law curve. We are beginning to see something like that in
2591 photovoltaics. Concentrating solar thermal, photovoltaics,
2592 wind power, geothermal, efficiency, and conservation are, I
2593 think, now ready to go.

2594 So, I will--well, let me just make one other point.
2595 Enough sunlight falls on the land surface of the Earth in 45
2596 minutes to provide a full year's worth of energy use for the
2597 entire planet. And the engineers and scientists in this
2598 country have been making fantastic breakthroughs in how to
2599 innovate more efficient versions of it.

2600 Mr. {Markey.} The gentleman's time has expired.

2601 Nothing--Senator Warner.

2602 Mr. {Warner.} Something that I said this morning, and I

2603 don't think that my colleague, either, is predicated on we
2604 are going to abandon fossil fuels. It is more how can we do
2605 it more efficiently, and in such a way, consume them so as to
2606 have minimal damage to the environment and to health. So, we
2607 are always going to have that.

2608 But we put such emphasis as we can to encourage wind,
2609 solar, and the like, but it is not going to transplant fossil
2610 fuels.

2611 Mr. {Markey.} Thank you, Senator. The chair recognizes
2612 the gentlelady from the Virgin Islands, Ms. Christensen.

2613 Ms. {Christensen.} Thank you, Mr. Chair, and I would
2614 like to welcome Vice President Gore and Senator Warner, and
2615 to thank you for your service, as well, and for the
2616 leadership you have provided on this issue, which has really
2617 brought about the consensus that we have in this country,
2618 that we must act today.

2619 I guess I would ask both of you, many in the committee
2620 have complained about the 25 percent reduction in greenhouse
2621 gas emissions, in poor communities especially. The American
2622 Public Power Association on the panel yesterday recommended
2623 15 percent reduction by 2025.

2624 Is that good enough, and what would you suggest to help
2625 communities and power companies reach that 25 percent that
2626 they don't think they can reach today?

2627 Mr. {Gore.} No, I don't think that would be good enough
2628 at all. The committee draft already represents a significant
2629 compromise, compared to what the, what others in the global
2630 negotiation are already doing, and what the scientific
2631 community says is advisable.

2632 I support the committee bill, regardless of that,
2633 because I think it is an excellent bill, and will set in
2634 motion a process of change that will lead to steeper
2635 reductions in a way that benefits our economy tremendously.
2636 But to cut back from the reductions in the bill, I think
2637 would cross a line that we should not cross at all.

2638 Ms. {Christensen.} Did you want to add anything,
2639 Senator Warner?

2640 Mr. {Warner.} Again, I come back to a basic premise I
2641 have. Let us draft the legislation, so we are directing
2642 ourselves towards resolution of the problems of how do we
2643 take our existing and additional energy sources, and do it
2644 efficiently and healthy.

2645 I tried, as best I could, not to let the Senate bill
2646 begin to be a welfare, or to help the needy. Those needs are
2647 there. They are definite, and how well you know that. But
2648 this legislation is directed towards a new energy policy.

2649 Ms. {Christensen.} But that being said, and this was my
2650 second question anyway, there are many communities,

2651 especially African-American, Hispanic-American, Native
2652 American, that have not been really benefiting from our
2653 economy as it is today. Do you think that our new green
2654 economy can be a vehicle to help close the gaps for those
2655 communities, and bring them into the mainstream? And I would
2656 ask both of you that question.

2657 Mr. {Warner.} I would say to those groups that you have
2658 identified, who are just as, have every right to the clean
2659 air and clean water and good food as do I, that this bill is
2660 directed to help them improve their quality of life, no
2661 matter what their economic status may be.

2662 Mr. {Gore.} I will, you know, Van Jones, who is now a
2663 part of the Administration in charge of green jobs, is the
2664 most eloquent spokesman I know on this point. But just to
2665 give a couple of examples. This bill will have a lot of
2666 incentives to unleash many jobs in insulating homes, changing
2667 out lighting and windows, and those jobs can't be outsourced.
2668 They are in the community, and they are good jobs, and there
2669 are a lot of them.

2670 Ms. {Christensen.} Thank you. It has been mentioned
2671 several times throughout the hearings that the benefits of
2672 addressing the concerns discussed in the bill, as both of you
2673 have basically just said, will over the long term, buffer the
2674 costs for the American people. The bill discusses the

2675 necessity for the Federal Government to establish measures to
2676 assist natural resources adapting to climate change. Are
2677 there one or two specific strategies that we should focus our
2678 attentions on?

2679 And additionally, to what extent will support of
2680 international adaptation strategies, such as preventing
2681 deforestation, assist in reducing the pressures levied on the
2682 United States and territories?

2683 Mr. {Gore.} The U.S. Conference of Catholic Bishops
2684 issued a very eloquent statement this past week, and part of
2685 their statement supports robust measures for adaptation, and
2686 both here at home and internationally. And I think that is
2687 very crucial, and I commend the authors of the bill for
2688 including it, and I agree with you that it is very important
2689 to do it.

2690 We look at the fact that poor and disadvantaged people
2691 in our country, as well as in the rest of the world, are
2692 those most likely to be victims of this. Indeed, many
2693 already have been, and so, adaptation is a crucial part of
2694 the response.

2695 Mr. {Markey.} Okay. The gentlelady's time has expired.
2696 The chair recognizes the gentlelady from Tennessee, Ms.
2697 Blackburn.

2698 Ms. {Blackburn.} Thank you, Mr. Chairman, and thank you

2699 to both of you for your patience today. Vice President Gore,
2700 you and I have had the opportunity to represent some of the
2701 same people from a truly wonderful state. And you talked a
2702 little bit about people have to have trust in what you are
2703 doing, and I think you know that this bill is going to
2704 fundamentally change the way America works, and it is going
2705 to affect families. We have all talked about how it affects
2706 individuals, and what it is going to do to their budgets, and
2707 what it is going to do to jobs in this country.

2708 And given the magnitude of those changes, I think it is
2709 really important that no suspicion or shadow fall on the
2710 foremost advocates of climate change legislation, so I wanted
2711 to give you the opportunity to kind of clear the air about
2712 your motives, and maybe set the record straight for some of
2713 your former constituents.

2714 And I have got an article from October 8, New York Times
2715 Magazine, about a firm called Kleiner Perkins, a capital firm
2716 called Kleiner Perkins. Are you aware of that company?

2717 Mr. {Gore.} Well, yes. I am a partner in Kleiner
2718 Perkins.

2719 Ms. {Blackburn.} So, you are a partner in Kleiner
2720 Perkins. Okay. Now, they have invested about \$1 billion in
2721 40 companies that are going to benefit from cap and trade
2722 legislation. So, is the legislation that we are discussing

2723 here today, is that something that you are going to
2724 personally benefit from?

2725 Mr. {Gore.} I believe that the transition to a green
2726 economy is good for our economy and good for all of us, and I
2727 have invested in it, but every penny that I have made, I have
2728 put right into a nonprofit, the Alliance for Climate
2729 Protection, to spread awareness of why we have to take on
2730 this challenge.

2731 And Congresswoman, if you are, if you believe that the
2732 reason I have been working on this issue for 30 years is
2733 because of greed, you don't know me.

2734 Ms. {Blackburn.} Sir, I am not making accusations. I
2735 am asking questions that have been asked of me.

2736 Mr. {Gore.} Well.

2737 Ms. {Blackburn.} And individuals, constituents, that
2738 were seeking a point of clarity. So, I am asking--

2739 Mr. {Gore.} I understand exactly what you are doing,
2740 Congresswoman. Everybody here does.

2741 Ms. {Blackburn.} --you for that point of clarity. And
2742 well, you know, are you willing to divest yourself of any
2743 profit? Does all of it go to a not for profit that is an
2744 educational not for profit?

2745 Mr. {Gore.} Every penny that I have made has gone--

2746 Ms. {Blackburn.} Every penny--

2747 Mr. {Gore.} --to it. Every penny from the movie, from
2748 the book, from any investments in renewable energy.

2749 Ms. {Blackburn.} Okay.

2750 Mr. {Gore.} I have been willing to put my money where
2751 my mouth is. Do you think there is something wrong with
2752 being active in business in this country?

2753 Ms. {Blackburn.} I am simply asking for clarification
2754 of the relationship.

2755 Mr. {Gore.} I am proud of it. I am proud of it.

2756 Ms. {Blackburn.} Thank you, and I appreciate the
2757 answer. And Mr. Chairman, I yield back.

2758 Mr. {Markey.} The gentlelady yields back, and I will,
2759 for the record, say that for eight years, I sat next to Al
2760 Gore on this committee, and on every one of these issues, he
2761 took a stand, he took a stand decades ago that is identical
2762 to the stand which he is taking as he sits here before our
2763 committee today, and there is one thing that I can say about
2764 the Vice President, is that he was a visionary. He
2765 identified these issues. He forced this committee and the
2766 Senate to consider it long before it was ready to deal with
2767 it, and his time has come on this issue. A prophet is being
2768 honored in this committee today, but by the world. He won a
2769 Nobel Prize for his work on this subject. The world has come
2770 to recognize that, and I think that his service to our

2771 country and our planet is something that I think is
2772 absolutely unchallengeable.

2773 We will complete the questioning of our special guests
2774 with the gentlelady from Ohio, Ms. Sutton.

2775 Ms. {Sutton.} Thank you very much, Mr. Chairman, and
2776 thank you to our witnesses. I regret that this very serious
2777 subject sometimes has turned into something that has resulted
2778 in sort of personal and somewhat, sometimes partisan
2779 appearing attacks.

2780 And Senator Warner, if I could just begin with you. You
2781 spent a good deal of time serving this country in the United
2782 States Senate, and one of the questions that I have, as a
2783 Member sitting over here, and certainly dedicated to trying
2784 to find a way to work this out.

2785 I come from Ohio. It is a challenging issue for us, but
2786 I believe in the science, and I believe in the merits of the
2787 potential. I do worry about the transition, and we can talk
2788 about that, so I am looking for solutions, to find a way to
2789 get from here to there. But Senator, in the Senate, I am
2790 concerned about the Senate, and whether or not they will pass
2791 a significant global climate change bill.

2792 Do you foresee that any time in the near future, based
2793 on your experience?

2794 Mr. {Warner.} I would have to respond that I think the

2795 Senate will, in a very serious and conscientious way, review
2796 such legislation as may be generated by this committee, and
2797 hopefully will, in my own judgment. And I have learned that
2798 the distinguished chairperson of our committee, former
2799 committee, Senator Boxer, is laying plans, possibly, to
2800 introduce a bill in the Senate.

2801 I do believe the time has come that both parties will
2802 conscientiously work on this issue, but quite frankly, I
2803 think it would be not in my province to try and predict what
2804 that outcome will be. We are at the basic threshold of the
2805 legislative process, going through this very important and
2806 extraordinary hearing agenda. We took 14 months to cover
2807 much of the same territory.

2808 But nevertheless, I have faith in the Congress to
2809 objectively and honestly look at this situation, and
2810 hopefully come up with a bipartisan solution.

2811 Ms. {Sutton.} Thank you, Senator.

2812 Vice President Gore, again, thank you for your work on
2813 this issue, and for the consensus that has finally come to
2814 be. And I just want to talk to you, just very briefly, or
2815 get your opinion very briefly. You mentioned in your
2816 testimony about the need for coal miners to have access to a
2817 job. And the question is kind of twofold. It would, well,
2818 threefold, perhaps. How would that work, and how fast would

2819 that happen? And are there other workers who are going to be
2820 similarly displaced, who should be given that kind of
2821 guarantee as well? Thank you.

2822 Mr. {Gore.} Yes. Yes, I think there ought to be
2823 attention to that. Absolutely. The bill already devotes
2824 considerable attention to it, but I have always had the
2825 position that anyone displaced by this has a right, not just
2826 to job training, but to a job. And I think that we have to
2827 manage the transition in a way that takes care of those who.
2828 I think the society as a whole benefits. I think the economy
2829 grows. But those who are especially affected, I think they
2830 have a right to it.

2831 Ms. {Sutton.} How about manufacture, employees in
2832 manufacturing plants, and that may be impacted by some of the
2833 things that we heard discussed here today, in the moment?

2834 See, my concern is that while I believe in the potential
2835 of green jobs--

2836 Mr. {Gore.} Yeah. Yeah.

2837 Ms. {Sutton.} And we have a very different problem in
2838 Ohio than my dear friend Congressman Inslee described it, as
2839 the causes of global warming, or not the causes, but global
2840 warming is causing job loss for him, you know, in this
2841 moment. So, he wants to stave off that, and I understand and
2842 respect that, and I am with him in trying to address that.

2843 But we also have a lot of, our folks, they care about this
2844 issue. They care about the environment.

2845 Mr. {Gore.} Yeah.

2846 Ms. {Sutton.} But if you don't have a job today, the
2847 concerns of this bigger issue, and where we need to go,
2848 become very difficult to address, when you have kids you
2849 can't, you know--

2850 Mr. {Gore.} Yeah.

2851 Ms. {Sutton.} You can't get what they need, and--

2852 Mr. {Gore.} Yeah.

2853 Ms. {Sutton.} --put food on the table, so it becomes
2854 almost a luxury to try and deal with that.

2855 Mr. {Gore.} Yeah. And I understand your question very
2856 well. It is very well put, and we would still face that
2857 challenge, if the legislation didn't pass. In fact, we have
2858 been facing that challenge. I believe this bill will make it
2859 better.

2860 I will give you an example from Ohio. There is a
2861 company that famously, very proud of the fact that they made
2862 the giant bolts for the Golden Gate Bridge, and they went
2863 through some hard times, and had to lay a lot of people off.
2864 They are now hiring people, or have been, to make windmills,
2865 to make parts for windmills.

2866 And I think it is a good example of how new jobs in Ohio

2867 will be created, are being created by the shift to green
2868 energy, and will be created in significantly larger numbers
2869 with the incentives and motivations in this bill.

2870 Mr. {Markey.} The gentlelady's time has expired.

2871 Let us complete this way. Let us ask each of you to
2872 give a summary statement to the committee before you leave.
2873 It has been our honor to have you with us here today.

2874 Could we begin with you, Senator Warner?

2875 Mr. {Warner.} Well, thank you, Mr. Chairman. I would
2876 say, very briefly, that the Congress today, in this hearing,
2877 has served their respective constituents well. We have had
2878 an open and free debate. We have clearly expressed to one
2879 another our concerns about this legislation, but it, I hope,
2880 renews our strength to go back and counsel with our
2881 constituents, and listen to our constituents, and seek out a
2882 way to lead. The country has to lead on this issue.

2883 Thank the chair. Having been a chairman myself, I know
2884 the challenges, and I think you have fulfilled them very
2885 well.

2886 Mr. {Markey.} Thank you very much, Mr. Chairman.

2887 Vice President Gore.

2888 Mr. {Gore.} Mr. Chairman, I began by nothing how it
2889 brings a lot of emotions for me to walk in at the beginning
2890 of the hearing this morning, and be, once again, in this

2891 room, where I spent eight years. I have sat through many
2892 hearings like this one in this chamber, many markups like the
2893 one you are about to embark upon.

2894 Having gone through many bills, I have to tell you that
2895 I am extremely impressed with what you and Chairman Waxman
2896 and others have done in really drilling deeply into so many
2897 aspects, virtually all of the aspects of this issue, and I
2898 want to compliment you and Chairman Waxman and the others for
2899 the work product you have produced.

2900 I know that in the committee process, there will be
2901 debates. There will be changes and so forth. That is the
2902 way it works. I would urge you, during that process, to stay
2903 on this side of the line that preserves the effectiveness of
2904 this legislation. And I know you will.

2905 My main point is, I compliment you on the bill. It is
2906 an honor to appear before this committee, agree or disagree
2907 with the views of some. I appreciate the questions and the
2908 exchanges, and thank you very much for inviting me.

2909 It is good to be back.

2910 Mr. {Markey.} Thank you. And it is our honor to have
2911 two of our greatest citizens of our country to appear before
2912 the committee today with the thanks of the committee and our
2913 country.

2914 We will take a brief recess, while our two witnesses are

2915 able to leave, and before we introduce Speaker Gingrich.

2916 Thank you.

2917 [Recess.]

2918 Mr. {Markey.} Our next one person panel features
2919 another familiar face to many of us, former Speaker of the
2920 House, Newt Gingrich.

2921 If the last panel was Back to the Future, then I guess
2922 this second panel is Back to the Future II. And the Speaker
2923 is gracing us with his presence here today. He served as
2924 Speaker from 1995 until 1999, and it is an honor for us to
2925 have you with us here today, Mr. Speaker.

2926 We welcome you, and I will turn to the gentleman from
2927 Michigan, if you would like to extend--

2928 Mr. {Upton.} We are grateful that he is here, and in
2929 the interest of time, I think we will get started.

2930 Mr. {Markey.} I turn to the chairman of the full
2931 committee. I turn to the gentleman from Texas, Mr. Barton,
2932 as well.

2933 Mr. {Barton.} Just simply say since we are Back to the
2934 Future II, where they went out to the Wild West, your bill
2935 would give us a carbon footprint equivalent to 1875, which is
2936 about when that movie was, so we appreciate our Speaker being
2937 here.

2938 Mr. {Markey.} That is your introduction, Speaker

2939 Gingrich. We look forward to hearing from, your testimony
2940 here today. Whenever you are comfortable, please begin.

|
2941 ^STATEMENT OF HONORABLE NEWT GINGRICH, FORMER SPEAKER OF THE
2942 HOUSE

2943 } Mr. {Gingrich.} Well, let me thank you, Mr. Chairman,
2944 and I appreciate the sheer endurance you and the members of
2945 this committee have shown so far.

2946 Mr. {Barton.} Make sure that microphone is on.

2947 Mr. {Gingrich.} I am sorry. It should be on. Is it
2948 not on?

2949 Mr. {Barton.} Is the light on.

2950 Mr. {Gingrich.} Yeah, the green light is on. So, this
2951 should be all right. Okay.

2952 I just want to thank you, and commend you for the
2953 endurance that you all have shown so far today.

2954 Mr. {Markey.} Can we say, Mr. Speaker, there are 21
2955 witnesses after you, if you want to get a sense of the place
2956 we are in the hearing today.

2957 Mr. {Gingrich.} And I want to ask permission for my
2958 written testimony to be placed in the record.

2959 Mr. {Markey.} Without objection, in its entirety, it
2960 will be included in the record.

2961 Mr. {Gingrich.} I, to meet Greg Walden's permanent
2962 question, I did begin reading the draft bill, but to be

2963 candid, I stopped around page 236, where it describes the
2964 Secretary of Energy as a Jacuzzi Czar, under the title
2965 portable electric spa. Actually, it is page 233. And at
2966 that point, I decided I had the gist of the bill, and decided
2967 I would develop my testimony.

2968 Let me just say, I want to begin with, from a
2969 background, I taught environmental studies at West Georgia
2970 College. I was coordinator. I participated in the second
2971 Earth Day. I supported the clean air system that we
2972 developed for sulfuric oxide, which actually involved a very
2973 limited number of sites in the initial application. It was
2974 263 units at 110 plants. Later on, it was expanded to a
2975 total of 2,000 units, which the Jacuzzi section alone would
2976 dwarf. And so, I do think there are some substantial
2977 differences between what we did in 1990, and the bill that as
2978 the Republican Whip, I helped pass, and what you are looking
2979 at today.

2980 I want to start with two general observations. One
2981 from, I guess, my namesake, King Canute, and the other, from
2982 the Polish resistance to Communism, which adopted the
2983 principle of two plus two equals four. Canute was asked, in
2984 the Middle Ages, by, his staff had been telling him how
2985 powerful he was. And so, he went down to the ocean, and told
2986 the waves to stop. And the waves did not stop. And he

2987 turned to his staff, and said this is a hint that I am not as
2988 powerful as you have been saying.

2989 This bill strikes me as a remarkable inability to learn
2990 the lesson of King Canute. If you look at the housing
2991 disaster, where the Congress decided 15 years ago, people who
2992 couldn't afford houses should buy houses, and banks should
2993 loan money to people who couldn't afford to buy houses, and
2994 then you look at the Federal Reserve, which decided that
2995 interest rates should be kept low enough to create a huge
2996 bubble on Wall Street. We don't seem to be able to learn
2997 from any of this. This bill massively expands the Department
2998 of Energy's power, gives all sorts of authority to the
2999 Secretary of Energy. Let me just quote two examples of why
3000 this is a huge mistake.

3001 The General Accounting Office said on the FutureGen
3002 Project, which is very important to this country's future,
3003 and very important to getting to green coal and carbon
3004 sequestration: ``Contrary to best practices, DOE did not
3005 base its decision to restructure FutureGen on a comprehensive
3006 analysis of factors such as the associated costs, benefits,
3007 and risks. DOE made its decision largely on the conclusion
3008 that costs for the original FutureGen had doubled, and would
3009 escalate substantially. However, in its decision, DOE
3010 compared two cost estimates for the original FutureGen that

3011 were not comparable, because DOE's \$950 million estimate was
3012 in constant 2004 dollars, and the \$1.8 billion estimate of
3013 DOE's industry partners was inflated through 2017.'

3014 So, you end up in a situation where, in the most
3015 important clean coal project of our time, the Department of
3016 Energy, which had promised in 2003 to deliver a working plant
3017 in 2008, announced in 2008 it might get to a working plant in
3018 2016. On efficiency standards, the General Accounting Office
3019 said: ``DOE has missed all 34 Congressional deadlines'--all
3020 34 Congressional deadlines--``for setting energy efficiency
3021 standards for the 20 product categories with statutory
3022 deadlines in the past. DOE's delays range from less than a
3023 year to 15 years. DOE has yet to finish 17 categories of
3024 such consumer products as kitchen ranges and ovens,
3025 dishwashers and water heaters, and such industrial equipment
3026 as distribution transformers. Lawrence Berkeley National
3027 Laboratory estimates that delays in setting standards for the
3028 four consumer product categories that consume the most
3029 energy, refrigerators and freezers, central air conditioners
3030 and heat pumps, water heaters, and clothes washers, will cost
3031 at least \$28 billion in foregone energy savings by 2030. DOE
3032 officials could not agree on the cause of delays.'

3033 Now, I just want to suggest to you, to take this
3034 Department, and give it 646 pages of additional power, is an

3035 astonishing avoidance of King Canute's record.

3036 The second is, on page 362 in this bill, you in effect
3037 mandate an 83 percent reduction in carbon by 2050. Now, that
3038 is exactly like telling the ocean to quit moving. The idea
3039 that we are actually going to get an 83 percent reduction in
3040 carbon, in my judgment, is a fantasy, barring a major
3041 scientific breakthrough, which legislators have zero ability
3042 to legislate. You can invest in it, you can hope for it, but
3043 to legislate, it strikes me, is exactly King Canute's rule.

3044 On two plus two equals four, I just want to put in the
3045 record a quote from George Weigel, and a quote from Orwell's
3046 1984, both of which point out that the State can tell you two
3047 plus two equals five, but it isn't true.

3048 Now, Congressman John Dingell captured the two plus two
3049 equals four exactly right, when he said earlier today, this
3050 bill is a big tax increase. And I want to make this quite
3051 clear. This bill is an energy tax. President Obama's budget
3052 makes clear it is a \$646 billion energy tax. That is what he
3053 has in the budget with an asterisk that says it will raise
3054 more than that.

3055 The press reports indicate the Administration believes
3056 that that energy tax would actually raise around \$.9
3057 trillion, which for a 648 page bill means it is between \$1
3058 billion and \$3 billion a page.

3059 Now, energy tax kills jobs, and Vice President Gore was
3060 talking earlier about how China is improving. I just want to
3061 quote, about India and China, two things. And this is from
3062 my written testimony. India is saying no to crippling its
3063 economy, no to stemming its growth, and no to punishing its
3064 citizens. One particular member, actually, of the Indian
3065 delegation to the U.N. conference in Bonn, said: ``If the
3066 question is whether India will take on binding emission
3067 reduction commitments, the answer is no.'' He went on to
3068 say: ``This sort of energy tax is morally wrong for India.''

3069 China, too, believes emission caps are the wrong answer.
3070 The lead climate negotiator for China said the following
3071 regarding who should pay to cut emissions: ``As one of the
3072 developing countries, we are at the low end of the production
3073 line for the global economy. We produce products, and these
3074 products are consumed by other countries. This share of
3075 emissions should be taken by the consumers, not the
3076 producers.'' And in fact, what the Chinese are saying is,
3077 they want us to pay for their emissions, on the grounds that
3078 we buy their products, which I think is actually a pretty
3079 large amount of-chutzpah.

3080 As Energy Secretary Steven Chu has said: ``If other
3081 countries don't impose a cost on carbon, then we will be at a
3082 disadvantage.'' And I think in this economy at this time,

3083 that is the number one thing to look at. An energy tax
3084 punishes senior citizens. It punishes rural Americans. If
3085 you use electricity, it punishes you. If you use heating
3086 oil, it punishes you. If you use gasoline, it punishes you.
3087 This bill will increase your cost of living, and may kill
3088 your job. The Tax Foundation estimates this bill, that an
3089 energy tax, could kill 965,000 jobs, and reduce the economy
3090 by \$138 billion a year.

3091 What is even more troubling about this bill, though, is
3092 it continues the recent tradition that Congress has adopted,
3093 and that is to move from Lincoln's government of the People,
3094 by the People, and for the People, towards a government which
3095 punishes the People into behavior. I favor incentivizing the
3096 future. I am opposed to punishing the present.

3097 We did not create the transcontinental railroads by
3098 punishing stagecoaches. I could strongly support an
3099 incentivized bill to maximize new technologies and to
3100 maximize green technologies. I would also point out that
3101 Vice President Gore's reference to \$0.30 a day came from an
3102 intellectually dishonest EPA study which included 150 percent
3103 increase in the number of nuclear power plants, and the EPA
3104 study itself indicated that it had been instructed by the
3105 committee staff not to, in fact, base its study on the bill.
3106 It is a footnote in the EPA study.

3107 Now, prudence suggests that we do need to consider the
3108 facts and that there are reasonable, affordable steps that
3109 might work. This committee should look at where we Americans
3110 as a country can move forward. Vice President Gore cited
3111 three risks we face; economic concerns, national security
3112 concerns, and the environment. I would add a fourth risk,
3113 which is the threat of big government, big bureaucracy, big
3114 deficits, and political manipulation.

3115 And I would be glad to engage in a dialogue on how we
3116 can meet these threats, because I think we do need a serious
3117 dialogue. You know, at Vice President Gore's request I made
3118 a commercial with Speaker Pelosi. We said that we would
3119 address climate change, that we needed cleaner energy
3120 sources, and that we needed a lot of innovation. I can
3121 accept all three of those, but a dialogue ought to be both
3122 ways. It ought to be not an automatic agreement or a salute
3123 but rather a genuine conversation.

3124 Vice President Gore made some startling and in some
3125 cases I think deeply misleading assertions. He cited Bernie
3126 Madoff and described bad information and talked about massive
3127 fraud, but, in fact, I think that it is very important to
3128 look in detail at his on testimony. He pointed--he said, for
3129 example, the rate--this is a quote. ``The rate of new
3130 discoveries is falling for energy.'' That is factually not

3131 true. In the last 3 years we have found 100 years of natural
3132 gas in the United States, because we now have new technology
3133 drilling at 8,000 feet, and we have literally found 100 years
3134 of natural gas in the last 3 years.

3135 In Brazil they found three fields, the Tupi field alone
3136 in 2007, a second field recently, and just in January an
3137 Exxon, Hess consortium found a third field. Brazilian
3138 reserves have gone from then billion barrels to 100 billion,
3139 but, of course, that is an off-shore Atlantic Ocean field,
3140 which was up until last October illegal to look for in this
3141 country.

3142 The Bachen field in North Dakota and Montana has jumped
3143 from a 1995, U.S. geological survey estimate of 151 million
3144 barrels in April of 2008, they raised it by 2,500 percent.
3145 They now believe there are between three and four billion
3146 barrels of oil in the Bachen field.

3147 What Vice President Gore does not tell you is that
3148 having supported the government stopping the exploration for
3149 oil, having supported the government stopping the development
3150 of shale oil in Colorado, having supported the reduction in
3151 the use of coal where we have 27 percent of the world
3152 reserves, we are then told that these government-imposed
3153 shortages prove we have no resources. That is fundamentally
3154 not true, and yet the Obama budget proposes to raise taxes on

3155 oil and natural gas development at exactly the time this
3156 economy needs more development and more jobs.

3157 On the facts of climate change, we need a national
3158 inquiry, and let me be quite clear in the spirit of the
3159 commercial I did with Speaker Pelosi at Vice President Gore's
3160 request. I want to invite Vice President Gore to join in a
3161 non-partisan inquiry, and I would love to have this committee
3162 agree to help sponsor it, so that every high school and
3163 college campus this coming October could have a discussion
3164 about the facts.

3165 For example, Vice President Gore in his testimony talked
3166 about the likelihood of a 20-foot rise in sea level. Let me
3167 say if we had a catastrophic 20-foot rise in sea level, that
3168 would be bad. I am happy to stipulate. That would be bad.
3169 However, even the inter-governmental panel on climate change
3170 said the probable maximum is between 7 and 23 inches over the
3171 next 100 years.

3172 Now, 7 and 23 inches over 100 years is radically
3173 different than 20 feet, but let me go a couple stages
3174 further. A recent report on Greenland, this is from the
3175 American Geophysical Union, a report said the following.
3176 ``So much for Greenland ices Armageddon.'' This is a quote
3177 within that. ``It has come to an end. Glaciologist Havey
3178 Murray of Swanson University in the United Kingdom, said

3179 during a session at the meeting, ``There seems to have been a
3180 synchronous switch off of the speed up.'' She said, ``Nearly
3181 everywhere around southeast Greenland outlook glacial flows
3182 have returned to the levels of 2000.'' That is from January
3183 of this year.

