

Overview of Electrical Generating Capacity
Now and in 2025
Current Regional Distributions and Projections of Total
Electrical Energy Requirements and the Portion met by
Coal – United States & Canada

Harold Garabedian

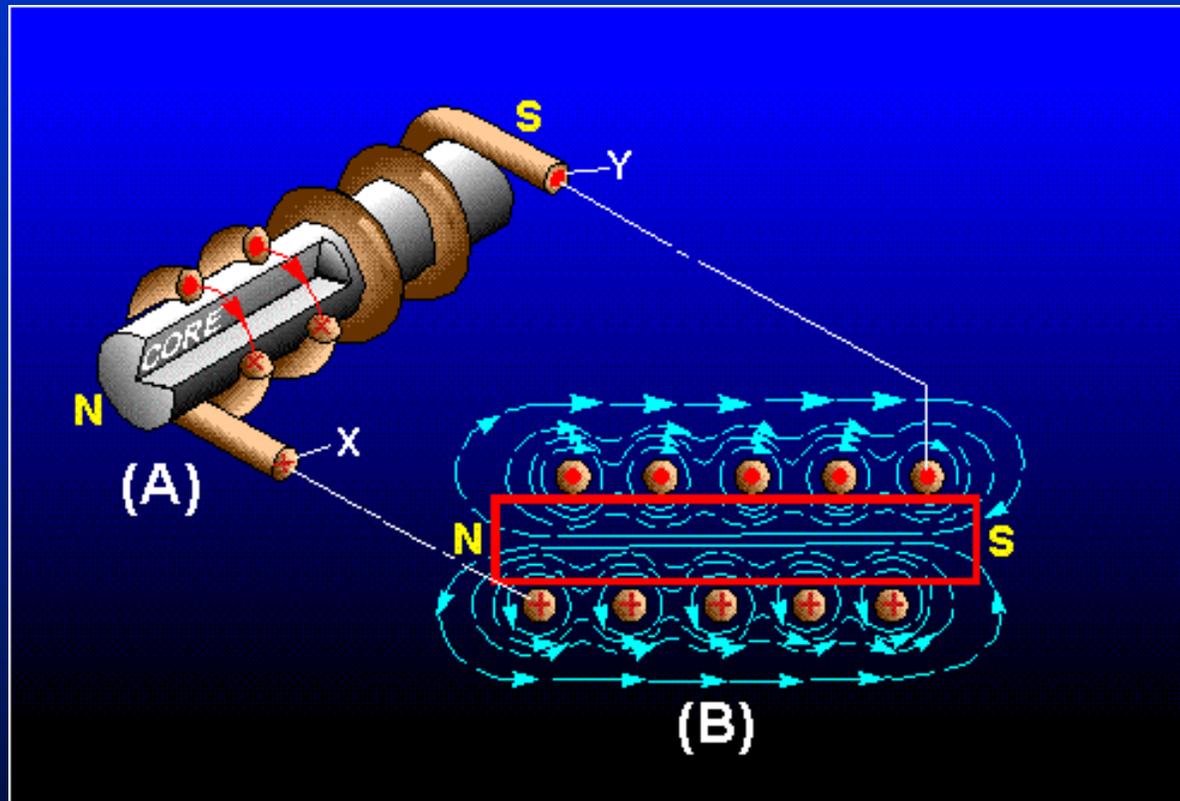
IAQAB

Vermont Agency of Natural Resources

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Electricity is a Secondary Form of Energy



Its made by spinning a magnet inside a coil of wire.

This is done in a variety of ways

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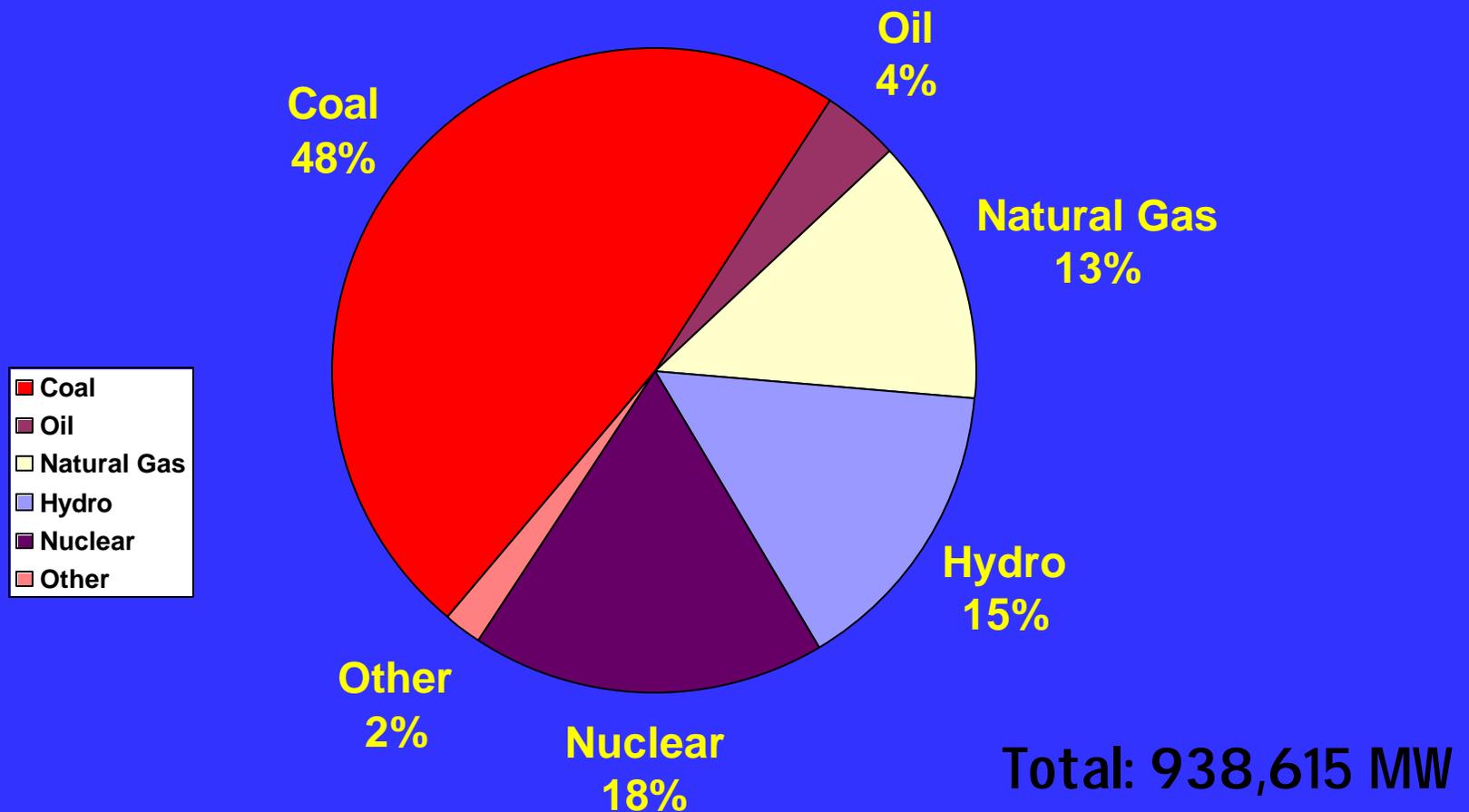


