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Energy 2004 – Plug Into What's New



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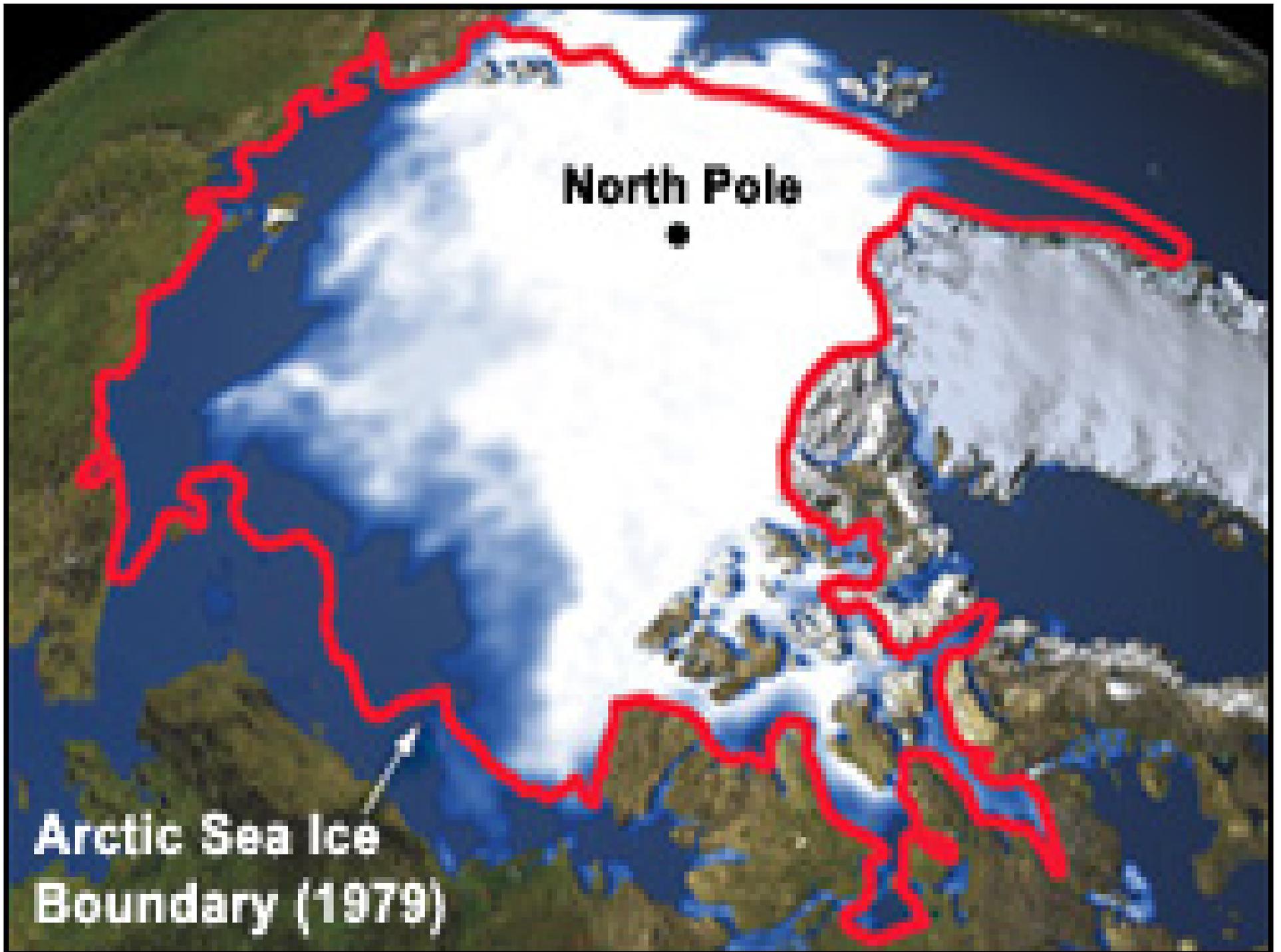
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Overview

