1. Climate Change Spurs Insecurity

In its fourth assessment report, released on April 6, 2007, the Intergovernmental Panel on Climate Change focuses on the likely impact of human-induced climate change on global populations. The report sees millions of people affected by land loss, water shortage, and new disease vectors, consequently greatly increasing the potential for conflict.

IPCC Fourth Assessment Report

http://www.ipcc.org

The United Kingdom has proposed that the United Nations Security Council hold a debate on April 17 on the relationship between energy, security, and climate change. This brief concept paper outlines some of the potential causes of conflict from climate change, including border disputes, migration, energy and other supply shortages, societal stress, and humanitarian crises.

UK concept paper on energy, security, and climate change

National Public Radio's Morning Edition ("Study: 634 Million People at Risk from Rising Seas," 3/28/07) reported that a new study determined that nearly 1/10th of the global population live in low-elevation coastal zones, and thus are at high risk from rising sea levels. An audio file of the broadcast is available on the website.

The Rising Tide

2. Detecting Nuclear Materials

The latest bulletin from the International Network of Scientists and Engineers Against Nonproliferation (INESAP) includes a series of essays resulting from a study on the detection of clandestine nuclear weapons processing conducted by the independent Group of Scientific Experts (iGSE). The project brought together 22 experts from nine countries to study the problems and possible solutions to detecting secret nuclear weapons programs.


3. Dealing with Excess Plutonium

Writing in the April 2007 edition of Arms Control Today, Matthew Bunn (“TroubledDisposition: Next Steps in Dealing With Excess Plutonium”) notes that the projected schedules for Russia and the United States to get rid of their excess plutonium have slipped by more than seven years while costs have increased dramatically. He argues that to bring the security benefits of disposition in line with the mounting costs, it should be applied to far greater quantities of plutonium than thus far, as part of a broader pursuit of deep and irreversible nuclear arms reductions.


4. International Oil and Gas Markets

The Energy Charter Secretariat released a report on “International Pricing Mechanisms for Oil and Gas.” The study notes that while oil has developed all the features of a global commodity market, strong variations remain in the pricing mechanisms for natural gas in different regional and national markets. The study explores reasons for these difference, and also examines the role of liquified natural gas in providing a link between different markets.

Putting a Price on Energy

5. Japanese Energy Consumption and Supply

Writing in Japan Focus, Vaclav Smil (“Light Behind the Fall: Japan’s Electricity Consumption, the Environment, and Economic Growth”) notes that despite averaging only 1.1% annual GDP growth over the past 15 years, Japan’s primary energy consumption actually increased by 17%. The article explores several factors that contributed to the growth in energy intensity in Japan over that period, including increasing use of electricity in the home.

Light Behind the Fall

OhmyNews International (Hisane Misaki, "Japan Pumps Funds Into Energy Drive," 04/03/07) reports that Japan’s New National Energy Strategy calls for increasing the ratio of oil produced and imported by domestic companies to 40% by 2030 from the current 15%. To achieve this goal, the strategy calls for stresses the importance of the government "drastically strengthening the supply of risk money" related to the exploration and development of overseas oil and natural-gas reserves by domestic development companies.

Japan Pumps Funds Into Energy Drive

6. Security Implications of Population Changes

Jack Goldstone, George Mason University Hazel Professor of Public Policy, at a conference hosted by
the Environmental Change and Security Program of the Woodrow Wilson Center on Feb. 27, 2007, warned that if current demographic trends of high population growth in developing countries and imminent population decline in developed ones hold, it could pose significant security challenges. But Goldstone said that governments that adopt immigration policies reflecting demographic realities can overcome the challenges of global population changes. The website includes Goldstone’s paper and presentation, and a video of the event.

Flash Points and Tipping Points

7. Greenhouse Gas Detection

SwissInfo (“Greenhouse gas makes its presence felt,” 3/28/07) reported that, from a monitoring station high up in the Swiss Alps, Swiss scientists have been able to detect the presence of Hydroflourocarbons (HFCs) as far away as Tasmania. While HFCs are considered less harmful than CFCs, since they don’t attack the ozone layer, the scientists warn that they could cause problems for global warming in the future.

Greenhouse gas makes its presence felt

The East Asia Science and Security Network (EASSNet) delivers timely news and innovative research across a range of issues relating to science and security, including energy security, biosecurity, nano-technology, nuclear fuel cycle, missile technology, and information technology, especially within the East Asia region. The network draws on research from Nautilus Institute and its partners in China, Japan, South Korea, Russia, Australia, and North Korea, as well as grantees of the MacArthur Foundation, of MacArthur Foundation, Ploughshares Fund, New Land Foundation, Korea Foundation, Ford Foundation, and US Department of Energy. The service provides researchers, journalists, and policymakers access to and understanding of developments beyond their own disciplinary, academic, or industrial communities.

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Nautilus Institute
2342 Shattuck Ave. #300, Berkeley, CA 94704 | Phone: (510) 423-0372 | Email: nautilus@nautilus.org