

fuels, and the real crisis in the future, the real challenge for the future, is going to be liquid fuels. Now, the only silver bullet that I know of, and, again, this is not liquid fuels, but you can have electric cars, was some challenges in producing batteries and with the raw materials necessary for those and disposing of the batteries and so forth.

Fusion is inexhaustible, if we get to it. That's what the sun is doing. It's a huge nuclear fusion plant. We may get there. We spend about \$250 million a year doing that, and we are always about 30 years away from a functioning fusion power plant.

I gladly support the \$250 million, but I will tell you that I think the odds of getting there are relatively small. The rewards are so huge that it's worth the investment even if the chance of success is small, so I happily vote for this.

But please have a plan B. If we get there, wonderful. But the probability that we will get there is, I think, quite small, so we really need a plan B. You can't count on that as the future energy source for your kids and your grandkids.

Now, here are the renewables that we have been talking about. Let's see if there are some here. Ocean energy. Lots of potential from energy from the oceans, the ocean waves, the ocean tides. The Moon lifts the whole ocean, three-fourths of the Earth's surface, several feet a day.

I carry two 5-gallon buckets of water, that's heavy. When I think about the huge amount of potential energy in just those tides, it's more than we are using, but it's disbursed, very difficult to capture. There is an old axiom that says, energy, to be effective, must be concentrated when the tides are just so disbursed. Very difficult.

There is ocean thermal gradients. Some places the surface of the ocean is very warm, the deep waters are very cold, and you can, with the principle of the thermocouple, get energy from that divergent temperature difference. So there are a lot of opportunities, potential opportunities from energy from the ocean, and we ought to be exploiting all of those.

Methanol. Methanol is simply an alcohol made from wood rather than grain. Grain alcohol has two carbons, wood alcohol has one carbon, but it burns with roughly the same amount of energy.

A biomass, and a lot of talk about biomass today, and you look out there at all of that wasteland and those trees and that grass, and, gee, if we could just take that and convert it into alcohol. You can do that with some little organisms that we have bioengineered that mimic what the organisms do in the gut of the sheep or the goat or the cow or the cecum of the horse and the guinea pig. They can break down the cellulose molecule into the constituent glucose molecules. Then, of course, you can ferment those glucose molecules. But we have not yet perfected that technology so that it is amenable to

huge, large-scale production, but maybe we can get there.

I have a major concern that Hyman Rickover talked about in his great speech, and again, I would urge that that's a very instructive speech. Hyman Rickover, energy speech, Google, search it. It will pop up for you.

He noted in that speech that we shouldn't be competing with food for energy. That's corn ethanol, biodiesel. We should be careful in competing with a humus for fuel, because, you see, the weeds that grow today in that vacant lot, that will grow this summer, are in at least some measure growing because last year's weeds died and are fertilizing them.

I remember back, I was born in 1926, so I lived during the Depression, and I remember farmers in the Depression which said, gee, I have now worn out my third farm. What they did was to go in and mine the farm simply by planting crops that drew from the soil far more energy than he or the plants put into the soil. So soon, the soils were nonproductive and there were few of us in a big country, and he just moved on.

You can't move on today, and so we have to have sustainable agriculture. I don't know the extent to which we can exploit what might be a huge potential from energy from biomass, but I would caution that we really need to look at sustainability.

If you have ever gone to the tropical rain forest that looks to be a hugely rich dynamic, and, gee, if I only could get all of that stuff off of there, I could grow tremendous crops on that soil.

But when they did that, there was bitter disappointment, because what they found was that essentially all of the nutrients in that ecosystem were involved in the growth, death, decay, regrowth. When they took that material off the soils, for what they called laterite soils, they baked like a brick. It would take a very long time by secondary succession to come back to a rain forest. We need to be very careful about sustainability.

I have been a big proponent of what we call ARPA-E, and we voted that. It's not been funded, and the administration is not recommending funding it, and I hope they reconsider.