- Background
- Energy Center Products & Services – What's New
 - ✓ Public Utilities Program
 - ✓ Natural Gas Acquisition Program
 - ✓ Competitive Electricity
 - ✓ Renewable Power
 - ✓ Energy Continuity Planning
- Wrap Up

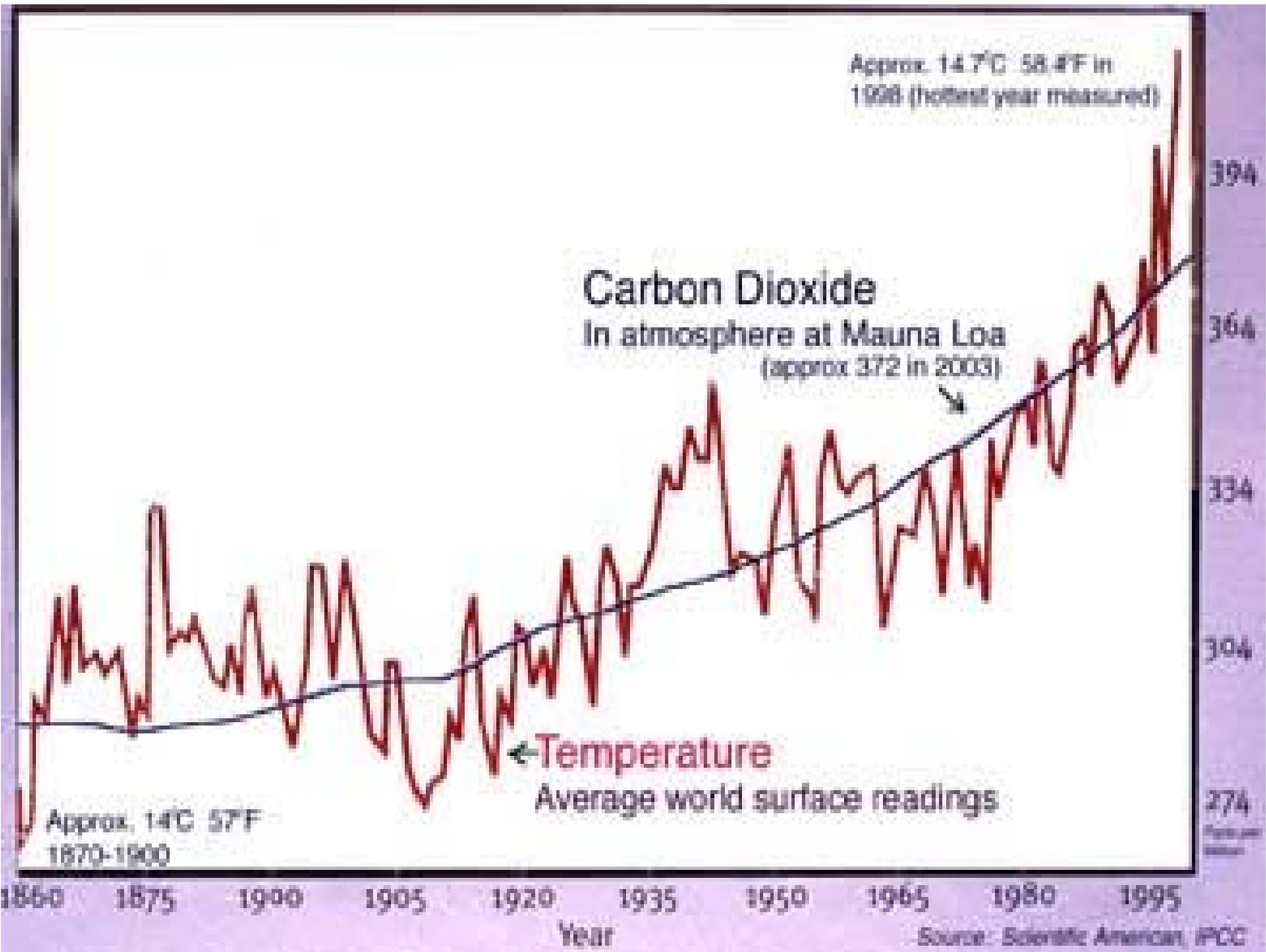
Background

- Why do we need to constantly upgrade our capabilities?
- When have we done enough?



