

The Nuclear Security Summit: Forging Consensus and Building Momentum

The summit created much needed momentum on nuclear security. Now all participants, not just the U.S., need to ensure that momentum is maintained.

Table: HEU, Reactors, and Commitments

This table shows the HEU stocks that the participants have, the number of operating research reactors (RR), the number of reactors that have been converted by each state from HEU to LEU and their civilian plutonium (PU) stocks, and the individual commitments the states have agreed to.

> 10 MT

COUNTRY	HEU RR [2]	CONVERTED RR [2]	CIVIL PU HOLDINGS [3]	NATIONAL COMMITMENTS ANNOUNCED [4]
United States	19	13	0	Requesting an advisory mission from the IAEA's IPPAS to review physical protection at the National Institute of Standards and Technology's Center for Neutron Research; accelerating efforts to complete ratification procedures for the two key international treaties governing nuclear security, the ICSANT and the 2005 Amendment to the CPPNM; signed the Protocol along with Russia to the Plutonium Management and Disposition Agreement, which commits both countries to eliminate 34 metric tons each of plutonium from their weapons programs; working with Russia and other members to turn the Global Initiative to Combat Nuclear Terrorism into a durable international institution; contributing to, a voluntary fund to help countries meet the obligations this resolution places on them, and to match them up with wide range of national, international, and nongovernmental sources of assistance; establishing for the first time a dedicated budget line for nuclear security; joining with Canada to call for another ten-year extension to the G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction with an expanded scope/mission and to commit up to another \$10 billion towards new projects,

including expanding our efforts to improving nuclear security to countries not previously eligible for G8 assistance.[5]

Russia	63	1	44.9	Signing Plutonium Disposition protocol; ending plutonium production; contributing to IAEA's Nuclear Security Fund.
Kazakhstan	4	0	0	Converting a HEU research reactor and eliminating remaining HEU; cooperative work on BN-350 reactor shutdown and fuel security; hosting a Global Initiative Activity in June; considering a International Nuclear Security Training Center.

1-10 MT

COUNTRY	HEU RR [2]	CONVERTED RR [2]	CIVIL PU HOLDINGS [3]	NATIONAL COMMITMENTS ANNOUNCED [4]
France	8	1	54.9	Ratifying the 2005 Amendment to the CPPNM; inviting an IPPAS security review from the IAEA; incorporating training in nuclear security at the European Nuclear Safety Training and Tutoring Institute and the International Nuclear Energy Institute (announced during March 2010 Paris nuclear energy conference).
Japan	5	2	46.7	Launching an integrated regional support center; research and development on detection and forensics; contributing new resources to IAEA's Nuclear Security Fund; hosting and funding a WINS best practices conference.
United Kingdom	3	0	77.7	Contributing \$6 million to the IAEA's Nuclear Security Fund; inviting an IPPAS security review from the IAEA; ratification of the ICSANT and 2005 Amendment of the Convention on Physical Protection of Nuclear Materials.
Canada	3	3	0	Returning a large amount of spent HEU fuel from their medical isotope production reactor to the United States; championing the extension of the G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction; funding HEU removals from Mexico and Vietnam; hosting and funding a WINS best practices workshop in Ottawa; unveiling \$100 million in new bilateral security cooperation with Russia.
China	4	3	0	Announce cooperation on nuclear security Center of Excellence.

0.1-1 MT

COUNTRY	HEU RR [2]	CONVERTED RR [2]	CIVIL PU	NATIONAL COMMITMENTS ANNOUNCED [4]
			HOLDINGS [3]	
Germany	1	2	15	Moving toward ratifying 2005 Amendment of the CPPNM
Netherlands	1	2	0	Proposal for international tribunal in the Netherlands to try countries suspected of supplying nuclear materials to terrorists.[6]
Belgium	1	0	0	Contributing \$300,000 to IAEA's Nuclear Security Fund.
South Africa	0	1	0	
Poland	1	0	0	
Ukraine	1	0	0	Removing all HEU by next Summit—half of it by year's end.
Italy	1	0	0	Signed a Megaports agreement with the United States to install radiological detection equipment at seaports; establishing a school of nuclear security in Trieste, in collaboration with the Abdus Salam International Center for Theoretical Physics and the IAEA, to train nuclear personnel from developing countries.

