



112th National Western Mining Conference

February 9, 2010



The New Energy Economy Requires a Real Minerals Policy



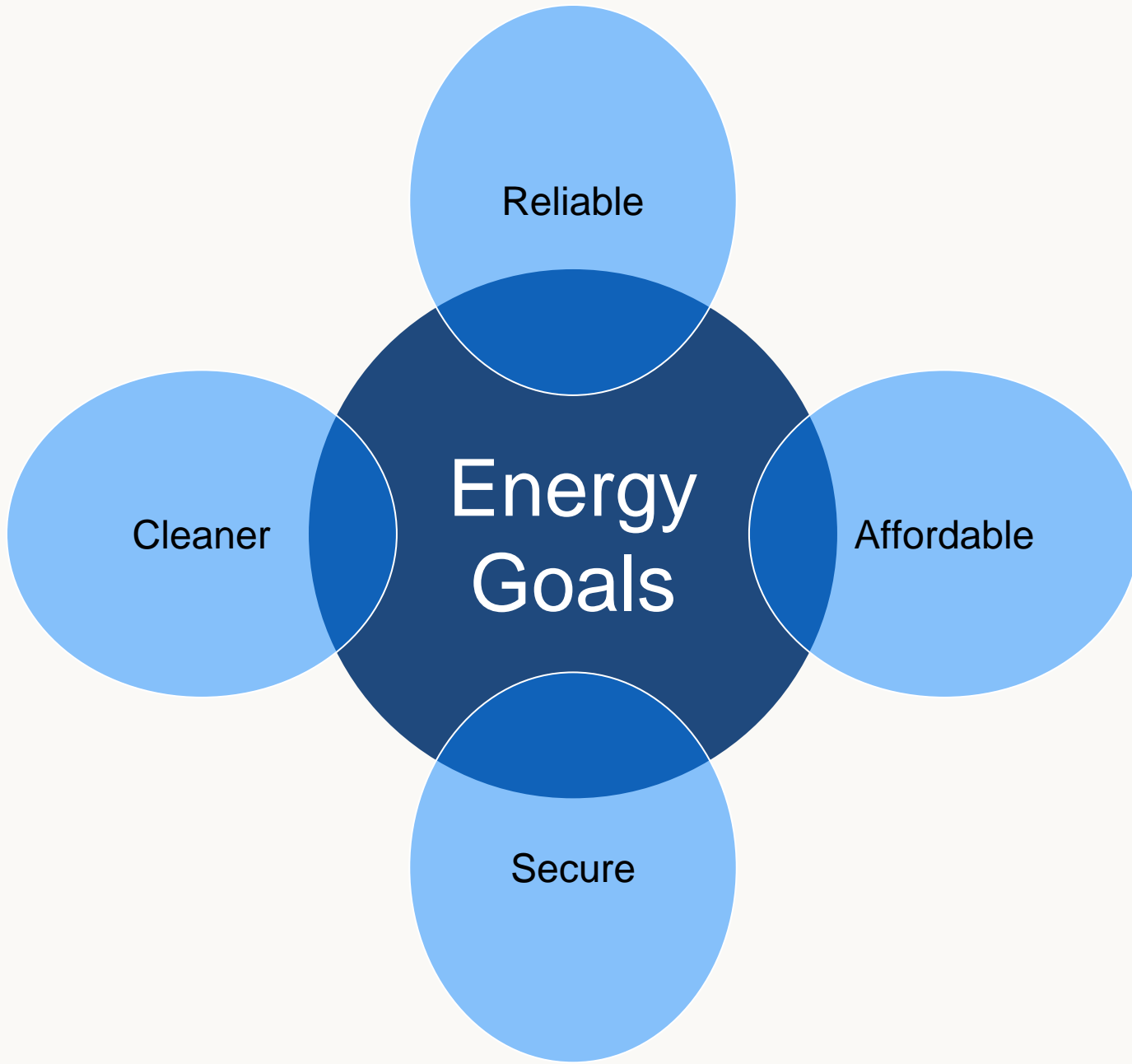
Hal Quinn

President & CEO

National Mining Association

New Energy Economy





Reliable

Energy
Goals

