
A nuclear renaissance



By Karen Cho

In an age of dwindling natural resources and expanding economies, more countries are turning to nuclear power. According to Mark Fitzpatrick, Senior Fellow for Non-proliferation at the International Institute for Strategic Studies in London, not since the Cold War has there been such renewed interest in nuclear -- though this time, the agenda is different.



“I think the word ‘nuclear renaissance’ is a fair description of the global interest in nuclear energy as one of the necessary solutions to the dangers of global warming and to the need for energy security and diversification. And certainly in Asia, the interest in nuclear energy is the highest,” Fitzpatrick told INSEAD Knowledge on the sidelines of International Energy Week held recently in Singapore.

Although the race for nuclear weapons has also been strong in Asia, specifically in South Asia and Northeast Asia -- more as a symbol of military prowess -- Fitzpatrick says this is no cause for panic, because even though Southeast Asia is “on the cusp of joining the nuclear renaissance,” the region views nuclear power from a different perspective.

“In Southeast Asia, the nuclear dangers are more in the area of nuclear safety and security. Apart from Myanmar (Burma) and possibly Vietnam, there are no proliferation drivers. In the case of Vietnam, even though there might be proliferation drivers, there's no proliferation intent.”

He explains that the uneasiness about nuclear power still persists today because people often are unable to differentiate between nuclear power and weapons. “They assume that if you have nuclear power it's an easy stepping stone to nuclear weapons. And in some ways, nuclear power and technology can be used in support of a nuclear weapons programme, but you need one of the sensitive technologies to get from nuclear energy to nuclear weapons. You need either enriched uranium or plutonium that is separated from spent fuel. And if you don't have the technology of uranium enrichment or separated plutonium, you can't get nuclear weapons.”

“And no nation in the Southeast Asia region or Australasia is looking at either enrichment or reprocessing. That’s one of the reasons we don’t see much of a proliferation danger there.”

But other dangers do exist, he says, particularly in regard to nuclear safety vis-a-vis environmental risk. “There are some particular issues that have to be addressed when looking at nuclear safety, (such as) the issue of seismic stability. Several of the countries in this region are on the ‘Pacific Ring of Fire’ (and so could be hit by earthquakes due to the movement of tectonic plates). So the standards that they would have to introduce for nuclear power plants have to go that extra mile to ensure that they could withstand that once-in-a-thousand-year shock. But Japan and China are also on the Ring of Fire and they've introduced nuclear power in a safe way.”



Though the nuclear route seems like an unstoppable process, Fitzpatrick says other safer options should also be considered. “I think that it's inevitable that countries will look to nuclear power as a source of energy. They face declining natural resources, declining resources of coal, gas and oil. They have expanding economies and have to produce electricity from some means. I don't think nuclear power is always the best means. Usually there are better, cheaper and safer means -- geothermal and hydro power. There could be other new forms of wind power, and so forth. But nuclear power probably will have to be part of the mix, if the world is to escape the dangers of global warming.”

While the threat of nuclear proliferation still seems to be under control, Fitzpatrick says our guard must never be let down because priorities can shift.

A case in point is Southeast Asia which for the most part lacks the intent. It is, however, no stranger to terrorist activity as the existence of Islamic militant cells has proven. “There are home-grown terrorism concerns in this part of the world ... (but) terrorists in Southeast Asia have not looked at nuclear power plants as a target. There aren't any nuclear research reactors for example, nor have they talked about stealing radioactive sources, except

(for) one case in Thailand.”

The key to curbing ill intent towards nuclear power, he advises, is through proper regulation of the sources of energy. “Let's try to persuade countries that they don't need these technologies (of uranium enrichment and plutonium reprocessing); they can get all the fuel supply services they need on the international marketplace and not have to have their indigenous sensitive technologies.”

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