
NARUC WINTER COMMITTEE MEETINGS

Committee on Energy Resources and the Environment

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Washington, D.C.

Political Developments in the Climate Change Debate

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The International Perspective

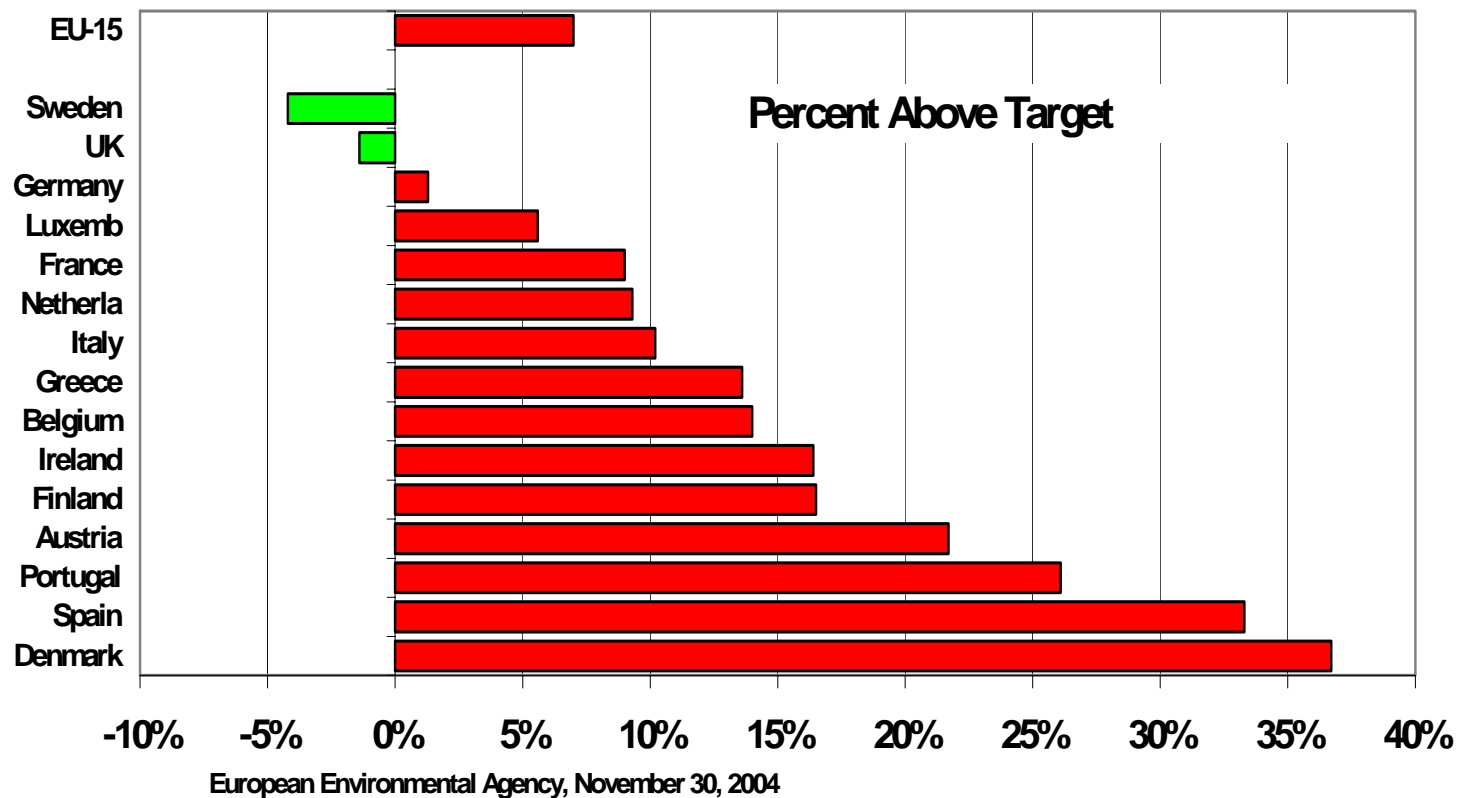
- **Congressional Budget Office: over the next 20 years, developing countries will account for 2/3 of the growth in CO₂ emissions**
- **U.K. PM Blair (Jan. 27, 2005): Developing countries' coal plant CO₂ emissions could exceed OECD power sector CO₂ emissions by 2030**
 - China: 562 coal plants; ½ by 2012
 - India: 213 coal plants
 - U.S.: 72 coal plants of 100 under development (Platts)

The International Perspective (continued)

- **Possible baseload responses:**
 - Barriers to development (economic, cost recovery, siting)
 - Air emissions equipment controls
 - Clean coal technology -- supercritical PC, IGCC, FutureGen
 - Nuclear, hydro

