

# Energy Subsidies and Big Wind: Sen. Alexander Sets the Record Straight (renewables 50x that of fossil fuels)

by Senator Lamar Alexander (R. Tenn)

May 23, 2011

**Editor note: The [full text](#) of the May 18 floor remarks of [Senator Lamar Alexander](#) (R. Tenn.) as reprinted in the Congressional Record last week. Subtitles have been added.**

“So I ask the question: If wind has all these drawbacks, is a mature technology, and receives subsidies greater than any other form of energy per unit of actual energy produced, why are we subsidizing it with billions of dollars and not including it in [the energy subsidy] debate? Why are we talking about Big Oil and not talking about Big Wind?”

“We have been debating tax subsidies to the big oil companies. The bill proposed by the senator from New Jersey would have limited it to just the big five oil companies even though many of the tax breaks or tax credits or deductions they receive are the same tax credits that every other company may take—Starbucks, Microsoft, Caterpillar, Google, and Hollywood film producers, for example. Many of the other credits look a lot like the [research and development] tax credit or other tax credits all American businesses may receive.

Well, I am one Senator who is very intrigued with the idea of looking at all of the tax breaks in the tax code. There are currently about \$1.2 trillion a year in what we call tax expenditures, and those are intended to be for tax breaks we think are desirable. I am ready to look at all of them and use the money to reduce the tax rate and/or reduce the Federal debt. But if we are going to talk about energy subsidies — tax subsidies — we ought to talk about all energy subsidies.

## Renewables vs. Fossil-energy Subsidies

Senator John Cornyn of Texas has asked the Congressional Research Service to do just this. It is an excellent study, and I commend Senator Cornyn for asking for it. This is some of what it finds:

According to the report, fossil fuels contributed about 78 percent of our energy production in 2009 and received about 13 percent of the Federal tax support for energy.

However, during that same time 10.6 percent of our energy production was from renewables and 77.4 percent of our energy tax subsidies went to renewables. So if we are to compare the subsidy per unit of energy, the estimated federal support per million BTUs [or British Thermal Units] of fossil fuels was 4 cents, while support for renewables was \$1.97 per million BTUs.

So, federal subsidies for renewables are almost 50 times as great per unit of energy as federal subsidies for fossil fuels. [But] this would be distorted because hydroelectric power is included within renewables. Most people think of renewables as ethanol, solar, or wind and those are the renewables that actually get the subsidies, while hydroelectric does not.

So, the federal taxpayer support for renewable energy is at least 50 times as great per unit of energy as compared with fossil fuel energy. So why aren't we including subsidies for all renewables in our debate? Specifically, if we are talking about 'Big Oil,' why don't we talk about 'Big Wind?' The Senate seems an appropriate place to talk about 'Big Wind.'

The Energy Policy Act of 1992 created what is called the production tax credit for energy produced using renewable resources. Most of this money has gone to subsidize 'Big Wind.' It is a policy that was supposed to last a few years. It has lasted two decades.

Today, the production tax credit for wind gives 2.1 cents for every kilowatt hour of wind electricity produced by a wind turbine during the first 10 years of operation. Let's put this into a context that is current. The new Shepherd's Flat Wind Farm in Oregon will have 338 of these huge wind turbines, producing enough power to run approximately 250,000 homes and will cost the American taxpayer about \$57 million a year in subsidies for that electricity produced. If we allocated the tax credit per home, taxpayers will be paying \$2,300 over the next 10 years for each of the homes served by the Shepherd's Flat Wind Farm in Oregon.

This doesn't even take into account the fact that \$1.3 billion in federal loan guarantees to this project means **Big Wind** will have its risk of default also financed by the taxpayer. Fossil fuel companies don't have that advantage. Nuclear power companies don't have that advantage, even though their electricity is completely clean — no sulfur, no nitrogen, no mercury, no carbon. If, like nuclear or fossil loan guarantees do, the wind farm in Oregon had to pay the risk of default up front as a fee, it would cost another \$130 million. That is money out of the pockets of taxpayers.

The total cost of the wind production tax credit over the next 10 years will cost the American taxpayers more than \$26 billion. Let me say that again. American taxpayers are subsidizing Big Wind over the next 10 years by more than \$26 billion with one tax credit. In fact, the tax breaks for the five big oil companies we have been debating on the Senate floor this week actually cost less than all of the money we give to big wind. The tax breaks for the five big oil companies amount to about \$21 billion over 10 years.