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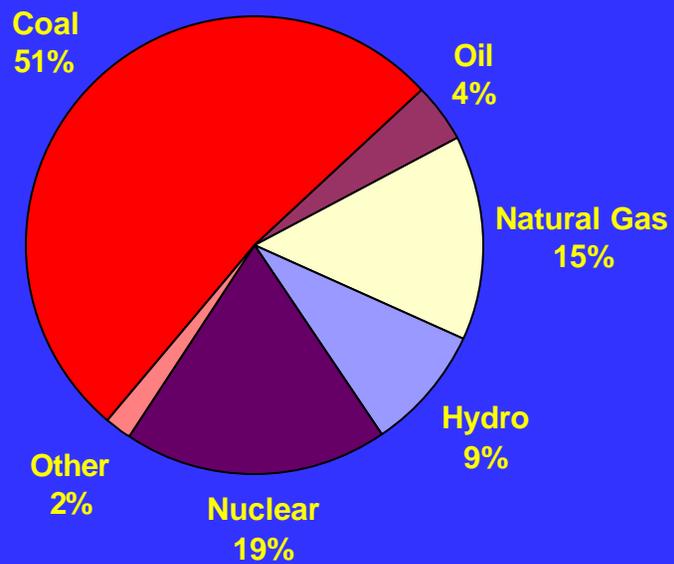
W
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Current Generation Mix: Canada and United States Combined



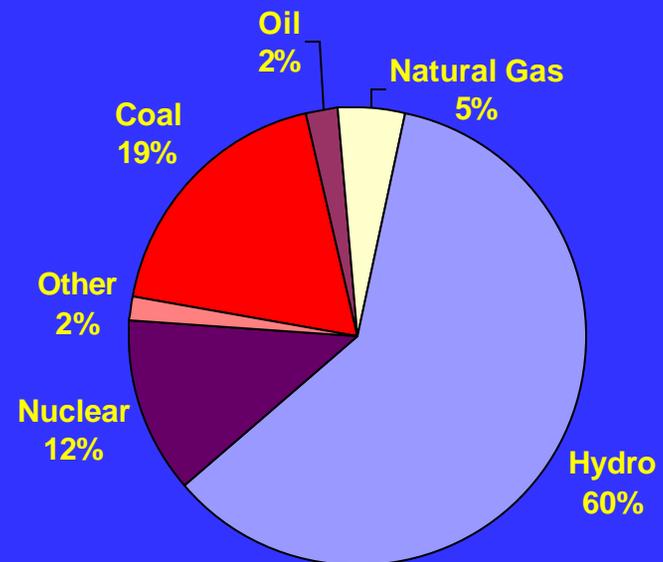
Generation Mix By Country:

