

THE LEGISLATIVE ENERGY AGENDA, AFTER DAVOS 2008

By

Senator Miriam Defensor Santiago
Chair, Senate Committee on Energy
Chair, Joint Congressional Power Commission

Fixed Principles of Energy Industry

I have just returned with President Arroyo and the rest of the Philippine delegation from the World Economic Forum 2008 in Davos, Switzerland. The delegation then proceeded to Dubai in the United Arab Emirates. This speech is a result of those trips.

There is no longer any debate that the world is entering a period of energy dislocation and, for some communities, the period of energy poverty. This development has been brought about by four trends:

Trend 1. High fossil fuel prices;

Trend 2. Growing concern about energy security. Because oil and gas resources are concentrated in a few countries, understandably they use their energy riches as an instrument of foreign policy. With the rise of petrodollar-based sovereign wealth funds, such countries are pursuing more proactive investment strategies. Countries in the Persian Gulf now control more than \$1 trillion. One of the reasons for this recent foreign trip was to pursue bilateral energy deals. And one of the consequences of that trip is for Congress to intensify efforts for resource self-sufficiency;

Trend 3. Growing social concern about both the local and global environments;

Trend 4. Technology innovation, which has attracted global investment in renewable and alternative energy, now standing at more than \$100 billion per year;

These four factors are related and taken together produce a complex interdependency, meaning, that there are tradeoffs. For example, coal is an economic energy source but it is also the single biggest source of manmade carbon emissions. Thus, coal as an energy source now has to contend with the phenomenon of climate change.

With these complex and interdependent trends, Mr. John Browne has recommended certain fixed principles, as follows:

Principle 1 is flexibility, meaning the ability to adapt and to respond quickly to change. The Philippines will not prosper by betting only on the biofuels options. Although I was the Senate author and sponsor of the Biofuels Act of 2007, I insist that our country should maintain a portfolio of options. For example, wind has a clear advantage for our country, because of our favorable weather, strong demand, and developing transmission systems.

Principle 2 is the ability to work in collaborative networks. Our work in government must be connected in multiple ways to the work of NGOs, business companies, consumers, and the Philippine public. We in government are fully

aware that we bear the burden of helping design the fiscal and regulatory policies that will drive new energy investments.

Principle 3 is energy efficiency, which will play a starring role in the energy future. Every business should put in place an energy efficiency plan covering the entire spectrum of business activities: operations, supply chains, and workforce behavior. For example, the Philippine airline industry can improve its fuel efficiency by more direct routings, more efficient taxiing on the ground, and less idle time queuing for takeoff slots.

Principle 4 is making carbon a mainstream economic cost for business. There is a global momentum building behind carbon pricing policy, notably in Europe and key American states. As Chair of the Senate Energy Committee, I plan to file a Carbon Pricing Act. Tomorrow, I will discuss at a Bureau of Customs seminar the prospect of a global agreement to succeed the Kyoto Treaty, with strengthened carbon measures. What carbon pricing bill the Congress will enact will be a source of the greatest uncertainty in energy law. My bill will provide for compensatory measures, because the costs of pricing carbon will hit some groups disproportionately, such as poorer people or energy-intensive sectors of the economy.

We have to bite the bullet on the thorny political-economic question of: “Who pays?” To reduce dependence on fossil fuels is a burden that should be shared. It will need an act of real political leadership to pass an aggressive carbon

law, which will require that we should put society as a whole above sectional politics. This is the best way to survive this period of energy dislocation.

Food or Fuel: Food Security and Biofuel Production

The United Nations has predicted that the global population will rise above 9 billion by 2050. This will place additional pressure on the global food supply, particularly for a developing country like the Philippines. Our country is characterized by an increasing demand for protein-rich foods which require more water to produce, and more available agricultural land. This is why food prices are likely to increase.

The Philippines joined the global bandwagon for biofuel production by adopting the Biofuels Act of 2007. Obviously, this law aims to reduce carbon emission and dependence on imported sources of energy. I do not understand why certain people refuse to accept that the dynamics of the energy economy will be introduced into global food markets. But I will not go into that now. Instead, I wish to point out that there are at least two complex tradeoffs between biofuel production and food security, as follows:

Tradeoff 1. The question of national equity: Any shift from food production to biofuel production will have certain consequences for certain communities. While crop exporters may benefit, crop importers may suffer, including agricultural communities which import grain as feeds for animals. In fact, those who might suffer the most in the long run of biofuel production might

be the poorer communities where food bought on the open market is a major component of overall expenditures.

Tradeoff 2. The question of global efficiency and perception of energy security. Global efficiency is best served by market-determined allocation of crop resources globally to food, and biofuels based on price and relative environmental efficiency. But concerns over energy security may undermine the attractiveness of global collaboration. Not all techniques for manufacturing biofuels are equally efficient in terms of reducing aggregate carbon emissions. Biofuels should be pursued not only under a global imperative to reduce carbon emissions, but more importantly, under a national security imperative.