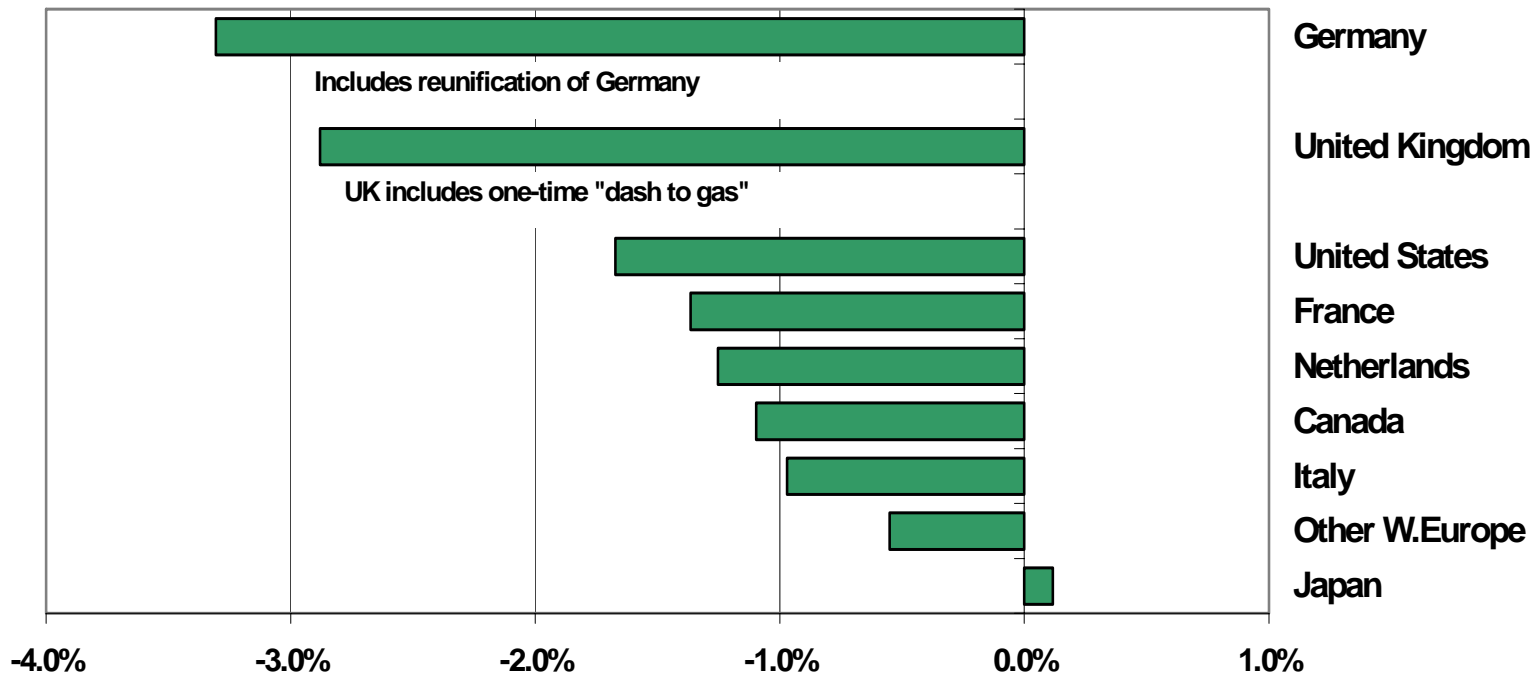
Even European Environmental Agency Says Most EU Countries Are Way Above Target

