

East Asia Science & Security Network Report, May 23, 2007

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1. DPRK 2005 Energy Balance

The Nautilus Institute, in cooperation with the Korea Energy Economics Institute, released a draft report with an updated analysis of the DPRK Energy Sector, including an estimated DPRK Energy Supply-Demand Balance table for 2005, and suggestions of options for the international community to engage the DPRK on energy security issues. The report found evidence of some improvement in the DPRK's energy sector since the last update to the energy analysis in 2000, but substantial energy sector problems in the DPRK remain.

DPRK Energy Futures

DPRK 2005 Attachments

2. US CO2 Emission Reductions

The Electric Power Research Institute (EPRI) conducted an analysis of the potential for significant CO2 reductions from the U.S. electric power sector within the next 25-30 years. The study found that while no single technology constituted a "silver bullet," it is possible using a combination of approaches to slow, stop, and eventually reduce CO2 emissions in the coming decades, while at the same time meeting growing power demands.

Executive Summary

Full Report

3. Japanese Biofuel Plans

OhmyNews International (Hisane Misake, "Roadblocks to Japan's Biofuel Goal," 5/12/07) reported that the Japanese government's goal to save 500,000 kiloliters of crude oil annually by 2010 through by increasing the use of biofuel is facing several obstacles. Not the least among these is the country's limited capacity for domestic production, and thus reliance on imports in an market where demand outstrips supply.

Roadblocks to Japan's Biofuel Goal

4. Nuclear Power Increase

The International Herald Tribune (James Kanter, "Climate change puts nuclear energy into hot water," 5/20/07) reports that while nuclear energy is being touted as a possible solution to climate change, global warming threatens to cause a shortage of cool water necessary for operating reactors.

Climate change puts nuclear energy into hot water

The New York Times (Matthew Wald, "A Nuclear Reactor Reborn," 5/11/07) reported that the government's decision to restart the Brown's Ferry nuclear reactor, which was shut down 22 years ago for safety reasons, indicates the difficulties expected in getting regulatory clearance to open new plants. The \$1.8 billion spent refurbishing the reactor is almost equal to the cost of a new plant.

A Nuclear Reactor Reborn

5. Criticism of GNEP

The Sydney Morning Herald ("Partner plan shares benefits and risks," 5/19/07) reported that the Bush administration's Global Nuclear Energy Partnership idea is coming under attack from both nonproliferation experts and countries that are being asked to forgo uranium enrichment, for promoting double-standards in nuclear proliferation.

Partner plan shares benefits and risks

6. Tidal Power Generation

Technology Review ("Tidal Turbines Help Light Up Manhattan," 4/23/07) reported that six turbines are being submerged off New York's Roosevelt Island to generate electricity from the rapid tidal currents in the East River. Unlike traditional tidal barrages, the new turbines don't have any major impact on tidal flow, although there are some concerns about the danger they may pose to fish.

Tidal Turbines to Light Up Manhattan

7. Securing Electric Power Grids

Reuters ("Attack-Proof Power Lines to be Installed Under NYC," 05/21/07) reported that Consolidated Edison and American Superconductor Corp. have agreed to install a superconducting power line underneath New York City to make the city's power grid less vulnerable to an attack or extreme weather.

Attack-proof power line to be installed in NYC

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