Is all green energy, good energy?

By Kamma Thordarson

15 April 2011 [MediaGlobal]: Recent events in Japan illustrate the unpredictable consequences of natural disasters. No one foresaw that an earthquake and tsunami would lead to the near meltdown of a nuclear power plant, a water crisis, a food crisis and, most recently, the dumping of radioactive water into the Pacific Ocean.

Within a century, countries such as Tuvalu and the Maldives may go underwater. Being just above sea level now makes both extremely vulnerable to rising sea levels. Entire populations may eventually flee and become environmental refugees.

Hans Gunter Brauch and Úrsula Oswald Spring from the United Nations University Institute for Environment and Human Security (UNU-EHS) are the editors of “Coping with Global Environmental Change, Disasters and Security,” a handbook focused on global environmental change, climate change, desertification, hazards, and security threats.

The handbook advocates for a “Fourth Green Revolution” to mitigate disasters brought on by human-made environmental change. The goal of the handbook is to assist students, scientists, and policymakers across the world and influence discussions that will take place at Rio+20.

Under the United Nations Framework Convention on Climate Change, Least Developed Countries (LDCs), and Small Island Developing States (SIDS) are recognized as being the most vulnerable to the adverse effects of climate change. “You know, the emitters and the people who are highly affected are not the same,” Oswald Spring told MediaGlobal.

Brauch explained, “The problem for the Least Developed Countries is that they hardly contributed anything to global warming during the last industrial revolution, but many of them are impacted worse.” He added that the Global North must “take on the historical responsibility of climate change, and make a contribution to help the poor countries.”

Without immediate incentive to focus on environmental change mitigation, it is questionable how serious the commitments of the developed countries are. “If you see the obligations the industrialized countries have undertaken, and their performance, there’s a huge gap,” Brauch stated. “If the people are not willing to undertake a fundamental transformation, we will probably have to pay the price. The later we start, the higher the price will be.”

The price will be especially high for SIDS. “On one side, the small islands which are very low over the sea level, are threatened not only by sea level rise but also by the waves,” said Oswald Spring. “The intrusion of saltwater into their aquifers presents another problem, that of losing their ability to have water for their own supply.”
Global environmental change foreshadows many future challenges; the world must prepare for such eventualities.

“We are proposing one policy, a very radical approach. The countries should receive environmental refugees in the amount of their emissions of greenhouse gases. This would be an international equity approach. You emit, you destroy the livelihood of the people, so you are obliged now to receive the people in the amount of your emissions,” Oswald Spring told MediaGlobal. This can be done through physical migration as well as financial support to those forced to emigrate.

In order to mitigate environmental change, switching to renewable energy is often suggested. “Renewable energy is just one tiny part, but it helps to redirect the direction of our energy system,” Brauch told MediaGlobal.

The Fukushima incident in Japan has left public opinion especially sensitive to the idea of nuclear energy as a means to reduce dependence on fossil fuels. “It is necessary to explore other options but going to biofuels has negative repercussions with regards to the food price,” said Brauch. “It narrows the basis of the food exports.”

“I’m absolutely against of using food items for biofuel; this has brought us to the food crisis we have now in the moment,” said Oswald Spring, discussing biofuel’s negative impact on food supplies worldwide. “You use more energy to transform it into biofuel than you get out so it’s a negative balance,” Oswald Spring added, highlighting biofuel’s inefficiency.

Many LDCs have “a very high demand, particularly if there is a severe drought, for temporary food imports,” said Brauch. “But if we use some of our best soils for producing energy instead of food, food prices go up.”

The handbook criticizes the current energy system of the world and makes the connection between global environmental change and future disasters. Climate change mitigation is presented as necessary, with public opinion sensitive to nuclear energy. The editors make a point of discouraging the use of food items for biofuels since higher food prices have a severe effect on the populations of developing countries.