

Session 5: Peaceful Use of Nuclear Energy

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Summary

The panel covered the peaceful use of nuclear energy in four areas: overview on the nuclear energy, international governance, nuclear nonproliferation, and spent nuclear fuel management.

Sharon Squassoni, the first speaker covering overview on the nuclear energy, questions the conventional drivers for expansion of nuclear energy—electricity growth, environmental concerns, and energy security. Essentially, her point is that the assessment of nuclear energy on individual states has to be country-specific rather than universal. In addition to the three drivers, Sharon also briefly covers range of issues, from nuclear waste, safety, recent nuclear bills in US congress, and ends by touching on nuclear governance issue.

Miles Pomper briefly discusses South Korea's desire to expand its role as nuclear technology exporter, regardless of the Fukushima accident. He ends by emphasizing the need for Korea to be more transparency within nuclear suppliers group (NSG) that has fallen after US-India deal.

Next speaker, Trevor, presents on global governance. He argues that the global governance arrangements only strengthened traditionally only after crisis, illustrating US initiatives taken to strengthen security measures only after learning Iraq's nuclear programs and after the Chernobyl incident.

One area he identifies as a threat from nuclear revival is emergence of states equipped with nuclear energy for the first time. They lack institutional arrangements, safety culture,

personnel, and national authority to address safety, security and safeguard concerns. Incorporating these requirements, IAEA estimates at least 10 years before states can host first nuclear power plants, and therefore cautions newcomer states from rushing nuclear development. Kenya and Nigeria represent two states IAEA had successfully convinced not to proceed with their nuclear programs. To increase the positive role of IAEA, he recommends greater resources for the agency to provide advises and assistance to newcomer states.

Finally he recommends the need to encourage newcomers with entirely new set of safeguard system. One way is by further strengthening nuclear safeguards through promoting a mandatory system of checks for nuclear safety rather than maintaining current voluntary peer review system.

Specter, the third speaker, focuses on how to enforce nuclear commerce through gentle advice, a softer approach on rules for nuclear supply. He identifies a list of areas for improvement. The checklists include: new countries going in might need to adapt additional protocol, safety requirements enforced with greater requirements in commercial transaction, and convention on nuclear terrorism. As countries engage in nuclear power plant sale, countries must check to see if clients meet the requirements.

He lists Vietnam for a case of successful nudging, where Japan conditioned additional protocol in exchange for the supply. As the result, Vietnam is about to ratify the protocol through gentle nudge process.

The last speaker, Tom from RAND Corporation, lists several options on spent fuel management. Essentially, he recommends two-stage strategy of starting with centralized spent fuel storage, then moving to permanent repository site. Since the process for selecting a permanent site can be time consuming, he recommends buying time with centralized storage, then transitioning into a permanent storage.

* The views expressed herein do not necessarily reflect the views of the Asan Institute for Policy Studies.

Session Sketches

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