United States



828,631 MW

Canada

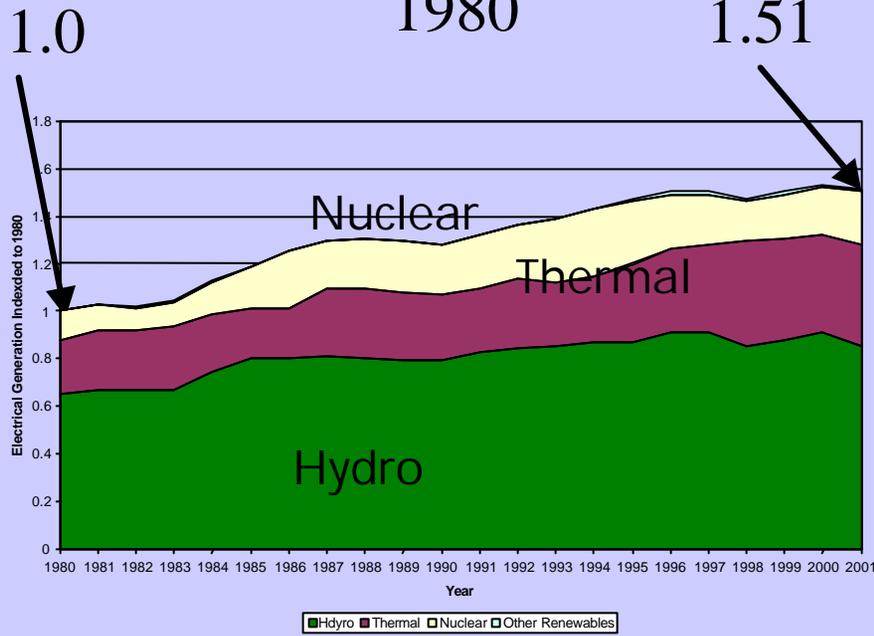


109,984 MW

Historical Growth in Cnd. Electricity Growth Index to

1980

1.51

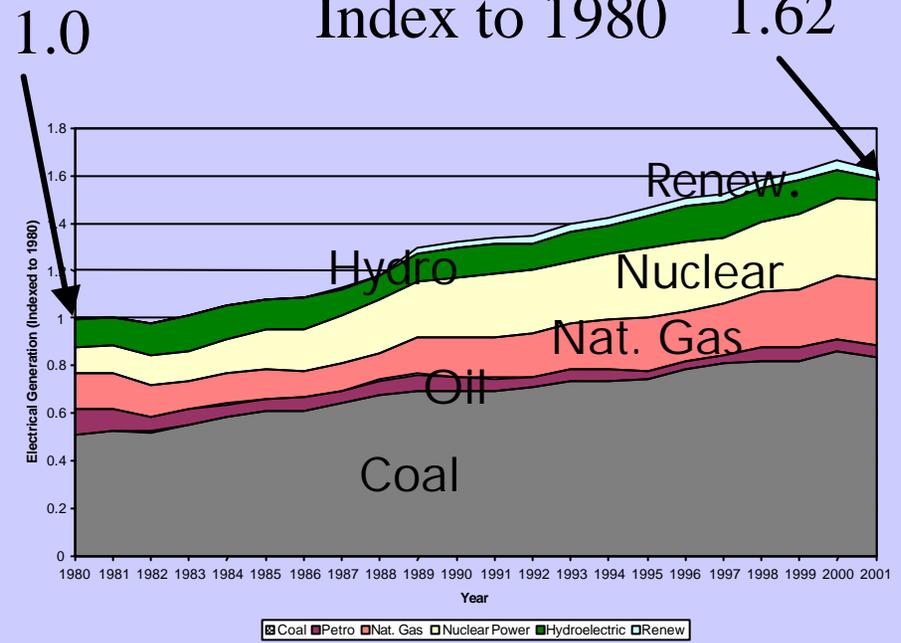


1980

2001

Historical Growth in U.S. Electricity Growth

Index to 1980 1.62

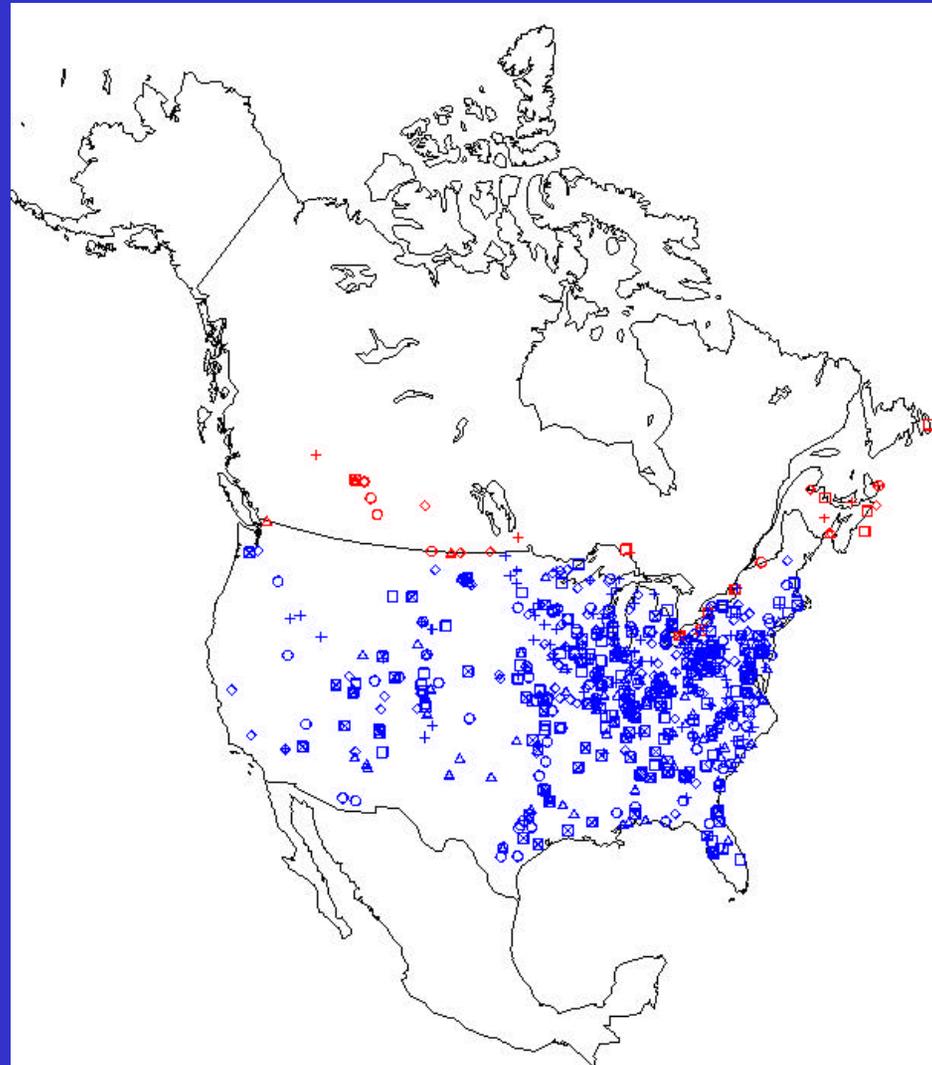


1980

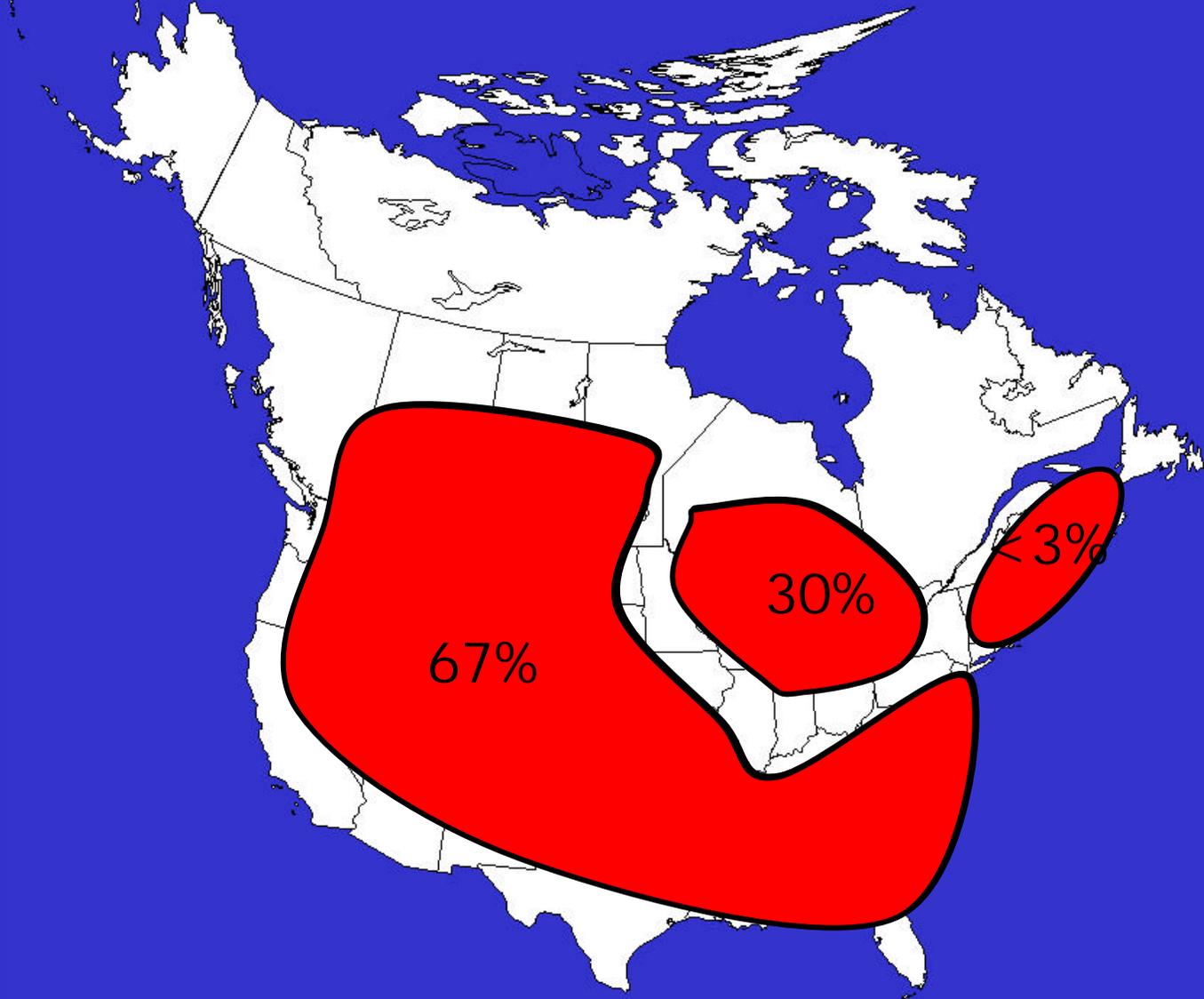
2001

Location of Fossil Fuel/Combustion Plants:

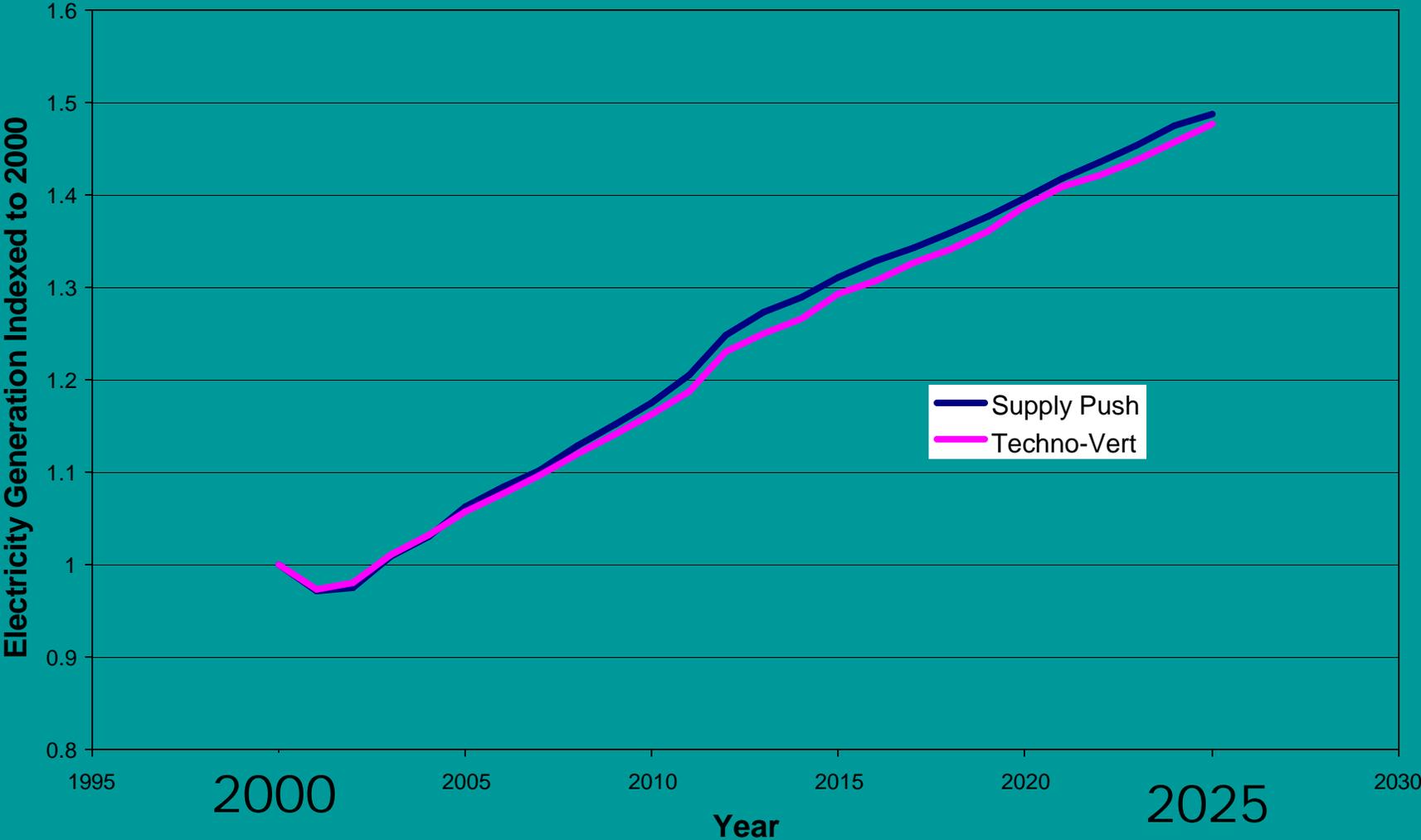
	US	CN
Coal	1,174	71
Nat. Gas	772	22
Oil	202	26
Other	216	3
TOTAL	2,208	121



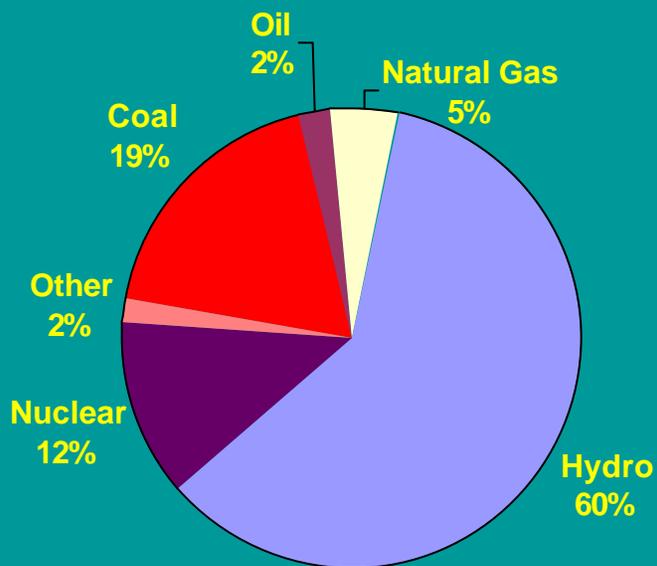
Where is Coal Consumed for Electric Power Generation in US & Cnd.?



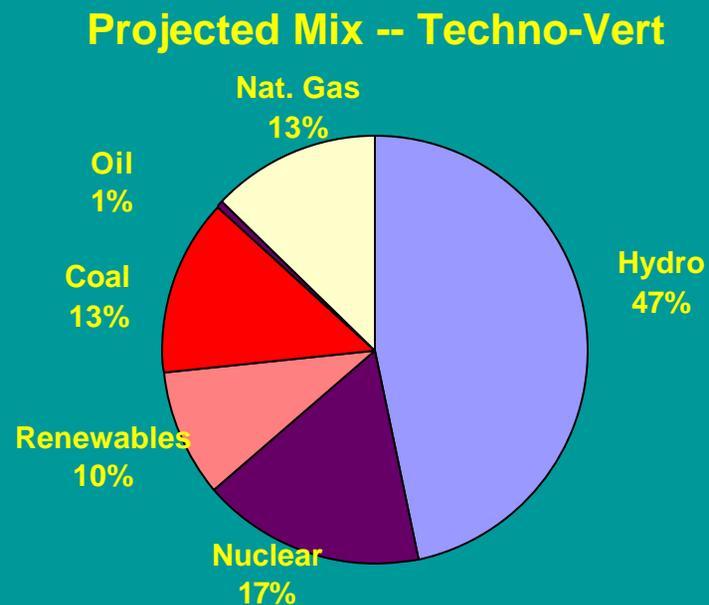
Growth In Canadian Electricity Generation 2000 - 2025