3184 On the question of whether or not Antarctic ice is, in
3185 fact, shrinking, let me just quote from the Australians who
3186 said, slightly longer, ``Antarctica has 80 percent of the
3187 earth's ice, 90 percent of the earth's ice and 80 percent of
3188 its fresh water.'' According to the Australians, ``Extensive
3189 melting of Antarctica ice sheets would be required to raise
3190 sea level substantially. Ice is melting in parts of western
3191 Antarctica. The destabilization of the Wilkins Ice Shelf
3192 generated international headlines, however, the picture is
3193 very different in East Antarctica, which includes the
3194 territory claimed by Australia. East Antarctica is four
3195 times the size of west Antarctica and parts of it are
3196 cooling.'' The Scientific Committee on Antarctic Research
3197 report prepared for last week's meeting of Antarctic treaty
3198 nations in Washington noted the South Pole had shown
3199 significant cooling in recent decades. Australia Antarctic
3200 Division Glaciology Program head Ian Allison said, ``Sea and
3201 ice losses in west Antarctica over the past 30 years had been
3202 more than offset by increases in the Ross Sea region, just

3203 one sector of east Antarctica. Sea ice conditions have
3204 remained stable in Antarctica generally," Allison said.

3205 ``So ice core drilling and the fast ice off Australia's
3206 Davis Station in east Antarctica by the Antarctic Climate and
3207 Ecosystems Cooperative Research Center shows that last year
3208 the ice had a maximum thickness of 1.8 nine meters, its
3209 densest in 10 years.''

3210 Finally on coral die-offs it is hard to understand why
3211 carbon dioxide or current temperatures would lead to coral
3212 die-offs. Coral was very abundant in earlier eras when the
3213 earth's temperature was as much as 10 to 15 degrees warmer
3214 and atmospheric CO2 was two to seven times higher. I am an
3215 amateur paleontologist. I would be glad to take the vice
3216 president to the Smithsonian or the American Museum of
3217 Natural History where we can look at all sorts of marine
3218 invertebrate life, which is collected as fossils, because, in
3219 fact, they used carbon quite effectively.

3220 All I am suggesting is that there is a sufficient debate
3221 over facts, not over theories, over facts, that will be very
3222 useful to have an inquiry on every college and high school
3223 campus, allow everyone to present their evidence, and discuss
3224 in a way, a genuine dialogue about this.

3225 But while I think there is no evidence that we need to
3226 rush to a massive energy tax increase or a massive increase

3227 in government, there are many steps we could take that are
3228 reasonable and that are legitimate. I suggest 38 of them in
3229 my testimony. I am just going to mention a couple quickly
3230 here.

3231 First, I think we should rebuild the American economy
3232 with American energy, both for jobs and for national
3233 security. I think it is very important that we have a pro-
3234 American energy bias in our system.

3235 Second, I do think that green coal and carbon
3236 sequestration is the most important single breakthrough we
3237 could make because the objective fact is China is adding one
3238 coal-burning plant a week. There is no evidence they are
3239 going to slow down, and unless you get to an affordable green
3240 technology for coal, there is no possibility that American
3241 developments are going to affect the volume of carbon in the
3242 atmosphere because the Chinese will more than offset any
3243 savings we have.

3244 Third, I think that enhanced oil recovery as a component
3245 of carbon sequestration could lead to up to 100 billion
3246 barrels of additional oil coming out of existing fields,
3247 which is a key answer to the peak oil question, which creates
3248 jobs in the U.S., keeps money in the U.S., helps our foreign
3249 exchange rate, solves an environmental challenge, while also
3250 solving an economic challenge.

3251 Fourth, the U.S. should expand the use of biofuels,
3252 including ethanol, and I agree with two questions. One on
3253 page 8, why would you exclude biomass from federal forest
3254 lands. I mean, I think that is a--makes zero sense in terms
3255 of the sound management of federal forests and in terms of
3256 biomass, and second, on page 110 why would you exclude energy
3257 from municipal wastes. If we can get methane production from
3258 municipal waste, why isn't that a totally legitimate use of
3259 biofuel on a renewable basis?

3260 Number five, you should add a section on nuclear energy.
3261 I thought the dialogue between the committee and Vice
3262 President Gore was fascinating. China has the largest
3263 nuclear building program in the world. Now, if the vice
3264 president wants to come here and tell this committee he is
3265 encouraged by China, then he has to confront nuclear energy.
3266 The French produce 80 percent of their electricity from
3267 nuclear energy. If we maxed that, we would take 2 billion,
3268 100 million tons of carbon dioxide a year out of the
3269 atmosphere. The fact is that Vice President Gore mentioned
3270 one off reactor. That is entirely a function of government
3271 policy. If we wanted to, we could follow the Japanese and
3272 Canadians develop a clear model of a routine, repetitive
3273 nuclear reactor, build a huge number of them.

3274 If you want to lower the cost to building nuclear power

3275 plants, streamline the permit system and streamline the
3276 litigation system, bring American production down to the rate
3277 of Japan or France. It takes 5 years to build a nuclear
3278 power plant in Japan. It takes 15 to 20 if you can get past
3279 the litigation in the United States.

3280 And finally, any notion that civilian development of
3281 nuclear reactors by the United States has any impact on
3282 nuclear weapons worldwide I think requires you to ignore that
3283 North Korea and Iran are doing quite fine on their own, and
3284 they don't seem to have any need for an American nuclear
3285 program to develop their nuclear weapons.

3286 Sixth, I want to just close by recommending something
3287 that, not just to this committee, but to the whole Congress,
3288 and this may be bolder than anything that is in the current
3289 bill. We are on the edge of a huge opportunity in science.
3290 There is going to be four to seven times as much new science
3291 the next 25 years, 65 percent of it coming outside the United
3292 States. We have more scientists alive than all of previous
3293 human history. They are every year getting better computers
3294 and better instruments, they are connected by e-mail and by
3295 zip code. I mean, by e-mail and by cell phone. Today they
3296 are then connected to licensing and venture capital and
3297 royalties so they can move from the laboratory to the market
3298 more rapidly than ever.

3299 We recently had an Alzheimer's study group report that
3300 you know fully well about, Chairman Markey, where we proposed
3301 a very bold, fundamental change in the budget act to go from
3302 an accountant design science budget to ask the scientific
3303 community to optimum they could invest. There is no zone
3304 other than health where it would be more appropriate than in
3305 the field of energy and the environment to fundamentally
3306 reshape how we invest in science and to set as a goal very
3307 radical, dramatic breakthroughs to get affordable,
3308 reproducible, and scalable breakthroughs in energy, which I
3309 think are possible. I do think that part of this bill is
3310 moving in the right direction. I would love to find a way to
3311 design a very bold breakout, whether it is hydrogen, new
3312 materials technologies, or a variety of other things. I
3313 think they could be there.

3314 But I would just close by urging you don't mandate
3315 beyond the technology. When we passed the act in 1990, we
3316 actually knew the technology existed for sulfuric acid to be
3317 dealt with. We didn't--and we did it for a very limited
3318 number of sites. This is a fundamentally different question,
3319 and it threatens the entire American economy.

3320 But I appreciate very much the change to be here.

3321 [The prepared statement of Mr. Gingrich follows:]

3322 ***** INSERT 3 *****

|
3323 Mr. {Markey.} We thank you, Mr. Speaker, very much.

3324 We will begin by recognizing the chairman of the full
3325 committee, Mr. Waxman.

3326 The {Chairman.} Thank you very much, Mr. Chairman, for
3327 recognizing me first so I could attend to some other
3328 business.

3329 Mr. Gingrich, as I hear what you are saying is it can't
3330 be done, it costs too much, there is really not that great a
3331 threat anyway, and we don't want to rush out and spend
3332 government money and have government programs in the large
3333 government. But it was interesting your proposals were
3334 rebuild the American economy with greener energy. I assume
3335 that is going to cost somebody some money. Green coal and
3336 carbon sequestration. Of course we need it. It is going to
3337 cost some money. Enhanced oil recovery, expand biofuels,
3338 nuclear energy. We ought to ask the scientists how much
3339 money they want. I don't disagree with those ideas, but I
3340 don't know how you do it without spending some money, and
3341 quite frankly, I would rather give the marketplace some
3342 incentives to get some of these results than to have
3343 government funds do it, attempt to do it, because I think the
3344 free economic system that we have is the best way to get
3345 results.

3346 But as I look at your basic core argument, it is going
3347 to cost too much, and in fact, you said it is going to be a
3348 glorified \$1 to \$2 trillion new energy tax will cost
3349 households over \$3,000 a year. Is that right? Is that your
3350 position?

3351 Mr. {Gingrich.} Well, those are the numbers I have
3352 seen.

3353 The {Chairman.} Okay. Well, those are numbers that
3354 have been cited, and the problem with these numbers if they
3355 are simply not true. Republican members have cited this
3356 before at other hearings, and they say that this is supported
3357 by an MIT study, but the author of this study, Dr. John
3358 Riley, said the estimate is a gross exaggeration, that the
3359 study is 2 years old, uses outdated data, examines a
3360 different piece of legislation.

3361 I would like to enter into the record, Mr. Chairman, two
3362 letters that Dr. Riley sent to Minority Leader Bainer
3363 explaining that Republicans are mischaracterizing his work.
3364 Just yesterday Dr. Riley confirmed that, ``The Republican
3365 approach to estimating the cost of cap-and-trade is just
3366 wrong.'' EPA analyzed the--

3367 Mr. {Markey.} Without objection it will be included in
3368 the record.

3369 [The information follows:]

3370 ***** COMMITTEE INSERT *****

|

3371 The {Chairman.} --cost of the bill that Mr. Markey and
3372 I have proposed, and this analysis says the bill will cost
3373 the average family less than 40 cents per day. When the
3374 American people hear statements that you have made, they get
3375 scared, which is exactly what I think is intended. Let us
3376 scare people. This is not a new tactic. I remember over the
3377 years we have heard it over and over again from industry.
3378 Twenty years ago when we were doing the Clean Air Act
3379 opponents of the Acid Rain Provision said it would bankrupt
3380 the utility industry. In fact, we cut emissions in half at a
3381 fraction of the cost the naysayers predicted. They said it
3382 was certain that we would lose the air conditioning in our
3383 office buildings and that we simply couldn't make cleaner
3384 automobiles. All of these predictions turned out to be
3385 completely inaccurate.

3386 I believe that you are trying to give us a false choice.
3387 Our economic future and clean energy are inextricably
3388 intertwined. The economy that will grow the fastest in this
3389 century will be the one that makes the greatest investment in
3390 new energy technologies.

3391 Nearly 40 years ago this committee passed the original
3392 Clean Air Act and since that time in 40 years we have reduced
3393 dangerous air pollutants by 60 percent or more. You acted as

3394 if it would be incredible that we could reduce carbon
3395 emissions by huge numbers. Incredible that we did that under
3396 the Clean Air Act and during the same period our population
3397 has grown by 50 percent and our economy by over 200 percent.

3398 There aren't that many of us in the room that were here
3399 when we did the Clean Air Act. I don't know if you--you
3400 certainly weren't here in 1970. You were here in 1990. We
3401 heard all of these scare tactics firsthand and what the
3402 Congress did on a bipartisan basis is we let commonsense
3403 prevail. We acted decisively to clean up air pollution, and
3404 our Nation has benefited ever since.

3405 And I would suggest that your ideas are not bold. They
3406 are a repeat of the old scare tactics. Let us get the
3407 American people really scared. The Democrats are going to
3408 charge you more money than it is impossible to achieve. Why
3409 only the South Pole on one side is sinking and other side
3410 not. I just think that the American people ought to see
3411 through what you have to say, and I would hope you would not
3412 go to every campus to give your speeches but urge Republicans
3413 and Democrats to work together, just don't attack Gore and
3414 attack the President and attack the Democrats. Work with us,
3415 and if you don't think it is a problem, then I don't know why
3416 you are even giving us those six or seven solutions, because
3417 I think there is a problem, and you ought to face up to us

3418 and help us solve that problem.

3419 My time has expired and yield back the time.

3420 Mr. {Gingrich.} Am I allowed to respond?

3421 {Voice.} The gentleman would be allowed to respond.

3422 The {Chairman.} Well, I didn't ask a question, and I
3423 don't mind if he responds, but the rules that I understand we
3424 have always had is members have 5 minutes to either ask a
3425 question, I asked you one upfront, and then to say whatever
3426 we want to say.

3427 Mr. {Barton.} Mr. Chairman.

3428 The {Chairman.} I would certainly think you ought to be
3429 able to respond if you want to, but that is going to be up to
3430 the committee to violate the rules and give you an extra
3431 privilege that other people have not had.

3432 Mr. {Barton.} Mr. Chairman, we have--

3433 Mr. {Markey.} The gentleman's time has expired. I can
3434 recognize--

3435 Mr. {Barton.} Ask to speak out of order, either one.

3436 Mr. {Markey.} The gentleman is recognized for that
3437 purpose.

3438 Mr. {Barton.} The chairman of the subcommittee
3439 explicitly gave Vice President Gore earlier today the
3440 opportunity to respond to Congressman Radanovich's statement,
3441 which wasn't a question, and Mr. Markey--

3442 The {Chairman.} Well, in that case if the gentleman
3443 would yield I will ask unanimous consent that the--Mr.
3444 Gingrich be given 3 minutes to respond.

3445 Mr. {Barton.} Well, he should just be given--we should
3446 give--

3447 Mr. {Gingrich.} I can do it in much less--

3448 Mr. {Barton.} --the Speaker of the House the same
3449 courtesy we gave the Vice President of the United States.

3450 Mr. {Gingrich.} I can do it in much less than 3
3451 minutes.

3452 Let me must say first of all, that the \$640 billion tax
3453 increase comes out of the Obama budget and has an asterisk
3454 indicating it will be more than that. That is not my number.
3455 That is the President's director of the budget's number.

3456 Second--

3457 The {Chairman.} You said that is how much would come in
3458 a cap-and-trade program that would be then redistributed.

3459 Mr. {Gingrich.} Yes. It is in the budget, so it could
3460 be redistributed.

3461 The {Chairman.} So you take money, and you redistribute
3462 it.

3463 Mr. {Gingrich.} But it would be redistributed.

3464 The {Chairman.} Okay, and you propose some
3465 redistributing of dollars as well.

3466 Mr. {Gingrich.} On the MIT study I--

3467 The {Chairman.} Where does your money come from?

3468 Mr. {Gingrich.} I would ask permission, if I might--

3469 The {Chairman.} Where does your money come from for
3470 your ideas here? Where is the money going to come from that
3471 we are going to transform the American economy with American
3472 energy?

3473 Mr. {Gingrich.} Well, look. I think when you--

3474 The {Chairman.} Where is it going to come from for
3475 green coal and carbon sequestration? That is an expensive
3476 proposition. We have got to do it. We have got to invest in
3477 it. Where is the money going to come from to transform the
3478 way scientists are able to do their work?

3479 Mr. {Gingrich.} Well, first of all, in a Congress which
3480 passed a \$787 billion stimulus without reading the bill, I
3481 think we can find the money. I am perfectly happy to work
3482 together to find the money.

3483 Second, I have never said I am against the government
3484 incentivizing change. I am against the government punishing
3485 change.

3486 Third, I would like to put in the record a recent
3487 article in the Weekly Standard called Fuzzy Math, which is
3488 actually John McCormack's conversation with the MIT
3489 professor, and in terms of citations, I would cite \$10,800

3490 cost per family of four by 2020, according to a laperstudy,
3491 \$2,700 per family of four according to Warden econometrics,
3492 and \$750 per year for the porous quintile according to the
3493 Center for Budget Policy Priorities as some of my sources.

3494 The {Chairman.} Mr. Gingrich--

3495 Mr. {Gingrich.} Finally--

3496 The {Chairman.} --I don't object to any of those going
3497 in the record, but Mr. Gingrich, I am sure glad you are not
3498 in charge of foreign policy. Do you think the only way to
3499 incentivize a country is by offering them more and more
3500 carrots? You have got to have some--

3501 Mr. {Gingrich.} I don't think--

3502 The {Chairman.} --and sometimes--

3503 Mr. {Gingrich.} Chairman.

3504 The {Chairman.} --you have to say to incentivize you we
3505 are going to give you some assistance, but there are going to
3506 be consequences.

3507 Mr. {Gingrich.} Mr. Chairman, I don't think of American
3508 citizens the way I think of foreign dictators, and I don't
3509 think this Congress should punish the American people. I
3510 think this Congress has every right to reward the American
3511 people, but I don't think Lincoln's government of the people,
3512 by the people, and for the people should be turned into a
3513 government punishing the people, and that is the major

3514 difference.

3515 Lastly I would point out that in the EPA analysis of
3516 your bill, your bill is not complete, and the EPA analysis
3517 included 150 percent increase in nuclear power, and there is
3518 no nuclear power section of the bill. So I would be
3519 perfectly happy to talk to you in more detail when the bill
3520 is complete. I would be glad to come back and testify if the
3521 bill gets completed, but this is an incomplete bill, and the
3522 EPA analysis had certain assumptions that don't relate to the
3523 bill. But I am always delighted to be here with the
3524 chairman.

3525 Mr. {Markey.} The gentleman's time has expired.

3526 The chair recognizes the gentleman from Texas, Mr.
3527 Barton.

3528 Mr. {Barton.} Thank you. Thank you, Mr. Chairman.

3529 I just want to put in the record this famous MIT study
3530 is based between 2015, and 2050, there will be an annual,
3531 which means every year, average of \$366 billion in revenues.
3532 You take that number, you divide by the number of households
3533 in America, which MIT estimates to be 117 million, and lo and
3534 behold that equals \$3,128 per household.

3535 Now, you can redistribute it, you can play with the
3536 numbers, you can go up on your allowances, down on your
3537 allowances, but the fact remains if we put anything close to

3538 what we think Mr. Markey and Mr. Waxman are going to put on
3539 the table in terms of a cap-and-trade system, it is going to
3540 raise huge amounts of money, billions and billions of dollars
3541 every year, and somebody is going to pay for it, and that
3542 somebody is the American taxpayer and the American consumer.
3543 That is number one.

3544 Number two. When Mr. Waxman asked about how you do the
3545 research and how you pay for carbon sequestration, he well
3546 knows that Mr. Boucher and myself and other members of the
3547 committee have a bill that assesses a very small fee, like
3548 per mill fee, per megawatt or--yeah, megawatt of electricity
3549 produced where the industry itself pays for the fund that
3550 develops this sequestration technology for carbon capture,
3551 our conversion, and sequestration.

3552 That bill is part of the 648-page draft. The Boucher
3553 proposal that I support and many Republicans support is in
3554 this draft bill. What is not in this draft bill is the
3555 actual allowance system, scheme and who gets free allowances
3556 and who has to pay for allowances. That is not in this bill.
3557 And that is--there may be good reasons why it is not in the
3558 bill, but it is not in the bill.

3559 Now, my question to you, Mr. Speaker, the draft bill has
3560 a renewable electricity portfolio standard called RES, but it
3561 does not include nuclear power and does not include clean

3562 coal technology. The Republican alternative will have a
3563 clean energy standard which will include both nuclear and
3564 clean coal technology. Which of those two definitions, if
3565 any, do you support?

3566 Mr. {Gingrich.} Well, obviously I would support
3567 including clean coal technology and nuclear power, but let me
3568 point out in terms of one of the things that the chairman
3569 asked me a minute ago, if you simply pass regulatory and
3570 litigation reform for nuclear power, I suspect you get a
3571 dramatic increase in nuclear power investment at no cost to
3572 the Federal Government. It would be beneficial for the
3573 committee to hold a hearing and invite in the nuclear power
3574 industry and say, if we wanted to have a robust nuclear power
3575 industry with no federal investment, what changes would we
3576 need to get to a clean, simple, guaranteed approach that
3577 allowed companies to go out and actually build a nuclear
3578 power plant. And I think you would be startled at how many
3579 nuclear power plants you could build if they weren't faced
3580 with massive litigation, continuous regulation, and an
3581 increasingly difficult-to-deal-with Nuclear Regulatory
3582 Commission, which in effect is virtually guaranteed that it
3583 is too expensive to build the very plant here that is
3584 routinely built in either France or Japan.

3585 Mr. {Barton.} My last question, Mr. Speaker, I think we

3586 have pointed out repeatedly the problems with the cap-and-
3587 trade system. The fact that it doesn't work, it hasn't
3588 worked in Europe, it is going to be hugely expensive, it is
3589 going to cost lots of money, it is going to cost millions of
3590 American jobs. The Republican alternative does always with
3591 cap-and-trade and puts in its place an efficiency or
3592 performance standard similar to what we put in the Clean Air
3593 Act amendments of 1990. We used existing--the best available
3594 technology as the standard in a given incentive for plants.
3595 If they develop better technology, they then get an
3596 accelerated depreciation on their tax returns.

3597 I know you haven't had a chance to look at the
3598 Republican alternative, but does that sound like something
3599 that would be better in your view than a cap-and-trade
3600 program that simply doesn't work?

3601 Mr. {Gingrich.} I think the history of America is that
3602 when you reward people, when you have prizes, when you have
3603 incentives, you can get extraordinary levels of
3604 entrepreneurial energy and an amazing amount of
3605 inventiveness. And historically whether it was prizes for
3606 airlines for aviation breakthroughs in the '20s and '30s or
3607 it was the grants of land in order to build the railroads,
3608 the Transcontinental Railroad in the 19th century, we have
3609 been very successful as a country in incentivizing the

3610 future. We are not very effective when we either
3611 bureaucratize it or punish the present.

3612 Mr. {Barton.} Thank you, Mr. Speaker. Thank you, Mr.
3613 Chairman.

3614 Mr. {Markey.} The gentleman's time has expired.

3615 The chair recognizes the gentleman from Washington
3616 State, Mr. Inslee.

3617 Mr. {Inslee.} Thank you.

3618 I must say this has been surprising testimony because I
3619 think many people will ask what happened to the old Newt
3620 Gingrich. We expected an optimist, someone who believes in
3621 the creative power of the American economy, but we have had a
3622 sudden attack of pessimism that we can't solve this problem.
3623 And I want to ask you some questions about that. Perhaps we
3624 can put up a chart here on this screen about some questions
3625 you were asked on February 15, 1970, if we can get the first
3626 slide up.

3627 You were basically asked--you are going to help us out
3628 there, I hope. You were basically asked if you supported a
3629 cap on carbon in 1970, which basically is what this bill is.
3630 This is--excuse me. 2007. And you said, and I am just going
3631 to read several of your quotes. You said, ``I think that if
3632 you have a mandatory, have mandatory caps, combined with a
3633 trading system, much like we did with sulfur, and if you have

3634 a tax incentive program for investing in the solutions, that
3635 there is a package that is very, very good, and frankly, it
3636 is something I would strongly support.''

3637 This bill is exactly that package. It is a mandatory
3638 cap. It protects Americans from unrestrained pollution. It
3639 is exactly what we did for sulfur dioxide, and if you will
3640 put up the next slide, please, we will just take some--just
3641 so you will know I am just picking these at random, in the
3642 same interview said, ``The caps with the trading system on
3643 sulfur has worked brilliantly. It has brought free market
3644 attitudes, entrepreneurship, and technology and made it very
3645 profitable to have less sulfur.''

3646 So people said, wow. It
3646 is worth my time and effort.

3647 Next slide, please. You went on to say, and I will read
3648 this. ``I think,''

3649 I will just read the last paragraph. ``I
3649 think that we are right at a tipping point where you could
3650 begin to imagine the development of an entirely-new
3651 generation of systems where you had a combination of a carbon
3652 cap with a trading system. You had prizes for the invention
3653 of major breakthroughs, and you had incentives for investing
3654 in the new breakthroughs and accelerating their use and their
3655 development. And you could imagine a world 15 years from now
3656 that is dramatically greener than the world we are currently
3657 in.''

3658 Now, the bill that we are working on does basically what
3659 you said you wanted to see happen in 2007. It is a mandatory
3660 cap. We are no longer allowed polluting industries to put
3661 pollution in unlimited amounts into the atmosphere, and we
3662 are going to require polluting industries to pay some amount
3663 for the right to put pollution into this atmosphere.

3664 We will use a trading system to have the most efficient
3665 as the market will determine allocation of those scare
3666 resource. We will have investment in these technologies of
3667 the ones that you alluded to. We have incentives in this
3668 bill, tax and otherwise, just as you alluded to in 2007.

3669 So I am trying to figure out why this massive change in
3670 your position, and I ask myself, well, is it because we found
3671 out that this program would be more expensive than we
3672 thought. Well, I know that is not the situation. I am
3673 holding a letter of April 14 from Dr. John Riley of MIT, who
3674 is the author of this report being quoted by Republicans
3675 trying to scare Americans thinking this is going to destroy
3676 the economy.

3677 And what he said is, ``Dear Representative Boehner, I
3678 write to correct an estimate I sent on April 13 to counter
3679 what we feel is a misrepresentation of our work by the
3680 National Republican Congressional Committee." Continuing,
3681 ``A collect estimate of that cost as opposed to auction

3682 revenue for the average household just in 2015, is about \$80
3683 per family or \$65 if more appropriately stated in present
3684 value terms discounted in an annual 4 percent rate.''

3685 That is 18 cents per day. The Republican party
3686 unfortunately is trying to tell people that the continued
3687 climate that we have here is too expensive at 18 cents a day.
3688 I don't believe that is too expensive. I also believe it
3689 could end up being cheaper, given the enormous technological
3690 creativity of our economy.

3691 So I will just ask you this. Just a very, very simple
3692 question, Mr. Gingrich. Do you believe a dramatic reduction
3693 by use of a cap-and-trade system that would cost Americans 18
3694 cents a day is too much to pay to save the planet?

3695 Mr. {Gingrich.} Well, as I said earlier in two plus two
3696 equals four and if you think that the \$646 billion Obama tax
3697 increase in this budget can be translated into 18 cents a
3698 day, I think you probably think two plus two equals 700. The
3699 fact is the cap-and-trade system I supposed in 1970, affected
3700 263 units and at its peak affected 2,000. Now, if you want
3701 to write a bill that covers the 2,000 most polluting places
3702 and say, fine, those 2,000 are part of cap-and-trade, I would
3703 be glad to look at it.

3704 Mr. {Inslee.} Could I ask you--

3705 Mr. {Gingrich.} If you want to include as I said in--if

3706 I might, if you include as I said in that quote very strong
3707 incentives, I would be glad to look at it. If you include
3708 prizes, I would be glad to look at it. If you would liberate
3709 the nuclear power industry from trial lawyers and regulatory
3710 controls, I would be glad to look at it. This bill does none
3711 of those things.

3712 This bill actually has the Department of--the Secretary
3713 of Energy regulating Jacuzzis. Now, the idea that we are
3714 going to have a cap-and-trade system that regulates Jacuzzis
3715 strikes me as close to being nuts.

3716 Mr. {Inslee.} Could I just--I just really would like
3717 you--I would like to know what you think about this. By the
3718 way, the only Jacuzzis this will regulate will have to
3719 produce 2,500 megawatts of energy, okay, to be covered, so
3720 you don't have to worry about Jacuzzis.

3721 But just let me ask you this question. In your opinion
3722 do you believe 18 cents a day for the American family is too
3723 much to save the planet? You can give us your thoughts about
3724 that. What do you think?

3725 Mr. {Gingrich.} I think if you could convince anybody
3726 that that is the real price, I--

3727 Mr. {Inslee.} Well--

3728 Mr. {Gingrich.} --as I said awhile ago, then explain
3729 the \$646 billion that is in the Obama budget. I mean, if you

3730 and the President have an argument, you don't have an
3731 argument with me. I am citing the President. Let me just
3732 ask you--

3733 Mr. {Inslee.} I just think--

3734 Mr. {Gingrich.} --let me ask, because maybe I
3735 misunderstood. So maybe you can help me, Congressman Inslee.
3736 On page 233, line five, portable electric spas. Now, I don't
3737 know what a portable electric spa is. I was told it was a
3738 Jacuzzi, but that is in this bill. Page 233. Now, that is
3739 why I said, when I got to that point, I quit reading the
3740 bill.

3741 Mr. {Inslee.} We will give you a hot spa that is energy
3742 efficient. I hope that doesn't offend you. My point is is
3743 that the economists who are testifying in this committee,
3744 including one called by the Republicans yesterday, said there
3745 would be a minimal cost of this. One yesterday, Dr. Jay Apt,
3746 former U.S. astronaut, told us that it won't cost us any more
3747 than compliance with the Clean Air Act. He said that was
3748 well worth the cost.

3749 Thank you very much.

3750 Mr. {Markey.} The gentleman's time has expired.

3751 The chair recognizes the gentleman from Michigan.

3752 Mr. {Upton.} Thank you, Mr. Chairman.

3753 I just want to go back to John Dingell's statement

3754 earlier this morning when he said that cap-and-trade is a
3755 tax, and it is a real big one, and the EU screwed this thing
3756 up twice to put it in his words.

3757 Mr. Speaker, it is good to have you back, and I am one
3758 that believes that we can, in fact, reduce emissions and deal
3759 with the issue in a major way, and you and I were both in the
3760 Congress with Mr. Barton, Mr. Markey, certainly Mr. Dingell
3761 when we took this issue up back in the '90s called the BTU
3762 tax. A lot of us labeled it the big time unemployment, and
3763 we knew at the time that the Senate was never going to take
3764 that bill up, but somehow we had a march in the House. The
3765 Republicans were in the minority, and that BTU tax did pass,
3766 219 t 213, and the Senate to their word never took the bill
3767 up.

3768 As we look at the landscape today with the Senate
3769 failing to take up the Warner, Lieberman bill last year,
3770 failing to get 60 votes, with another 12 that said that they
3771 would have voted against it had it made it to closure, when
3772 we look at the vote earlier this month in April where the
3773 Senate voted almost by a two-to-one margin, including my two
3774 senators, Evan Bayh, a number of others in the mid-west
3775 region, the rust belt, who, again, said it should not be part
3776 of reconciliation as part of the budget, thus requiring 60
3777 votes instead of 50. They said no. And as we try to work

3778 together on a bill to me it is quite apparent that even if
3779 the House passes a cap-and-trade tax as Mr. Dingell called
3780 it, it is not going to fly in the Senate. So why don't we
3781 work together on a number of things that, in fact, can bring
3782 us together?

