Japan's crisis is another reason to look at energy use March 22, 2011 |

[http://www.davidsuzuki.org/blogs/science-matters/](http://www.davidsuzuki.org/blogs/science-matters/2011/03/japans-crisis-is-another-reason-to-look-at-energy-use/?gclid=CNrrxNuM-60CFSUbQgodxAGUMg)

*By David Suzuki with contributions from Ian Hanington, Communications and Editorial Specialist*

The massive earthquake and subsequent tsunami that hit Japan are horrendous and heart-wrenching, and our thoughts are with the people of that country as they cope with the aftermath and the terrible losses they have suffered.

To make matters worse, the terrifying natural disaster has sparked a human-caused crisis, as radiation leaks from crippled reactors at the Fukushima Daiichi nuclear power plant, [sparking fears of a meltdown](http://peaceandhealthblog.com/disaster-in-japan/).

Although our immediate concern is for the people of Japan, we must also [draw lessons from this misfortune](http://allthingsnuclear.org/tagged/Japan_nuclear).

First, we can learn from the Japanese about being prepared. As horrific as the earthquake and its aftermath were, the situation could have been far worse if the Japanese people took the same complacent approach to disaster planning that many Canadians follow. But it's also another indicator that we have to take a close look at our energy systems.

Last year, the world watched another energy-related calamity unfold, as oil spewed into the Gulf of Mexico after an explosion on the Deepwater Horizon drilling platform. Both the [nuclear crisis in Japan](http://www.wmo.int/pages/mediacentre/press_releases/pr_909_en.html) and the oil spill in the Gulf focused our attention on the things that can go wrong in our insatiable pursuit of cheap energy. But the issues around our energy use are far more serious and persistent. They include pollution, political instability, rising costs, and climate change.

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Once again, our energy appetite has provoked a global nightmare. We can sink deeper into crisis, or we can use it as an opportunity to look at ways to [achieve a sustainable energy](http://www.greenpeace.org/canada/en/campaigns/end-the-nuclear-threat/Get-involved/StopDarlington1/) future. Fossil and nuclear fuels are finite and therefore cannot be truly sustainable. They will run out, and we're already seeing one of the outcomes of depleting supplies: skyrocketing prices. Another consequence is that we will have to rely increasingly on oil from difficult sources (environmentally and politically) like deeper water, the tar sands, the Arctic, and volatile political jurisdictions. Using fossil and nuclear fuels also creates enormous problems now and into the future as greenhouse gases and radioactive and long-lived wastes accumulate.

In addition, fossil and nuclear fuels are not equitably distributed throughout the world. Oil deposits, for example, are often found in geopolitically unstable areas. And [nuclear energy has proven to be incredibly expensive](http://www.ieer.org/comments/Daiichi-Fukushima-reactors_IEERstatement.pdf) and time-consuming to get into production. If the money proposed to refurbish aging facilities and build new ones were put toward renewable energy from wind, solar, and geothermal, the impact would be immediate and would get us moving toward a truly sustainable energy future.

The need to assess our energy options is more important than ever. All have consequences and tradeoffs. Climate change caused by burning fossil fuels endangers our planet, nuclear disasters and nuclear waste are potentially [significant threats to our health](http://www.cbc.ca/news/health/story/2011/03/15/f-radiation-sickness.html) and ecosystems, and even renewable sources have impacts. It's time we took a close look at our energy use and sources in order to find better ways of providing for our needs. We can all start doing our part by using less.

Regardless of the path we choose, we must plan more carefully. A number of [organizations in Canada](http://www.redcross.ca/article.asp?id=38380) are working to develop a national energy strategy — something that is surprisingly lacking in a developed country like ours.

For its part, the David Suzuki Foundation has joined with the Canadian Academy of Engineering and the Trottier Family Foundation to consider Canada's energy options as part of the [Trottier Energy Futures Project](http://www.trottierenergyfutures.ca). We're looking at questions around what we can do to limit strain on our energy production system. How is our energy use leading to overinvestment in potentially dangerous energy sources and technologies? How can we factor in energy sources with fewer environmental impacts? We look forward to working with Canadians from all walks of life to develop a sustainable energy future for Canada.

We all hope the situation in Japan doesn't become more serious than it already is, but with that hope we must come to the realization that we can and must find ways to reduce the risks that come with our energy use and technologies.

**FAQs: Japan nuclear concerns - September 2011**

<http://www.who.int/hac/crises/jpn/faqs/en/>

**What is the current risk of radiation-related health problems in Japan for those residing near the reactor in comparison to those in other parts of Japan?**

* During the early phase of the nuclear emergency radiation-related health were dependant on exposure, which is turn were due to several things, including: the amount and type of radiation released from the reactor; weather conditions, such as wind and rain; a person’s proximity to the plant; and the amount of time spent in irradiated areas.
* The Government of Japan’s early actions in response to events at the Fukushima Daiichi nuclear power plant were in line with the existing recommendations for radiation exposure. The Government has evacuated individuals who were living within a 20-kilometre radius around the Fukushima Daiichi plant. Those living between 20 km and 30 km from the plant were asked to evacuate voluntarily. In general, people living farther away of the site of the event are at lower risk than those who live nearby.
* In light of evolving new information on levels of environmental radioactivity in the 20-30 km zone and some surrounding areas beyond the 30km zone, the Government of Japan established new planned evacuation zones from which residents were relocated to temporary housing based on the estimated cumulative doses they may receive in the 1 year following the accident.
* In addition, an emergency evacuation preparedness zone was also identified in which residents were asked to prepare their affairs in case they were asked to evacuate. These zones also follow administrative boundaries and extend beyond the 30 km radius.

**Is there a risk of radioactive exposure from food contamination?**

* Yes, there is a risk of exposure as a result of contamination in food.
* However, contaminated food would have to be consumed over prolonged periods to represent a risk to human health.
* The radioactive iodine and caesium in concentrations above the Japanese regulatory limits have been detected in some food commodities as a result of food monitoring
* Japanese authorities have advised residents to avoid these food and have implemented measures to prevent their sale and distribution.

**Are there health risks to people living outside of Japan from radiation emitted into the atmosphere from damaged Japanese nuclear power plants?**

* Thus far, there are no health risks to people living in other countries from radioactive material released into the atmosphere from the Japanese nuclear power plants. Radiation levels measured to date in other countries are far below the level of background radiation that most people are exposed to in every day circumstances.