Affordable

Secure

Cleaner

U.S. Energy Policy

1970s

Price
Regulation

Point of Entry
Regulation

2010

Environmental
Policy

Market-based
Mechanisms

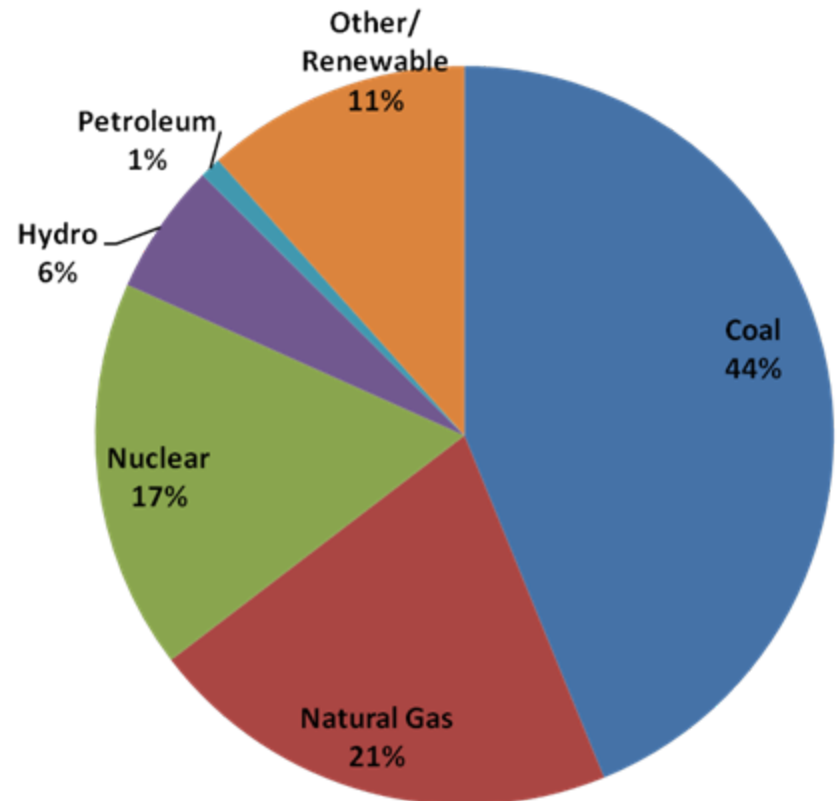
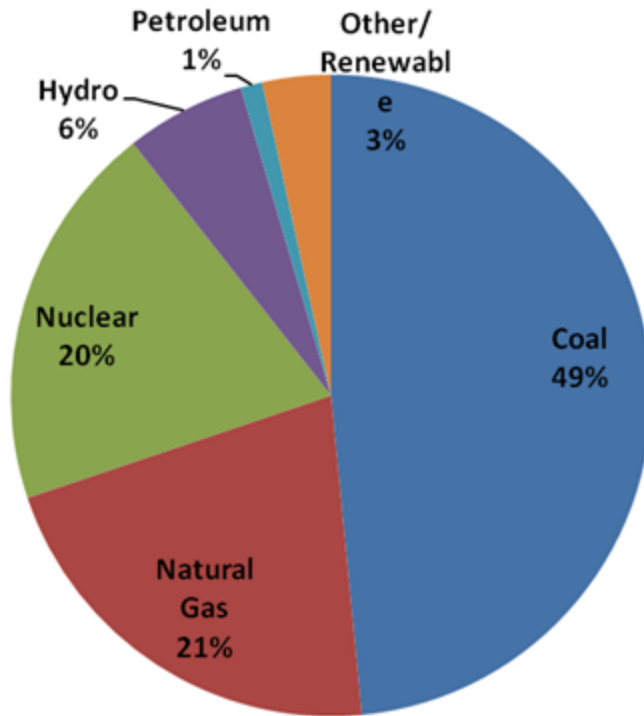
The Domestic Energy Challenge