EEA "Existing Measures" Projection for 2010



US Making Strong Progress Reducing Carbon Intensity of GDP

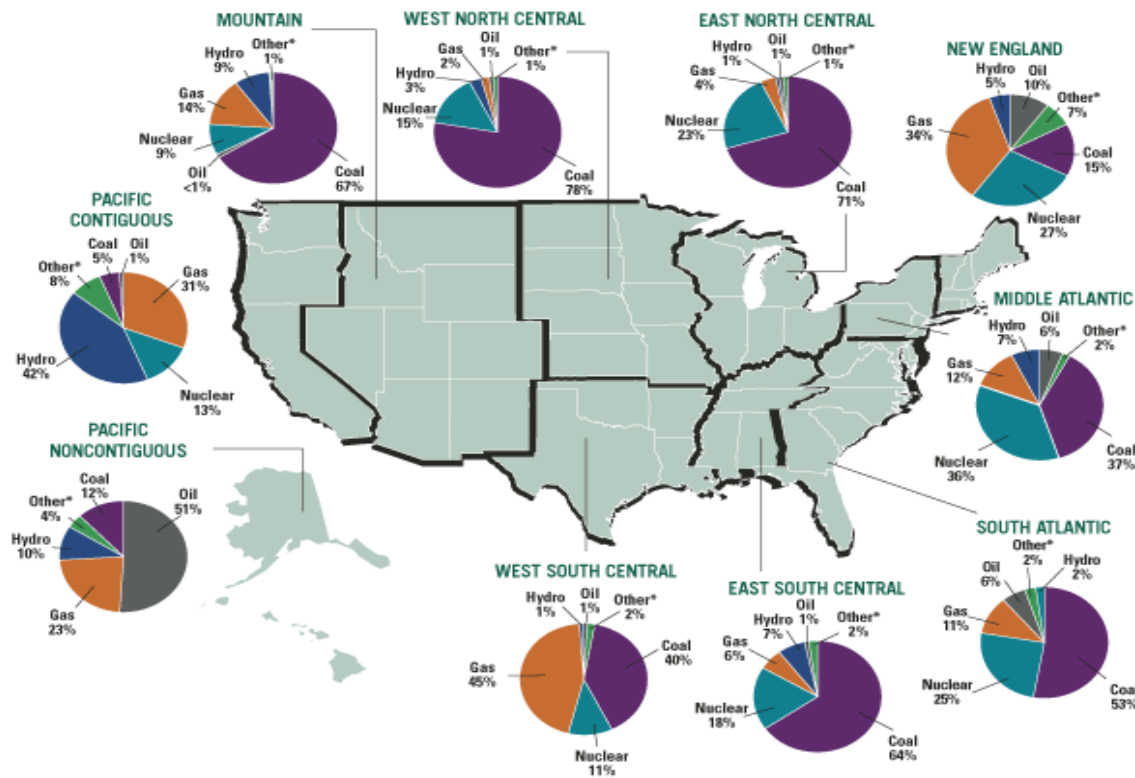
1990-2001 Annual Average % Change



EIA, *International Energy Outlook 2004*

The National Perspective: Regional Fuel Diversity

Different Regions of the Country Rely on Different Fuel Mixes to Generate Electricity.



Across the U.S., a diverse mix of fuel is used to generate electricity. Several factors influence an electric company's decision to use particular fuels. These include the price and the availability of supply. This map, arranged by census region, illustrates the diversity of fuel use across the U.S. and shows how the electricity generation mixes in various regions of the country differ. The map further demonstrates that major changes in the generation mix could have economic and reliability impacts, especially on a regional basis.

Some numbers may not equal 100% due to rounding.

* "Other" includes generation by agricultural waste, landfill gas recovery, municipal solid waste, wood, geothermal, non-wood waste, wind, and solar.

Source: Energy Information Administration, Annual Electric Generator Report, Utility and Non-Utility Data (2005 Preliminary). By U.S. Census Division.

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U.S. Regional and State Issues

- **Federal v. state approaches to greenhouse gases**
 - U.S. EPA and D.C. Circuit litigation
 - New Jersey DEP and New Jersey bill
- **Regional Greenhouse Gas Initiative and West Coast Governors' Global Warming Initiative**
 - Constitutional issues
 - Political issues
 - Implementation issues
- **Bottom line:** Global climate change is an international phenomenon that merits international and national approaches

What the U.S. Power Sector Is Doing

- **Continuing successes of voluntary programs**
 - Climate Challenge: 281 mmtCO₂e reductions, avoidances and sequestrations by the power sector, or 67% of reported tons in 2002
 - Carbon intensity in the power sector decreased about 10% from 1980 to 2004
- **Climate VISION's Power Partnerssm**
 - MOU signed with DOE on December 13, 2004; Work Plan to be implemented
 - Goal is to decrease power sector carbon intensity the equivalent of 3-5% over a decade

Technology Responses

- **Climate technology R, D & D and transformational technologies**
- **Power sector:**
 - Advanced clean coal and geologic sequestration (carbon capture and storage)
 - Nuclear energy
 - Renewables
 - Fuel switching?

Technology Responses (continued)

- **Transportation sector**
 - Hybrid electric vehicles, etc.
 - Freedom Car

- **Industrial and commercial sector**
 - Fuel cells
 - Hydrogen economy

What NARUC Can Do

- **Participate in sustainable development**
 - U.N. Commission on Sustainable Development
 - 1.4 billion people still projected to lack electricity by 2030
- **Participate in U.N. Framework Convention on Climate Change**
 - International technology transfer
 - Help facilitate “activities implemented jointly” under FCCC (i.e., international energy and forestry projects)