ARPA-E kind of mimics our DARPA, which has been an enormously successful organization in exploiting leading-edge technologies, and the net out there is their creation. They have been the creator of a lot of really exciting technology, because what they do is to fund leading-edge things that are so far out there and so risky that business rationally can't do it, and probably in terms of fidelity to their stockholders should not be doing it.

We think the future demands very creative approaches to selecting which of these alternatives we invest our limited amount of time and money and energy in.

My wife tells me that I shouldn't be talking about this. She said that don't

you remember that in ancient Greece they killed the messenger that brought bad news. I tell her this is really a good news story. It's a good news story in two respects. One is that the sooner we start, the less bumpy the ride will be.

Now, we should have started at least 28 years ago. I say that because by 1980 we knew absolutely that M. King Hubbert was right about the United States. We were already 10 years down the other side of Hubbert's peak. We have now blown 28 years when he should have been doing something, but if we start today, the ride will be smoother than if we start tomorrow.

But even more importantly, I think this challenge is just exhilarating. There is no exhilaration like the exhilaration of meeting and overcoming a huge challenge, and, boy, this is a big one.

A year ago, the holiday season, I was privileged to lead a codel of nine Members to China, and we went there to talk about energy. Incredibly, they began their discussion of energy by talking about post oil. Gee, you know, in our country, we tend to think in terms of the next quarterly report, and the next election. We are kind of dominated by what's called the tyranny of the urgent, which frequently sweeps the important off the table. But in that part of the world they seem to think in terms of generations and centuries. And so with that perspective, they were talking about a post-oil world, and they talked about post oil, and they had a five-point plan.

Number one, conservation. That's where it has got to begin is conservation. That will buy some time and free up some energy because we have run out of time. There is no surplus energy to invest in alternatives. Their oil wouldn't be \$100 a barrel.

The second and third points of their five-point program was find alternatives, and as many of those as you can from their own country.

The fourth one will interest you, it's be kind to the environment, and they know that they are big polluters.

The fifth one is international cooperation. They are pleading for international cooperation.

What we need, and I will close with this brief statement, what we need is a program that has a total commitment of World War II, the technology focus of putting a man on the Moon, and the urgency of the Manhattan Project. We are the most creative, innovative society in the world. We are up to the challenge. We need leadership. We can do it.

#### REMOVAL OF NAME OF MEMBER AS COSPONSOR OF H.R. 3609

Mr. SHAYS (during the Special Order of Mr. BARTLETT of Maryland). Mr. Speaker, I ask unanimous consent to withdraw as a cosponsor from H.R. 3609, the Emergency Homeownership and Mortgage Protection Act.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Connecticut?

There was no objection.

### LEAVE OF ABSENCE

By unanimous consent, leave of absence was granted to:

Mr. GINGREY (at the request of Mr. BOEHNER) for today on account of the birth of his granddaughter.

Mr. GARY G. MILLER of California (at the request of Mr. BOEHNER) for today on account of family reasons.

### SPECIAL ORDERS GRANTED

By unanimous consent, permission to address the House, following the legislative program and any special orders heretofore entered, was granted to:

(The following Members (at the request of Mr. FARR) to revise and extend their remarks and include extraneous material:)

Mr. DEFAZIO, for 5 minutes, today.

Ms. KAPTUR, for 5 minutes, today.

Mr. SCHIFF, for 5 minutes, today.

(The following Members (at the request of Mr. PRICE of Georgia) to revise and extend their remarks and include extraneous material:)

Mr. TIM MURPHY of Pennsylvania, for 5 minutes, today.

Mr. BROUN of Georgia, for 5 minutes, today.

Mr. PRICE of Georgia, for 5 minutes, today.

(The following Member (at his request) to revise and extend his remarks and include extraneous material:)

Mr. HOYER, for 5 minutes, today.

### SENATE BILLS REFERRED

Bills of the Senate of the following titles were taken from the Speaker's table and, under the rule, referred as follows:

S. 1200. An act to amend the Indian Health Care Improvement Act to revise and extend

that Act; to the Committee on Natural Resources and to the Committee on Ways and Means in addition, to the Committee on Energy and Commerce for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned.