Limits to Energy Price Resiliency

In the report submitted to the World Economic Forum entitled “Global Risks 2008,” experts said: “The global economy has demonstrated remarkable resiliency to increases in energy prices since 2004. **But the limits of resiliency may be close to being reached.**”

The WEF Global Risk Networks, which prepared the report, warned that there is a conflict between the objectives of secure, reasonably priced energy on the one hand, and reductions in emissions of greenhouse gases on the other hand. We see this conflict in the following ways:

- Coal, the only cheap, widely available fossil fuel, is linked with carbon emissions;
- Oil reserves are located in regions of geopolitical instability;

- Gas, the cleanest fossil fuel, is difficult to transport;
- Nuclear power is probably the best option for carbon-neutral energy from the perspective of currently available technology. But nuclear power continues to cause anxiety, given the problems of waste disposal, fear of nuclear accidents, and questions on the desirability of the global spread of nuclear technologies;
- Green technologies, such as wind power and biofuel, have their own problems, notably problems of scale. The use of crops for biofuel may promote greater insecurity for other global resources, namely, food and water.

Fighting Climate Change with Nuclear Power

Over 30⁺ countries already have a functioning nuclear industry: Europe, the United States, China, India, and Russia. Other states are exploring the nuclear power option, among them: Turkey, Vietnam, and Egypt.

The **benefits** of nuclear power are as follows:

- CO₂-free power generation
- Reliability
- Low per-unit direct cost to consumers.

However, the **risks** of nuclear energy are as follows:

- Environmental pollution resulting from spent-fuel disposal
- Potential dual use, meaning both civilian and military, associated with fuel enrichment

- Safety concerns for the integrity of nuclear power plants
- Difficult control over nuclear fuel inventories

The problem with nuclear power is that it raises the issue of how to safeguard the nuclear fuel development and distribution process. Furthermore, current weapons and nuclear stockpiles must be comprehensibly inventoried and monitored. The world will have to repatriate highly enriched uranium and replace it with low enriched uranium. At present, six states produce enriched uranium on a commercial basis: France, Germany, Netherlands, Russia, United Kingdom, and the United States. These six countries could block the efforts of other countries to explore a national capacity for nuclear energy.

The primary motivator for the Philippines to consider nuclear power is energy security and diversifying away from fossil power generation. But in the global context, this will require multilateral arrangements that will assure supply. Nuclear power also puts in question the effectiveness of the Nuclear Non-Proliferation Treaty. And, we have to consider the true costs of nuclear energy, because it will be reliant on state support. We also have to consider liability and antiterrorist cover, radioactive waste storage, international monitoring, and research and development costs. For these reasons, I do not foresee a nuclear energy bill in the Senate, or a so-called “nuclear renaissance,” in the near future.

Senate Energy Agenda

For sometime now, we have began the new era of energy reevaluation. Most recently, rising demand, particularly from China and India, has nearly

doubled the price of benchmark crudes, with proportional increases for natural gas and other energy products. Oil futures markets indicate that prices will continue to remain within a significantly higher range. This being the case, a developing economy and energy-importing country like the Philippines will be hit the hardest. Experts say that on average, 1.6 percent of total revenues in countries like ours are already being lost. Higher oil prices also delay the transition from environmentally destructive usage of biomass fuels, such burning wood toward gas, kerosene, and electricity.

With a higher price environment, we can expect the Senate to discuss measures such as the following:

- Provide incentives for clean coal technologies. But because higher volumes of conventional coal usage would greatly accelerate carbon emissions, it will be a high priority goal of the Senate to develop clean air technologies that are both effective and affordable;
- In the long-term, the Senate will have to extend the nuclear option on a need-driven and affordable basis. I have already discussed the pros and cons of nuclear energy. I do not see it on the radar screen in the short-term. However, nuclear power does not contribute to climate change. Hence, we have time to put in place safeguards against nuclear proliferation, terrorism, and industrial accidents;
- Place a premium on alternative fuel bills, specially substitutes for gasoline or diesel in motor vehicles. Our recent law has placed climate-neutral

biomass fuels such as ethanol and biodiesel in a more competitive position. However, agricultural tariffs still pose a barrier to global markets;

- Increase the efficiency of biomass fuel use, and promote the use of modern fuels, such as kerosene and LPG, for meeting the cooking needs of the poor;

- Increase access to efficient stoves for both biomass and modern fuels;
- Subsidize capital costs for rural grid electrification, and develop off-grid solutions to providing energy services;

- Target subsidies to access, not to consumption;
- Remove market barriers to trade in kerosene, LPG, biomass fuels, and charcoal, for meeting the cooking needs of the poor;

- Provide supportive regulatory policies for meeting the need for energy services other than cooking; in particular, to make financially sustainable the expansion of access to electricity by poor households.

Our vision on climate change should include tighter government regulation regarding fuel quality, plant emissions, and safety. Unfortunately, these concerns will entail further costs to the energy industry and the Filipino consumer.

After the World Economic Forum 2008, we have to accept the message that perceptions of global risks and priorities are changing with extreme rapidity. In fact, it is said that insuring against business interruption has become more expensive than property insurance.

Former certainties about cheap energy and its environmentally risk-free consumption have disappeared. The World Economic Forum has properly warned that: "In a rapidly changing world, the very fundamentals of energy – price, availability, security, acceptability – stand in need of constant and careful reevaluation. In the national debate on alternative energy sources, there is no room for opinionated legislators.

In conclusion, I have to issue a gentle reminder to the non-lawyers in Congress that under R.A. No. 3019, also known as the Anti-graft and Corrupt Practices Act, it is a crime for any Congress member, "during the term for which he has been elected, to acquire or receive any personal pecuniary interest in any specific business enterprise which will be directly and particularly favored or benefited by any law or resolution authored by him." If he does possess such an interest, he should divest himself of that interest within 30 days after approval of the bill. This is a friendly reminder from a concerned lawyer who has no political plans for 2010.

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