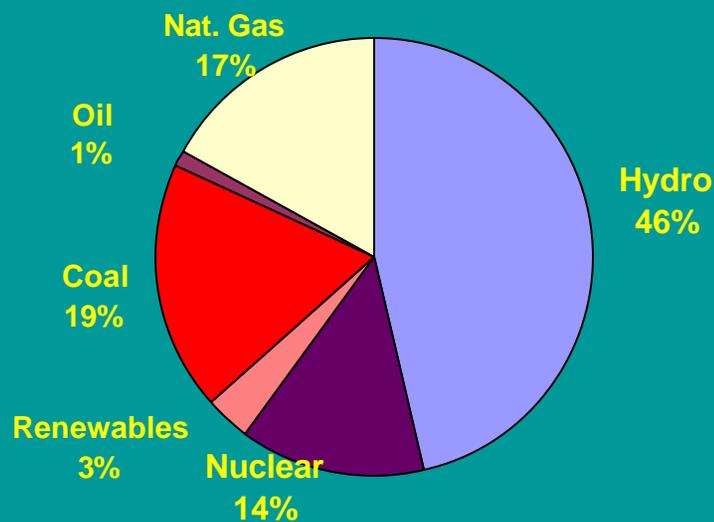
Canadian -- Current and Projected (2025) Electricity Generation Mix