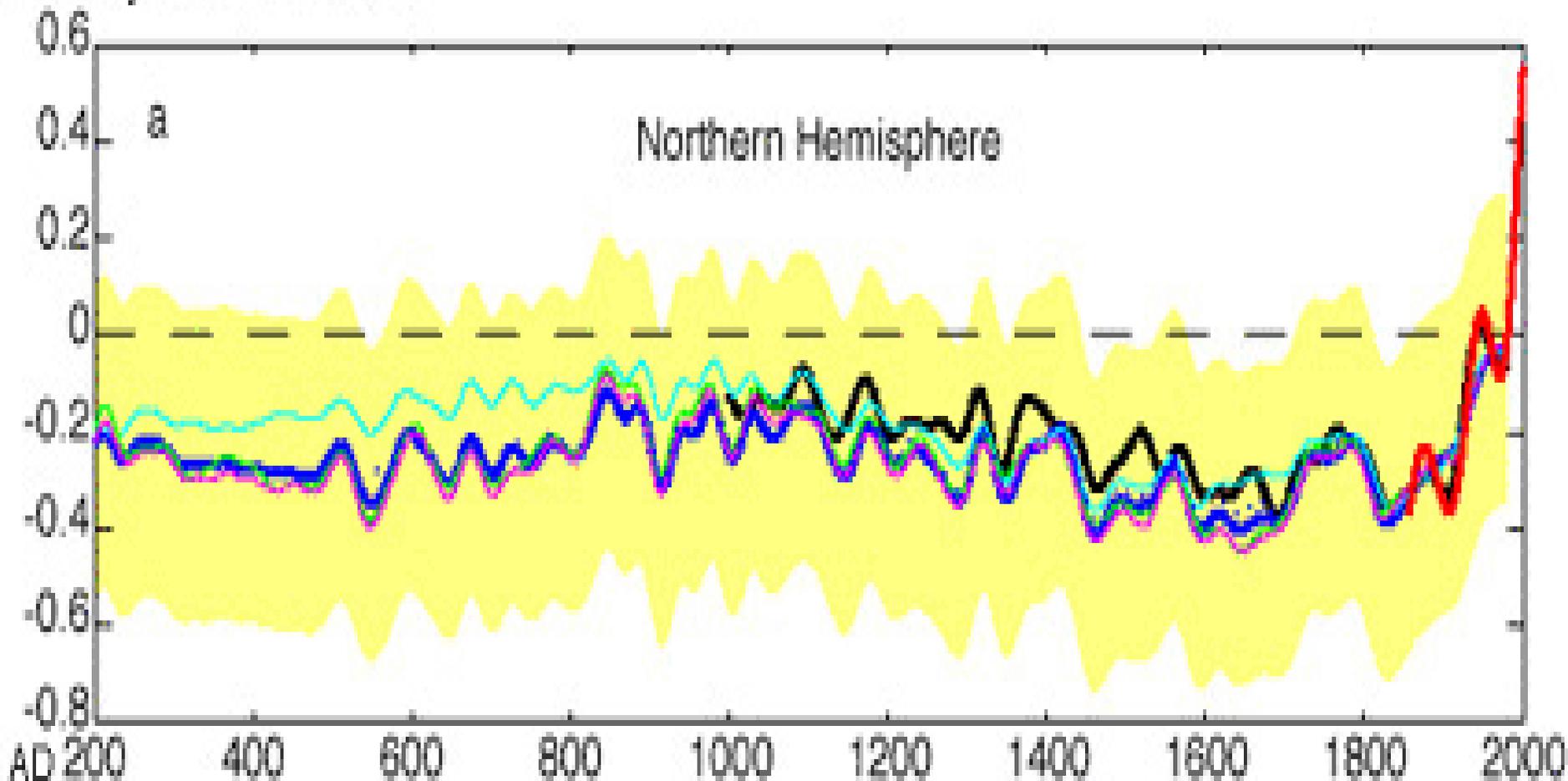


Chicago July 1995 - © Gary Braasch



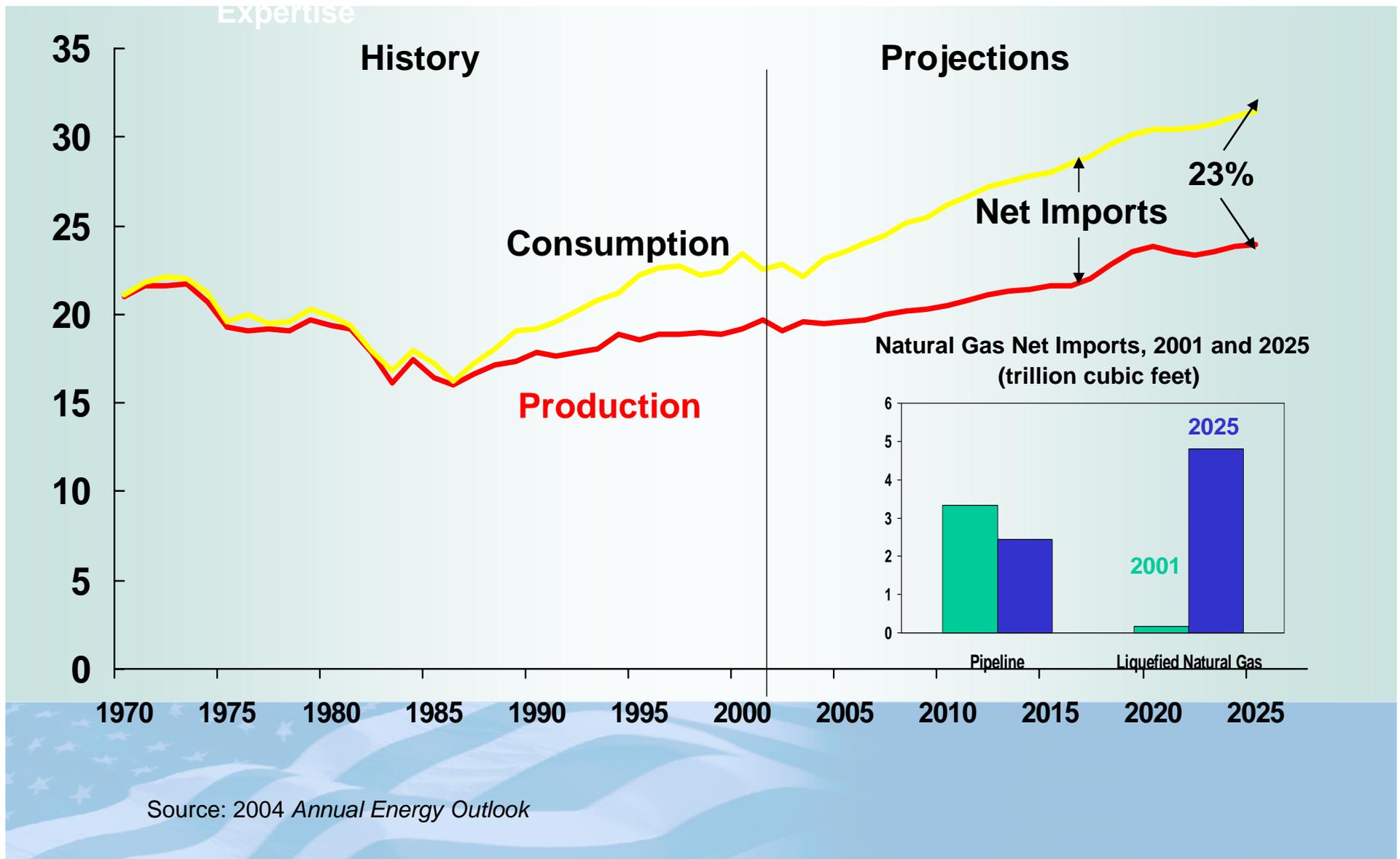
Degree C

anomaly from 1961-90 norm

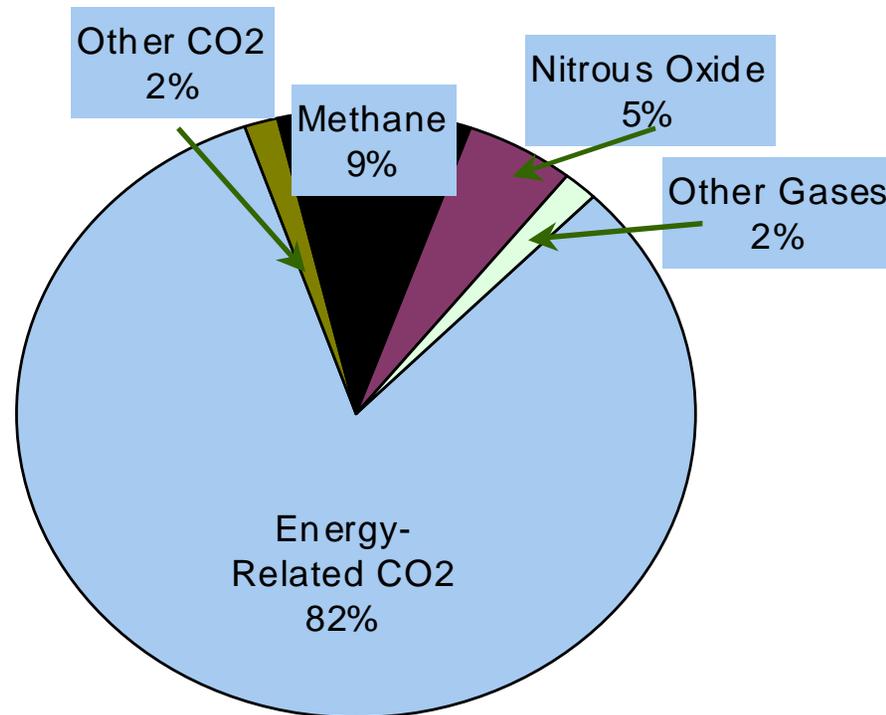


Temperatures AD 200-2000, from proxy temperature indicators and direct measurement (red), showing rise from from long-term cooling trend. Mann & Jones, *Geophys. Research Letters*, 2003.

Natural Gas Production, Consumption, and Imports, 1970 - 2025 (trillion cubic feet)



Energy-related Carbon Dioxide Emissions Are the Predominant Source of U.S. Greenhouse Gas Emissions



In 1990 energy-related CO2 was 79%, Other CO2 2%, Methane 12%, Nitrous Oxide 6% and Other Gases 1%

Source: EIA, *Emissions of Greenhouse Gases in the United States 2001*

1) The measure must produce measureable energy or water reductions or measurable amounts of demand reduction:

2) Language may be included in negotiated Authorizations that secures guarantees of the energy and/or cost savings similar to that language commonly found in ESPCs. The method of savings guarantee can be as simple as using an engineering estimate of savings, however, savings must be measured and verified using the DOE M&V protocol.

- ✓ New definition of Demand Side Management
- ✓ Measurement and Verification required

Natural Gas Acquisition D

- ✓ New reverse auction bidding
- ✓ New pricing strategy increasing the number of auctions - **150**
- ✓ More contractors - **19**
- ✓ More federal accounts - **318**
- ✓ Total estimated decatherms under procurement – **11,053,550**
- ✓ Total estimated dollar cost - **\$62,999,510**

Each account is auctioned for both a baseload and indexed price

Competitive Electricity

- ✓ New PJM contract includes implicit demand response incentive
- ✓ Demand charges are based on each account's demand on the grid's peak summer days
- ✓ GSA will be alerting its PJM clients on anticipated peak summer days to shed/manage load (est. 10 days)

Renewable Power

- ✓ New Solicitation to purchase renewable energy
 - REC indexed to a market pricing point
 - GSA guarantees supplier receive fixed price for 10 years.
 - Annual REC Price = Guaranteed Minimum Price – (PJM West all hours avg. price (or similar index) + capacity price (if any value))



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Energy Security Planning

- ✓ New manual
- ✓ Upcoming workshops





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Energy Center of Expertise Website

- <http://www.gsa.gov/energy>