3783 Things like a renewable portfolio standard to include
3784 non-carbon emissions as part of that. Thirty states have
3785 moved forward. Michigan among them. Texas among them.
3786 Presume Massachusetts among them. But as we look at the list
3787 of states with a high percentage of carbon-based fuels, we
3788 look at Massachusetts at 90, better than 90 percent, Michigan
3789 86 percent, Texas at 95 percent, even Wyoming at 97 percent.
3790 I think it is clear that we can take a number of steps to
3791 focus on renewals, and we ought to make sure that waste to
3792 energy is part of that, we ought to make sure that wind and
3793 solar incentives are there. I am one that believes that
3794 nuclear, which, of course, has no greenhouse gases emissions,
3795 we ought to be looking at that as part of that portfolio, and
3796 I am convinced that we will have bipartisan majority on a
3797 number of those issues where we can, in fact, move that
3798 legislation ultimately getting to the President's desk.

3799 You have made some good points about nuclear, and it is
3800 not part of this bill. I intend to work with Republicans and
3801 Democrats to add that title to the bill when we get to markup

3802 in the next week or two. I want to make sure that we don't
3803 have caps on emissions before we have technology that can
3804 actually make sure that we get to those.

3805 What is your sense in terms of the argument that I
3806 raised this morning about the WTO? Would that be a good idea
3807 to have an off ramp?

3808 Mr. {Gingrich.} Well, I think the people have to
3809 recognize the very grave danger that this bill is going to
3810 kill jobs in the United States and that the bill is not going
3811 to have any automatic affect on other countries except to
3812 export factories and export work. I do want to recognize
3813 that the distinguished Chairman and my very deal friend has
3814 come in, and it is a great honor to be with him, and we did
3815 many different things together over the years, most of them I
3816 have to say for the good I would like to think or for the
3817 country.

3818 But I do think his testimony this morning or his
3819 comments this morning when he was talking with the vice
3820 president and with Senator Warner, this is a tax, and here is
3821 the core challenge that I find fascinating, and it is
3822 something which Mr. Butterfield I thought alluded to in his
3823 questions earlier and that Ms. Sutton alluded to. The
3824 argument is that we have to raise the cost in order to get
3825 people to transition out of fossil fuels because fossil fuels

3826 are inexpensive. Okay. That is a legitimate argument,
3827 however, when you raise the cost, you are raising the cost,
3828 and then people say, but there is not really a higher cost
3829 when they raise the cost because somehow magically we are
3830 going to get to the promised land where there will be a lower
3831 cost after the higher cost.

3832 But if you are a normal person in this economy, if you
3833 have looked at us lose millions of jobs, if you are worried
3834 about your marginal last dollar of your income, the fact that
3835 eventually someday we will reach Nirvana, may not comfort you
3836 while you go broke. And to think that the challenge for
3837 everybody who wants to punish us into change, understand, the
3838 people you are trying to punish are the American people. I
3839 am very much in favor as I think you are, Mr. Upton, to
3840 incentivize us into dramatic change. I think you could write
3841 a bill that will be truly bipartisan that would have a
3842 dramatic number of breakthroughs in getting to a cleaner
3843 environment and to less carbon in the atmosphere.

3844 But it would do so in a positive way, and it would do so
3845 by incentivizing rather than punishing, and it would do so in
3846 a clean way that did not require a massive expansion of
3847 government bureaucracy.

3848 Mr. {Upton.} Thank you.

3849 Mr. {Markey.} The gentleman's time has expired.

3850 The chair recognizes the gentleman from Michigan,
3851 Chairman Emeritus of the committee.

3852 Mr. {Dingell.} Thank you. I would like to begin by
3853 welcoming my old friend, Mr. Gingrich, back. Glad to see you
3854 here, Newt.

3855 I share your concern on the points that you have raised
3856 as you have gone over these matters. The question of
3857 competitiveness in this matter is a very important one. The
3858 question of how it is we are to address this business of
3859 global warming at the same time while we are dealing with the
3860 other questions of preserving competitiveness is a matter of
3861 great concern.

3862 China and Indians you have indicated have indicated that
3863 they are going to be developing countries for always and that
3864 means we have some problems. There are others who are out
3865 from under the burdens of this under the Quioto Agreement and
3866 will have a potential for a large advantage over the United
3867 States. These things I find are very, very troublesome to
3868 me, and so the first question is how do we see to it that we
3869 don't be the only country in the world which carries this
3870 load? How do we, for example, address the questions of
3871 trade? How do we, for example, address the questions of
3872 dealing with the business of cap-and-trade so that it doesn't
3873 impose excessive burdens on our people while letting others

3874 get away? What do we do with regard to addressing these
3875 concerns within the framework of a global cap-and-trade
3876 package but also within the framework of things like GAT and
3877 the WTO?

3878 Mr. {Gingrich.} Well, let me say first of all, Mr.
3879 Chairman, you know full well in Michigan, in the area that
3880 you have represented to ably, what the pain has been of
3881 unemployment and of competition killing jobs. I worry a
3882 great deal the European experience was captured in one study
3883 in which a cement plant left Belgium under cap-and-trade and
3884 opened up in Morocco, actually emitting more carbon in
3885 Morocco than it was originally emitting in Belgium, taking
3886 the jobs away from Belgians and giving them to Moroccans.
3887 And I do worry that if we unilaterally adopt this that it
3888 would be a disaster. Now, those, Vice President Gore, for
3889 example, was very optimistic about the Chinese. You know, it
3890 might be useful to offer an amendment that said that the cap-
3891 and-trade section of this bill would only go into effect when
3892 it was certified that the Chinese had adopted a comparable
3893 program. I think that would be one way to guarantee that
3894 we, A, I think would probably never go into effect, but, B,
3895 that we wouldn't be kidding ourselves with what we are going
3896 to do to American jobs.

3897 In this economy--

3898 Mr. {Dingell.} When I was at Quioto told me that they
3899 were only, that they were a developing country, they were not
3900 going to be covered by the agreement, and that they would
3901 never be covered by the agreement because they are always
3902 going to be a developing country.

3903 Mr. {Barton.} I am a witness to that. That really
3904 happened.

3905 Mr. {Dingell.} Yeah. Now, the problem that is our
3906 concern here is we have to do something about the wasteful
3907 use of energy in this country, and I desperately want to
3908 support this bill, principally for that reason.

3909 But the question is if--we have this nasty balancing.
3910 On the one hand we have got to deal with the question of how
3911 we make other countries comply and cooperate, how we at the
3912 same time achieve the efficiencies that we have got to do,
3913 how we force other countries to comply, and how we don't wind
3914 up with a huge mess and a loss of jobs on our own hands.

3915 Mr. {Gingrich.} I think you are putting your finger on
3916 the heart of the challenge of this bill. Let me just say I
3917 believe you could write a bill that liberated the nuclear
3918 power energy industry and allowed us to move towards
3919 dramatically more nuclear, which would take a great del of
3920 carbon out of the atmosphere.

3921 I believe you could write a bill which dramatically

3922 incentivized moving towards a green coal system of carbon
3923 sequestration and using the carbon then to have an AMSOIL
3924 recovery. I think you could write a bill which had very
3925 substantial increase in research and development for
3926 materials technology, for hydrogen, and for other
3927 breakthroughs. I think frankly you could move ethanol from
3928 10 to 15 percent of all liquid fuels and you could move
3929 towards a much better use of natural gas, and the combined
3930 effect would both dramatically increase the American economy,
3931 reduce the amount of carbon loading in the atmosphere, create
3932 a lot of American jobs, and improve our national security.

3933 None of the things I just mentioned requires a national
3934 federal bureaucracy to micromanage Jacuzzis and none of the
3935 things I just mentioned requires punishing anybody. And I
3936 think that has got to be part of the key. We have in a world
3937 market, when we unilaterally punish Americans, we cripple the
3938 American worker in competing with our foreign competitors.

3939 Mr. {Dingell.} All right. Now, I got one other
3940 question. You and I have been floundering around in this
3941 morass for a long time, and both of us have seen our concerns
3942 and interests and feelings change. In April of 2007, you had
3943 some comments on this, and in April of 2008, you had some
3944 other comments.

3945 In 2007, you said my message is that evidence is

3946 sufficient that we should move towards the most effective
3947 possible steps to reduce the carbon loading of the atmosphere
3948 and do it urgently. In April of 2008, we--you said I want to
3949 be clear. I don't think that we have conclusive proof of
3950 global warming, and I don't think we have conclusive proof
3951 that humans are at the center of it.

3952 How do we rhyme those two statements?

3953 Mr. {Gingrich.} Well, Mr. Chairman, first of all, I
3954 believe, and then I went on to say as a conservative I think
3955 conservation and caution are part of being a conservative.
3956 And I think that as a prudent person you can take steps to
3957 limit carbon loading of the atmosphere without having
3958 conclusively proved anything about that causality of whether
3959 carbon loading has an affect on the temperature of the earth,
3960 because I think frankly it is clear that as Mr. Barton
3961 earlier indicated that there has been an increase in carbon
3962 loading of the atmosphere, and there will probably be a
3963 continuing increase.

3964 In the interim I also wrote a book called Contract with
3965 the Earth, and I believe that it--I think one of the reasons
3966 I volunteered to come here today is I believe if we can find
3967 and incentivize a positive way to move to a new generation of
3968 greener energy, and if we can find a way to do it that
3969 increases the competitiveness of the American economy, it is

3970 absolutely in our national security interests and our quality
3971 of life interest to do it.

3972 And so I do think that there are practical steps we
3973 could take, and I would associate myself with Mr. Upton's
3974 description of the kind of bipartisan bill that I think could
3975 have very widespread support that would help Michigan create
3976 jobs, that wouldn't kill more jobs, and it would actually
3977 expand the choices of the American people. It wouldn't try
3978 to punish them into change.

3979 Mr. {Dingell.} Thank you. It is good to see you back.

3980 Mr. {Gingrich.} Good to see you, sir.

3981 Mr. {Markey.} Okay. The gentleman's time has expired.
3982 The chair will recognize himself.

3983 You asked, Mr. Speaker, what would the nuclear industry
3984 ask. Well, I can tell you that the asked his committee in
3985 1992, to combine the construction and operating license. We
3986 did that. That was the 1992, Energy Act. In 2005, President
3987 Bush, the Republican House and Senate, they asked the nuclear
3988 industry what do you need. They said, well, we need to
3989 consolidate the licensing proceedings for modular nuclear
3990 reactors. That is exactly what was in the 2005, Energy Act.

3991 But in addition to that we have authorized the Price
3992 Anderson Act for them for 25 years to protect them against
3993 insurance exposure because they are the only industry that

3994 cannot, in fact, get insurance from the private sector that
3995 we enacted a production tax credit for the nuclear industry.
3996 We enacted a tax credit that allows all nuclear power plant
3997 owners to deduct the cost of the money they put into their
3998 nuclear power plant decommissioning funds from their taxes.
3999 We authorized the DOE to assist companies in helping to get
4000 their power plant licensing requirements through the NRC. We
4001 authorized the wide-ranging DOE R&D Program and nuclear power
4002 plant technologies, and perhaps most importantly, and this is
4003 what they say is absolutely the bottom line need that they
4004 have, we authorized a \$50 billion government-backed loan
4005 guarantees for the nuclear industry and other advanced
4006 technologies, which means that if the utility defaults, the
4007 American taxpayer is on the line for the money, which is the
4008 system in France and China. They are Socialist and Communist
4009 countries. We adopted that provision for them.

4010 However, there is no question that even with all that
4011 said and done that if there is a cap-and-trade system put in
4012 place and a low carbon economy is created, that would be the
4013 best marketplace incentive for the utility industry to move
4014 back towards the nuclear industry. Because then a premium
4015 would be placed upon it.

4016 So the marketplace is the best place for them, although
4017 they have been dependant upon government support for the last

4018 50 years, and they have only intensified in that request over
4019 the last 3 or 4 years, which has been met by the Congress.
4020 So that is just the reality of the nuclear industry. It will
4021 do better in a cap-and-trade system.

4022 Second, on your point about the 34 times that the
4023 Department of Energy missed their deadlines for appliance
4024 sufficiency, that is accurate. They did. I know that
4025 because I requested the GAO report on that issue. I know and
4026 have a concern about it because they missed the deadline
4027 required in my appliance sufficiency law.

4028 Now, without question that led to an additional dozens
4029 of power plants that had to be built, fossil fuel plants, in
4030 order to generate the electricity for those appliances.
4031 However, the reality is in addition that when you were
4032 speaker, there was actually a writer that barred adoption of
4033 any new or revised appliance sufficiency standards, and a
4034 second writer actually barred any new standards for
4035 fluorescent light bulbs.

4036 So to bring this up to the Jacuzzi amendment, the hot
4037 job amendment, that provision is inside of the appliance
4038 efficiency standards that we are going to require. Now, of
4039 all of the things that we would want to have high energy
4040 efficiency, it would be I would think Jacuzzis. I mean,
4041 there is a discretionary purchase in the American economy,

4042 and all we are saying there is like light bulbs or
4043 refrigerators or stoves, that there should be high standards
4044 for energy efficiency in the manufacture of Jacuzzis and hot
4045 tubs. It is just part of what, it is part of what you were
4046 criticizing in the very beginning in terms of the Department
4047 of Energy, not meeting high energy efficiency standard. And
4048 by the way, the standard that we included is the industry
4049 consensus standard, and a standard they say they believe all
4050 industry participants can meet.

4051 And I would just add this one other thing, which is that
4052 beginning in 1995, there was a rider attached to every
4053 transportation bill, which banned the Department of
4054 Transportation from improving the fuel economy standards of
4055 the vehicles which we drive. So in the same way that not
4056 having high standards for appliances, led to more fossil
4057 fuel, electrical generating plants had to be built, sending
4058 more CO2 up into the atmosphere.

4059 So, too, they are delaying the improvement in the fuel
4060 economy standards lead to more imported oil, yes, but
4061 ultimately delayed the point in time in which the auto
4062 industry would have to meet the innovation tests that the
4063 rest of the world was applying to our auto industry.

4064 So I just point all those things out just to let you
4065 know that in the confines of this bill the nuclear industry

4066 is a huge beneficiary. The appliance and other industries
4067 will be dealt with in a way that I think matches the kind of
4068 prize that they should be receiving for innovation, but it is
4069 just creating this work smarter, not harder economy that
4070 depends upon innovation rather than the importation or the
4071 burning of domestic fossil fuels unnecessarily, although
4072 where it is necessary, we obviously need it to continue.

4073 So that is the only point I would make to you, Mr.
4074 Speaker. These are the things that I have been working on my
4075 entire career, and in a lot of ways this bill that we are now
4076 debating makes it possible for us to move to the innovation
4077 economy. It makes it possible for us to move forward to now
4078 deal with the reality that we only have 3 percent of the
4079 world's oil reserves while consuming 25 percent of it, which
4080 is an unsustainable long-term profile for our country.

4081 Mr. {Gingrich.} Just two quick comments. You have
4082 shown great fortitude today and great patience. Two
4083 comments. One, on the question of reserves, I would just
4084 cite back what I had said earlier when you realize the U.S.
4085 geological survey just increased the Bachen reserve by 2,500
4086 percent to between 3 and 4 billion barrels from what would
4087 have been a very small reserve, and you realize that the
4088 Brazilians went and the last few years from 10 billion to 100
4089 billion because they have barrels of reserve, because they

4090 actually permitted looking for oil. I think--and we
4091 literally have gotten 100 years supply of natural gas
4092 discovered in the last 3 years. I think that the reserve
4093 issue is not, is actually not valid but is a function of bad
4094 government policy, and I just would say I can't imagine a
4095 much better way to close the difference between being liberal
4096 and conservative in America than whether or not one could
4097 allow consumers to actually evaluate Jacuzzis or whether we
4098 needed a federal department of Jacuzzi regulation.

4099 I think it is a perfect contrast in our two approaches,
4100 and I have great respect for you and what you are trying to
4101 do, but I do think it is a pretty dramatic difference in our
4102 view of how America should operate.

4103 Mr. {Markey.} Well, I thank you, Mr. Speaker, but,
4104 again, I am only referring back to your own criticism of the
4105 Department of Energy, and by the way, that was the Bush
4106 Department of Energy that missed all 34 deadlines--

4107 Mr. {Gingrich.} Well, I would say that--

4108 Mr. {Markey.} --for energy efficiency.

4109 Mr. {Gingrich.} --the mismanagement, for example, of
4110 nuclear waste, clean up processes has been an ongoing
4111 Department of energy problem across several Administrations.

4112 And I have limited faith in the ability of federal
4113 bureaucracies to operate with agility and alacrity.

4114 Mr. {Markey.} And I appreciate that, Mr. Speaker, but
4115 the reality is is that the FutureGen product that you talked
4116 about and are critical of the Department of Energy decision
4117 to walk away from was a decision made by the Bush Department
4118 of Energy in 2000.

4119 Mr. {Gingrich.} I agree with you, and I am happy to be
4120 bipartisan in my criticism.

4121 Mr. {Markey.} Just so you know we put \$3 billion into
4122 the stimulus bill for climate change and sequestration. We
4123 have already \$10 billion built into this bill for carbon
4124 capture and sequestration research, development, and
4125 demonstration projects. The fundamental flaw to be honest
4126 with you with the nuclear waste site, because I was here. I
4127 was actually chairman of this subcommittee back in that era,
4128 was that rather than listening to the National Academy of
4129 Sciences the--this Congress back then in that time decided
4130 that they would pick Yucca Mountain in Nevada, ignoring the
4131 National Academy of Sciences. So it was not a science-based
4132 decision. It was strictly political, and that is what we are
4133 now reaping the harvest of because whether you put something
4134 near a river, near an earthquake fall, you are going to wind
4135 up long-term with real problems if you are trying to isolate
4136 nuclear materials for 20 or 30,000 years.

4137 So we are hoping that we can create a bridge here. We

4138 are hoping that we will be able to work together, Mr.
4139 Speaker, with Republicans on this issue to find a way that we
4140 can move forward, because in the long run we only have 3
4141 percent of the world's global oil reserves. Even if it
4142 became 4 percent, we now consume 25 percent, and it is -- in
4143 the long run incumbent upon us to find a technological
4144 solution to it, and the quicker that we get to it, the
4145 quicker that we put in place the incentives for market-based,
4146 science-based, breakthroughs. Then I think the sooner that
4147 we will be able to tell those countries around the world that
4148 we import 13 million barrels of oil from--on a daily basis
4149 that we don't need their oil anymore than we need their sand,
4150 but there is now way we are producing an extra 13 million
4151 barrels of oil a day. We only produce eight million barrels
4152 of oil a day today.

4153 So we need a plan in place in order to be successful,
4154 and we want to really work on a bipartisan basis, which would
4155 be the Democrats and Republicans to accomplish that goal. It
4156 is an honor for us to have you with us today.

4157 I would like to conclude by giving you an opportunity to
4158 give us your closing thoughts, your comments in terms of what
4159 you want us to remember as we go forward with the
4160 consideration of this legislation.

4161 Mr. {Gingrich.} Well, first of all, I am very honored

4162 that you let me come over and share these ideas with you, and
4163 I am very grateful for the patience and the length of time
4164 that you put in today.

4165 I would say that there is a way to develop an
4166 incentivized and a positive approach that can accelerate
4167 dramatically our moving towards more effective energy
4168 systems. I think that to the degree we divert that into
4169 trying to build a national bureaucracy and trying to create a
4170 national managed system that it is likely to carry us down a
4171 road we don't do very well, and I agree with what Chairman
4172 Dingell said earlier this morning that watching the two
4173 efforts by the Europeans has not been very encouraging in
4174 terms of the likelihood of designing the system.

4175 But I do appreciate the way you have approached it, and
4176 I hope that you and Mr. Upton are able to find some common
4177 ground on which to write a bipartisan bill.

4178 Mr. {Markey.} Thank you, Mr. Speaker.

4179 Mr. {Gingrich.} Thank you.

4180 Mr. {Markey.} And, again, it is our honor to have you
4181 here with us.

4182 Mr. {Gingrich.} Thank you.

4183 Mr. {Markey.} We have 21 more witnesses to go today,
4184 and the chairman needs approximately a 3-minute break before
4185 we begin the next panel. So we will stand in recess for 3 or

4186 4 minutes.

4187 [Recess.]

4188 Mr. {Markey.} Ladies and gentlemen, we apologize to you
4189 but we had historic guests visiting the committee today. We
4190 are moving at a rapid pace to try to construct our historic
4191 legislation that matches the quality of the witnesses which
4192 we have appearing before us. On this next panel, we have a
4193 group of nationally recognized experts in their subject area
4194 and we are going to begin with Ian Bowles. Mr. Bowles is the
4195 secretary of the Executive Office of Energy and Environmental
4196 Affairs for the Commonwealth of Massachusetts. He also
4197 served as associate director of the White House Council on
4198 Environmental Quality and senior director of the Global
4199 Environmental Affairs Directorate at the National Security
4200 Council. We welcome you, Mr. Bowles. By the way, I will
4201 introduce all of you so you won't have to reintroduce
4202 yourself, which might save you 15 or 20 seconds in your
4203 testimonies, so whenever you are ready, Mr. Bowles, please
4204 begin.

|

4205 ^STATEMENTS OF IAN BOWLES, SECRETARY, EXECUTIVE OFFICE OF
4206 ENERGY AND ENVIRONMENTAL AFFAIRS, COMMONWEALTH OF
4207 MASSACHUSETTS; DAVE MCCURDY, PRESIDENT AND CEO, ALLIANCE FOR
4208 AUTOMOBILE MANUFACTURERS; ALAN REUTHER, LEGISLATIVE DIRECTOR,
4209 INTERNATIONAL UNION, UNITED AUTOMOBILE, AEROSPACE &
4210 AGRICULTURAL IMPLEMENT WORKERS OF AMERICA (UAW); DANIEL
4211 SPERLING, DIRECTOR, INSTITUTE OF TRANSPORTATION STUDIES,
4212 UNIVERSITY OF CALIFORNIA DAVIS; DAVID FRIEDMAN, RESEARCH
4213 DIRECTOR, CLEAN VEHICLES PROGRAM, UNION OF CONCERNED
4214 SCIENTISTS; DAVID GARDINER, PRESIDENT, DAVID GARDINER AND
4215 ASSOCIATES, LLC (ON BEHALF OF ENERGY FUTURE COALITION); JEFF
4216 GENZER, COUNSEL, NATIONAL ASSOCIATION OF STATE ENERGY
4217 OFFICIALS; CHARLES T. DREVNA, PRESIDENT, NATIONAL
4218 PETROCHEMICAL AND REFINERS ASSOCIATION; ANDREW DELASKI,
4219 EXECUTIVE DIRECTOR, APPLIANCE STANDARDS AWARENESS PROJECT;
4220 AND CHARLES RICHARDSON, ON BEHALF OF THE NATIONAL ASSOCIATION
4221 OF HOMEBUILDERS

|

4222 ^STATEMENT OF IAN BOWLES

4223 } Mr. {Bowles.} Thank you, Mr. Chairman, for your
4224 terrific work on this legislation. I am sure as you stare at
4225 this panel, it feels like Heartbreak Hill in the Boston

4226 Marathon, so I commend you for your patience in these
4227 proceedings and thank you for having us here today.

4228 Let me say at the outset, Mr. Chairman, that Governor
4229 Patrick and the work we have been doing on clean energy is
4230 very much aligned with the legislation that you and your team
4231 have produced and we appreciate the thoughtful approach to
4232 developing a federal-state partnership that advances the
4233 goals of clean energy and greenhouse gas reduction. I also
4234 want to note that many States have been leading in this area
4235 for recent years and we all welcome this important
4236 legislation.

4237 In short, the legislation builds on, buttresses and
4238 accelerates but doesn't supplant proven State programs on
4239 energy efficiency and renewable energy. On energy
4240 efficiency, the bill creates a strong new set of federal
4241 standards but also recognizes that much of the retail work
4242 retrofitting will be done and implemented at State and local
4243 levels. On renewable energy, the legislation recognizes the
4244 regional diversity of clean power solutions and the
4245 fundamentally regional nature of electricity markets and the
4246 need to bolster, not eliminate, such markets. And on
4247 transmission, I think it carefully resists the call for some
4248 top-down central planning that would disrupt competitive
4249 energy markets such as we have in the Northeast and instead

4250 creates a market-based set of mandates that in our view is a
4251 superior way to accelerate renewable energy.

4252 On regulation of greenhouse gases, the bill rightfully
4253 crafts unified, robust national program but it still leaves
4254 the States tools to innovate and continue to contribute to
4255 low-carbon solutions. As you consider the design of the cap-
4256 and-trade program, we in Massachusetts endorse 100 percent
4257 auction approach. No other system provides the clarity and
4258 simplicity to the private sector and it also allows the
4259 federal government acting on behalf of the public interest to
4260 put the proceeds to work to mitigate economic and consumer
4261 impacts, accelerate renewable energy and energy efficiency
4262 and realign our public transportation infrastructure. Let me
4263 say in the case of our experiment with RGGI in the Northeast,
4264 our permit auctions have run smoothly and we are putting tens
4265 of millions of dollars to work creating jobs and reducing
4266 energy costs for our consumers. As you consider a transition
4267 to the federal program, we believe such programs are needed
4268 and should be funded, not just for the RGGI States but for
4269 all 50 States, and the federal recovery legislation begins
4270 that process with the State energy program funding. As you
4271 develop your priorities for spending auction proceeds, we
4272 really strongly encourage the committee to put a big push on
4273 energy efficiency and make it a large part of your

4274 investment.

4275 The proposed Energy Efficiency Resource Standard also
4276 represents a complementary tool to accomplish this. In
4277 Massachusetts, we have restructured our electricity market so
4278 that efficiency now competes with power generation on price
4279 to meet the low demand. The EERS would create a similar
4280 mandate for other States.

4281 For those who say the EERS may be too stringent, I would
4282 note that in Massachusetts we have met through measures over
4283 the last decade 8 percent of our load through energy
4284 efficiency investments. In rough terms, that would be
4285 equivalent to the 2017 mandate in your legislation. So I
4286 encourage the committee to retain, include robust measures on
4287 energy efficiency and I would encourage you also to add some
4288 more significant measures on monitoring and verification so
4289 that we can demonstrate to the public what these investments
4290 in energy efficiency are producing.

4291 In building codes, I think the work based on the IECC
4292 and ASHRAE standards is terrific. We in Massachusetts are
4293 building our new code currently on the 2009, not 2006 code,
4294 and I would encourage the committee to look closely at the
4295 2009 code potentially as the basis.

4296 On transportation, the bill breaks new ground by
4297 incorporating greenhouse gas standards for vehicle emissions

4298 and transportation planning. I encourage the committee to go
4299 further even by tying federal highway funds to greenhouse gas
4300 reductions, consider incentives for vehicle mile traveled
4301 reductions and give the States some flexibility to set and
4302 enforce greenhouse gas targets.

4303 On fuels, the proposal in the legislation is a
4304 transition to the renewable fuel standard, to transition that
4305 standard into a low-carbon fuel standard. We think that is
4306 the right policy. If anything, we would encourage you to
4307 move the timeline more quickly but also to recognize some of
4308 the regional opportunities and the special considerations
4309 such as we have in the Northeast where we don't want to have
4310 leakage out of transportation fuels into things like home
4311 heating oil.

4312 In a related vein, we fully support the higher
4313 efficiency standards for appliances, especially the provision
4314 that allows States to set more-stringent standards where
4315 conditions warrant. As you may know, in the Commonwealth we
4316 have a State law that requires furnace efficiency standards
4317 for cold weather States. We think there are some important
4318 regional differences there.

4319 In sum, I would say this is a terrific piece of
4320 legislation. We commend you and your staff for your hard
4321 work and I would be delighted to take the committee's

4322 questions. Thank you.

4323 [The prepared statement of Mr. Bowles follows:]

4324 ***** INSERT 4 *****

|
4325 Mr. {Markey.} Thank you, Mr. Secretary, very much.

4326 Our next witness, Dave McCurdy, is a former extremely
4327 distinguished Member of the United States Congress, former
4328 chairman of the Intelligence Committee, and he is now using
4329 all of those political skills and intelligence as the
4330 president and CEO of the Alliance for Automobile
4331 Manufacturers and he was previously the president and CEO of
4332 the Electronic Industries Alliance. We welcome you back,
4333 Dave. Whenever you are ready, please begin.

|
4334 ^STATEMENT OF DAVE MCCURDY

4335 } Mr. {McCurdy.} Thank you, Mr. Chairman, for the
4336 opportunity and Ranking Member Upton and Chairman Dingell.
4337 It is always a pleasure to be back. I will tell you, I have
4338 chaired a lot of hearings in my career as well but I am not
4339 sure any would match the marathon of the last 4 days, so I
4340 commend you for your interest and endurance, and I would
4341 respectfully suggest that if there is only one thing you
4342 recall from my testimony today, just remember this, that
4343 automakers are committed to reducing greenhouse gas emissions
4344 from the vehicles we sell and from our assembly plants, and
4345 today I am going to focus on how we can work together to
4346 accomplish that.

4347 To begin with, the Alliance supports federal legislation
4348 for an economy-wide greenhouse gas emissions reduction
4349 program. We agree with the chairman, Administrator Jackson
4350 and others that a comprehensive legislative approach is
4351 superior to regulating greenhouse gas under the existing
4352 Clean Air Act. When we look ahead and envision what a low-
4353 carbon future for automobiles will look like, here is what we
4354 see. It is going to require substantial investment in
4355 advanced vehicle technologies. Secondly, our country needs

4356 complementary policies for fuels, and third, we need a single
4357 national program for improving fuel economy and reducing
4358 greenhouse gas emissions.