According to the Energy Information Administration in 2007, big wind received an \$18.82 subsidy per megawatt hour — 25 times as much per megawatt hour as subsidies for all other forms of electricity combined. But wind is about the least efficient means of energy production we have. It accounts for just about 2 percent of our electricity. It is available only when the wind blows, which is about one-third of the time. The Tennessee Valley Authority says it is reliable even less than that, meaning we can have it when we need it only about 12 to 15 percent of the time.

## **Other Windpower Problems**

Wind farms take up a huge amount of space. Turbines are 50 stories high. Their flashing lights can be seen for 20 miles. An unbroken line of turbines along the 2,178-mile Appalachian Trail would produce no more electricity than four nuclear reactors on 4 square miles of land.

Wind is generally the strongest—and land available—where the electricity isn't actually needed. So we have thousands of miles of new transmission lines proposed to get the energy from where it is produced to where it needs to go. Those often go through conservation areas, and according to the National Academy of Sciences, wind power is more expensive than other forms of electricity, such as coal, nuclear, biomass, geothermal, and natural gas.

We haven't even talked about the fact these wind turbines only last about 25 years. The question is: Who is going to take them down? Wind farms also kill as many as 275,000 birds each year, according to the American Bird Conservancy. They can interfere with radar systems, and many who live near them say they are very noisy.

So I ask the question: If wind has all these drawbacks, is a mature technology, and receives subsidies greater than any other form of energy per unit of actual energy produced, why are we subsidizing it with billions of dollars and not including it in this debate? Why are we talking about Big Oil and not talking about Big Wind?

I believe there are appropriate uses of temporary incentives and subsidies to help jump-start innovation and the development of new technology — such as jump-starting electric cars, or natural gas fleets of trucks, or loan guarantees for nuclear power plants and other forms of clean energy — as long as these are short term. I believe research and development is an appropriate role for the federal government whether it is in recycling used nuclear fuel or finding alternative biofuels made from crops we don't eat. I believe it is entirely appropriate for there to be research for offshore wind farms, which we don't know as much about and which might actually prove to be a useful supplement in the Northeast. But my point is, if we are going to debate subsidies to Big Oil, we ought to be debating all the energy subsidies including those to Big Wind.

### **Republicans vs. Democrats**

There is a difference between the Republican plan and the Democratic plan for \$4 gasoline and high energy prices. The Democratic cure for high prices is basically to raise the price. They want to tax energy more, but that makes energy cost more. Republicans want to find more American energy and use less energy. We might sum it up this way: Republicans want to find more and use less; Democrats want to find less and tax more.

The Democratic plan, according to Senator Schumer of New York, was never intended to talk about lowering gas prices. Senator Reid agreed, Senator Baucus agreed, Senator Landrieu agreed, and

Senator Begich agreed, but why aren't we talking about trying to find a way to lower gasoline prices when it is \$4 a gallon and going up?

The Republican plan is very specific: Find more American oil and more American natural gas. We can find that offshore where 30 percent of our domestic oil and 25 percent of our natural gas is produced. We can find it on Federal lands, and we can find it in Alaska.

The other part of our equation is to use less. We have some agreement with the Obama administration on some of these ideas. There are a number of them, such as jump-starting electric cars. Senator Merkley and I have a bill that is before the Energy Committee tomorrow to do just that. I believe electrifying our cars and trucks is the single best way to reduce our dependence on foreign oil. There is legislation to jump-start natural gas for trucks, biofuels from crops we don't eat, and fuel efficiency. All these are various ways to use less.

Senators Thune and Barrasso have performed a service by setting the record straight to show that the United States produces a lot of oil. We are actually the third largest oil producer in the world. So I ask this question: If less Libyan oil can raise gasoline prices — which it did — then shouldn't more American oil help lower gasoline prices? At least, for every dollar of American oil we produce, it is one less dollar we have to send overseas for foreign oil.

## **Conclusion**

So, Madam President, the Republican plan is to find more American oil and natural gas and to use less. My suggestion is, if we are going to be talking about tax subsidies for Big Oil, let's talk about tax subsidies for all energy. The Senate floor seems an especially appropriate place, if we are going to talk about Big Oil, to also talk about tax subsidies for **Big Wind.**"