S. 2450. An act to amend the Federal Rules of Evidence to address the waiver of the attorney-client privilege and the work product doctrine; to the Committee on the Judiciary.

### ADJOURNMENT

Mr. BARTLETT of Maryland. Mr. Speaker, I move that the House do now adjourn.

The motion was agreed to; accordingly (at 1 o'clock and 30 minutes p.m.), under its previous order, the House adjourned until Monday, March 3, 2008, at 2 p.m.

## EXPENDITURE REPORTS CONCERNING OFFICIAL FOREIGN TRAVEL

Reports concerning the foreign currencies and U.S. dollars utilized for Speaker-authorized official travel during the second and fourth quarters of 2007 and the first quarter of 2008, pursuant to Public Law 95-384 are as follows:

### REPORT OF EXPENDITURES FOR OFFICIAL FOREIGN TRAVEL, PATRICK ALWINE, HOUSE OF REPRESENTATIVES, EXPENDED BETWEEN NOV. 21 AND NOV. 26, 2007

Name of Member or employee	Date		Country	Per diem <sup>1</sup>		Transportation		Other purposes		Total	
	Arrival	Departure		Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>	Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>	Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>	Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>
Patrick Alwine .....	11/21	11/24	Kuwait .....		1,000.50						1,000.50
	11/24	11/25	Turkey .....		357.00						357.00
	11/25	11/26	Belgium .....		871.78						871.78
Committee total .....					2,229.28						2,229.28

<sup>1</sup> Per diem constitutes lodging and meals.

<sup>2</sup> If foreign currency is used, enter U.S. dollar equivalent; if U.S. currency is used, enter amount expended.

PATRICK ALWINE, Feb. 6, 2008.

### REPORT OF EXPENDITURES FOR OFFICIAL FOREIGN TRAVEL, JERRY HARTZ, HOUSE OF REPRESENTATIVES, EXPENDED BETWEEN DEC. 31, 2007 AND JAN. 8, 2008.

Name of Member or employee	Date		Country	Per diem <sup>1</sup>		Transportation		Other purposes		Total	
	Arrival	Departure		Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>	Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>	Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>	Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>
Jerry Hartz .....	12/31	1/2	New Zealand .....		300.00		( <sup>3</sup> )				300.00
	1/2	1/4	Antarctica .....				( <sup>3</sup> )				
	1/4	1/5	New Zealand .....		150.00		( <sup>3</sup> )				150.00
	1/5	1/7	Australia .....		350.00		( <sup>3</sup> )				350.00
Committee total .....											800.00

<sup>1</sup> Per diem constitutes lodging and meals.

<sup>2</sup> If foreign currency is used, enter U.S. dollar equivalent; if U.S. currency is used, enter amount expended.

<sup>3</sup> Military air transportation.

JERRY HARTZ, Feb. 8, 2008.

### REPORT OF EXPENDITURES FOR OFFICIAL FOREIGN TRAVEL, KAY A. KING, PH.D., HOUSE OF REPRESENTATIVES, EXPENDED BETWEEN JAN. 4 AND JAN. 15, 2008

Name of Member or employee	Date		Country	Per diem <sup>1</sup>		Transportation		Other purposes		Total	
	Arrival	Departure		Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>	Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>	Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>	Foreign currency	U.S. dollar equivalent or U.S. currency <sup>2</sup>
Kay A. King, Ph.D. ....	1/5	1/7	Egypt .....		556.00		( <sup>3</sup> )				556.00
	1/7	1/9	Ghana .....		578.00						578.00
	1/9	1/12	South Africa .....		972.00						972.00
	1/12	1/15	Morocco .....		940.00		( <sup>3</sup> )				940.00
Committee total .....					3,046.00						3,046.00

<sup>1</sup> Per diem constitutes lodging and meals.

<sup>2</sup> If foreign currency is used, enter U.S. dollar equivalent; if U.S. currency is used, enter amount expended.

<sup>3</sup> Military air transportation.

KAY A. KING, PH.D., Feb. 5, 2008.