Current

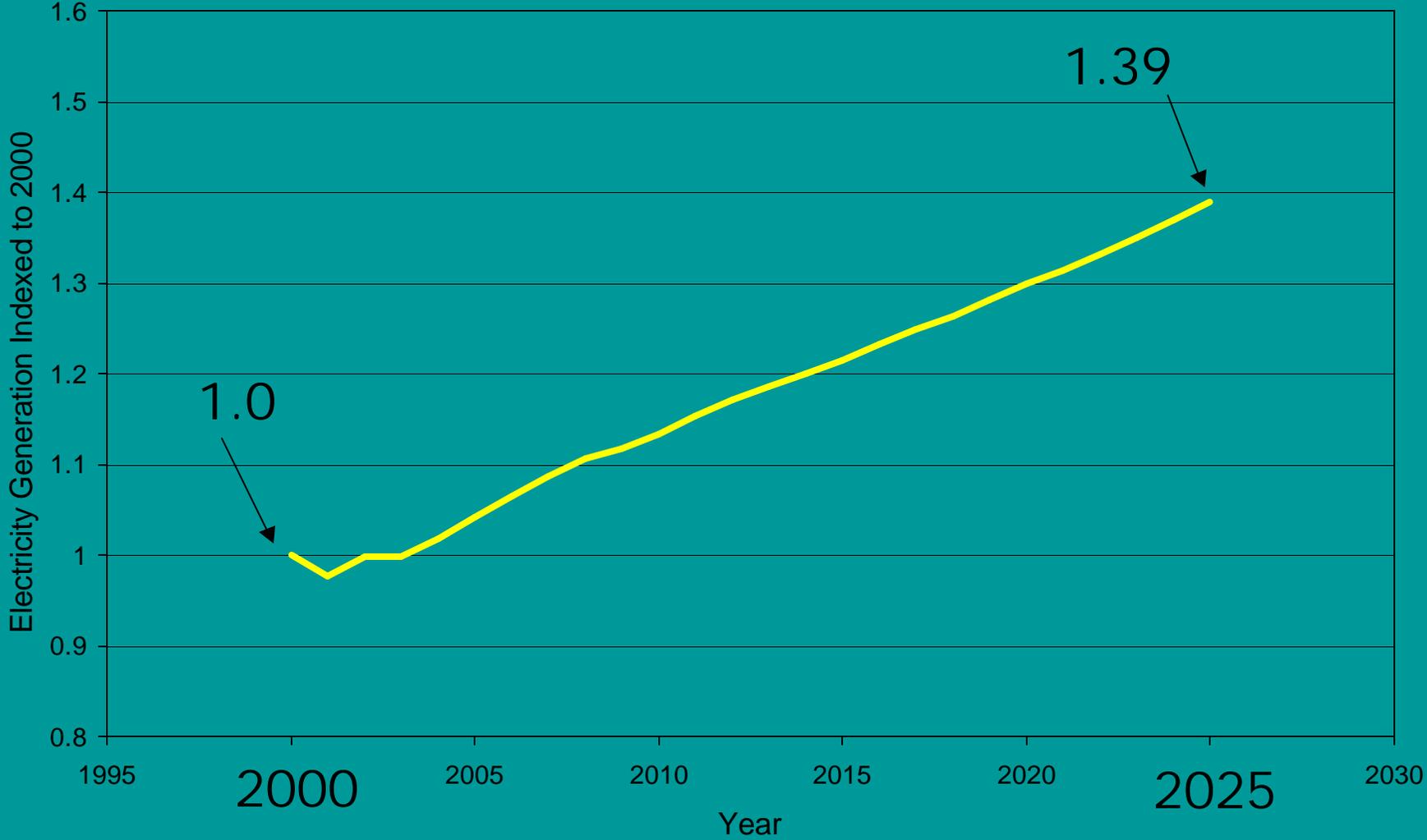


Projected Mix -- Techno-Vert



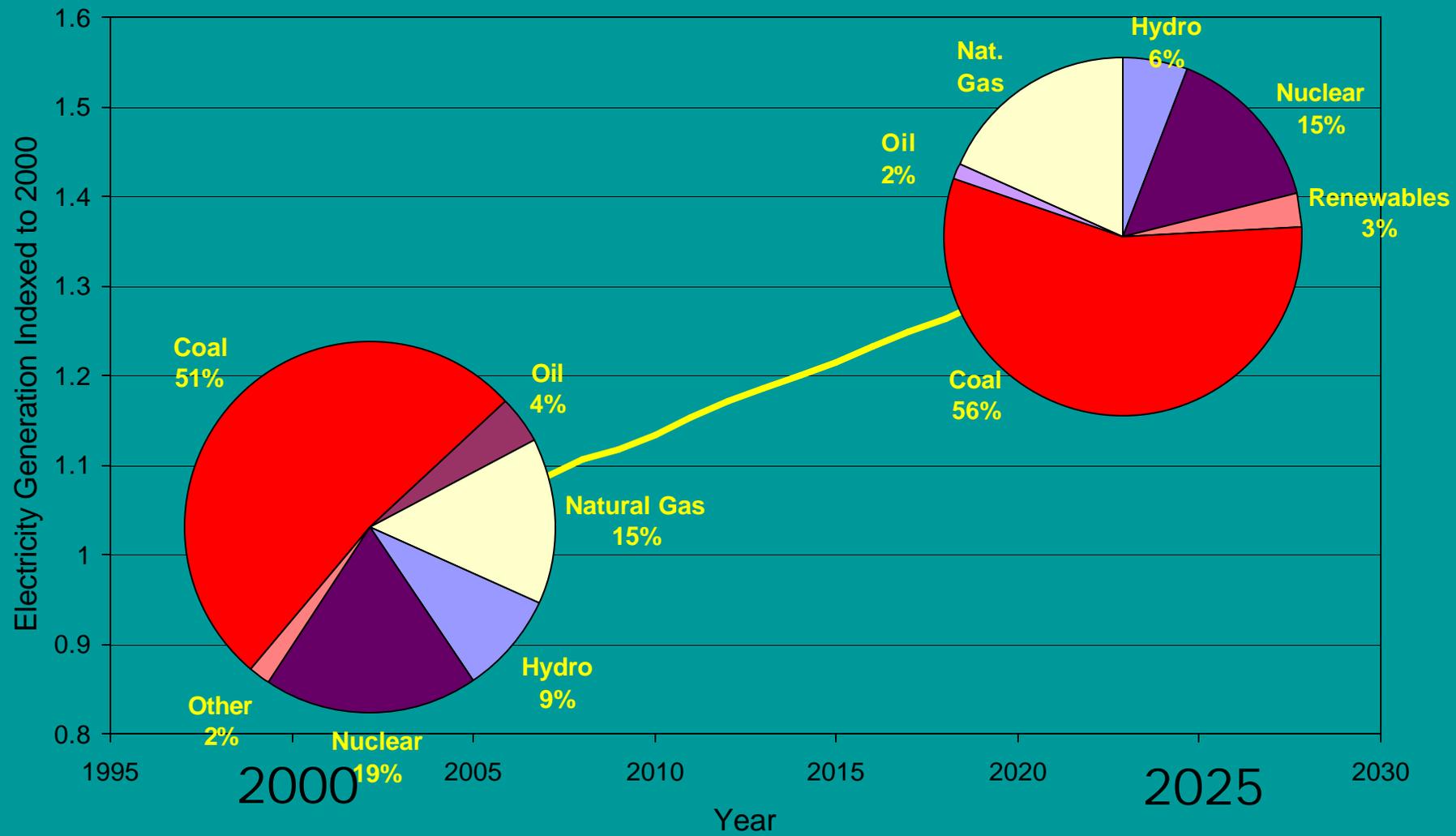
Projected Mix -- Supply Push

US Growth in Electricity Generation 2000-2005