4359 Let me start with investment in technologies. Providing
4360 clean energy necessary for continued economic growth and
4361 prosperity will require rapid development and commercial-
4362 scale deployment of advanced technology across many sectors
4363 including motor vehicles. We strongly urge the committee to
4364 use revenues generated from the proposed cap-and-trade system
4365 to help fund research, development and implementation of new
4366 technologies and upgrading and retooling of manufacturing
4367 facilities to provide the next generation of green vehicles.
4368 According to the endangerment finding released by EPA last
4369 week, light-duty vehicles, cars, trucks and SUVs that we
4370 drive, account for around 17 percent of manmade greenhouse
4371 gas emissions in the United States. In order to realize the
4372 significant reductions we know we will have to achieve in our
4373 sector, we need sizable, sustained investments to take
4374 advanced low-carbon vehicle technologies from our
4375 laboratories to our customers' garages. Frontloading
4376 investments in these technologies is particularly critical
4377 for automakers, given the long lead times to develop new
4378 technologies, the extended periods needed to ramp up
4379 production of new technologies and the long-lived nature of

4380 our products. Given the importance of this sector, we urge
4381 at least 5 percent of annual allowance value, either in the
4382 form of allowances or revenue, be dedicated specifically to
4383 development and deployment of advanced technologies for
4384 light-duty vehicles. We are open to further discussions with
4385 the committee on how to allocate such resources among
4386 manufacturers, suppliers and consumers.

4387 With regard to fuels, the draft bill's approach of
4388 capping emissions primarily upstream at the fuel source
4389 allows for the broadest possible coverage and also will
4390 result in price signals at the rate of about 8.5 cents, 8-1/2
4391 cents per gallon of gasoline for every \$10 ton of carbon.
4392 Clean vehicles need clean fuels so the Alliance supports a
4393 low-carbon fuel standard such as the one included in section
4394 121 of the draft. Lowering the carbon content of the fuels
4395 we put into our fuel tanks will help lower greenhouse gas
4396 emissions from the fuel source to our tailpipes for years to
4397 come, and the benefits of cleaner fuels can be realized by
4398 all the 250 million autos on the road today.

4399 Finally, a key concern for automakers is that we not be
4400 subject to duplicative and incompatible State and federal
4401 regulatory approaches either from mobile sources or
4402 stationary sources. It is well known that the Alliance
4403 strongly supports a single national program for motor vehicle

4404 greenhouse gas emissions and fuel economy to bridge State and
4405 federal programs. We support the authors' efforts to clarify
4406 the roles of existing regulatory framework and the States
4407 with regard to our manufacturing facilities. We will
4408 continue to work constructively with Congress, the
4409 Administration and all other stakeholders to ensure a
4410 national vehicle program administered by the federal
4411 government that not only enhances energy security and
4412 addresses climate change but also gives automakers a clear
4413 roadmap to compliance.

4414 Before I close, I wanted to raise one other issue that
4415 is important to members of this committee. Last month
4416 President Obama pointed to a fleet modernization or so-called
4417 cash for clunkers programs that had been successful in Europe
4418 and announced he would work with Congress to fund the program
4419 from existing dollars in the Recovery Act. The Alliance
4420 welcomes presidential as well as Congressional support for
4421 fleet modernization program. We will continue working
4422 towards creating a program available to all manufacturers and
4423 consumers. A well-crafted fleet modernization program will
4424 deliver two important benefits. In the near term, it will
4425 stimulate auto sales during the current economic credit
4426 crisis and in the long term it will help replace older, less
4427 fuel-efficient vehicles with cleaner, safer, more fuel-

4428 efficient ones.

4429 In closing, Mr. Chairman, the transition to a new way of
4430 using energy and new energy sources requires that we
4431 collaborate with government and other industries like never
4432 before. The next generation of vehicles will require a new
4433 generation of fuels and supporting infrastructure. You have
4434 our commitment to continue reinventing the automobile. We
4435 will continue to provide Americans with a wide range of
4436 vehicles that are highly fuel efficient and we will be at the
4437 leading edge of the world's low-carbon economy, an economy in
4438 which green auto jobs are a fundamental part of the engine
4439 driving our communities. Thank you.

4440 [The prepared statement of Mr. McCurdy follows:]

4441 ***** INSERT 5 *****

|

4442 Mr. {Markey.} Thank you, Dave, very much.

4443 Our next witness, Mr. Alan Reuther, is the legislative
4444 director for the International Union of the United Auto
4445 Workers. He is a member of one of the most aristocratic
4446 automobile families in the history of our country and we are
4447 honored to have you with us today, sir. Whenever you are
4448 ready, please begin.

|
4449 ^STATEMENT OF ALAN REUTHER

4450 } Mr. {Reuther.} Thank you, Mr. Chairman. I am pleased
4451 to be here on behalf of the UAW, which represents over 1
4452 million active and retired members, many of whom work for or
4453 receive retirement benefits from the auto manufacturers and
4454 parts supplies. We appreciate the opportunity to testify
4455 before this subcommittee.

4456 The UAW supports the provisions of Title II establishing
4457 an economy-wide cap-and-trade program to reduce greenhouse
4458 gas emissions. We welcome the inclusion of mechanisms to
4459 contain costs. However, we believe the provisions in Title
4460 IV that seek to preserve the competitiveness of domestic
4461 industries need to be strengthened in a number of ways. For
4462 example, these provisions should be expanded to include
4463 products such as auto parts that contain large amounts of
4464 energy-intensive materials. Most importantly, the UAW
4465 believes a substantial amount of the revenues from the
4466 auction of carbon allowances should be used to help auto
4467 manufacturers and parts companies with the major upfront
4468 costs associated with meeting tougher vehicle efficiency
4469 standards. This includes at least another \$25 billion to
4470 fund the existing section 136, advanced technology vehicles

4471 manufacturing incentive program, as well as funds for the new
4472 program that may be established under section 124 of Title I.

4473 In addition, revenues should be used to pay for other
4474 costs associated with meeting tougher vehicle efficiency
4475 standards beyond those linked to advanced technology
4476 vehicles. Because of their current difficult financial
4477 situations, the Detroit-based automakers and many parts
4478 suppliers do not have the resources to make the necessary
4479 investments.

4480 The UAW also supports the clean fuels and vehicles
4481 provisions in Title I of the discussion draft. The low
4482 carbon fuel standard can make a major contribution to
4483 reducing our Nation's consumption of oil and greenhouse gas
4484 emissions. The provision supporting large-scale
4485 demonstrations of electric vehicles can create demand for the
4486 production of these vehicles and the provisions in section
4487 124 granting financial support to automakers to retool plants
4488 to build plug-in electric drive vehicles in this country can
4489 accelerate the introduction of these vehicles but also ensure
4490 that they will be produced in the United States by American
4491 workers.

4492 The UAW applauds the transportation planning
4493 requirements in Title II which recognize that initiatives to
4494 reduce vehicle miles traveled must be an important part of

4495 any effort to reduce oil consumption and greenhouse gas
4496 emissions from the transportation sector. Although the
4497 light-duty vehicle efficiency provisions in Title II take the
4498 commendable step of calling for the harmonization of
4499 standards that may be set by NHTSA, EPA and the State of
4500 California, they do not purport to establish any minimum
4501 benchmark for such standards beyond 2015. Instead, they
4502 merely provide a green light for subsequent regulatory action
4503 by the State of California. The UAW believes this approach
4504 has several deficiencies. It fails to provide any certainty
4505 that there will be guaranteed minimum improvements in vehicle
4506 efficiency over an extended period of time and it fails to
4507 provide automakers with certainty as to what will be required
4508 of them. In lieu of this approach, the UAW submits that it
4509 would be preferable to mandate minimum national harmonized
4510 vehicle efficiency standards that must be met by the
4511 automakers for specified dates extending through 2030. These
4512 could be set at specific MPG targets or as percentage
4513 improvements from a certain baseline. The UAW recognizes
4514 that this alternative approach would have to embody a
4515 negotiated agreement between NHTSA, EPA and the State of
4516 California as well as other stakeholders. This could reflect
4517 the desire of California for more-stringent reductions in
4518 vehicle emissions and oil consumption. However, we believe

4519 it also should reject some of the deficiencies in California
4520 law AB 1493 including the exemption of foreign automakers,
4521 the one-size-fits-all flat MPG approach and the lack of any
4522 anti-backsliding rule. Under the alternative approach that
4523 we are suggesting, the legislation could specify that it is
4524 not altering existing law regarding the authority of
4525 California and other States after the end date of any
4526 negotiated agreement on a harmonized national vehicle
4527 efficiency standard.

4528 In conclusion, the UAW appreciates the opportunity to
4529 testify before this subcommittee. We look forward to working
4530 with you, Mr. Chairman, and the other members of the
4531 committee and the entire Congress to craft improved
4532 provisions relating to vehicle efficiency standards and
4533 providing the resources needed by automakers and parts
4534 supplies to meet new efficiency standards. Thank you.

4535 [The prepared statement of Mr. Reuther follows:]

4536 ***** INSERT 6 *****

|
4537 Mr. {Markey.} Thank you, Mr. Reuther, very much.

4538 Our next witness is Dr. Dan Sperling. Dr. Sperling is
4539 the founding director of the Institute of Transportation
4540 Studies at the University of California Davis. He was
4541 appointed to the automotive engineering seat on the
4542 California Air Resources Board by Governor Schwarzenegger and
4543 served as co-director of the California Low Carbon Fuel
4544 Standards Study. We welcome you, Dr. Sperling.

|
4545 ^STATEMENT OF DANIEL SPERLING

4546 } Mr. {Sperling.} Thank you. It is a pleasure to be
4547 here, and it is a special pleasure because I bring important
4548 news on the low-carbon fuel standard from California. Last
4549 night the California Air Resources Board made history. We
4550 voted to adopt a low-carbon fuel standard. It will take
4551 effect in January 2011. It requires a 10 percent reduction
4552 in greenhouse gas emissions per unit of energy for gasoline
4553 and diesel fuel by 2020, and I note that 11 other States have
4554 signed MOUs to also adopt the low-carbon fuel standard and
4555 that the European Union is also moving toward adopting
4556 policies that closely resemble a low-carbon fuel standard.

4557 So I would like to point out that there are a number of
4558 reasons why the United States should follow California's lead
4559 and adopt a low-carbon fuel standard. One, it applies to all
4560 potential transportation fuels, unlike the current renewable
4561 fuel standard that Congress passed in 2007, which only
4562 applies to biofuels. Another feature is the emissions are
4563 measured on a lifecycle basis, and this is the scientifically
4564 correct way to regulate greenhouse gases to include all the
4565 emissions in the energy chain from the oil well, the coal
4566 mine or the cornfield all the way to the vehicle. Neither

4567 cap and trade nor the renewable fuel standards program are
4568 based on lifecycle measurements. Another key feature is uses
4569 a performance standard, not volumetric mandates, as is the
4570 case with the renewable fuel standard and thus it allows
4571 industry and it allows customers to pick the winners. The
4572 winners are not picked and the losers are not picked by
4573 government in this case. It harnesses market forces to
4574 stimulate innovation. The low-carbon fuel standard allows
4575 the energy providers to buy and sell credits among each
4576 other, creating a market for these low-carbon fuel standard
4577 credits and reducing the overall cost of developing low-
4578 carbon fuels. And so what it is doing is, it is creating a
4579 durable, permanent framework for orchestrating the transition
4580 to low-carbon alternative fuels.

4581 The history of alternative fuels is one of ad hoc short-
4582 lived policy actions. We have seen policymakers and the
4583 media jump from one solution to another, from syn fuels to
4584 methanol to battery electrics to hydrogen to corn ethanol and
4585 now the fuel du jour, the technology du jour is plug-in
4586 hybrids. We need a more permanent policy framework that
4587 sends consistent signals to industry and consumers and that
4588 doesn't pick winners. And very importantly, it also achieves
4589 both energy security and climate goals, and I would note that
4590 producers of oil sands complain that they will be put out of

4591 business with a low-carbon fuel standard, and this is just
4592 not true. The low-carbon fuel standard does not preclude any
4593 fuel. Rather, it provides an incentive to produce fuels more
4594 efficiently and with less carbon, and indeed, senior oil
4595 executives have indicated to me that with sufficient
4596 incentive they could make gasoline from oil sands with less
4597 greenhouse gas emissions than gasoline from conventional oil.
4598 And lastly, a low-carbon fuel standard reduces oil price
4599 volatility and it caps petroleum price increases.

4600 So the proposed national LCFS is modeled on the
4601 California low-carbon fuel standard but it has two
4602 differences. First is that the proposed national standard in
4603 this bill does not include biofuels until 2023. It assumes
4604 that the renewable fuel standard enacted in the EISA of 2007
4605 will handle the biofuels until then. The result is that
4606 until 2023 the national low-carbon fuel standard only targets
4607 petroleum and non-biofuel options, mostly electricity,
4608 natural gas and hydrogen. Failure to integrate the renewable
4609 fuel standard into the low-carbon fuel standard until 2023 is
4610 problematic. Keeping the biofuels separate from other
4611 alternative fuels reduces the flexibility of the market to
4612 respond to the targets and it also reduces incentives to
4613 produce the very lowest carbon fuels. So unlike the
4614 renewable fuel standard, the low-carbon fuel standard

4615 provides incentives for continuous improvements.

4616 The other difference, the second important difference
4617 between the two is that the national standard has more modest
4618 targets. The California low-carbon fuel standard has a
4619 target of 10 percent reduction in greenhouse gases per unit
4620 of energy by 2020 with further reductions to follow. The
4621 national one sets a target of zero percent improvement until
4622 2022 and then in 2023 when the RFS and the biofuels are
4623 folded in, it jumps to 5 percent but it is still considerably
4624 less, and then it goes to 10 percent in 2030. I would argue
4625 for higher targets.

4626 Okay, so the recommendations, just very quickly, the RFS
4627 should be integrated into the national LCFS as soon as
4628 possible. Targets should be more aggressive and the federal
4629 program should not preempt the State programs but the
4630 priority is, adopt this low-carbon fuel standard. It is a
4631 good idea, even in a limited fashion. Thank you.

4632 [The prepared statement of Mr. Sperling follows:]

4633 ***** INSERT 7 *****

|
4634 Mr. {Markey.} Thank you, Dr. Sperling, very much.

4635 Our next witness, David Friedman, is the research
4636 director of the clean vehicles program at the Union of
4637 Concerned Scientists. Mr. Friedman has served on three major
4638 committees for the National Academy of Sciences covering fuel
4639 economy, fuel-efficient tires and fuel cell vehicles. We
4640 welcome you, sir.

|
4641 ^STATEMENT OF DAVID FRIEDMAN

4642 } Mr. {Friedman.} Thank you, Mr. Chairman, and thank you,
4643 members of the committee for the opportunity to testify
4644 before you today. I would also like to thank you
4645 specifically for your leadership on fuel economy. That was
4646 the important first step on transportation.

4647 But now as we look to where we need to go from here, the
4648 discussion draft before us represents the essential next
4649 step, and as my testimony will show, the transportation
4650 system can go much farther than the progress delivered under
4651 the 2007 energy bill. What America needs is a comprehensive
4652 approach that addresses transportation as a system of
4653 vehicles, fuels and infrastructure and a strong cap that
4654 covers all parts of the economy including transportation.

4655 We released a 2-year peer-reviewed study on Wednesday
4656 before the full committee. Our Climate 2030 Blueprint
4657 demonstrates the need for a well-designed cap-and-trade
4658 system and a comprehensive set of policies for the energy and
4659 transportation sectors. With this approach, we can
4660 accumulate \$1.6 trillion in savings through 2030. Let me say
4661 that again: we can save money while tackling climate change.
4662 Now, if we remove some of the complementary policies, we will

4663 still save \$600 billion but it will go down. These
4664 complementary policies are essential to saving money while
4665 addressing climate change.

4666 Now, the results of our study highlight that the draft
4667 bill will also require significant action by the
4668 Administration to make these policies work. For example, the
4669 Environmental Protection Agency will need to set strong
4670 global warming emission standards for all vehicles and off-
4671 road equipment. There are opportunities to save money and
4672 cut carbon emissions from every vehicle, every ship, every
4673 plane. The EPA must also protect and defend State authority
4674 to help bring about cleaner cars and fuels in recognition
4675 both of the unique circumstances in those States and the
4676 history of leadership on these issues from California and
4677 many others. Thanks in large part to California and the
4678 States that have supported its efforts, cars and trucks today
4679 are 90 percent cleaner when it comes to smog than those sold
4680 40 years ago. So I believe that EPA can head a partnership
4681 with States and with NHTSA that provides the clarity and
4682 certainty that automakers need.

4683 Now, automakers that don't invest in this future and in
4684 these clean and efficient technologies will be left by the
4685 side of the road but as a result of this, in these hard
4686 economic times, it does make sense for the federal government

4687 to help the auto industry. However, taxpayers deserve a
4688 return on their investment, a requirement that automakers at
4689 least meet nationwide the same global warming emission
4690 standards adopted by California and 14 other States. That
4691 said, we cannot, we must not put all the responsibility on
4692 the auto industry. Oil companies and fuel providers must
4693 step up and that is why EPA will also need to make a
4694 transition from a renewable fuel standard that covers only 10
4695 percent of today's transportation fuels to a low-carbon fuel
4696 standard that covers all fuels and counts all direct and
4697 indirect emissions.

4698 State and local governments and everyone who drives must
4699 also step up. The Department of Transportation will have to
4700 build on their plans to develop a smarter transportation,
4701 working with local governments to help get people where they
4702 need to go with fewer miles and less pollution. This will
4703 require investments in transit and support for pay-per-mile
4704 programs that will keep our roads and bridges repaired. EPA
4705 also has a significant role to play here in setting up
4706 standards to evaluate local transportation plans but there
4707 must also be consequences associated with making and meeting
4708 effective plans.

4709 Finally, we need our scientists and engineers to step up
4710 and to deliver on the promise of fuel cell, plug-in and

4711 battery electric vehicles and the lowest carbon fuels. If
4712 Congress and the Administration step up to the plate, the UCS
4713 Climate 2030 Blueprint shows that the United States can cut
4714 carbon emissions from cars and light trucks to 40 percent
4715 below 2005 levels by 2030. We can hold carbon emissions from
4716 freight trucks steady despite an 80 percent growth in the
4717 economy through 2030. At the same time, we can deliver net
4718 annual savings of \$120 billion to consumers and businesses in
4719 2030 alone. Consumers specifically will save about \$580 per
4720 household per year. We are not talking about how much it
4721 will cost, we are talking about how money they will save as a
4722 result of cutting global warming emissions.

4723 Now, by 2030, we will also have additional benefits. We
4724 can reduce transportation's addiction to oil by more than 3
4725 million barrels per day, more than we currently import
4726 from the entire Persian Gulf region, and this is all on top
4727 of the benefits that you helped deliver through the 2007
4728 energy bill. When you look at today's economy and the
4729 prospect of rising gas prices and rising carbon emissions,
4730 once we beat this recession we simply cannot afford to ignore
4731 this opportunity to invest in a cleaner transportation future
4732 and the jobs that investment will create.

4733 [The prepared statement of Mr. Friedman follows:]

4734 ***** INSERT 8 *****

|
4735 Mr. {Markey.} Thank you, Mr. Friedman, very much.

4736 Our next witness is Mr. David Gardiner. He is the

4737 founder and president of David Gardiner and Associates, an

4738 energy and climate consulting firm. He previously served as

4739 the executive director of the White House Climate Change Task

4740 Force during the Clinton administration. We welcome you,

4741 sir.

|
4742 ^STATEMENT OF DAVID GARDINER

4743 } Mr. {Gardiner.} Thank you, Mr. Chairman.

4744 This morning Congressman Butterfield asked a question
4745 about what he could say to his low-income consumers in his
4746 district about this broad legislation and we believe that a
4747 key part of the answer to that question is, we are going to
4748 deliver a lot more energy efficiency to you and particularly
4749 as contained in your discussion draft, we should adopt an
4750 energy efficiency resource standard. An energy efficiency
4751 resource standard, as in your bill, Mr. Chairman, would
4752 require utility companies to deliver increasing amounts of
4753 energy efficiency to their customers, specifically that we
4754 would deliver 15 percent more energy efficiency by 2020 in
4755 the electricity area and 10 percent for natural gas. With
4756 this requirement, which we have in place in 19 States already
4757 today, what utility companies do is to turn around and offer
4758 rebates to their customers for investing in energy efficiency
4759 appliances and making energy efficient homes. Colorado, for
4760 example, has just adopted a standard and the utility there,
4761 Excel, has recently launched two programs to offer rebates to
4762 homebuilders because it is cheaper for Colorado to pay for a
4763 more efficient home than it is to build a power plant to

4764 serve that. Now, under your draft discussion bill, Mr.
4765 Chairman, this provision for an energy efficiency resource
4766 standard saves consumers \$170 billion by 2020. It is exactly
4767 the kind of thing that Congressman Butterfield is looking for
4768 for his low-income consumers. It also creates 220,000 new
4769 net jobs because there is a lot of jobs out there making
4770 homes more energy efficient and building more energy-
4771 efficient appliances. It also will avoid the equivalent of
4772 \$48 million automobiles worth of greenhouse gas emissions.

4773 Now, there are some who have suggested that we should do
4774 is to merge the energy efficient resource standard with a
4775 renewable electricity standard. That is an unwise path
4776 because that will lead to less energy efficiency and it will
4777 increase consumer costs. Our own analysis indicates that
4778 could be as much as a \$70 billion increase for consumers. On
4779 the converse side, the energy efficiency resource standard
4780 and the renewable electricity standard actually lower the
4781 costs of meeting a cap on carbon dioxide and they do so by
4782 approximately 15 percent. They do it because they eliminate
4783 the barriers that are out there for cost-effective
4784 investments in energy efficiency. The chief barrier to that
4785 is that in most States in the country, electric utility
4786 companies lose money if there are significant investments,
4787 that they make significant investments in energy efficiency.

4788 So an energy efficiency resource standard turns that around
4789 and makes energy efficiency a profitable venture for electric
4790 utility companies and starts to deliver the kinds of savings
4791 that consumers are going to want to need and can be an
4792 important component of making sure that the achievement of
4793 our greenhouse gas reductions is done at the lowest possible
4794 cost. So we urge the committee to not only retain the
4795 discussion draft provision on the energy efficiency resource
4796 standard but to make sure that we move forward as rapidly as
4797 possible to get this in place because energy efficiency is a
4798 resource that we can start taking advantage of today. We can
4799 start saving consumers money today and we can start creating
4800 those jobs in the energy efficiency today so it is urgent
4801 that the Congress move forward with adopting the energy
4802 efficiency resource standard.

4803 [The prepared statement of Mr. Gardiner follows:]

4804 ***** INSERTS 9, 10 *****

|
4805 Mr. {Markey.} Thank you, Mr. Gardiner, and your
4806 testimony was consistent with your energy philosophy. You
4807 yielded back 1 minute to us. We appreciate that, really a
4808 great gift to us today.

4809 Our next witness, Mr. Jeff Genzer, is counsel for
4810 National Association of State Energy Officials. Mr. Genzer,
4811 we welcome you, and whenever you are ready, please begin.

|
4812 ^STATEMENT OF JEFF GENZER

4813 } Mr. {Genzer.} Thank you, Mr. Chairman.

4814 The energy efficiency programs within the bill are solid
4815 and we generally support them. I won't focus on the
4816 appliance provisions since Mr. Delaski will be discussing
4817 that.

4818 Number one, NASEO supports specific 30 percent increases
4819 in both residential and commercial building energy codes and
4820 standards. These should be federal and mandatory and need to
4821 happen quickly. The residential code should be adopted and
4822 effective on January 1, 2010, which represents a 30 percent
4823 increase over the 2006 international energy conservation
4824 code. It has become clear to State energy officials that the
4825 residential consensus code process has become dominated by
4826 interests that refuse to recognize the role that new homes
4827 play in energy use and climate change and that seek to
4828 maintain the status quo despite the very acceptable costs, in
4829 fact cost reductions for consumers of moving to much more
4830 efficient buildings.

4831 On the commercial side, ASHRAE should be given an
4832 opportunity to achieve a 30 percent commercial building
4833 standard increase over ASHRAE 90.0 2004. However, it needs

4834 to be effective on January 1, 2011. We cannot achieve our
4835 energy and climate goals without this. We have waited far
4836 too long already. We simply cannot accept the ridiculous
4837 argument that it is never a good time to raise energy-
4838 efficient building codes, never good in flush times, never
4839 good in bad times. Homeowners live in these homes and
4840 consumer energy for centuries. Every day we wait is another
4841 day of dollars out the pockets of homeowners and taxpayers.
4842 The costs of achieving the same gains in energy efficiency is
4843 an order of magnitude higher when we retrofit than during the
4844 initial construction. Funding will be required for States
4845 and local governments to conduct compliance, training and
4846 enforcement. The only possible source is at the federal
4847 level but we would maintain that the national interest in
4848 reducing the 10 percent share of global greenhouse gas
4849 emissions that comes through out buildings warrants that
4850 federal investment.

4851 Two, we support the Retrofit for Energy and
4852 Environmental Performance program that was sponsored by
4853 Representative Welch. It will lead to significant increases
4854 in energy efficiency for homeowners, commercial buildings and
4855 public buildings. This will lead to local jobs, putting
4856 building contractors back to work and it will produce real
4857 energy savings for real people and return dollars to

4858 communities.

4859 Third, we supply the rebate program to get homeowners
4860 out of the older pre-1976 manufactured housing. We support
4861 the program sponsored by Representative Baron Hill.

4862 Number four, we support a building energy performance
4863 labeling program. We don't understand why anyone engaged in
4864 helping Americans make wide decisions when owning, operating,
4865 buying or selling a building would reject an effort to allow
4866 consistent, comprehensive and understandable information
4867 about that building's energy consumption to be readily and
4868 indeed publicly available.

4869 Fifth, most state energy offices support an energy
4870 efficiency resource standard but want to ensure the State-
4871 administered programs will be allowed to continue.

4872 Six, the State Energy and Environmental Development
4873 Fund, the SEED Fund included in the bill, is another positive
4874 program and would provide a good overlay for energy and
4875 environmental program initiatives. We look forward to
4876 working with the subcommittee and the committee in examining
4877 these programs. A number of items that have been discussed
4878 and will be discussed at these hearings are certainly worth
4879 including.

4880 Commissioner Grunich discussed yesterday a proposal on
4881 State planning. Bill Becker will be on the next panel from

4882 NACAA. He will be discussing our desire to avoid State
4883 preemption and permit States to run programs on the
4884 environmental side that are more robust than the federal
4885 program. Third, Representative Van Hollen made a good
4886 proposal for a federal energy loan bank. While it is a good
4887 idea at the local level, we are concerned that it will be
4888 very difficult for the Department of Energy despite Secretary
4889 Chu's monumental efforts to get their loan program going at
4890 DOE to run it from the federal level.

4891 I want to, in my 19 seconds left, mention to
4892 Congresswoman Baldwin that my daughter is a junior at
4893 Wisconsin and I have a rising freshman. Thank you.

4894 [The prepared statement of Mr. Genzer follows:]

4895 ***** INSERT 11 *****

|
4896 Mr. {Markey.} We thank you, Mr. Genzer.

4897 Our next witness is Mr. Charles Drevna. He is the
4898 president of the National Petroleum and Refiners Association.

4899 He has more than 35 years of experience in that field. We

4900 welcome you, sir.

|
4901 ^STATEMENT OF CHARLES T. DREVNA

4902 } Mr. {Drevna.} Thank you, Mr. Chairman and Ranking
4903 Member Upton and Congresswoman Baldwin. Thank you for having
4904 me here today.

4905 Addressing climate change requires realistic long-term
4906 strategies that recognize the vital role that all forms of
4907 energy will play in maintaining our country's security,
4908 economic strength and quality of life. NPRA supports the
4909 advancement and deployment of new technologies that will
4910 bring reliable, affordable and clean supplies of domestic
4911 energy to consumers. We do, however, have some serious
4912 concerns with the ability of the discussion draft, the
4913 American Clean Energy and Security Act of 2009, to achieve
4914 these goals, particularly in relationship to the
4915 transportation sector regarding the discussion draft, but
4916 rather than attempt to simply condense the written statement
4917 in the time allotted, I will briefly reiterate some specific
4918 areas of concern.

4919 These include the adoption of a low-carbon fuel
4920 standard. At best, the LCFS is redundant and overly costly.
4921 More likely, it is contradictory and punitive. We do not
4922 need the LCFS if fuels are regulated under the cap through a

4923 scientifically achievable timeframe. The compliance
4924 timeframes in the discussion draft are, in our opinion,
4925 again, on the transportation sector, overly aggressive.

4926 Another area of concern is the refining industry, we
4927 believe and we hope to demonstrate, that the refining
4928 industry is indeed energy intensive and subject to
4929 international competition as opposed to what the findings of
4930 the discussion draft. And finally, we have some questions
4931 concerning the allocation of emission allowances. There
4932 seems to be a dearth of knowledge on how those will be
4933 handled in the discussion draft. Now, I anticipate that the
4934 committee will have questions regarding these items among
4935 others and I look forward to discussing them with you.

4936 In the remaining time I have, I want to focus somewhat
4937 on links. A rather rudimentary description of the petroleum
4938 refining process but one that must be achieved in order to
4939 facilitate technological and commercial success is a
4940 rearrangement of the links between and among hydrocarbon
4941 molecules. It has been a very long time since refineries
4942 were described as structures that boil oil or simply are a
4943 bubble in the oil pipeline. Today's refineries are complex,
4944 sophisticated, state-of-the-art facilities that operate most
4945 efficiently while providing consumers with the reliable
4946 products that drive the Nation's economy from clean burning

4947 gasoline, diesel and home heating oil to the petrochemical
4948 feedstocks that are building blocks for a multitude of
4949 products, asphalt to aspirin, cosmetics to computers, heart
4950 valves to helmets, pharmaceuticals to patio furniture. The
4951 domestic refining industry is the linchpin for these
4952 products. Transforming various hydrocarbon molecules, again,
4953 rearranging the molecular links of the oil in a
4954 technologically advanced, environmentally sound and
4955 economically viable fashion is vital to the success of the
4956 domestic refining industry and the overall economy it drives.