10-100 kg

COUNTRY	HEU RR [2]	CONVERTED RR [2]	CIVIL PU	NATIONAL COMMITMENTS ANNOUNCED [4]
			HOLDINGS [3]	
Israel	1	0	0	
Pakistan	1	1	0	
Mexico	1	0	0	Converting a HEU research reactor and eliminating remaining HEU working through IAEA.
Czech Republic	1	1	0	

1-10 kg

COUNTRY	HEU RR [2]	CONVERTED RR [2]	CIVIL PU HOLDINGS [3]	NATIONAL COMMITMENTS ANNOUNCED [4]
Argentina	0	2	0	Joined the GICNT; moving toward the ratification of the ICSANT and 2005 Amendment of the Convention on Physical Protection of Nuclear Materials.
Switzerland	1	0	<0.05	
Chile	1	1	0	Removed all HEU (18 kg) in March 2010.
Nigeria	1	0	0	
India	1	0	6.4	Announcing the creation of a Nuclear Energy Center with a nuclear security component.

< 1 kg

COUNTRY	HEU RR [2]	CONVERTED RR [2]	CIVIL PU HOLDINGS [3]	NATIONAL COMMITMENTS ANNOUNCED [4]
Australia	0	1	0	Moving toward the ratification of the ICSANT.
Brazil	0	1	0	
Georgia	0	0	0	Signed instrument of approval for ICSANT on April 7, 2010.
Indonesia	0	0	0	
Norway	0	0	0	Contributing \$3.3 million over the next four years to the IAEA nuclear security fund (flexible funds for use for activities in developing countries); contributing \$500,000 in additional support to Kazakhstan's efforts to upgrade portal monitors to prevent nuclear smuggling as part of the GICNT.
Philippines	0	1	0	Joining the GICNT.
Republic of Korea	0	0	0	Hosting 2012 Nuclear Security Summit; hosting a Global Initiative activity.
Spain	0	0	0	
Sweden	0	2	0	

Thailand	0	0	0	Joining the GICNT.
Turkey	0	1	0	
Vietnam	0	1	0	Converting a HEU research reactor; joining the GICNT.

0 kg

COUNTRY	HEU RR [2]	CONVERTED RR [2]	CIVIL PU HOLDINGS [3]	NATIONAL COMMITMENTS ANNOUNCED [4]
Algeria	0	0	0	
Armenia	0	0	0	Ratified ICSANT; passed new export control law.
Egypt	0	0	0	Passed new comprehensive nuclear law in March 2010 that includes nuclear security, criminalization of sabotage and illicit trafficking provisions as well as envisaging an independent regulatory authority.
Finland	0	0	0	Invited an IPPAS security review from the IAEA.
Jordan	0	0	0	
Malaysia	0	0	0	Passed new export control law.
Morocco	0	0	0	
New Zealand	0	0	0	Contributing to IAEA's Nuclear Security Fund; contributing to the U.S. Nuclear Smuggling Outreach Initiative.
Saudi Arabia	0	0	0	Hosting a UNSCR 1540 conference for Gulf Cooperation Council
Singapore	0	0	0	
United Arab Emirates	0	0	0	

Sources:

[1] See NTI [HEU Map](#)

[2] Ole Reistad and Styrkaar Hustveit, "HEU Fuel Cycle Inventories and Progress on Global Minimization," *The Nonproliferation Review*, July 2008, Vol. 15, No. 2, pp. 266-287, www.nonproliferation.org.

[3] A. Glaser, Table 8A.2, "Global stocks of separated plutonium, SIPRI Handbook 2009: Armaments, Disarmament and International Security," www.princeton.edu.

[4] Text taken verbatim from "Highlights of the National Commitments made at the Nuclear Security Summit" except for the United States which was taken from [5], www.whitehouse.gov.

[5] Nuclear Security Summit National Statement of the United States, www.whitehouse.gov.

[6] Not announced as part of [4] but announced in the national press.