US Growth in Electricity Generation 2000-2005

Projected Mix -- 2025



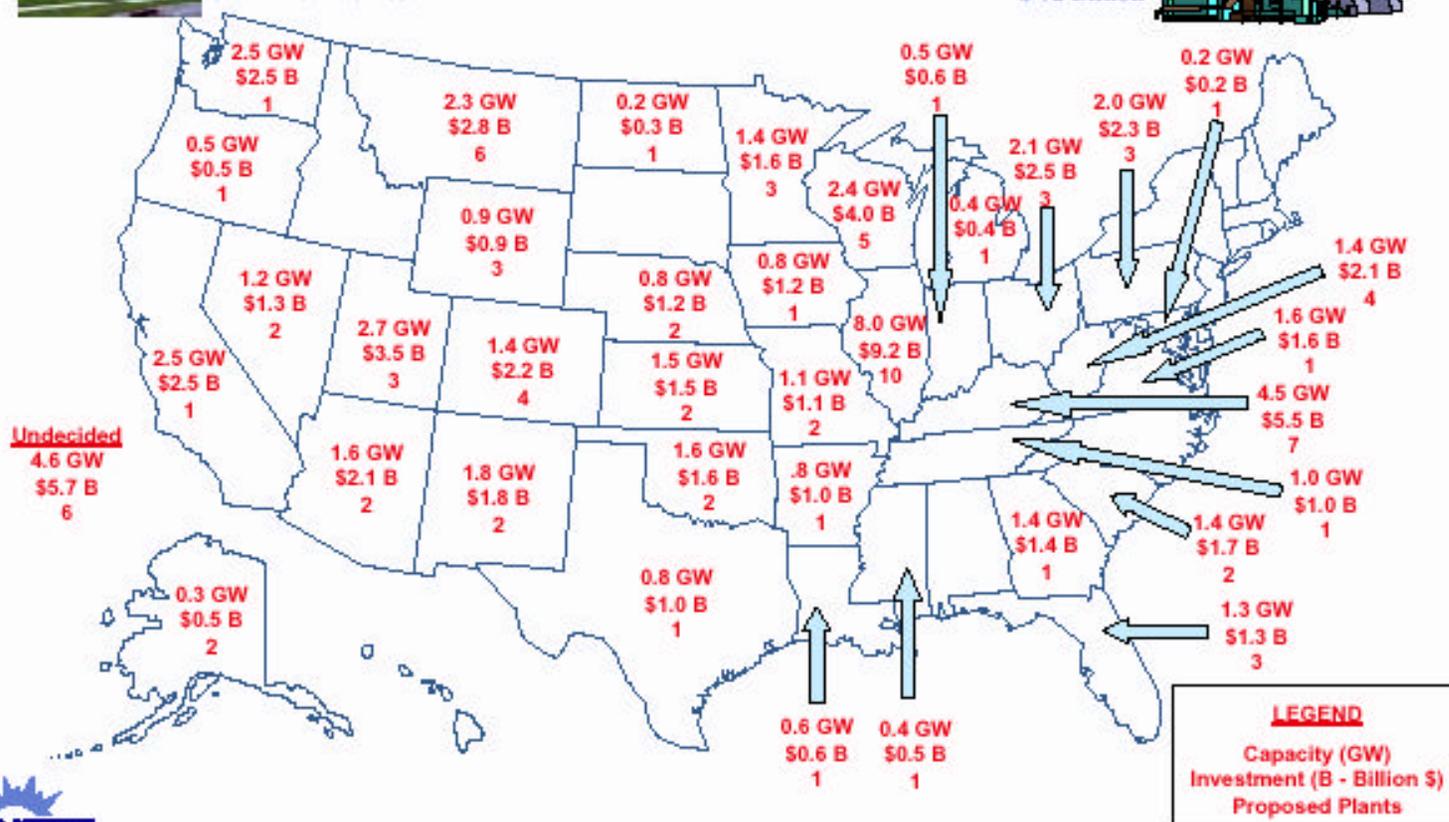
Coal's Resurgence in Electric Power Generation