4957 There are more consequential links as well, the link
4958 between energy and economic strength for the entire Nation
4959 and the link between energy and American security. The
4960 question before this committee today and ultimately for the
4961 entire Nation is, will the current draft of the American
4962 Clean Energy and Security Act of 2009 or similar legislation
4963 forge stronger, more viable links than these vital chains or
4964 will doing so lead to adverse economic impacts not on just
4965 the domestic refining industry but on the Nation's economy.
4966 The answers to these questions must be fully investigated,
4967 understood and documented before enactment of any
4968 legislation. Most likely, we have but one chance to get it
4969 right. The Nation simply can't afford anything short of a
4970 complete understanding.

4971 Lastly, the provisions of the draft legislation neglect
4972 to ensure one other link, the link between international
4973 participation and the ultimate success of the initiative.
4974 For example, and we have heard this over and over today,
4975 China continues to state that it will not participate in any
4976 program that restricts its emissions. International
4977 participation is a critical issue as we need to implement any
4978 program. One ton of CO2 emitted in Columbus, Ohio, is
4979 indistinguishable from one ton emitted in Beijing, Mumbai or
4980 Moscow.

4981 The possible consequences should determine the pace or
4982 else the pace could determine the consequences. Mr. McCurdy
4983 stated that you good people have sat here for 4 days in a
4984 marathon and I commend you for that. Again, I really commend
4985 you for that. But don't try to sprint to the finish line.
4986 Keep the marathon going. It is a marathon, not a sprint. We
4987 have to know everything before we can go forward, and to that
4988 extent, I would ask that we have some more hearings on the
4989 transportation sector of this bill. Thank you very much.

4990 [The prepared statement of Mr. Drevna follows:]

4991 ***** INSERT 12 *****

|
4992 Mr. {Markey.} Thank you, Mr. Drevna. I have been on
4993 the Energy Committee for 33 years, the Natural Resources
4994 Committee for 33 years, so that is 66 years of hearings that
4995 I have gone to, and the Speaker created a Select Committee on
4996 Global Warming and Energy Independence and that gave me 3
4997 more years of hearings that I have had on the subject, so I
4998 do think of it as a marathon, believe me. Most of these
4999 issues have been percolating around here for a long, long
5000 time. That much I can promise you.

5001 Our next witness is--and I don't think anyone else is
5002 ever going to try it again, go to the number of hearings I
5003 have gone to on these subjects. You can already see the
5004 effect that today's hearing has had on our membership.

5005 Our next witness is--

5006 Mr. {Upton.} If the gentleman would yield for just a
5007 second, I remember when Mr. Dingell had hearings like these
5008 and he had coffee in front of everybody and so they went
5009 maybe a little faster.

5010 Mr. {Markey.} In many ways they went a lot faster with
5011 that coffee in front of them.

5012 Mr. Andrew Delaski is the executive director of the
5013 Appliance Standards Awareness Project, a coalition dedicated
5014 to advancing cost-effective appliance and equipment

5015 efficiency standards. He is joining us here today from my
5016 home State of Massachusetts, so we welcome you, Mr. Delaski.

5017 Mr. {Sperling.} Excuse me, Chairman. I have to leave.
5018 I have a flight back to California out of Dulles now. I am
5019 really sorry.

5020 Mr. {Markey.} And we apologize to you, Dr. Sperling,
5021 and by the way to all of the witnesses and those who are
5022 accompanying our witnesses today, you could, I think, capture
5023 the intensity of interest which the members had in the
5024 questioning of Vice President Gore and New Gingrich, so it
5025 went for an unexpectedly long period of time and it is with
5026 our apologies to you that we request that you work with us
5027 over the next month or so towards developing a bill which
5028 does reflect, you know, the highest aspirations. Thank you,
5029 sir.

5030 Mr. {Sperling.} Thank you.

5031 Mr. {Markey.} Again, back to you, Mr. Delaski.
5032 Whenever you are ready, please begin.

|
5033 ^STATEMENT OF ANDREW DELASKI

5034 } Mr. {Delaski.} Thank you, Mr. Chairman. I will just
5035 say a word about ASAP. ASAP is a coalition project which
5036 consists of representatives of energy efficiency advocacy
5037 organizations, environmental and consumer groups including
5038 low-income advocacy organizations, State government and
5039 utilities. Our mission, as you said, is to advance cost-
5040 effective energy efficiency standards for appliances,
5041 lighting and equipment.

5042 My testimony today is limited to subtitle B concerning
5043 the appliance and equipment standards in the bill. I will
5044 summarize just a few key points from my in-depth testimony.
5045 Congress first enacted natural appliance, equipment and
5046 lighting standards in 1988, as Chairman Markey well knows, in
5047 legislation that you authored. It added new standards in
5048 1992, 2005 and 2007. In general, Congress has established
5049 initial standards by statute and directed the Department of
5050 Energy to review standards on a set schedule, increasing to
5051 higher efficiency levels if shown to be technically feasible
5052 and economically justified. The American Council for Energy
5053 Efficient Economy, ACEEE, estimates that absent existing
5054 national standards, U.S. electricity use of peak electric

5055 demand would be about 10 percent higher in 2010 than
5056 currently projected. ACEEE also estimates that consumers and
5057 business which buy the affected products will net more than
5058 \$400 billion in net savings from already existing standards.

5059 The enormous energy, environmental and economic benefits
5060 delivered by national product efficiency standards have
5061 contributed to a history of strong bipartisan support and
5062 cooperation for new standards and enhancements to the
5063 Department of Energy's program structure. The bill before us
5064 today builds on this successful history.

5065 We thank Chairman Waxman and Subcommittee Chairman
5066 Markey for including the importance appliance efficiency
5067 subtitle in ACES. The subtitle consists of three parts.
5068 Sections 211 and 212 enact specific new standards for six
5069 categories of products including portable electric spas, as
5070 we learned earlier. Section 213 provides critical
5071 enhancements to improve overall effectiveness and
5072 responsiveness of a DOE program, and sections 214 and 215
5073 provide the voluntary programs including EnergyStar. We
5074 estimate that the specific standards included in ACES will
5075 save at least 17 billion kilowatt-hours annually by 2020, or
5076 roughly enough to meet the needs of 1-1/2 million typical
5077 U.S. households. The standards included in the bill would
5078 reduce power sector carbon dioxide emissions by about 12

5079 million metric tons per year in 2020.

5080 I would like to especially call out the outdoor lighting
5081 standard initially introduced by Representative Harman. This
5082 standard offers the lion's share of the savings from the
5083 specific standards in the bill. Discussion between members
5084 of the industry and efficiency proponents that I work with
5085 are ongoing. We remain optimistic that we will have further
5086 joint recommendations to present to you shortly on outdoor
5087 lighting.

5088 The program reforms in ACES are just as important as the
5089 specific efficiency standards. As we have gained experience
5090 with DOE rulemakings through the course of several
5091 Administrations, we have learned some of the shortcomings of
5092 a statutory structure which can stand in the way of cost-
5093 effective efficiency gains. The bill contains several
5094 important reforms which address some of these shortcomings,
5095 and I will highlight just two but we support the entire
5096 package of reforms for the Department of Energy's program.
5097 First, the bill makes clear the DOE authority to apply more
5098 than one efficiency metric as part of a single product's
5099 efficiency standard. While Congress has set more than one
5100 requirement for at least a dozen products in statute, DOE has
5101 recently held that the law prevents the agency from including
5102 more than one requirement per product. Often a standard for

5103 a given product must include more than one element to capture
5104 different aspects of a product's efficiency, for example,
5105 energy and water efficiency, gas and electric efficiency in
5106 the case of a furnace which uses both gas and electricity, or
5107 to capture the cost-effective savings from controls or other
5108 technologies that are not reflected in a product's test
5109 method. For example, successful application of smart grid
5110 technology and demand response technology make depend on
5111 specific appliances including particular control features.
5112 Such features are typically not represented in a performance
5113 test method but may be a critical feature of future energy
5114 efficiency standards. The Department's current
5115 interpretation of the law will prevent this sort of
5116 requirement in future appliance standards. This provision
5117 passed the House in 2007 and we strongly urge you to act on
5118 it again.

5119 Another area I would like to highlight concerns the
5120 preemption limits that national standards place on State
5121 building codes. House and Senate energy bills have proposed
5122 federal targets of 30 percent savings in new buildings in the
5123 near term and 50 percent savings later through better
5124 building codes. However, the preemption associated with
5125 national appliance standards effectively puts savings from
5126 space and water heating and air conditioning off limits even

5127 when such savings would be very cost-effective for new
5128 construction and major renovations. The discussion draft
5129 will create new flexibility for State building codes while
5130 still preserving a basic structure, a basic federal
5131 preemption framework.

5132 There are several other program reforms which we also
5133 support. Suffice it to say that as a package, these reforms
5134 significantly strengthen the national appliance standards
5135 program and will pave the way for greater energy savings and
5136 benefits.

5137 Finally, with respect to the voluntary programs, we are
5138 concerned that the limits in section 215 which are placed on
5139 the EnergyStar program would make some of the existing
5140 EnergyStar programs, home furnaces and other products, would
5141 end those programs. We urge that section be modified.

5142 In sum, we support the subtitle and look forward to
5143 working with the committee to make it even better.

5144 [The prepared statement of Mr. Delaski follows:]

5145 ***** INSERT 13 *****

|

5146 Mr. {Markey.} Thank you, Mr. Delaski, very much.

5147 Our final witness is Mr. Dwight ``Sonny'' Richardson.

5148 He is the chairman of the National Association of Home

5149 Builders Construction Codes and Standards Committee. He is

5150 also president of Richardson Home Builders in Tuscaloosa,

5151 Alabama. Please begin when you are ready, Mr. Richardson.

|
5152 ^STATEMENT OF CHARLES RICHARDSON

5153 } Mr. {Richardson.} Thank you, Mr. Chairman, Ranking
5154 Member Upton and Ms. Baldwin. I appreciate the opportunity
5155 to travel to Washington to discuss the energy bill, the
5156 carbon cap bill, global climate change bill with you on
5157 behalf of the 200,000 members of the National Association of
5158 Home Builders, NAHB.

5159 As you well know, we in the home building industry are
5160 facing devastating times in addition to the environmental and
5161 energy challenges facing our country. From building 2
5162 million homes in 2006, we expect to construct less than
5163 500,000 this year nationwide. Nonetheless, amidst the worst
5164 housing downturn since the Great Depression, I can personally
5165 attest to the strides our industry has made in energy
5166 efficiency and sustainability for our Nation's new homes.
5167 According to the Energy Information Administration, newer
5168 homes, those built since 1991, account for only 2.5 percent
5169 of all energy consumed nationally. Our industry has
5170 pioneered development of the only national green building
5171 standard approved by the American National Standards
5172 Institute and has invested millions in an industry-
5173 transforming green building program, saving both energy and

5174 natural resources.

5175 Drawing on my lifetime experience, I am a second-
5176 generation home building, in the construction field, I
5177 believe that some of the policy approaches put forth in the
5178 American Clean Energy and Security Act draft are unlikely to
5179 produce the expected energy savings. In particular, the
5180 provisions in section 201 aggressively increase energy
5181 targets for new homes, provide greater authority for the
5182 Department of Energy to modify codes and give little
5183 flexibility to State or local areas with specific geographic
5184 and climatic conditions. The current language is problematic
5185 for a number of reasons. In the broadest sense, seeking
5186 significant savings from new homes, smallest, most energy
5187 efficient misses the target. Increasing costs and reducing
5188 affordability for newer, more efficient homes adversely
5189 affects lower and moderate income families that spent the
5190 most as a percentage of income on energy. In some instances,
5191 the provisions in section 201 exceed a number of successful
5192 programs such as EPA's Energy Star for Homes and many green
5193 building programs, not just the new national green building
5194 standard. Striving solely for small incremental savings
5195 without accommodation for the more robust sustainability
5196 framework of a green program means that the more
5197 environmentally sound green homes could be noncompliant with

5198 the targets outlined in section 201 yet these homes have a
5199 smaller carbon footprint because of sustainable design and
5200 resource considerations not covered by energy codes alone.

5201 On the other hand, NAHB is pleased to see that section
5202 202 of the draft legislation provides resources to consumers
5203 to upgrade their existing homes and buildings and equally
5204 pleased that Vice President Gore supports this path. This
5205 will direct the resources of the federal government at the
5206 largest consumer of energy in the residential sector, older
5207 homes. According to the Census Bureau, there are roughly 128
5208 million homes in the United States today and fully 74
5209 percent, or 94 million, were built before the existence of
5210 modern energy codes. Home builders have done their part and
5211 are doing their part to make newer homes more efficient. Now
5212 the federal government can help residents of existing homes
5213 continue to help to do their fair share to reduce energy
5214 consumption.

5215 Despite our economic challenges, our home building
5216 industry has voluntarily taken the initiative to develop a
5217 rigorous national green building standard, continues to
5218 implement energy efficiency in new construction and is
5219 working diligently to preserve housing affordability for the
5220 next generation of green and energy efficient homes. NAHB
5221 supports improving efficiency in national model codes and

5222 participates along with many others in the development
5223 process of the International Code Council. Because codes by
5224 their very nature do not address all aspects of energy
5225 consumption in housing, NAHB hopes that Congress will
5226 carefully consider an integrated energy strategy for the
5227 residential sector. This includes many aspects beyond the
5228 reach of codes such as equipment efficiency, occupant
5229 behavior, plug loads and appliance choices. Our NAHB members
5230 are stakeholders in both the building and energy efficiency
5231 industries. We look forward to working with the subcommittee
5232 to craft policies that effectively address the energy
5233 challenges facing our Nation and housing.

5234 My written comments provide additional details on these
5235 points as well as recommendations for changes to the draft
5236 legislation the committee will soon consider. Thank you for
5237 the opportunity to appear today and testify on behalf of my
5238 National Association of Home Builders.

5239 [The prepared statement of Mr. Richardson follows:]

5240 ***** INSERT 14 *****

|
5241 Mr. {Markey.} Thank you, Mr. Richardson, very much, and
5242 now we turn to questions from the subcommittee members and we
5243 begin with the gentlelady from Wisconsin, Ms. Baldwin.

5244 Ms. {Baldwin.} Thank you, Mr. Chairman, and Mr. Genzer,
5245 I am not starting with you just because your daughter goes to
5246 UW Madison but I do have a question because I think you would
5247 be great to answer.

5248 I have been sharing with my fellow committee members
5249 about how I spent my spring recess, which included an energy
5250 tour of my home State and meeting with innovators and
5251 renewable energy producers. One of the sites that I had the
5252 chance to visit was Johnson Controls. Johnson Controls does
5253 a wide range of things but they have a building energy
5254 efficiency segment of their business and in fact we had a
5255 representative of Johnson Controls testify a few months back
5256 before our subcommittee. Just a couple of weeks ago the
5257 company announced that they would be involved in retrofitting
5258 the Empire State Building using innovative processes and
5259 state-of-the-art tools that should help reduce the building's
5260 energy consumption by a pretty impressive 38 percent per year
5261 with technologies that will pay off in a 2-year timeframe.
5262 That would probably place it, I think, in the top 10 percent
5263 of all U.S. office buildings in terms of energy efficiency.

5264 But one of the things I found interesting in my discussions
5265 with employees at Johnson Controls was an interesting
5266 conundrum. Because many of the commercial buildings turn
5267 over ownership so often, sometimes as rapidly as every 3
5268 years or so, the incentive of owners to make energy
5269 efficiency improvements and investments often just don't
5270 exist, and so I would love to hear your thoughts about how we
5271 on this panel could incentivize this sort of energy
5272 efficiency improvement in some of these buildings. I have
5273 been tossing around a few ideas of my own but I would to hear
5274 yours right now.

5275 Mr. {Genzer.} Thank you. First of all, the whole
5276 energy service performance contracting programs that Johnson
5277 Controls is really one of the leaders in is a great model.
5278 In fact, a lot of the funds that came through the stimulus
5279 package targeted to the State energy program, what we are
5280 seeing in a lot of the states is that a lot of those funds
5281 are being targeted to energy service performance contracts.
5282 So that is one of the real preeminent examples and we can
5283 certainly give you more information on a state-by-state basis
5284 as that moves forward. In terms of incentives for commercial
5285 building owners where they need payback periods in a shorter
5286 period of time, one of the elements of the draft bill now,
5287 the Retrofit for Energy and Environmental Performance program

5288 that is in the bill, I think Representative Welch is the
5289 chief sponsor of that, included targets for commercial
5290 buildings on a per-square-foot-basis for extra incentives.
5291 So we think that is a great idea. It is one of the steps.
5292 There is also additional things that could be done in terms
5293 of energy service performance contracts.

5294 We are trying to do a lot more at the State level on
5295 that and extension of the commercial building energy
5296 efficiency tax deduction is another one that would be
5297 helpful. We are spending a lot of time working with
5298 commercial building owners on a State-by-State basis to try
5299 to see if there are additional incentives. So we would
5300 certainly work with them and it is a great idea, and also I
5301 think Mr. Gardiner might have a comment about the tie-in with
5302 the energy efficiency resource standard.

5303 Ms. {Baldwin.} Absolutely, and I actually have another
5304 question and a time limit, so if you want to make a quick
5305 comment, Mr. Gardiner, and then I have--

5306 Mr. {Gardiner.} Just as I said in my opening statement,
5307 that under an energy efficiency resource standard what
5308 happens is that utility companies offer rebates including to
5309 commercial building owners to do this and so it takes away
5310 the problem that you identify, which is one of the serious
5311 barriers to efficiency which is the builder or the landlord

5312 isn't necessarily the person who is responsible for paying
5313 the energy bill, may not own the building for a long period
5314 of time so the rebates that utility companies offer under the
5315 provisions in the draft discussion under the energy
5316 efficiency resource standard are, I think, a critical
5317 incentive.

5318 Ms. {Baldwin.} Let me jump in quickly with my second
5319 question, and I am very supportive of the EERS in the bill.
5320 Based on information I have received from my constituency, I
5321 feel like Wisconsin is well suited to comply with the EERS
5322 through at least 2012. However, I do have a question. One
5323 of the things we talked about in another section of the bill
5324 is the potential for widespread deployment of electric
5325 vehicles over the next 15 or more years, and if we see this
5326 widespread deployment, the base quantities for retail
5327 electricity distributors could grow quite rapidly and thus
5328 the amount of electricity savings that they will be required
5329 to achieve could grow rapidly, could kind of potentially
5330 transform the EERS savings required, making them a little bit
5331 more challenging to meet, and expensive to meet, and I am
5332 wondering if this is the intent, and if not, is there
5333 anything we should be looking at modifying in anticipation of
5334 the potential of widespread deployment of electric vehicles.

5335 Mr. {Gardiner.} The Energy Information Administration

5336 says today that actually if you look out towards the future
5337 that the amount of electricity that vehicles like that might
5338 consume is still projected to be relatively small. That
5339 could, of course, change in the way that you suggest and we
5340 think that was a good idea so I think that there could be
5341 some provision that would allow the Secretary of Energy, for
5342 example, to modify that if he or she saw that the amount of
5343 electric vehicles were consuming a large amount of energy.
5344 But I think at the moment it looks like it is a relatively
5345 small problem, at least through 2020, but it is an issue and
5346 I think it is certainly worthy of further discussion to look
5347 at.

5348 Mr. {Friedman.} If I could just make a quick comment,
5349 our blueprint included a significant ramp-up in plug-in
5350 hybrids to reaching 20 percent of sales by 2030, so expecting
5351 very aggressive progress on that technology, and under our
5352 blueprint when you invest in efficiency and when you invest
5353 in renewable electricity, the grid can handle that, and
5354 frankly, I would love to have the problem where we have too
5355 many plug-ins on the road. That is a problem I look forward
5356 to having some day.

5357 Mr. {Markey.} The gentlelady's time has expired. The
5358 chair recognizes the gentleman from Michigan, Mr. Upton.

5359 Mr. {Upton.} Well, thank you, Mr. Chairman, and I too

5360 sadly will have to leave you with the last panel on your own,
5361 I am afraid, I regret to say. Before I start, I want to put
5362 into the record a letter from the International Code Council
5363 addressed to yourself, Chairman Waxman, Mr. Barton and
5364 myself.

5365 [The information follows:]

5366 ***** COMMITTEE INSERT *****

|
5367 Mr. {Markey.} We will include it in the record without
5368 objection.

5369 Mr. {Upton.} And I want to focus just a little bit on
5370 autos before I get in my auto and depart. Mr. McCurdy and
5371 Mr. Reuther are good friends of mine too. I appreciate all
5372 the work that you have done for our State as we try to have
5373 the auto industry survive. Mr. McCurdy, you talked a lot
5374 about having a single standard, and of course, that is in the
5375 bill but the standard is California, and the way that I read
5376 it, it allows them to in fact change the standard, and when
5377 they change it, that is California, so does the rest of the
5378 Nation then follow their lead. Is that your understanding of
5379 the way that it is in the draft as well?

5380 Mr. {McCurdy.} Mr. Upton, thank you for your comments
5381 earlier too and I very much appreciate working with you and I
5382 have for a number of years. Section 221, I believe, is the
5383 section you are referring to and sub 4, and I think the draft
5384 made an effort to address at least three of the concerns in
5385 the first three sections about the standard. The fourth
5386 section, I think Mr. Reuther and I both would concur, needs
5387 work and that is the area that we would like to see the
5388 committee continue conversations. I think the Obama
5389 Administration has an opportunity to create a single national

5390 approach that would be administered by the federal government
5391 so that we eliminate the duplicative and potentially
5392 conflicting standards. The reason there are concerns, it is
5393 not just a question of stringency. The structure is one of
5394 the major challenges of compliance, enforcement, and several
5395 other provisions, and that has to be harmonized and I think
5396 the Administration is going to try to address that, and I
5397 think they are going to have to work with Congress as well.
5398 So again, you know, we do strongly support a single national
5399 standard.

5400 One comment that my friend, Mr. Reuther, made with
5401 regard to future. It is clear that under the EISA, the
5402 energy bill of 2007, which we supported and the CAFE
5403 provisions that we can see our way to 2016. Beyond that,
5404 though, is an area of major concern. It is a concern because
5405 of the need for clarity and predictability because of the
5406 need to ramp up to produce the kinds of technologies. Mr.
5407 Friedman mentioned 20 percent plug-in hybrids by 2030. That
5408 is an extremely aggressive number. We would like to be there
5409 but I am not sure that without proper incentives, without a
5410 real energy policy that incentivizes consumers, there is
5411 certainly no guarantee that that will occur. So we need--
5412 there is not one single silver bullet technology but it is
5413 clear we need certainty and predictability, and I think that

5414 section is one that on a bipartisan basis that we should
5415 address and look forward to working with you on it.

5416 Mr. {Upton.} And Mr. Reuther, do you want to comment on
5417 that at all?

5418 Mr. {Reuther.} We read the draft bill a little bit
5419 differently. To us, it appears to say through 2015 there
5420 would be a harmonized standard but after that point in time
5421 nothing is clear except there is a green light for California
5422 to go ahead, and as I indicated in testimony, we would like
5423 to see longer-term harmonization and certainty both for the
5424 environmental fuel savings benefits but also because it will
5425 assist the companies in knowing what is required of them,
5426 where they have to put their emphasis in terms of investments
5427 and technology.

5428 Mr. {Upton.} Now, both of you talked about substantial
5429 investment to be able to get to that point and I presume that
5430 that comes from, as you said, Mr. McCurdy, 5 percent of the
5431 allocation. I would presume then if the Obama
5432 Administration's request of 100 percent auction, therefore
5433 leaving nothing to be taken out of that for allocations, you
5434 all would be opposed to the bill. Is that right?

5435 Mr. {McCurdy.} Well, I said either allocations or
5436 revenue, so it is a question. I think that section in the
5437 bill is not clear. I am sure it is something that the

5438 committee is going to be working on but the point I hope is
5439 clear, and that is, if we are going to be held accountable or
5440 responsible for EPA's number of 17 percent of the emissions
5441 and we understand the incredible cost associated with
5442 addressing that, that there should be dedicated revenues or
5443 allocations for the investments needed for research and
5444 development, production, retooling, which is going to be
5445 quite substantial.

5446 Mr. {Upton.} Just in closing, I know my time is
5447 expired, I was glad to hear you talk about the clunkers bill.
5448 I think that is very important to get the consumers back into
5449 the showroom and send the green light to all of our
5450 autoworkers, whether they be suppliers or assembly folks. It
5451 is key and I am glad that we have bipartisan support led by
5452 our colleague, Betty Sutton from our committee and Candice
5453 Miller from Michigan, which I am a cosponsor. Thank you.

5454 Mr. {Markey.} The gentleman's time is expired. We
5455 recognize another sponsor of the cash for clunkers
5456 legislation, Mr. Inslee, for questioning.

5457 Mr. {Inslee.} Thank you.

5458 Mr. McCurdy, some of us have been looking at the Project
5459 Better Place model of trying to improve infrastructure for
5460 charging and swapping out batteries. Could you give us your
5461 group's thoughts about it? How do we make that work? We do

5462 have a provision in the bill that will help development of
5463 infrastructure. I appreciate your comments on that.

5464 Mr. {McCurdy.} Thank you, Mr. Inslee.

5465 Mr. {Inslee.} And I don't mean to limit my comments to
5466 Project Better Place. There are other companies involved in
5467 this as well.

5468 Mr. {McCurdy.} No, you are exactly right. It is good
5469 to see you and I appreciate your support. As I indicated in
5470 my written statement, fuels and autos are a system and for
5471 the past few decades I think the focus has been on the autos
5472 and not as much on fuels or the system. If we move to the
5473 electrification of vehicles, whether it is--and again, there
5474 are a number of business models out there, we can't comment
5475 on which one is most likely to succeed but it is clear the
5476 infrastructure has to be there and you have to move now in
5477 order to pave the way for whether it is plug-ins, fully
5478 electric vehicles, whether it is--and that is where the smart
5479 grid comes in. It is also where utilities, I think, are
5480 going to be incentivized to address that as well. What you
5481 need is the ability to recharge, whether it is home, through
5482 a smart grid at night when the rates are lower or your place
5483 of work or if you moving around urban environments, and it is
5484 clear the current infrastructure is not there to support
5485 that, so this is an important investment. Better Place, that

5486 you mentioned, is one where they have a different business
5487 model but they want to have fast charging or replace the
5488 batteries themselves. Again, we are not going to down-select
5489 one particular technology but we think the infrastructure
5490 could be supportive of the entire electrification process.

5491 Mr. {Inslee.} Thank you. I appreciate it.

5492 Mr. {McCurdy.} I wanted to ask Mr. Sperling and Mr.
5493 Drevna, the discussion about the low-carbon fuel standard,
5494 Mr. Drevna--and I missed your oral testimony but I was just
5495 reading your testimony and you were making reference that you
5496 thought that there was a possibility that the approach to the
5497 bill would discriminate against certain petroleum products, I
5498 think you were referring to Canadian tar sands, and I don't
5499 understand that criticism. Basically the bill would have
5500 ``some discrimination'' but it is based on carbon content.
5501 All the creators' children would be treated the same, it is
5502 just dependent on how much carbon content is in each fuel
5503 source. So I don't consider the bill discriminatory in that
5504 sense. It simply judges each system based on its carbon
5505 content. Perhaps Mr. Drevna and Mr. Sperling could comment
5506 on that.

5507 Mr. {Drevna.} Thank you, Mr. Inslee. Unfortunately,
5508 Mr. Sperling had to catch an airplane. The question about
5509 the low-carbon fuel standard, what you are saying, there are

5510 two parts to it that we see. One is that the bill, the draft
5511 itself has a cap, a cap-and-trade mechanism, and the bill
5512 also contains a low-carbon fuel standard. We view those two
5513 things, as I said in my oral testimony, at best duplicative
5514 and redundant and at worst is punitive and counterproductive.
5515 We have no control over the--the only way to get low-carbon
5516 fuel standard is to blend non-carbon fuels into gasoline or
5517 diesel. We have no control over the technology, advancing
5518 those new fuels. We have no control over the infrastructure.
5519 If you have a cap, that is a performance standard. Then you
5520 are saying you have to do more, do a low-carbon fuel standard
5521 and then when you look at the renewable fuel standard that we
5522 are still obligated under EPACT 2005 as amended by EISA 2007,
5523 we have got three potentially competing kinds of legislation
5524 and regulation we have to look at. I think there is a
5525 misconception among a lot of folks, and I know the draft says
5526 well, we are going to phase out the RFS as we ramp up the
5527 LCFS. In theory, that sounds marvelous. In practicality, it
5528 is very difficult for refiners to do so. We don't have a
5529 magic switch that we flip one day and say okay, now we are
5530 out of the RFS and went to the LCFS. It is almost like the
5531 proponents believe that there are two dimmer switches, one we
5532 are going to raise on the LCFS while we lower the RFS.
5533 Unfortunately, Mr. Inslee, it simply doesn't work that way,

5534 and again I go back to saying, if you have a cap, you have a
5535 performance standard, you know, it is one thing to have a
5536 belt and suspenders, you know, but these two are competing.
5537 They could potentially be competing because there are many
5538 studies out there right now that suggest that a low-carbon
5539 fuel standard is actually more energy intensive than other
5540 ways of reducing carbon, and I will be more than happy--I
5541 don't want to use up all your time. I will be more than
5542 happy to--

5543 Mr. {Inslee.} I appreciate that. I think you came up
5544 with three criticisms I hadn't even heard yet.

5545 Mr. {Drevna.} Well, and again, I will be more than
5546 happy to discuss these with you. This is why I suggested
5547 that, you know, we would suggest another hearing on this for
5548 the transportation sector. We heard a lot this morning about
5549 a lot of things involving electricity. We really--you know,
5550 from my parochial interest, and I shouldn't even say
5551 parochial. This is a nation's interest. From our interest,
5552 we have to fully understand what the impact is going to be on
5553 transportation fuels because as we all know, this is what
5554 drives the economy.

5555 Mr. {Inslee.} I appreciate it.

5556 Mr. Friedman.

5557 Mr. {Friedman.} Thank you, Congressman, and thank you

5558 very much for your leadership on the low-carbon fuel
5559 standard. You have been very important to making progress in
5560 this area. I think part of what we are seeing, when people
5561 don't want to make progress they try to make things sound a
5562 lot more complicated than they really are. The low-carbon
5563 fuel standard is a very straightforward policy that creates
5564 market for cleaner fuels, and one of the problems, one of the
5565 challenges with a cap-and-trade system is if we do it right,
5566 if we add in the complementary policies, sure, we will maybe
5567 increase gasoline prices 15, 20 cents a gallon. Well, it
5568 took a near quadrupling of gas prices last summer to get
5569 significant change out of consumers. Fifteen or 20 cents a
5570 gallon is not going to stimulate low-carbon biofuels, it is
5571 not going to stimulate electric vehicles, it is not going to
5572 stimulate fuel cell vehicles. A low-carbon fuel standard
5573 will do just that. Also, it is not just about alternative
5574 fuels. Refineries have the potential to increase efficiency
5575 10 to 20 percent. We have got a wellspring of efficiency
5576 improvements that can be sent throughout the economy and
5577 refineries are part of that. So there is a lot of potential.
5578 This is really a lot simpler than I think people make it
5579 seem. It is really the same case with vehicle standards.
5580 Once EPA sets strong enough standards, California has already
5581 made clear they will cede to EPA's authority when they set

5582 strong standards.

5583 Mr. {Inslee.} Thank you. I am over my time. I just
5584 want to make one closing comment. Throughout these
5585 discussions, one of the things we are trying to do is really
5586 promote the creation of new technology. We have to have new
5587 technologies here, and even if we could do certain things at
5588 zero cost today that don't get us to the ultimate goal, we
5589 have to create these new technologies. I think this helps.

5590 Mr. {Markey.} The gentleman's time has expired. I
5591 would like to continue on a little bit with the subject that
5592 Congressman Inslee was discussing, and that is fuel economy
5593 standards and the automotive sector, and ask if I could, Mr.
5594 Reuther and Mr. McCurdy and Mr. Friedman, if we could just
5595 have a little discussion about the 2007 fuel economy
5596 standard, 35 miles per gallon for the fleet by 2020, combined
5597 with the \$25 billion in the Green Car Factory Funds, combined
5598 with the \$2 billion for the Battery Fund that has been
5599 created in the stimulus, and just give me some sense of your
5600 optimism about how we just might reach a tipping point in 3,
5601 4, 5 years where we move much more rapidly than even the law
5602 requires because of the adoption of these green car new
5603 technologies that will be manufactured by every company not
5604 only in the United States but around the world. Mr. McCurdy.

5605 Mr. {McCurdy.} Thank you, Mr. Chairman. We obviously

5606 applaud the efforts to dedicate some revenue or some funds
5607 after the passage of EISA, \$25 billion section 136 funds. As
5608 we know, that was over a year ago. Those funds are just now-
5609 -the loans are just now starting to be made available. The
5610 battery money is important. You have particularly strong
5611 interest in those technologies. That is a step, a small step
5612 in the right direction. If you recall, the NHTSA estimates
5613 for the cost to the U.S. sector for compliance with CAFE was
5614 going to be roughly \$85 billion. So 25 is a down payment. I
5615 think it is an important step. But if you want to accelerate
5616 that, which is really where you would like to go, it is going
5617 to take considerable more investment, and it is not just a
5618 question of money. I mean, with all due respect to Mr.
5619 Friedman, it is not as easy as perhaps some would say in
5620 theory. I mean, you actually have to go beyond the
5621 laboratory and get it deployed. In the manufacturing world
5622 and when you are dealing with consumers, the real key is
5623 being able to have it where it is a warrantable product that
5624 will last whether it is in the rather cold climate of
5625 Wisconsin in the winter or the summers in Arizona, and so
5626 batteries, that is a big challenge to battery and
5627 electrification. But having said that, we are very
5628 optimistic and hopeful about transformation to the new
5629 technologies and we want to work with Congress and the

5630 Administration in order to make that happen.

5631 Mr. {Markey.} Thank you.

5632 Mr. Reuther.

5633 Mr. {Reuther.} We believe that the 2007 law was a very
5634 good law and we are optimistic the companies will be able to
5635 meet the standard in that law and perhaps do even better than
5636 that. It is my understanding that already enough
5637 applications have been submitted to exceed the \$25 billion.
5638 It has already been appropriated for the section 136 program
5639 and that is part of why we believe that there is a need to
5640 provide additional funding going forward. I also have to
5641 underscore, though, that the ability of the companies to
5642 achieve better results in the future is being impacted by the
5643 current severe recession in the industry, which is severely
5644 straining the financial resources of the companies. It is
5645 also changing the underlying assumptions. I mean, one of the
5646 key assumptions that goes into the cost-benefit analyses is
5647 the number of vehicle sales. That affects the reductions
5648 that you get and emissions. It affects the cost of diffusing
5649 the technology across the entire fleet. So I think everyone
5650 is going to have to go back and revisit the calculations on
5651 what can be achievable going forward, given the dramatic
5652 change that we are seeing in the nature of the auto market.
5653 Mr. {Markey.} As the auto marketplace once again goes

5654 from 10 million cars a year back up to 16 or 17 million cars
5655 per year which are sold in the United States, and I do
5656 subscribe to Vice President Gore's analysis that as we
5657 recover and as the Chinese and Indian economies and other
5658 developing countries' economies continue to expand, we will
5659 see an inexorable rise in the price of gasoline here in the
5660 United States. Do you think that it is likely that the
5661 automotive industry will plan now that they have this much
5662 lower demand for that 16- or 17-million-vehicle world that
5663 will be re-created in 3 or 4 years hopefully in a way that
5664 has a higher percentage of vehicles coming from this energy
5665 efficient or plug-in hybrid or straight hybrid vehicles, Mr.
5666 Reuther?

5667 Mr. {Reuther.} Well, I think a lot of analysts are
5668 questioning whether we will be getting back to the 16, 17
5669 million vehicles sales level, that there may have been a
5670 long-term change in the overall demand. So I think that is
5671 an important thing. We do agree that over time the gas
5672 prices are going to be going to higher levels. I mean, we
5673 believe there is a need for the government to try and
5674 incentivize and drive the electrification of the industry and
5675 to drive that process as quickly as possible, and we want to
5676 work with you to be supportive of that.

5677 Mr. {Markey.} I am just working from my own personal

5678 set of assumptions, that maybe we do have to pay cash for
5679 clunkers, which I think we ultimately will wind up doing
5680 here, but there is going to be a point at which people spend
5681 their own cash for new cars, and that is when the economy
5682 recovers and I think it is a pretty good bet that people will
5683 not like riding around in clunkers if they have got the cash
5684 back in their pockets and I think that is a good planning
5685 premise.

5686 Mr. Friedman?

5687 Mr. {Friedman.} Thank you, Mr. Chairman. As I said in
5688 my testimony and I will reinforce today, I think that there
5689 are good reasons to try to help the auto industry through
5690 these difficult times to invest in the auto industry to help
5691 them get through these difficult times. Any time you invest
5692 in technology you create more jobs, and if we invest in the
5693 auto industry tied to performance standards, any time the
5694 federal taxpayers put out money, they should expect something
5695 in return so there should be performance standards tied to
5696 those investments. If we make those investments, I do think
5697 the auto industry can make significant changes. In fact, we
5698 are already seeing it. This is an article from Business
5699 Week. Detroit finds green in recycled fuel economy ideas.
5700 It is about how Ford wants mixed fuel saving tricks from the
5701 1950s and is now using them to boost mileage and cut

5702 emissions. The auto industry has the technology. The
5703 engineers and autoworkers are incredibly talented. If you
5704 give them the chance, if you make the investment in them, if
5705 you trust them to help cut our emissions and make us less
5706 dependent on oil, they will deliver.

5707 Mr. {Markey.} Thank you, Mr. Friedman.

5708 Let me ask you, Mr. McCurdy.

5709 Mr. {McCurdy.} I just have one comment on that Mr.
5710 Chairman. As you know, I have had long discussions and
5711 conversations about this. Four dollar gasoline did more to
5712 move consumers to fuel-efficient vehicles and choices than
5713 any regulation, any edict, any government action, and if
5714 prices do recover--and just one other point, your numbers are
5715 accurate on production levels. We have dropped from a high
5716 of 17 million vehicles to below 10 million vehicles currently
5717 annualized sale. Assuming a V-shaped recovery, and that is
5718 an optimistic assumption, you are looking at 2014, 2015
5719 minimum to get back to those kinds of levels. We would
5720 welcome 12 and 13 million unit sales at this point. But the
5721 important thing is, even with this downturn, this industry
5722 continues to invest more than any other industry in those
5723 technologies, in research and development.

5724 Mr. {Markey.} Thank you, Mr. McCurdy.

5725 And let me ask you, Mr. Bowles, one final question, and

5726 that is to relate to us the lesson, if you can succinctly,
5727 that the regional greenhouse gas initiative that
5728 Massachusetts and nine other States are a part of that has
5729 kind of an equivalent system out in California, the West
5730 Coast and that other States are looking at. What can we
5731 learn from what happened in terms of having a system in place
5732 that creates new incentives for reducing the amount of
5733 greenhouse gases that are emitted into the atmosphere?

5734 Mr. {Bowles.} Thank you very much, Mr. Chairman, for
5735 the question, and really on behalf of the 10 RGGI states, I
5736 think we can report remarkable success. We learned from the
5737 experience of the European Union and the windfall profits
5738 that were given to power generators when they were given on
5739 an allocation basis their permits and then held them in
5740 reserve and ultimately sold them later at a greater price and
5741 ended up making money off the permits when the point was to
5742 reduce greenhouse gas emissions. In Massachusetts, we have
5743 adopted 100 percent auction policy. We have been through
5744 three auctions in the Nation's first functioning cap-and-
5745 trade. The price of the auctions have gone up modestly at
5746 each point from about \$3 a permit to about \$3.50 a permit.
5747 In Massachusetts we have raised \$43 million that we are
5748 plowing back into energy efficiency. We are seeing jobs
5749 being created by people saving money on their electric bills

5750 from those investments. So I think what we have taken from
5751 it is that an auction system works, it works brilliantly. We
5752 haven't had big surprises. We have generated resources back
5753 for economically efficient returns that are protecting the
5754 environment and creating jobs at the same time.

5755 Mr. {Markey.} And can you give us some sense of what
5756 the response is in those 10 States to this system that right
5757 now is limited to the utility sector?

5758 Mr. {Bowles.} Yes, very well. I mean, in Massachusetts
5759 we are spending about \$150 million a year on energy
5760 efficiency anyway as a baseline. We are adding significant
5761 new resources and expanding those programs so I would say it
5762 has been very well received in Massachusetts and I think
5763 across the footprint of the 10 RGGI States.

5764 Mr. {Markey.} Okay. Great. Here is what I am going to
5765 ask each one of you to give us your 30-second summary as we
5766 move forward in terms of what you want this committee to
5767 remember as we move forward over the next month on passing a
5768 climate change and energy bill out of this committee. We
5769 will go in reverse order and we will give you, Mr. Delaski,
5770 the first shot.

5771 Mr. {Delaski.} I will just reiterate that our support
5772 for the subtitle concerning appliance standards and urge you
5773 to keep that subtitle strong and to maintain the reforms to

5774 enable the Department of Energy to set standards stronger as
5775 they move forward to get their program back on track.

5776 Mr. {Markey.} Thank you very much.

5777 Mr. Drevna.

5778 Mr. {Drevna.} Thank you, Mr. Chair. If I could sum it
5779 up in 30 seconds or less, I would urge the committee and the
5780 Congress to make sure we know all the consequences intended
5781 and unintended as we forge on, as you forge on with the
5782 legislation. It is just too important, and again from the
5783 transportation sector, I think we should sit down again and
5784 talk about the transportation sector and talk about what is
5785 in the discussion draft and where we have some concerns and
5786 where we have some other ideas for you. Thank you very much.

5787 Mr. {Markey.} Thank you, Mr. Drevna, very much.

5788 Mr. Genzer.

5789 Mr. {Genzer.} The stimulus package was a good start, a
5790 great start on energy efficiency funding, things you have
5791 been fighting for for 35 years. The Retrofit for Energy and
5792 Environmental Performance program and the other elements of
5793 the efficiency part of this bill should definitely good
5794 forward and it is also time to move forward aggressively on
5795 building codes, both at the residential and the commercial
5796 level.

5797 Mr. {Markey.} Thank you, Mr. Genzer.

5798 Mr. Gardiner.

5799 Mr. {Gardiner.} The energy efficiency resource standard
5800 that is contained in the discussion draft is a great deal for
5801 consumers. It is going to save them \$170 billion. It is
5802 also a critical--coupled with the renewable electricity
5803 standard, it is a critical cost containment strategy that
5804 will yield the lowest cost carbon reductions as we go forward
5805 to reducing greenhouse gas emissions.

5806 Mr. {Markey.} Thank you.

5807 Mr. Friedman.

5808 Mr. {Friedman.} Thank you, Mr. Chairman. The key to
5809 addressing transportation is looking at it as a system,
5810 addressing vehicles, fuels and a smarter transportation
5811 infrastructure and more investment in transit. This bill
5812 deserves to pass because it addresses all of these issues.
5813 It requires leadership from the Administration on top of that
5814 but it sets us down the right path. The thing that we have
5815 to do is prepare for our future, and if we look back at \$4-a-
5816 gallon gasoline, one of the things that that did is, it
5817 started moving consumers away from car companies that weren't
5818 ready and to the car companies that were ready with the best
5819 technology. We can't afford for that to happen again. We
5820 need to make sure they all have the best technology.

5821 Mr. {Markey.} Thank you, Mr. Friedman.

5822 Mr. Reuther.

5823 Mr. {Reuther.} UAW believes that discussion draft has
5824 many excellent provisions. We look forward to working with
5825 you and the entire subcommittee to refine the vehicle
5826 efficiency standards to provide longer-term certainty both on
5827 fuel economy environmental benefits and certainty to the
5828 companies on the directions they need to go with the
5829 technology, and we look forward to working with you to make
5830 sure that the resources are there so that the companies can
5831 do that.

5832 Mr. {Markey.} Thank you, Mr. Reuther.

5833 Mr. McCurdy.

5834 Mr. {McCurdy.} Mr. Chairman, I said earlier automakers
5835 are committed to reducing CO2 from the vehicles that we sell
5836 and the plants where we manufacture them. We think the
5837 discussion draft provides a platform for discussion. We
5838 share some of the concerns as indicated by Mr. Reuther and
5839 believe that we can work to improve those.

5840 Mr. {Markey.} Thank you, Mr. McCurdy.

5841 And Mr. Bowles.

5842 Mr. {Bowles.} Mr. Chairman, thank you again for this
5843 hearing today and the opportunity. Three points to recall.
5844 One is, please keep the strong federal-State partnership
5845 found in the draft. It builds on mechanisms that work and

5846 accelerates them, not replacing them. Second, with due
5847 respect, we urge you to get on with it. Congressional
5848 leadership on clean energy and climate change is long
5849 overdue. You have personally been a tremendous advocate.
5850 Movement through this body is vitally important. And third,
5851 the promise of the clean energy economy is real. It is
5852 happening in the Commonwealth of Massachusetts. We thank you
5853 for your leadership.

5854 Mr. {Markey.} Thank you, Mr. Bowles, very much. And by
5855 the way, I just would like to say that any three of you would
5856 be a fantastic panel alone at an ordinary time and I
5857 appreciate your understanding that time is of the essence.
5858 This is the year. Copenhagen is in December. We have to
5859 move and we have to have these issues, and you are right, we
5860 are getting it on, Mr. Bowles. You saw that today with the
5861 Vice President and Speaker Gingrich. We are in the middle
5862 of an historic debate in this committee. We thank you all,
5863 very much, for your participation.

5864 While this panel leaves and the next one assembles
5865 behind their names, we will take a 2-minute break.

5866 [Recess.]

5867 Mr. {Markey.} Ladies and gentlemen, thank you so much.
5868 We invite our witnesses to come and to sit behind their
5869 nametags at 4:25 on Friday afternoon. I just want you to

5870 know that this is all part of our plan to get rid of
5871 everybody so we could have the most important panel to
5872 ourselves with unlimited questioning by the chairman and by
5873 Ms. Baldwin, and so the whole day, this has been the plan,
5874 just so we have this special panel for that purpose.

5875 To begin, I am going to ask Congresswoman Baldwin to
5876 introduce our first witness.

5877 Ms. {Baldwin.} Thank you, Mr. Chairman. I am pleased
5878 to introduce a constituent whose expertise in conservation
5879 and climate change is well known and well documented. During
5880 her 17 years with the Nature Conservancy, Tia Nelson led that
5881 organization's climate change program where she played a key
5882 role in developing forest protection and restoration as a
5883 climate change mitigation strategy. Tia received the EPA's
5884 climate change leadership award in the year 2000. Since
5885 2004, Tia has served as executive secretary of the Wisconsin
5886 Board of Commissioners of Public Lands, and in 2007, Governor
5887 Jim Doyle appointed Tia as co-chair of the Governor's Task
5888 Force on Global Warming, a broad coalition of Wisconsin's
5889 experts and leaders that in 2008 produced a nearly unanimous
5890 report on the ways Wisconsin can be a leader in addressing
5891 the challenges presented by climate change, reduce our
5892 dependence on fossil fuel and advance the State's energy
5893 independence objectives. As the daughter of Wisconsin's

5894 great Congressman, governor and U.S. Senator Gaylord Nelson,
5895 the founder of Earth Day, you can certainly say that Tia's
5896 dedication to preserving land and water resources is in her
5897 blood. She is carrying on her father's great environmental
5898 legacy and forcefully creating her own. He would be justly
5899 proud to see her with us today. Tia.

|
5900 ^STATEMENTS OF TIA NELSON, EXECUTIVE SECRETARY, BOARD OF
5901 COMMISSIONERS OF PUBLIC LANDS, STATE OF WISCONSIN; BILL
5902 BECKER, EXECUTIVE DIRECTOR, NATIONAL ASSOCIATION OF CLEAN AIR
5903 AGENCIES; CARL ROYAL, COUNSEL, SCHIFF HARDIN LLP, FORMERLY
5904 SENIOR VICE PRESIDENT AND GENERAL COUNSEL, CHICAGO MERCANTILE
5905 EXCHANGE; JON ANDA, EXECUTIVE-IN-RESIDENCE, FUQUA SCHOOL OF
5906 BUSINESS, DUKE UNIVERSITY, VISITING FELLOW NICHOLAS INSTITUTE
5907 FOR ENVIRONMENTAL POLICY SOLUTION; DAVID DONIGER, POLICY
5908 DIRECTOR, CLIMATE CENTER, NATURAL RESOURCES DEFENSE COUNCIL;
5909 PATRICIA MULROY, GENERAL MANAGER, LAS VEGAS VALLEY WATER
5910 DISTRICT/SOUTHERN NEVADA WATER AUTHORITY; ANNE E. SMITH, VICE
5911 PRESIDENT, PRACTICE LEADER OF CLIMATE AND SUSTAINABILITY, CRA
5912 INTERNATIONAL; AND WILLIAM L. KOVACS, VICE PRESIDENT,
5913 ENVIRONMENT, TECHNOLOGY AND REGULATORY AFFAIRS, U.S. CHAMBER
5914 OF COMMERCE

|
5915 ^STATEMENT OF TIA NELSON

5916 } Ms. {Nelson.} Thank you so much for your very kind
5917 introduction. I am quite grateful. I am proud to be
5918 represented by you in Congress and grateful too for your
5919 environmental leadership. Thank you, Chairman Markey, for
5920 your endurance this week. I am grateful to be here today.

5921 In the interest of conservation and efficiency, I plan on
5922 trying to be very brief and talk very fast.

5923 I am here to share with you a little bit about
5924 Wisconsin's experience. Governor Doyle, who has been a
5925 leader on the issue of climate change, appointed a task force
5926 which I co-chair with my distinguished colleague, Roy Filley
5927 from WPPI Energy, and Roy and I co-chaired a group of 29
5928 stakeholders representing industry, tribes,
5929 environmentalists, manufacturers, labor interests,
5930 agricultural interests, citizens, and we reached near-
5931 unanimous consensus on our report which Tammy just held up
5932 for you.

5933 The governor tasked us with three objectives. Number
5934 one was to identify short- and long-term targets for
5935 emissions reductions. Number two was to present policy
5936 recommendations to achieve these goals. Number three was to
5937 identify opportunities to address climate change while
5938 growing Wisconsin's economy and creating jobs. We worked for
5939 a year. We produced a report, as I said, near-unanimous
5940 support. That report has many similarities to your bill, Mr.
5941 Chairman. The renewable energy and efficiency titles are
5942 quite similar. The renewable portfolio standard, the low-
5943 carbon fuel standard, the energy efficiency language, the
5944 building codes, the lighting standards and a few others are

5945 remarkably similar to our report. These are the measures
5946 that are most cost effective, as you know, and we in our
5947 process identified them similarly.

5948 So first and foremost, Mr. Chairman, I would like to
5949 applaud you. The committee draft offers real solutions to
5950 address climate change, promote energy independence and
5951 modernize our energy infrastructure, and I support the draft
5952 you have put forward and believe if we work together it will
5953 work for Wisconsin and for the Nation.

5954 The biggest challenge for us is working on cost
5955 containment. Wisconsin, as progressive and long of an
5956 environmental tradition as we have, Wisconsin is heavily
5957 reliant on coal. About 70 percent of our energy comes from
5958 coal. We are the third largest manufacturer in the United
5959 States. This means that cap and trades poses some real cost
5960 challenges for us but we believe that we can work with you on
5961 those costs. The draft does not propose an allowance
5962 structure and I am not here to support a particular approach
5963 but I thought it would be valuable to share with you what we
5964 did in the task force because what we did in the task force
5965 ended up uniting this diverse group of stakeholders to
5966 support a bill that has strong emission reduction targets.
5967 They are almost identical to yours, a little tougher in the
5968 mid term and a little weaker in the long term but effectively

5969 about the same. We have tough targets. We have tripling
5970 conservation and efficiency increasing renewables two and a
5971 half fold and it is quite--and endorsing a cap and trade, not
5972 a State cap and trade but a federal cap and trade.

5973 The biggest issue for us to discuss was how to do cost
5974 containment as a heavy coal-dependent State. We came up with
5975 an idea that I haven't heard yet that I hope you will
5976 seriously consider. The discussion to date has been about
5977 allocation issues and whether to auction all allowances or
5978 allocate them for free. These are the two extremes. What we
5979 did was come up with a compromise. That compromise united
5980 the group. That compromise suggested that up to 90 percent
5981 of the allowances in the early years, maybe for a period as
5982 long as 10 years, up to 90 percent would be allocated but not
5983 for free, would be allocated at a small fee, and that you
5984 would increase the auction percentage and decrease the
5985 allocated at a fee percentage over time to give us time to
5986 transition our economy in essence. That fee structure gives
5987 you cost certainty, gives you cost containment. It creates a
5988 predictable revenue stream which you can then draw on to help
5989 low-income folks do energy efficiency, do investments in
5990 climate research and so on. So that is how we got at the
5991 issue of cost abatement. For a State like Wisconsin, offsets
5992 will also be important. We have very important forest and

5993 farm industries and we believe that changes in land-use
5994 practices can help mitigate climate change. I was thrilled
5995 to see in your bill that you included offsets both
5996 international and domestic and recognized the role of
5997 forestry. Many people don't know that deforestation is more
5998 than 20 percent of annual greenhouse gas emissions globally
5999 and as a matter of fact, those emissions exceed the emissions
6000 from all of the planes, trains and automobiles in the world.
6001 You cannot address climate change without addressing the
6002 issue of deforestation and assisting developing countries in
6003 funding alternatives to destroying not only their forests and
6004 emitting greenhouse gases but other environmental benefits of
6005 the forest.

6006 So those are the two most important issues for us in
6007 terms of cost containment. We want to embrace most strongly
6008 your draft bill and discuss with you ways to help make it
6009 work for Wisconsin. We are grateful for your leadership and
6010 I thank you.

6011 [The prepared statement of Ms. Nelson follows:]

6012 ***** INSERT 15 *****

|
6013 Mr. {Markey.} Thank you. In the same way that we had
6014 Mr. Reuther earlier, the Nelsons of course are environmental
6015 aristocracy, and I think everyone is feeling good to be on
6016 this panel with you here on the 39th anniversary and
6017 hopefully by the 40th anniversary of Earth Day we will have
6018 resolved all of these issues.

6019 Ms. {Nelson.} I am going to hold you to that.

6020 Mr. {Markey.} Well, I think we can do it but it is, as
6021 you can see from the earlier preliminary rounds that we had
6022 here, it is going to be contentious but I think ultimately
6023 achievable.

6024 Ms. {Nelson.} Well, you have a big challenge but I want
6025 you to know that Wisconsin is keen to work with you on
6026 overcoming some of those challenges.

6027 Mr. {Markey.} Thank you. I appreciate it.

6028 Our next witness is Bill Becker, executive director of
6029 the National Association of Clean Air Agencies. He served as
6030 the first executive director of the State and Territorial Air
6031 Pollution Program Administrators and the Association of Local
6032 Air Pollution Control Officers. So whenever you are
6033 comfortable, Mr. Becker, please begin.

|
6034 ^STATEMENT OF BILL BECKER

6035 } Mr. {Becker.} Thank you, Chairman Markey and
6036 Congresswoman Baldwin. My name is Bill Becker. I am the
6037 executive director of the National Association of Clean Air
6038 Agencies. We are an association of air pollution control
6039 agencies in 53 States and territories and more than 165 major
6040 metropolitan areas across the country, and undoubtedly every
6041 one of them is watching this hearing through the Internet
6042 today and into the evening.

6043 Chairman Markey, our association applauds you and
6044 Chairman Waxman and your staffs for not only the incredible
6045 amount of hard work that went into drafting this proposal but
6046 for your leadership and the level of commitment being put
6047 forth for moving this legislation so quickly and yet so
6048 thoughtfully. By carefully balancing the vast array of
6049 diverse interests, you found a center point around which
6050 consensus can ultimately be achieved. You have put the
6051 prospect of success on this critical issue which for so long
6052 has been so elusive within reach and taken together the core
6053 components of this bill comprise a solid foundation for a
6054 realistic and federal climate program. We are particularly
6055 pleased that you have included a mandatory economy-wide

6056 greenhouse gas reduction strategy with quantifiable and
6057 enforceable limits and significant near, mid and long-term
6058 reduction targets, generally strong language protecting the
6059 rights of States and localities to exercise leadership in
6060 responding to global warming, performance standards for
6061 stationary sources of greenhouse gases, a renewable
6062 electricity standard, a low-carbon fuel standard,
6063 requirements for cleaner, more efficient transportation,
6064 provisions for adapting to global warming and many others.

6065 Is this precisely the bill that our association would
6066 have written had we held the pen? No, not exactly, but we
6067 fully understand the perspective from which you crafted this
6068 legislation and toward that end have developed a set of
6069 recommendations that we believe are consistent with that
6070 perspective and can be incorporated into the bill without
6071 upsetting the balance you worked so hard to achieve. Our
6072 written testimony details each of our recommendations, and
6073 what I would like to do is spend a couple of minutes
6074 highlighting three of them.

6075 First, we agree with the emissions reduction targets in
6076 the bill that are significant and that they are part of a
6077 compromise, part of the U.S. CAP proposal. At issue,
6078 however, is whether they are sufficient to avert dangerous
6079 anthropogenic warming. Since the last IPCC report was

6080 released in early 2007, scientific developments have shown
6081 that global warming is proceeding more quickly and with
6082 greater impacts than previously thought. Accordingly, we
6083 urge that you consider strengthening the reduction targets or
6084 at the very least ensure that these targets not be weakened
6085 as the bill moves through Congress.

6086 Second, while we support the offset integrity provisions
6087 in the discussion draft, which are designed to ensure that
6088 any offset credit represents permanent, enforceable,
6089 additional and verifiable emissions reductions, we are
6090 concerned about the generous offset credit pool which would
6091 allowed capped sources to use up to 2 billion offset credits
6092 each year to meet their compliance obligations. When cap
6093 sources purchase offset credits rather than reduce their own
6094 greenhouse gas emissions, this dilutes the effectiveness of
6095 the cap.

6096 And finally, we are pleased that the bill would amend
6097 the existing Clean Air Act savings clause to make clear that
6098 States and localities have the authority to enact various
6099 important measures and strategies. I am sorry Congressman
6100 Upton isn't here for this because we think it is very clear
6101 in the bill that you have preserved not only California's
6102 ability to retain its own greenhouse gas standards for motor
6103 vehicles but you have not tampered with the authority in the

6104 Clean Air Act under section 177 for other states to opt into
6105 California's program.

6106 We are troubled by the provision in your bill that would
6107 preempt State and local governments from 2012 through 2017
6108 from implementing or enforcing their own caps, thereby
6109 compelling the dissolution of regional cap-and-trade programs
6110 such as RGGI, the Midwestern Accord and the Western Climate
6111 Initiative as well as California's program. We recognize
6112 this provision may be intended to create a breather during
6113 which the federal cap-and-trade program would be the only one
6114 in existence. Nonetheless, this would revoke an important
6115 state and local authority. Moreover, we fear that if the
6116 bill is weakened as it moves through the legislative process
6117 yet this timeout remains, States would be required to
6118 surrender their successful programs and revenue in exchange
6119 for an inferior federal program. Instead, these State and
6120 regional path-breaking programs should be provided the option
6121 to decide whether the federal program is rigorous enough and
6122 the choice to transition into the federal program.

6123 So in conclusion, a successful national climate
6124 protection program must be predicated on a strong local-
6125 State-federal partnership. In order for our Nation to meet
6126 our greenhouse gas targets, we must ensure that all levels of
6127 government are fully engaged in the design and implementation

6128 of this program. We look forward to working with the
6129 committee as it moves through Congress and to President
6130 Obama's desk for signature. Thank you.