Equivalent Power
for
61 Million Homes

Proposed New Plants

93 Plants
61 GW
\$ 72 Billion



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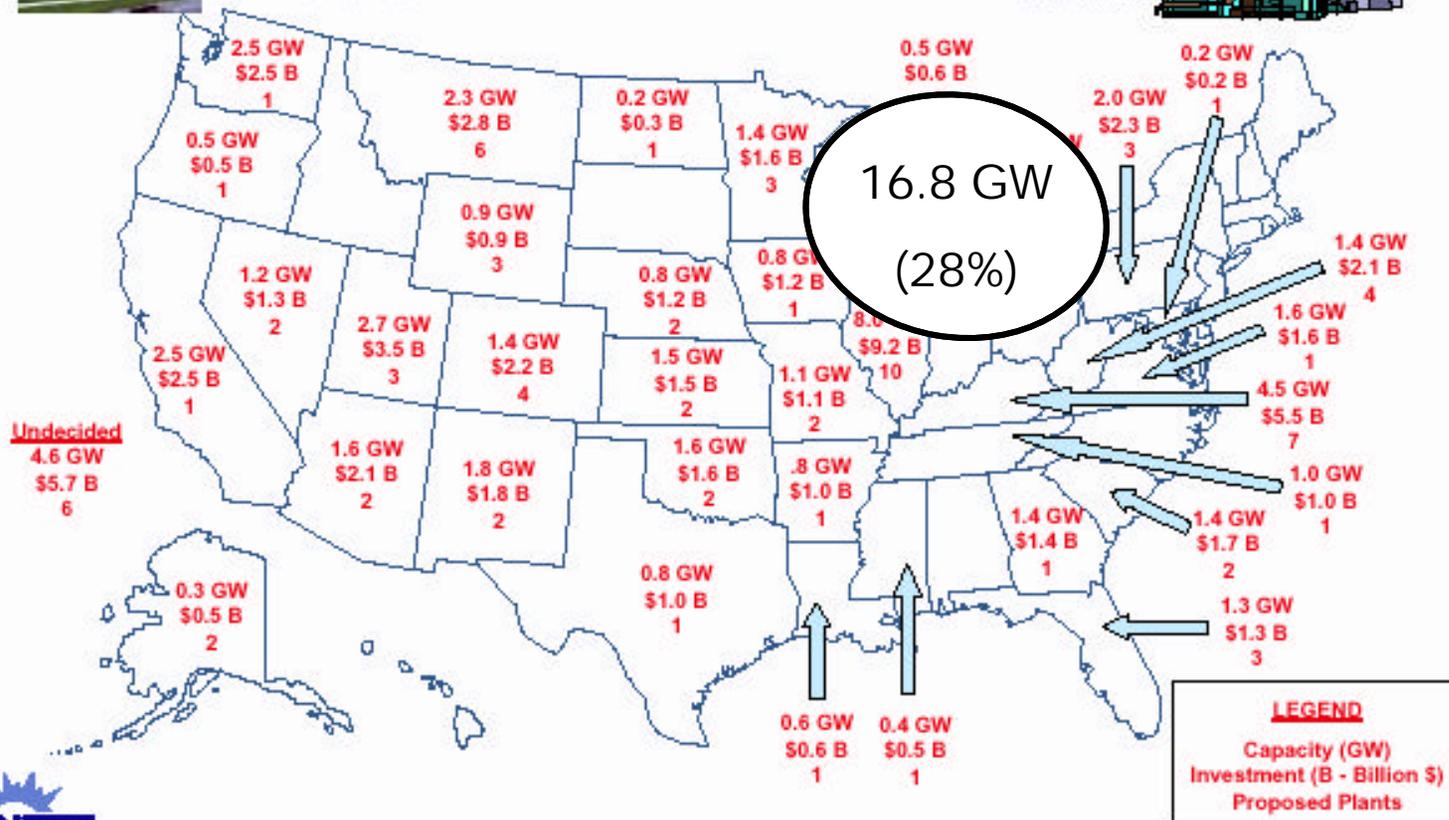
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Summary:

- > The historically dominant primary energy sources will continue to dominate into the future.
- > Coal is the dominate primary energy source for electric generation in North America.
- > Electrical generation in both Cnd. & U.S. is expected to increase in the order of 40-50% in the next 20 years.
- > The Great Lakes region is and will continue to be a major region of coal consumption for electric generation and is expected to see an increase in new generation capacity.