6131 [The prepared statement of Mr. Becker follows:]

6132 ***** INSERT 16 *****

|

6133 Mr. {Markey.} Thank you, Mr. Becker, very much.

6134 Our next witness is Carl Royal, a member of the

6135 Securities and Futures Regulation Practice Group of Schiff

6136 Harden LLP. He has over 30 years of experience in the

6137 regulation of markets and market participants under the

6138 federal securities and commodities laws and he has spent 14

6139 years at the Chicago Mercantile Exchange serving as senior

6140 vice president and general counsel, and on a day when we

6141 heard Ken Lay's name mentioned again, Mr. Royal can perhaps

6142 give us good instruction as to how to construct this

6143 marketplace in a way that will protect against fraud and

6144 manipulation. We welcome you, sir.

|
6145 ^STATEMENT OF CARL ROYAL

6146 } Mr. {Royal.} Thank you, Mr. Chairman. I recognize that
6147 this bill and this committee's jurisdiction is covering a
6148 very wide territory as the various other speakers have
6149 already covered. I am going to focus on a very narrow aspect
6150 of that, and that is the trading part of cap and trade and
6151 how that market should be regulated.

6152 I think there are two basic themes that are of critical
6153 importance here. First is just recognizing that it is very
6154 important to have a well-regulated market to avoid some of
6155 the abuses that we have seen in other markets. In this
6156 market in particular, because it has such an impact over so
6157 many sectors of the economy and there is going to be of great
6158 importance to users of emissions and the general public so I
6159 do believe that it is essential that the regulatory framework
6160 to be created by Congress protect the integrity of the market
6161 and ensure that the market achieve its environmental purpose.
6162 It therefore should meet the following objectives. It should
6163 be designed to be as transparent as possible. Participants
6164 in the market should be protected from manipulation and fraud
6165 and the market should resist the development of speculative
6166 bubbles that divert prices away from the fundamental drivers

6167 of supply and demand.

6168 Because this market is one that is being created de
6169 novo, this gives Congress an opportunity to create a market
6170 that can avoid some of the problems that we have seen in
6171 other markets. In my view, if we can provide a regulatory
6172 framework that combines an exchange trading requirement,
6173 strict limitations on traders such as position limits and
6174 margin requirements, and tough enforcement provisions, it
6175 then would be possible to achieve protection of the public in
6176 those areas. I recognize that there have been other markets
6177 in recent months where there have been some serious problems,
6178 credit default swaps, for example, but I would point out that
6179 that was a market that exists in the unregulated over-the-
6180 counter market and is not necessarily a problem with the
6181 instruments but perhaps in the market and how it was not
6182 regulated effectiveness. If you move a market to an exchange
6183 environment, I think you can avoid many of those problems.

6184 I think first that exchange trading maximizes market
6185 transparency because all parties in the market as well as the
6186 federal regulators have access to pricing information in real
6187 time and can see what other traders are doing. Second,
6188 exchange traded products have standardized terms that make
6189 them easy to understand easy to price. That improves market
6190 liquidity which helps keep the cost of trading low. Third,

6191 exchange trading comes with clearing by a central
6192 clearinghouse acting as central counterparty to all
6193 transactions. Under central counterparty clearing, all
6194 positions are valued every day based on market prices as
6195 determined by a neutral party. If a position's value goes
6196 down, there is a daily call for cash called variation margin.
6197 This financial discipline would have prevented many of the
6198 problems that are now being faced by banks and other
6199 participants holding mortgage-backed securities and other
6200 forms of OTC derivatives that are worth much less than the
6201 banks are valuing them on their balance sheets.

6202 Further details on some regulatory suggestions are
6203 contained in my written remarks, and I thank the committee
6204 for this opportunity.

6205 [The prepared statement of Mr. Royal follows:]

6206 ***** INSERT 17 *****

|

6207 Mr. {Markey.} Thank you, Mr. Royal, very much.

6208 Our next witness, Jon Anda, is a visiting fellow of the

6209 Nicholas Institute for Environmental Policy Solutions at Duke

6210 University. Mr. Anda was previously president of the

6211 Environmental Markets Network at the Environmental Defense

6212 Fund. He has worked to create a framework for the U.S.

6213 carbon market that is fair, efficient and responsive to

6214 lessons learned in the financial crisis. And that is very

6215 important because we have many people who are saying well,

6216 how can we create a new market here, and won't that be

6217 dangerous, you know, mentioning Bernie Madoff or mentioning

6218 Ken Lay or mentioning credit default swaps or other

6219 machinations of the marketplace that have occurred. The

6220 truth is that what Bernie Madoff did was illegal and there

6221 were clues actually to track him down 10 years ago that just

6222 were not followed up on, and in credit default swaps there

6223 were many warnings over the years as well as there are in

6224 many of these other areas that ultimately came to hurt

6225 confidence in the marketplace. But at the same time we are

6226 not going to abandon the New York Stock Exchange or the

6227 NASDAQ or the Chicago Mercantile Exchange and say trading

6228 just can't occur because that would bring capitalism to its

6229 knees. And so that is why we have Mr. Royal and Mr. Anda

6230 here today to help us to frame the way in which we can create
6231 a marketplace that will work, be transparent, honest, and if
6232 manipulation does occur, lead to the apprehension of and
6233 ultimate imprisonment of someone who abuses the system.

6234 So we welcome you, Mr. Anda, and whenever you are ready,
6235 please begin.

|
6236 ^STATEMENT OF JON ANDA

6237 } Mr. {Anda.} Thank you, Mr. Chairman. I think we
6238 obviously have a risk with creating a new financial market
6239 for carbon but we also have a great opportunity. Carbon
6240 actually could set a standard that could be used in other
6241 markets, and Carl referred to that and I certainly support
6242 that point.

6243 Let me just right down to some comments about the work
6244 the committee has done. I think you did two things really
6245 right in establishing fairness efficiency but also taking
6246 some lessons from the recent financial crisis. The first one
6247 was in allowances. The discussion draft sets a best
6248 execution standard for allowances. That means that anyone
6249 who buys an allowance is assured of getting the best price
6250 available in the market. That is something we do in our
6251 equity markets under something called the national market
6252 system and that was a great thing for the committee to do.

6253 Secondly, the committee made a very important decision
6254 in derivatives. In derivatives, the discussion draft says that
6255 derivatives will basically be traded on listed regulated
6256 markets, the kind that Carl described, rather than in the OTC
6257 market which is very common for commodities. Sometimes

6258 people put carbon the commodities world. I think those were
6259 bold decisions and set the right tone for the bill. So I
6260 will talk maybe a little bit more about those later but I
6261 want to add some context to these decisions. I know it is
6262 late on a Friday afternoon but I think just a few numbers are
6263 instructive.

6264 Over the life of the bill, you are going to be issuing
6265 131 billion allowances but initially we might have as little
6266 as 5 billion outstanding of we just do an auction for 1 year.
6267 So in the financial world we call this a really small float,
6268 131 billion over the life and 5 years out in the first year.
6269 Now, another way to think about that is that you are telling
6270 emitters that they have to abate carbon over 38 years, that
6271 they want to manage that risk, they only have 1 year of
6272 allowances worth to trade to manage their risk. So what will
6273 that lead to? That is going to lead to huge demand for
6274 derivatives, absolutely huge demand, and I don't think that
6275 is a problem. I just think it is a good idea if you are
6276 going to have huge demand for derivatives recognize it and
6277 have those derivatives traded transparently and in a way that
6278 the system doesn't get out of control.

6279 As an aside, I would encourage you to think about
6280 increasing the flow. You can do that as you have already
6281 provided in the discussion draft. You can auction an extra 4

6282 years worth upfront. But if you think about using that
6283 provision, if you did it you have maybe 25 billion tons to
6284 auction in the first 5 years. If that was \$20 a ton, you
6285 would hosting a half a trillion dollar auction. That is a
6286 little too big. So that is a tough way to do it. But to the
6287 extent that you do have free allocations, either for all the
6288 topics we have talked about the last few days, leakage or
6289 giving them to LDCs, do it up front so that we have more
6290 allowances and a less derivatives-dependent market.

6291 Lastly, I would encourage you to think about something
6292 like rights. The government auctions rights to emitters to
6293 buy allowances in, say, 5 years' time at a fixed price, say
6294 \$20. That would be a way of sort of pre-selling the rights
6295 and providing some financing to emitters and clearly I won't
6296 discuss that late on a Friday afternoon in my 5 minutes.

6297 Let me just go back to the best execution point and make
6298 one little comment. I love the national market system. In
6299 my 20 years at Morgan Stanley, I came mostly out of the
6300 equity business and we certainly are--our markets have
6301 benefited from that rule. But carbon isn't, you know,
6302 thousands of stocks, it is basically one instrument, and I
6303 think certainly one option for the allowance market would be
6304 to have a central marketplace, one electronic, what I call a
6305 CLOB for carbon, a central limit order book where all the

6306 trades occur, everybody can see the bids and offers. I think
6307 that is something that might be a good idea and might even be
6308 embraced by the market participants.

6309 In the derivatives area, I just want to make one
6310 important comment, what goes hand in hand with requiring
6311 listed exchange trading of derivatives. You have to have
6312 rationale accounting so that emitters can use these
6313 instruments. So if an emitter, one of your local utilities,
6314 wants to buy a future and their intention is to exercise that
6315 future in a few years and turn it in for compliance, don't
6316 make them market to market. They are just locking in an
6317 expense and deferring it. If you do market to market, one of
6318 the main reasons people do OTC highly structured derivatives
6319 is to avoid market to market so get the accounting right.
6320 U.S. CAP mentions rational accounting in their blueprint and
6321 I think what we want to do, we want these derivative markets
6322 to be kind of like farmers use derivatives all the time. It
6323 is part of their normal course of business and I hope it can
6324 be for emitters too.

6325 So just to conclude, I apologize for this being a bit
6326 technical but if you want to go a little further you can read
6327 my written testimony and also included in my testimony as an
6328 appendix is a primer on carbon markets that we at the
6329 Nicholas Institute wrote just a couple months ago and it

6330 gives a lot of background on this important topic, but again,
6331 I congratulate the committee on setting the tone for a fair
6332 and efficient U.S. carbon market that does take lessons form
6333 the financial crisis. Thank you.

6334 [The prepared statement of Mr. Anda follows:]

6335 ***** INSERT 18 *****

|

6336 Mr. {Markey.} Thank you, Mr. Anda, very much. Just for
6337 your information, the regulation of the securities
6338 marketplace was proposed here in this committee until the
6339 year 2000 when the Republican majority moved it over to the
6340 Banking Committee and so I was the chairman of the
6341 subcommittee with jurisdiction over the financial marketplace
6342 so I find this a fascinatingly exciting subject that you are
6343 talking about, and I would only note to you that in 1994, the
6344 last year I was chairman, I had introduced a bill to regulate
6345 derivatives. Alan Greenspan sat where you are sitting and his
6346 testimony was that counterparties have a stake in the
6347 stability of the system so we did not need any kind of
6348 regulatory system in the derivatives marketplace. I think we
6349 have now learned that derivatives in and of themselves are
6350 not good or bad but unregulated derivatives in a non-
6351 transparent marketplace is like a hydrogen bomb aimed at the
6352 economy, and so by learning these lessons, putting in place a
6353 well-structured regulatory marketplace, I think we have a
6354 chance to incorporate each one of these instruments in a
6355 rational financial system.

6356 Our next witness, David Doniger, is the policy director
6357 of NRDC's Climate Center. Mr. Doniger works on policies to
6358 cut global warming pollution from power plants, motor

6359 vehicles and other major industries and leads NRDC's work to
6360 complete the phase-out of chemicals that deplete the earth's
6361 protective ozone layer. David also served for 8 years in the
6362 Clinton Administration where he was director of climate
6363 policy at the Environmental Protection Agency. We welcome
6364 you here, sir. Whenever you are ready, please begin.

|
6365 ^STATEMENT OF DAVID DONIGER

6366 } Mr. {Doniger.} Thank you very much, Mr. Chairman.

6367 I want to focus today on the relationship between your
6368 new bill and the current Clean Air Act. The Supreme Court
6369 found in Massachusetts versus EPA that EPA already has the
6370 authority and responsibility to control carbon dioxide and
6371 other heat-trapping pollutants under the Clean Air Act. NRDC
6372 salutes Administrator Lisa Jackson and the Obama
6373 Administration for issuing the endangerment determination a
6374 week ago, officially recognizing what she called the
6375 compelling and overwhelming evidence that global warming is
6376 dangerous to our health and well-being. We can take a big
6377 bite out of global warming pollution using the Clean Air Act
6378 we have today but we cannot do all that is needed under the
6379 current law. We need the legislation before this committee
6380 to cap and cut carbon emissions, to raise energy efficiency
6381 and energy standards and to rebuild the economy and create
6382 millions of new jobs on a foundation of clean energy.

6383 The ACES bill wisely proposes to keep and in most
6384 instances strengthen provisions of the current Clean Air Act.
6385 Despite the Supreme Court decision, there are some who claim
6386 that no part of the existing law should ever be used because

6387 if EPA ever starts using the Clean Air Act to address big
6388 sources like cars and power plants, it will not be able to
6389 stop itself from regulating every donut shop and barbecue in
6390 the land. But EPA has the tools to focus on the big sources,
6391 not the tiny ones. Donut lovers and barbecue fans can sleep
6392 soundly at night.

6393 NRDC supports the ACES provisions reaffirming the Clean
6394 Air Act authority to set performance standards for vehicles.
6395 We support the goal of coordinating the Clean Air Act and
6396 CAFE standards and setting new ones that meet or exceed
6397 California's pioneering levels. This is a plan that retains
6398 California's critical leadership while also giving the auto
6399 industry the benefits of practical national uniformity. For
6400 power plants and major industries, EPA also had authority
6401 under section 111 of the current Clean Air Act. Indeed,
6402 Administrator Jackson is required to act soon on power plants
6403 in another case, a companion case to the Massachusetts case.
6404 The ACES bill tailors the current Clean Air Act provisions
6405 for power plants. We support those provisions.

6406 The bill does contain a number of proposed exemptions
6407 from the Clean Air Act. Two of the changes NRDC believes
6408 make sense, that is, not to regulate greenhouse gases under
6409 the ambient standards or hazardous air pollutant programs.
6410 We support the bill's provisions to set new source standards

6411 for sources outside the cap but we disagree with exempting
6412 sources covered by the cap from those same new source
6413 standards. And we also disagree with the complete
6414 elimination of the case-by-case new source review for large,
6415 new and expanded carbon emission sources to meet the donut
6416 shop concern. It is sufficient to limit new source review to
6417 sources of more than 10,000 tons of CO2 equivalent.

6418 Let me say a word about the role of the States. During
6419 the long period of federal abdication, States have led the
6420 way, and if the federal program should come off the rails at
6421 some future point, it is critical that States be able to pick
6422 up the slack once again. States have capabilities to curb
6423 emissions and deliver energy efficiency and renewable energy
6424 that the federal government can't match, and for these
6425 reasons NRDC strongly supports the many provisions of the
6426 ACES bill that would harness State capabilities and protect
6427 their role. There is one very troubling exception though, a
6428 6-year suspension of State authority to implement or enforce
6429 cap-and-trade-type programs. NRDC doesn't believe a real
6430 case has been made for why any such suspension is needed. We
6431 suggested in the written testimony a possible way forward
6432 that would keep States in the game and keep a strong state
6433 program.

6434 One last word about equal access to justice. The ACES

6435 bill expresses an entirely commonsense intent that persons
6436 with either environmental or economic injuries should have
6437 equal access to the courts when EPA's compliance with the new
6438 is in question. These provisions are fair and balanced and
6439 they should be retained.

6440 So I covered carbon market regulation issues in my
6441 written testimony. I would be happy to comment on those too
6442 in Q&A. But thank you very much for the opportunity to
6443 testify.

6444 [The prepared statement of Mr. Doniger follows:]

6445 ***** INSERT 19 *****

|
6446 Mr. {Markey.} Thank you so very much for being here,
6447 Mr. Doniger.

6448 Our next witness, Patricia Mulroy, is the general
6449 manager of the Las Vegas Valley Water District and Southern
6450 Nevada Water Authority. Ms. Mulroy oversees the operations
6451 of the Las Vegas Valley Water District and the Southern
6452 Nevada Water Authority, which is responsible for acquiring,
6453 treating and delivering water to southern Nevada. We welcome
6454 you.

|
6455 ^STATEMENT OF PATRICIA MULROY

6456 } Ms. {Mulroy.} Thank you, Mr. Chairman. I am also here
6457 today on behalf as a member of the board of the Association
6458 of Metropolitan Water Agencies and on the board of the Water
6459 Research Foundation, and on behalf of America's water
6460 utilities, I want to congratulate you and thank you for your
6461 ship on a bill that many of us have been awaiting anxiously
6462 for some time.

6463 While the primary focus of the bill is energy, water and
6464 energy are inextricably linked and must be considered
6465 together. The Department of Energy estimates that 4 percent
6466 of our country's energy is consumed by the treatment,
6467 transmission and delivery of water while conversely the
6468 generation of energy consumes vast amounts of water
6469 resources. We in the water utility business are on the
6470 frontline of climate change and for us it is happening right
6471 now. Water utilities are learning to adapt to this reality
6472 and we have to if we are going to provide safe, reliable
6473 water supply to our Nation. My experience reflects the
6474 challenges facing the American Southwest where the flows of
6475 the Colorado River support nearly 30 million people and
6476 irrigate 15 percent of the Nation's crops. During this

6477 decade the seven States that share this river had witnessed
6478 cumulative flows drop 11.8 trillion gallons below average.
6479 If this drought continues, in 3 years Hoover Dam will cease
6480 generating electricity. Other regions are also beginning to
6481 see the effects, whether it is floods in the Midwest or
6482 groundwater aquifers beginning to see saltwater intrusion,
6483 and you know only too well the drought that has been ravaging
6484 the Southeast.

6485 My agency's first adaptation strategy was to adopt one
6486 of the Nation's most aggressive water conservation programs,
6487 having paid our customers \$110 million to remove grass and
6488 replace it with desert vegetation. This has resulted in
6489 reducing our water use by 22 billion gallons over the same
6490 time period where our population swelled by 400,000
6491 inhabitants. We are also racing to build a new intake that
6492 goes deeper within Lake Meade. In California, officials are
6493 grappling with not only worsening Colorado River conditions
6494 but a drought in the Sierra and restricted use of in-State
6495 supplies. My purpose today is not to induce alarm but rather
6496 to convey the magnitude of the situation and offer water
6497 industry perspective on adaptation strategies.

6498 One of our most immediate needs is research, not just
6499 more research but more focus applied research. There are
6500 nearly two dozen climate change models but none of them

6501 adequately predict effects on a watershed-specific scale.
6502 The development of these strategies requires actionable
6503 research that explores the full range of impacts. To that
6504 end, we recommend that they federal government partner with
6505 the Water Research Foundation to optimize the value of these
6506 research investments. I encourage you to incorporate into
6507 your legislation the Climate Change Drinking Water Adaptation
6508 Research Act, which was sponsored last year by Representative
6509 Diana DeGette and Senate Majority Leader Harry Reid, which
6510 provides funding for climate change-related research from a
6511 small percentage of the cap-and-trade proceeds. This applied
6512 research will help provide information water managers need to
6513 make sound policy decisions. But even the best-studied
6514 strategies won't work if they cannot be implemented. Climate
6515 change adaptation also means new water infrastructure. Our
6516 new Lake Meade intake will cost \$1 billion and this is only
6517 one project in one community. Considering all the water
6518 agencies that will likely be affected, the financial
6519 implications are staggering.

6520 To help communities capitalize the necessary
6521 investments, we propose your legislation also include a
6522 concept similar to the proposed green bank for energy
6523 investments. A blue bank for water infrastructure would
6524 provide municipal water agencies the necessary capital to

6525 enact adaptation strategies utilizing a portion of the
6526 proceeds from a cap-and-trade system. Providing access to
6527 low-cost loans for climate change-qualified projects would
6528 enable us to proactively adapt. To be clear, I feel strongly
6529 that water agencies should be financially self-sufficient.
6530 These funds would be subject to repayment by the water
6531 agencies which are historically among the country's most
6532 secure borrowers.

6533 Again, on behalf of the water industry, I would like to
6534 thank you very much for including us in this historic
6535 conversation and respectfully ask that you support our
6536 efforts to adapt and surmount the challenges of our changing
6537 climate. Thank you.

6538 [The prepared statement of Ms. Mulroy follows:]

6539 ***** INSERT 20 *****

|
6540 Mr. {Markey.} Thank you so much.

6541 Our next witness is Anne Smith, who is vice president of
6542 and practice leader of climate and sustainability for CRA
6543 International. At CRA, Ms. Smith specializes in
6544 environmental policy and corporate compliance strategy.
6545 Before joining CRA, Ms. Smith was a vice president at
6546 Decision Focus Incorporated, leading that company's policy
6547 analysis. We welcome you here, Dr. Smith. Whenever you are
6548 ready, please begin.

|
6549 ^STATEMENT OF ANNE E. SMITH

6550 } Ms. {Smith.} Mr. Chairman, members of the committee,
6551 thank you for inviting me. My testimony today is my own and
6552 does not represent my company CRA or any of its clients.

6553 Let us be honest here. Reducing global greenhouse gas
6554 emissions in order to actually substantially reduce the risks
6555 of climate change will be a costly undertaking no matter how
6556 it is done. Therefore, a successful emissions policy that is
6557 both credible and enduring is going to have to have a laser-
6558 like focus on cost minimization. The ACES bill lacks this
6559 focus right now. Even though it does contain a cap-and-trade
6560 program, which is often thought of as a cost-minimizing
6561 approach, achieving cost-effectiveness will be elusive with
6562 this bill for two reasons, first, its other non-market
6563 regulatory schemes, and second, uncertainty in the allowance
6564 prices in the cap and trade.

6565 First, the bill piles on excessive and redundant
6566 regulatory schemes on top of the cap and trade that reflect
6567 the command control mentality of yesteryear such as a
6568 renewable electricity standard, a low-carbon fuel standard,
6569 energy efficiency resource standard and many more including
6570 even a Jacuzzi-specific that we have been hearing about

6571 today. These prescriptive provisions will undercut the
6572 transparency and predictability of the carbon prices under
6573 the cap and that will only increase the costs of meeting the
6574 greenhouse gas objectives or the target for greenhouse gases
6575 in the bill. To minimize costs, Congress needs to remove
6576 those mandates, but even without those redundant programs,
6577 the bill's cap-and-trade program has its own barriers to cost
6578 minimization and this is allowance price uncertainty and
6579 volatility. These will hinder business planning and disrupt
6580 a company's credit worthiness.

6581 The U.S. experience with SO₂ and NO_x caps tells us that
6582 emission prices will be very unstable. SO₂ prices varied
6583 between \$100 and \$1,500 per ton in just the past 4 years, and
6584 that was despite a large bank of allowances. Europe's carbon
6585 cap has seen prices cycling up and down by a factor of four
6586 in the space of a few years. And despite assurances early on
6587 that Europe's carbon price volatility was only a feature of
6588 that cap's so-called learning phase, now we can see that
6589 those price swings are actually a feature of the cap's mature
6590 phase as well. In the E.U., this carbon price uncertainty
6591 has inhibited companies from investing in the low-carbon
6592 technologies that are desired, and that same problem will
6593 occur under U.S. CAP that allows that same price uncertainty
6594 to occur here too.

6595 Carbon price volatility introduces another concern that
6596 has not been discussed widely, credit risk. Companies will
6597 need to buy and hold allowances whose total value may be very
6598 large compared to their current cash flows and balance
6599 sheets. Allowance price variations can create cash-flow
6600 crunches and balance sheet variations that in turn will
6601 translate into credit ratings being reduced and increased
6602 difficulty in raising funding for new investments.

6603 The ACES bill has no provisions for providing the
6604 necessary price certainty and price stability to avoid these
6605 problems. Banking does not eliminate volatility. We have
6606 seen that in the U.S. and European experiences. Offsets do
6607 not either. The experience with the clean development
6608 mechanism says they may actually increase price uncertainty.
6609 And the bill's strategic reserve of allowances also does not.
6610 This provision would let prices vary by at least a factor of
6611 two before it would even come into effect and it doesn't
6612 ensure any actual price ceiling when the prices do spike.

6613 The bill needs to directly and transparently establish
6614 allowance price ceilings and price floors in order to remove
6615 these financial uncertainties which are only going to serve
6616 to exacerbate the policy's costs. Some fear that price
6617 ceilings will take away the certainty of adequate reductions
6618 in emissions. However, the certainty that is needed for

6619 emissions is their long-term reduction to nearly zero
6620 globally, not any specific reduction in a specific year in
6621 the United States. Achieving that long-term zero-emissions
6622 goal will require sustained investment over a very, very long
6623 period of time in utterly new directions and this is more
6624 likely to happen under a policy that establishes a carbon
6625 price signal that is predictable and credible for decades to
6626 come.

6627 And finally, we need a full accounting of the cost of
6628 this bill. EPA's analysis of the cost of the cap doesn't
6629 consider the command and control aspects of the bill nor the
6630 costs that are created by the allowance price uncertainty
6631 that we can expect. So it is misleading to present EPA's
6632 analysis as even a preliminary estimate of the impacts of
6633 this particular bill. Thank you.

6634 [The prepared statement of Ms. Smith follows:]

6635 ***** INSERT 21 *****

|
6636 Mr. {Markey.} Thank you very much, Dr. Smith.

6637 Our next witness is William Kovacs, the vice president
6638 of environment technology and regulatory affairs for the
6639 United States Chamber of Commerce. In government service,
6640 Mr. Kovacs served as vice chairman and chairman of the
6641 Commonwealth of Virginia's hazardous waste facilities siting
6642 board and chief counsel and staff director of the House
6643 Subcommittee on Transportation and Commerce. Was that on
6644 this committee, sir?

6645 Mr. {Kovacs.} Yes, sir. I am really that old.

6646 Mr. {Markey.} And what years were those?

6647 Mr. {Kovacs.} Nineteen seventy-four, 1975, through
6648 about 1978.

6649 Mr. {Markey.} So when I was here?

6650 Mr. {Kovacs.} Yes.

6651 Mr. {Markey.} So you were the chief counsel for Brock
6652 Adams?

6653 Mr. {Kovacs.} Fred Rooney.

6654 Mr. {Markey.} For Fred Rooney. Yes, great. Good to
6655 see you again. Welcome back. Whenever you are ready, please
6656 begin.

|

6657 ^STATEMENT OF WILLIAM KOVACS

6658 } Mr. {Kovacs.} Thank you for inviting us here today, and
6659 I have to tell you that when I was listening to you say this
6660 was your 66th year of hearings and I am your 60th witness,
6661 all I can say is what pressure. I have to say something
6662 really quick and something he has never heard, so that is
6663 quite a task.

6664 Let me start off by saying, the Chamber really does
6665 support trying to find ways to reduce greenhouse gases, we
6666 have made that clear in all of your testimony, accelerate the
6667 use of energy efficiency and certainly find new ways to put
6668 green technologies into the marketplace, and with that I just
6669 want to add a few suggestions because I think that they would
6670 really help move your bill forward. The first is, as you
6671 consider how you are going to do this, probably the one part
6672 that troubles us the most is, you have very steep emission
6673 reductions over the course of the years but there is really
6674 no assurance in the bill that as you force fossil fuels out
6675 of the system, that there is a mechanism for bringing
6676 substitute technologies into the system, and I say that
6677 because, and I am just going to use one example. If you just
6678 take the 115,000-megawatt windows that you are going to need,

6679 that is going to take enough space that is literally going to
6680 equal going around the earth twice, and it is an enormous
6681 land mass, and the problem you are going to run into is not
6682 that price isn't going to drive technologies but many times
6683 NIMBYs are going to drive technologies out, and one of the
6684 things we have done with this project is we have tried to
6685 identify the fact that in the last 18 months there have been
6686 65 renewable facilities that have not been able to get to the
6687 marketplace because of NIMBYs and 13 grid systems. So we
6688 think long term that is a very serious problem.

6689 Second, in terms of the Clean Air Act, we just think it
6690 is inappropriate, and if you are going to set up a structure
6691 you ought to set up a structure for carbon because it is
6692 going to be more workable. I think this idea of capping the
6693 large businesses with cap and trade and then going into new
6694 source performance standards for the medium-sized businesses
6695 and then leaving it unclear and vague as to the small
6696 businesses what you run the risk of with the small business
6697 is once an endangerment finding is made, there is going to be
6698 a lawsuit and you are going to have 26 million small
6699 businesses trapped in a new source performance standard. I
6700 don't think the agency can handle that.

6701 In terms of citizen suits, this might be the most
6702 troubling. I mean, you really--the cause of action has

6703 expanded so far. It is not just against government but it is
6704 against government with some limited monetary damages so that
6705 is the beginning of waiver of sovereign immunity. You remove
6706 the article 3 type actual case and actual harm for thought of
6707 harm, and long term that is just going to be more citizen
6708 suits, more projects stopped. And then when you have
6709 unlimited attorneys' fees, you are giving an incentive to the
6710 lawyers to bring these lawsuits. That is just not going to
6711 help you get the technology into the marketplace that you
6712 need.

6713 And then finally, on the preemption of State laws, again
6714 this is just going back to where we were before and that is
6715 you can't preempt it for 5 years and then let the States act.
6716 If the federal government is going to do it, you need one
6717 comprehensive unified law that makes sense, that the industry
6718 understands so that we can start developing the technologies
6719 as opposed to trying to fragment it to please a lot of
6720 different interests.

6721 With that, thank you very much for having me here.

6722 [The prepared statement of Mr. Kovacs follows:]

6723 ***** INSERT 22 *****

|
6724 Mr. {Markey.} Thank you, Mr. Kovacs, very much.

6725 We will now recognize the gentlelady from Wisconsin, Ms.
6726 Baldwin, for a round of questions.

6727 Ms. {Baldwin.} Thank you, but before I begin, I would
6728 ask unanimous consent to submit for the record the testimony
6729 of Thomas Gibson from the American Iron and Steel Institute
6730 on the bill.

6731 [The information follows:]

6732 ***** COMMITTEE INSERT *****

|
6733 Mr. {Markey.} Without objection, so ordered. Thank
6734 you.

6735 Ms. {Baldwin.} Tia, I appreciated your testimony and
6736 telling us a little bit about the real diversity among the
6737 stakeholders on Governor Doyle's task force on global warming
6738 and the fact that you were able to reach near consensus on a
6739 number of recommendations that you note are similar to the
6740 provisions contained in the draft discussion bill before us.
6741 We have also taken in this committee testimony from
6742 representatives of U.S. CAP that had a similarly diverse
6743 array of stakeholders and they were also able to reach
6744 substantial agreement around a blueprint for taking action on
6745 climate change, and I see similarities when I look across the
6746 Congress and this committee in terms of the diversity of
6747 interests and diversity of districts that we represent. So
6748 in many ways we have a similar task immediately before us in
6749 trying to gather support and gain a majority. While we would
6750 love to have a nearly unanimous vote in this committee on
6751 climate change legislation, I think we will be happy if we
6752 get a good majority vote on this. But I wonder if you can
6753 tell us about your yearlong experience leading the governor's
6754 task force on global warming with these diverse stakeholders,
6755 how they were able to come together to reach a set of goals

6756 and reduction targets that satisfied so many varied
6757 perspectives and if you could tell us particularly what were
6758 some of the key issues that you had to surmount and the
6759 perhaps significant points of contention that you were able
6760 to overcome.

6761 Ms. {Nelson.} Yes. Thank you for your question. Part
6762 of our success was, I think we just fatigued everyone. We
6763 were at it for--and I see that Chairman Markey is pursuing
6764 the same strategy, so I wish him a lot of luck. We met for--
6765 we were originally set to meet for 9 months. We met for well
6766 over a year and it was a difficult process. I think everyone
6767 came to the table in good faith, which obviously helped quite
6768 a bit. Ultimately what we did, and I give enormous credit to
6769 my co-chair for this particular strategy, after listening to
6770 multiple stakeholders about multiple strategies, agreeing
6771 that we wanted strong targets, recognizing that we would need
6772 to dramatically increase investments in conservation and
6773 efficiency and renewables to meet those targets, and then
6774 realizing that we couldn't without a cap-and-trade program,
6775 it became clear to Roy and I that we were going to have to
6776 put in front of the group in essence a straw man proposal
6777 that we hoped was delicately balancing the tradeoffs between
6778 constituencies without compromising the environmental
6779 integrity of our product, our report which the governor

6780 accepted in its entirety, I failed to mention before, and
6781 which is going to be introduced hopefully in the legislature,
6782 we are drafting it now, in the fall.

6783 For industry, manufacturing, utilities, the cost
6784 containment issue was huge so the way we kept them on board
6785 was a very frank, you know, recognition that Wisconsin will
6786 have challenges in competitiveness as a heavy coal dependent,
6787 heavy manufacturing, and our manufacturing sector tend to be
6788 more energy intensive. We have to be extremely sensitive to
6789 global competitiveness. And so by paying a lot of attention
6790 to the cost containment measure, we moved our RPS up, our
6791 existing RPS, and then increased it two and a half fold, the
6792 same as in the chairman's draft bill, 25 by 25. So really
6793 the compromise, for the environmentalists the cap and the
6794 integrity of the cap was essential, and for industry it was
6795 essential to recognize that Wisconsin is in a very
6796 economically vulnerable position being so heavily dependent
6797 on coal, and this allocation proposal that we came up with
6798 that allows for a transition--this is just for a limited
6799 period of time--it allows us to transition. Really that
6800 allocation got us where we needed to go.

6801 Ms. {Baldwin.} Thank you.

6802 I have a question. I will say that I have very limited
6803 knowledge on the market structure discussion but I find it

6804 incredibly important on this and so maybe you can help me
6805 understand it better. I will start with Mr. Anda and
6806 certainly Mr. Royal can comment on this. As I understand the
6807 futures market, you have hedgers and speculators. You have
6808 people who would want to possess futures on carbon that might
6809 actually use them some day because they are emitters, and
6810 then you have those just want to be a part of this market.
6811 Do we treat these two groups differently? Do you propose
6812 that we do? And how do we--especially with speculators, what
6813 sort of safeguards would you advise us to build into this
6814 market as we develop it?

6815 Mr. {Anda.} Well, I will let Carl perhaps handle the
6816 point about speculators but it is important that the market
6817 be open to all. The two points that I wanted to make are,
6818 number one, let us have that derivative trading in a place
6819 where we can see it, not over the counter but on listed,
6820 transparent exchanges, number one. Number two, market-to-
6821 market accounting is fine for financial institutions and
6822 hedge funds. They do that anyway. But let us create
6823 something for the covered entities where they can effectively
6824 cover their carbon risk using futures and options, because we
6825 might not give them any allowances to bank. Let us let them
6826 use those instruments, and if their intention is to submit
6827 for compliance, let us have accounting for them that in

6828 effect is special because they would treat this as a deferred
6829 expense whereas a speculator would market to market.

6830 Mr. {Royal.} Just very briefly, you do need to have
6831 speculators in the market, otherwise called liquidity
6832 providers, because when somebody wants to buy you need
6833 somebody on the other side to be the seller or else you don't
6834 have a market. In terms of treating them differently, I think
6835 you can. I mean, for example, in the area of position limits,
6836 an emitter would need to have a larger quantity of allowances
6837 because, you know, it actually needs it for its business
6838 where as a speculator is doing it just to provide liquidity
6839 for the market and so wouldn't need to have such a large
6840 limit, and I think the regulatory agency could, you know,
6841 establish different standards for those different types of
6842 market participants.

6843 Ms. {Baldwin.} Do you have any early guidance for us on
6844 what sort of position limits we would be looking at?

6845 Mr. {Royal.} I don't know the market well enough to how
6846 it is going to develop to be able to answer that. I think
6847 that is probably an area that might be delegated to the
6848 agency that is in charge of the market.

6849 Mr. {Anda.} I would just comment that the exchanges
6850 today do a pretty good job of setting limits because their
6851 members don't want to create excessive risk within the

6852 exchange, so where things get onto exchanges, you know,
6853 things tend to avoid blowups. When they are off exchange,
6854 that is a different story.

6855 Mr. {Doniger.} My colleague, Andy Stevenson, who is in
6856 the same field as these gentlemen, in our written testimony
6857 we recommended 5 percent position limits in the futures for
6858 any given vintage of a future, delivery date, with an
6859 adjustment that if an emitter had the kind of need that Mr.
6860 Royal suggested, that they might be holding 5 percent above
6861 their own needs. But a 5 percent seems to be an adequate
6862 amount in our judgment.

6863 Mr. {Markey.} The gentleman's time has expired. Let me
6864 turn to you, Ms. Mulroy, and I am very intrigued by your blue
6865 bank idea. I had testimony from the mayor of Philadelphia
6866 recently and he talked about the need for some way of dealing
6867 with his water supply problem and the protection of his
6868 watershed. Could you tell me how, let us say for
6869 Philadelphia's purposes, a blue bank might work to deal with
6870 those two problems?

6871 Ms. {Mulroy.} Yes, sir. I am not as familiar with
6872 Philadelphia as I am with New York, who shares a similar
6873 concern to Philadelphia, and actually are a member of the
6874 Climate Coalition that eight of us have formed in the United
6875 States. For them, the question is, increased flooding will

6876 contaminate reservoirs that today feed New York City and do
6877 not require treatment. At some point in time they are going
6878 to have to build treatment facilities which will cost them
6879 billions of dollars for treating water they have never had to
6880 treat before, because as those flood flows increase, it will
6881 contaminate those reservoirs.

6882 Mr. {Markey.} So how would the blue bank then work for
6883 New York City?

6884 Ms. {Mulroy.} For the blue bank, let us say in the case
6885 of New York, it would help them finance those treatment
6886 plants to protect New York City and allow them to build them
6887 in a timely fashion and not sit through 3 years of a boil
6888 order in New York after the contamination has occurred.

6889 Mr. {Markey.} Interesting. So just so I can understand
6890 a little bit about this concept that you have, does it have a
6891 coalition behind it or is this an idea that you have
6892 personally?

6893 Ms. {Mulroy.} No, there is a coalition of water
6894 agencies in the United States behind it. I think all of us
6895 whether we were in Florida, whether we are in New York or
6896 whether on the West Coast know that the way we have been
6897 managing water resources for the last 100 years is obsolete
6898 and whether it is investments in helping our communities make
6899 changes, investments in conservation that we can capitalize

6900 or whether it is new facilities because our water supplies
6901 are either being contaminated or disappearing before our
6902 eyes. We know we are facing those challenges.

6903 Mr. {Markey.} Thank you.

6904 Mr. Anda and Mr. Royal, let us take the European
6905 marketplace right now, and talk a little bit about how the
6906 price of a carbon credit has fluctuated between \$40 a euro
6907 and \$6 or \$8 a euro. Is that a good thing, a bad thing or
6908 that is the way the market works and it is better than the
6909 government making decisions about where the price should be
6910 and differing economic circumstances. Mr. Royal?

6911 Mr. {Royal.} Yes. I mean, I am not familiar with that
6912 exact market but I think in general, I mean, markets do go up
6913 and down and that is one of their functions. I think in this
6914 context, it could even serve a useful purpose because it
6915 would be countercyclical because in times of booming
6916 economies, you would expect more demand for the allowances
6917 and that would tend to increase prices at a time when it
6918 could be afforded whereas in times like we are having now
6919 where industries are closing plants, you would have less
6920 need, less demand for the allowances which would then tend to
6921 drive the price down, so in a way having a market-based
6922 mechanism would be self-correcting and it would, you know,
6923 help smooth out some of these economic cycles.

6924 Mr. {Markey.} See, that is how I view markets, but, you
6925 know, some people would say that is an indication of a market
6926 not working, but I would basically argue that is a perfect
6927 example of the market working.

6928 Mr. Anda, your comments.

6929 Mr. {Anda.} I just think two things. First of all, to
6930 highlight the point about the major factor in the market is
6931 the global economic recession. If you look in the EPA's
6932 recent work on evaluating your draft discussion, there was an
6933 interesting chart in there that showed that in 2006 our
6934 business as usual or reference scenario for emissions in the
6935 United States was, we were going to go from 6 billion to over
6936 8 billion. The current numbers go from 6 billion to about
6937 6.3 billion. So think about the impact. We have really
6938 changed our assumptions about how much we are going to emit
6939 without policy where those same factors have driven prices
6940 down in Europe, point number one.

6941 Point number two, let us not forget that the European
6942 market ends on the last day of 2012 and so while allowances
6943 are bankable into the next period, we don't really know what
6944 the next period is going to be so I don't think it is fair.
6945 The world emits, as you know, 30 billion tons of emissions
6946 from CO₂. A little over 2 billion are covered in the
6947 European trading system. They were bold enough to start with

6948 a small market. When we come in, I think we will have less
6949 volatility and a bigger market.

6950 Mr. {Markey.} Thank you.

6951 Mr. Doniger?

6952 Mr. {Doniger.} If I may add two points to that, and
6953 partial response also to Anne Smith's comments about
6954 volatility, the \$40 mark was hit at a point in the early
6955 experiment with the E.U. when they received for the first
6956 time accurate information about emission levels. In other
6957 words, they started their program without full information
6958 about how much was being emitted in the first place and there
6959 was a systemic overestimate of how many emissions there were
6960 going to be and people paid more for the allowances on the
6961 basis of that. When the data came in, there was an
6962 adjustment. This problem will not happen here because we
6963 already have much better data about actual emissions from the
6964 power sector, and thanks to the EPA's proposal of a more
6965 comprehensive emissions inventory system, even in advance of
6966 your legislation, we are going to have much better
6967 information across the board when the program starts.

6968 The other thing is, as Jon was just mentioning, if a
6969 program comes to an end, then there is a possibility that the
6970 allowances become valueless near the end. That is the
6971 advantage of your sketching out a long-term carbon budget

6972 with a declining cap, and since there will be long-term
6973 continuity, there won't be that problem of the program coming
6974 to an end or appearing to come to an end and people having
6975 doubt about what the allowances are worth.

6976 Mr. {Markey.} There is very little likelihood of the
6977 European program coming to an end either.

6978 Let me go to you, Mr. Kovacs. Some of the members on
6979 the Chamber board, Duke Energy, Alcoa, testified before this
6980 committee earlier this week, and while your board represents
6981 a broad coalition, it appears that many and possibly most of
6982 your members support a domestic policy that would set goals
6983 and the means for reducing the overall levels of U.S. global
6984 warming pollution. How do you reconcile the Chamber's
6985 position with those of some of the firms that sit on the
6986 Chamber board who are testifying before our committee asking
6987 us to pass a cap-and-trade bill?

6988 Mr. {Kovacs.} I guess I thought you would never ask.
6989 Look, within our federation, we have roughly about 3.5
6990 million members, 3,000 state and local chambers and 1,000
6991 trade associations. That is an enormous difference, so when
6992 we analyze a bill like yours, for example, and there was an
6993 example I used today, let us just take the application of the
6994 new source performance review. You have one group which is
6995 relatively small in numbers, 30, that would sit there and

6996 literally be exempt from the new source performance review
6997 because of the caps. Then you have the second tier, you
6998 know, thousands of members that would be subject to it, and
6999 then you have the 26 million small businesses out there that
7000 in some way have no idea whether they are going to be subject
7001 or not but could be challenged, and every one would be hit by
7002 an attorney's fee, so what we tried to do is, we take the
7003 entire policy. We apply our principles to what it is you are
7004 trying to do and we make a determination of whether or not it
7005 meets those principles, which are, does it harm the economy,
7006 does it promote competitiveness, does it accelerate
7007 technology, do we have enough energy in the environment and
7008 how is it going to affect the international structure, and
7009 that is how we do it.

7010 Mr. {Markey.} Is the Chamber willing to come forward
7011 with proposals that tell us what they would be comfortable
7012 with as the regulatory scheme?

7013 Mr. {Kovacs.} I thought you would never ask. We
7014 actually had a debate on this issue today, 3 hours, where we
7015 had the proponents of a carbon tax, the proponents of a cap
7016 and trade representing U.S. CAP and we had quite a spirited
7017 discussion, and you know, frankly, it was probably the most
7018 optimistic discussion I have had. I don't know that I am
7019 free to tell you the results but there certainly was a lot of

7020 talk and a lot of willingness to find out how it is we get
7021 reductions in a way that helps the economy.

7022 Mr. {Markey.} And your statement that Congress should
7023 not mandate the use of technologies before they actually
7024 exist, we don't have any mandates for any specific
7025 technologies in the legislation so I am just wondering what
7026 you are referring to.

7027 Mr. {Kovacs.} I will give you an example. Probably the
7028 biggest issue that we care about is that we don't think you
7029 can get enough energy back in the system as a substitute for
7030 what you are going to take out. I will give you an example,
7031 clean coal, the Bard facility in Ohio. Here was an example
7032 where they went through the DOE loan guarantee process. They
7033 literally got all of their permits. They were about to break
7034 ground and then they were notified by several environmental
7035 groups that they were going to sue. DOE then decided that
7036 the risk of that lawsuit was so great, they were going to
7037 pull the loan guarantees. This is clean coal, and so what
7038 happened is, the company walked away from the project, and if
7039 that was the only project, we probably wouldn't care but we
7040 have right now looked, and we have only been doing this a
7041 month, we have got about 300. I mean, there are other, it is
7042 not just energy. The other day we had a presentation on cell
7043 towers and someone said well, there are 800 on hold because

7044 of this. This is a big issue and we have to deal with it,
7045 and we got a lot of cooperation in the stimulus plan when we
7046 started off, how do we move this through. We wanted a time
7047 limit, and Senator Boxer and Senator Barrasso finally came to
7048 an agreement that we would use the most expedited route. But
7049 this is an issue that I think if you can solve and start
7050 making us feel like we are going to have real energy in this
7051 country and it is not going to get stopped, you are going to
7052 then find that some of our major concerns are really starting
7053 to be addressed.

7054 Mr. {Markey.} Again, we are not mandating any
7055 particular technology in the legislation, but I would say
7056 this to you in terms of kind of an extension of the
7057 optimistic meeting that you had today. Were you in two
7058 places at once or how did that work today for you?

7059 Mr. {Kovacs.} That was from 8:30 to 12. I am not
7060 closing in on the number of years of hearings that you have
7061 had.

7062 Mr. {Markey.} No, what I am saying is, I thought that
7063 you might be, you know, ubiquitous and omniscient, like super
7064 Chamber of Commerce. In 2008, there were about 9,500 new
7065 megawatts of natural gas capacity installed in the United
7066 States. There was about 1,500 new megawatts of coal
7067 installed in the United States. But the really, I think,

7068 kind of O. Henry ending to this is that while there was no
7069 new nuclear, there hasn't been for 15 years and there won't
7070 be for another 10 years because it takes that long to build a
7071 new plant, there were 8,500 new megawatts of wind installed
7072 in the United States in 2008, 400 new megawatts of solar, 150
7073 new megawatts of geothermal and 100 new megawatts of biomass,
7074 so that is 9,000, more than 9,000 new megawatts from
7075 renewables. In other words, 45 percent of all new installed
7076 capacity in the United States in 2008 were renewables, and
7077 that is before we pass a national renewable electricity
7078 standard. That is before we build incentives for a low-
7079 carbon economy. So while we are not mandating any specific
7080 new technology, it is obvious that the technologies are there
7081 and would be improved as the economies of scale kicked in as
7082 the market grew larger and larger. So I am a little bit
7083 perhaps more of an optimist because of my own experience with
7084 the 1996 Telecommunications Act, which I introduced in 1993
7085 before this committee. After it finally passed in 1996, we
7086 went from a point where not one home in America had broadband
7087 in 1996, not one home, to a point where 10 years later there
7088 is a whole new vocabulary, YouTube, Google, eBay, Amazon,
7089 Hulu, thousands of companies, millions of new jobs. They
7090 didn't exist because the market wasn't there before 1996 for
7091 broadband. It was all narrowband.

7092 So here we are talking about the same kind of a
7093 situation where there was an equivalent copper wire that we
7094 just had to move to digital, we had to move to broadband, we
7095 had to move to fiber optic. Well, we have another copper
7096 wire for electricity in America and it really hasn't been
7097 improved upon, and I agree with the chairman when he says,
7098 you know, we might go back 70, 80 years and the truth is that
7099 Thomas Alva Edison would recognize our electricity grid if he
7100 came back today. We need a revolution. But I think that the
7101 problem that I have with the Chamber is that the Chamber
7102 opposed the Telecom Act of 1996, and it was basically making
7103 the same arguments, you know, how do you move from a black
7104 rotary dial phone to a world where everyone has got devices
7105 in their pockets and you have all these new, you know,
7106 companies that are going to be created, and so you are right,
7107 it does take a little bit of a leap but a leap based upon our
7108 own American experience with technology and the
7109 entrepreneurial spirit. So my hope is that the meeting that
7110 you had today will lead to a more optimistic view about what
7111 the private sector can do when a new marketplace is created
7112 and unleash the opportunities for thousands of companies that
7113 will be created, that will create a whole new vocabulary 10
7114 years from now when people look back at this antiquated
7115 energy system which we have. And by the way, I would include

7116 in that a carbon capture system that probably won't look
7117 anything like anyone is talking about today and probably
7118 involves enzymes and acetic acids that are reformulating the
7119 way in which coal is burned and turning it into a positive
7120 product. But we have got to get on with that business, Mr.
7121 Kovacs, and I really urge the Chamber to just look back at
7122 its own history, especially with the Telecommunications Act
7123 and opposing that.

7124 Mr. {Kovacs.} Do you want me to respond?

7125 Mr. {Markey.} Yes, please.

7126 Mr. {Kovacs.} On the telecom issue, first of all, I
7127 wasn't there but my recollection is, especially as it had
7128 gone into broadband, is that they didn't want regulation on
7129 it because the wire system as being a regulated system was
7130 drying up and they needed a non-regulated system to put in
7131 \$150 billion in investment. Here in this Act, all I am
7132 trying to say is, you have got a structure here which layers
7133 cap and trade in two capacities, then you have regulations,
7134 then you have litigation. What I am saying is, is that I
7135 don't know that that structure will work, and the fact that
7136 you have 8,500 new megawatts of wind capacity, that is
7137 wonderful. What we are saying is, to get to the 10 percent
7138 you need 115,000. That is a long leap and it is a lot of
7139 land mass and it is a lot of litigation and--

7140 Mr. {Markey.} Can I say this? It is really not a big
7141 leap if you just take us from now to 2025 and you add just--
7142 well, it is actually nine total and just go nine times 15
7143 years or 16 years, we have got the number. That is if we
7144 don't do any better between now and 2025 if we just keep the
7145 pace that we are right now before we pass a national law. So
7146 all I am saying to you, Mr. Kovacs, it is such a rear-view-
7147 mirror view of what technology can accomplish. You know, if
7148 we look out the windshield towards the future, just using
7149 2008 as the metric, we wind up doing it, creating the jobs
7150 here and just revolutionizing our Nation's relationship with
7151 imported oil and with greenhouse gases. So that is really I
7152 am--in a lot of ways, you know, we do need the Chamber of
7153 Commerce to look at this and to look at it optimistically and
7154 to realize that the benefits will flow right across the whole
7155 society.

7156 And I will just give you one other example and I won't
7157 hold you beyond that. I am going to ask each one of you to
7158 give us in 30 seconds what you want us to remember about your
7159 testimony. But here when I was the chairman, we moved over
7160 200 megahertz of spectrum in 1993. Why did we do that? We
7161 took it from the defense department, we gave it over to the
7162 Department of Commerce because there were only two cell phone
7163 companies in the United States. They were both analog. They

7164 were both charging 50 cents a minute. They both projected
7165 relatively limited American use of cell phones. Obviously at
7166 50 cents a minute there weren't a lot of people going to be
7167 carrying that around in their pocket. So what we did was, we
7168 moved over the spectrum but said for the third, fourth, fifth
7169 and sixth license in every marketplace from Philadelphia to
7170 Las Vegas, they couldn't be owned by the first two companies.
7171 Well, guess what the third, fourth, fifth and sixth companies
7172 did? They went digital. By 1995, their price was under 10
7173 cents a minute and the first two companies, guess what? They
7174 both had to go digital and they were both under 10 cents a
7175 minute and then it was a race on to see can we put pictures
7176 on that phone, can we put data on that phone, can we have a
7177 huge basket of minutes, and here we are today all walking
7178 around everyone in this room with one or two devices in their
7179 pocket, none of it possible before that.

7180 So I guess what I am saying to you and really I would
7181 say to everybody who is interested in this issue, is that
7182 with just a little bit of optimism, not looking at some
7183 rocket science or putting a man on the moon but just what is
7184 already happening in America. If we gave the right boost to
7185 it, we could have this revolution just so far exceed anything
7186 that we are even talking about today. That is what happened
7187 in the telecommunications sector both wireless and wireline,

7188 and I think if we give people a chance in a new marketplace
7189 that the same thing will happen, Mr. Kovacs. So that is my
7190 message and I just hope that it is received in the Darwinian,
7191 paranoia-inducing, market-oriented way that we are going to
7192 try to construct this bill and put in the right market
7193 protections, transparency, anti-fraud, anti-manipulation and
7194 then just step back the way we did after 1996 and we don't
7195 know who the winners and losers are going to be. We don't know if
7196 there is going to be a 9X or a Bell Atlantic or a Bell South.
7197 All we know is that the companies that win will be the ones that
7198 adapt quickly and that is how it should be in our country,
7199 really Darwinian, and in a lot of ways I hate to say it, that
7200 is what we are talking about for our planet too. It is a
7201 real challenge for us in this Darwinian moment that we can
7202 adapt so that we can put in place the incentives that make
7203 people rich while also protecting the planet.

7204 So we will come back to you, Ms. Nelson, and we will
7205 give you an opportunity for 30 seconds to tell us what it is
7206 that you want us to remember.

7207 Ms. {Nelson.} Thank you, sir. You deserve the
7208 endurance prize. I am grateful for your interest. My
7209 message is simple. Help States like Wisconsin mitigate costs
7210 without compromising the integrity of the emission reduction
7211 goal and we will be your partner in finding a climate change

7212 solution.

7213 Mr. {Markey.} Thank you, Ms. Nelson.

7214 Mr. Becker.

7215 Mr. {Becker.} Thank you. I have three points to make.

7216 The first is that you and Congressman Waxman and others who
7217 worked on this bill should be very proud of your efforts. It
7218 is a very good bill. The second point is, as you know full
7219 well, this was a compromise and yet this will be probably be
7220 the high water mark before this gets signed into law. It is
7221 going to undergo significant change and it is going to get
7222 weaker. And the third point is, in light of that, it is very
7223 important that you strength the federal, State and local
7224 partnerships and preserve the rights of States and localities
7225 to not only fill whatever gaps exist but to be able to
7226 address emerging problems in the future.

7227 Mr. {Markey.} Thank you, Mr. Becker.

7228 Mr. Royal.

7229 Mr. {Royal.} I will be very brief. In a cap-and-trade
7230 market, it is essential that Congress create a regulatory
7231 framework that protects the integrity of the market and
7232 ensures that the market achieve its environmental purpose.

7233 Mr. {Markey.} Thank you, Mr. Royal.

7234 Mr. Anda.

7235 Mr. {Anda.} Three technical comments and one other.

7236 Increase the initial flow, think about a central marketplace
7237 to get your best execution requirement, the CLOB for carbon I
7238 talked about, and make sure that emitters can use the
7239 exchange-traded derivatives that you want to create. Lastly,
7240 I would just say I heard a lot of testimony today. Chairman
7241 Markey, I hope that you are in a position as Mr. Gore was
7242 this morning to be a witness. Your comments are great. I
7243 think they should be--I would like to see them expanded in a
7244 nice half-hour, hour format and good luck to you in your
7245 work.

7246 Mr. {Markey.} Thank you, Mr. Anda, very much.

7247 Mr. Doniger.

7248 Mr. {Doniger.} Thank you, Mr. Chairman. What this
7249 committee is doing is writing the next generation of the
7250 Clean Air Act and we have the existing Clean Air Act and what
7251 you are doing. We need them both and we need these things to
7252 merge and it can be done in a way that makes for an effective
7253 carbon control program and an integrated system that takes
7254 advantage of the best of the clean air laws that we have
7255 already.

7256 Mr. {Markey.} Thank you.

7257 Ms. Mulroy.

7258 Ms. {Mulroy.} Yes, Mr. Chairman. We in the water
7259 industry, many of us have been anxiously awaiting this day

7260 where we in this country take this issue of climate change
7261 head on and begin to make the necessary changes for us.
7262 because it is a decadal issue, we will feel the impacts and
7263 we are looking for assistance for research which is so
7264 desperately needed to quantify those implications and in
7265 making the necessary adaptations that we have to make. Thank
7266 you.

7267 Mr. {Markey.} Thank you.

7268 Dr. Smith.

7269 Ms. {Smith.} Two points. First, get back to cost
7270 minimization by stripping out the prescriptive and redundant
7271 measures so that that market-based approach can work in its
7272 Darwinian glory, and by incorporating features that provide
7273 price predictability so that you can unleash those
7274 investments. Second, I would like to correct the record.
7275 The prices in the E.U. did go up in the range of \$40 a ton
7276 twice, once during the early phase and the second time just
7277 about a year ago. So it is not just a phenomenon of the
7278 learning phase. Thank you.

7279 Mr. {Markey.} Thank you, Dr. Smith.

7280 And Mr. Kovacs, you have the final word of our historic
7281 hearings.

7282 Mr. {Kovacs.} Well, thank you for your good humor, if
7283 nothing else. I just wanted to say the success of broadband

7284 was really due a lot to what you did but also you didn't
7285 regulate it and I think that that is something we need. I am
7286 not saying we shouldn't have a regulatory system here but if
7287 you are going to do it, it needs to be transparent,
7288 understandable. You need to avoid overlapping and confusing
7289 regulatory structures between the Clean Air Act and whatever
7290 it is you are going to do. You need to find some way to
7291 limit litigation so we can get the projects moving, and I
7292 think at the end you need to appreciate the fact that if we
7293 are really going to reduce GHGs in the atmosphere, we have to
7294 have some way in which to engage the international community
7295 and we would suggest that the way to do that is an
7296 international treaty.

7297 Mr. {Markey.} Thank you, Mr. Kovacs, very much. The
7298 paradox of telecommunications regulation and regulation here
7299 is that you actually need new regulations in order to undo
7300 all of the old regulations that protected industries against
7301 change and that is the paradox, that in order to create a
7302 truly competitive marketplace that just doesn't play into the
7303 needs of the largest utilities whether they be telephone,
7304 cable or electric utilities because all of the laws have been
7305 written on their behalf at the state and federal level for
7306 100 years. You actually have to create a whole new set of
7307 laws, of regulations that ensure that the smaller distributed

7308 competitors can then begin to deploy their technologies.
7309 That is the paradox. But ultimately you wind up with many,
7310 many more, thousands of additional competitors trying to
7311 provide information services or here they will be energy and
7312 efficiency services for our country. And so that is kind of
7313 the paradox here, and while it seems as though we are
7314 regulating, what we are really doing is undoing the
7315 regulatory protection that was given to these industries for
7316 100 years while the assumption of monopoly on the wires was
7317 taken for granted when in fact it is just the opposite if you
7318 change the regulatory dynamic. So that is what we are trying
7319 to do in this legislation. We have already done it in
7320 telecommunications. We have done it in cable. And this is
7321 the final wire going into the home. This is the final set of
7322 issues that we have to deal with across the board, and if we
7323 do it, then we can get out of the way because people's
7324 interests in becoming millionaires and billionaires will
7325 completely trump anything that we can do because they will be
7326 out turning green into gold all across our country with their
7327 new technologies and their deployment.

7328 This has been a historic set of hearings. We thank all
7329 of you for your participation, and please stay close to us
7330 over the next month or so. We are going to need your ongoing
7331 advice. Thank you.

7332 [Whereupon, at 5:50 p.m., the subcommittee was
7333 adjourned.]