Growing Electricity Demand

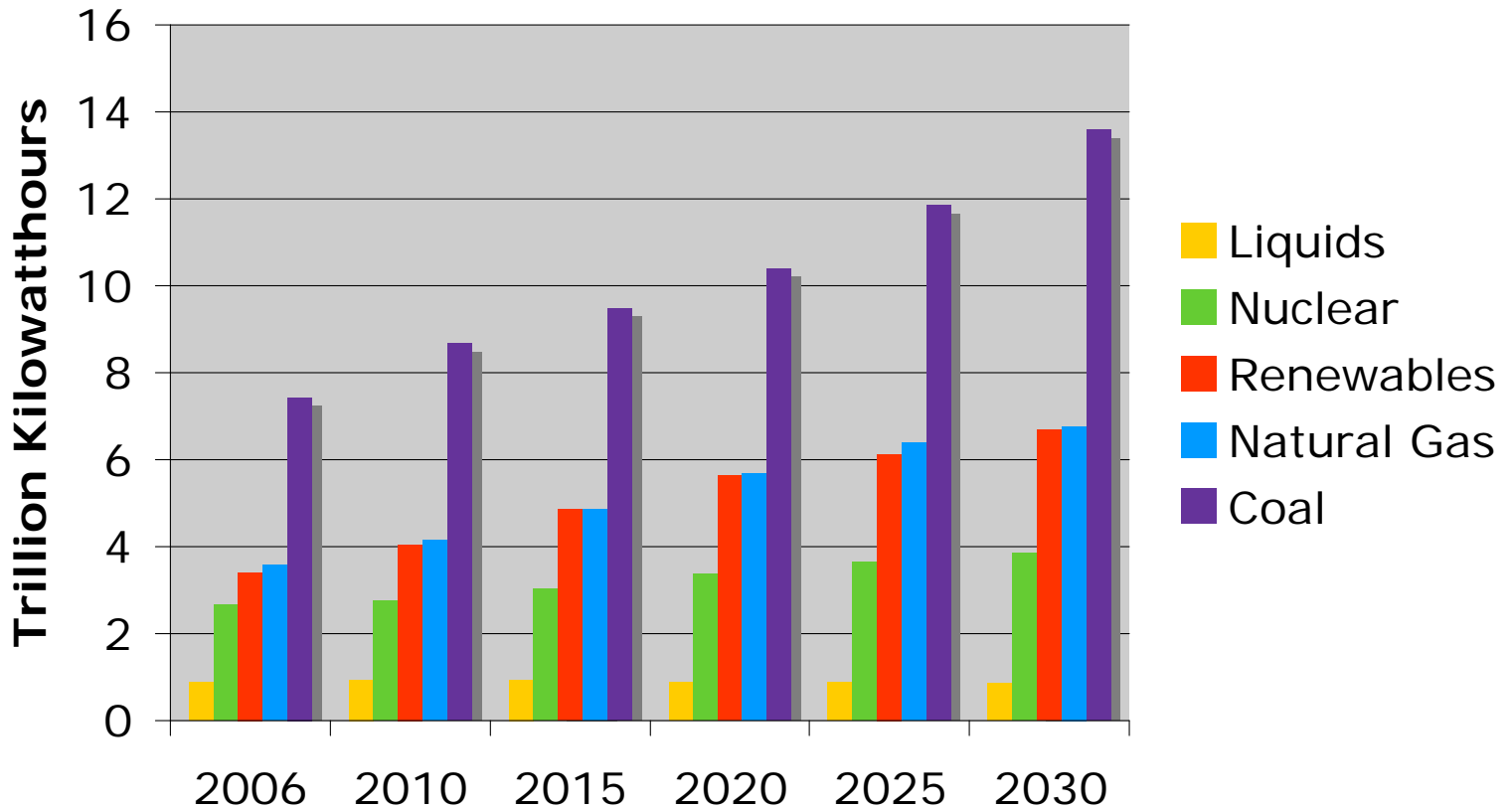
2008
4,116 TWh

28% Growth

2035
5,259 TWh



World Electricity Generation by Fuel, 2006-2030



Sources: 2006: Derived from Energy Information Administration (EIA), *International Energy Annual 2006* (June-December 2008), web site www.eia.doe.gov/iea.
Projections: EIA, *World Energy Projections Plus* (2009).

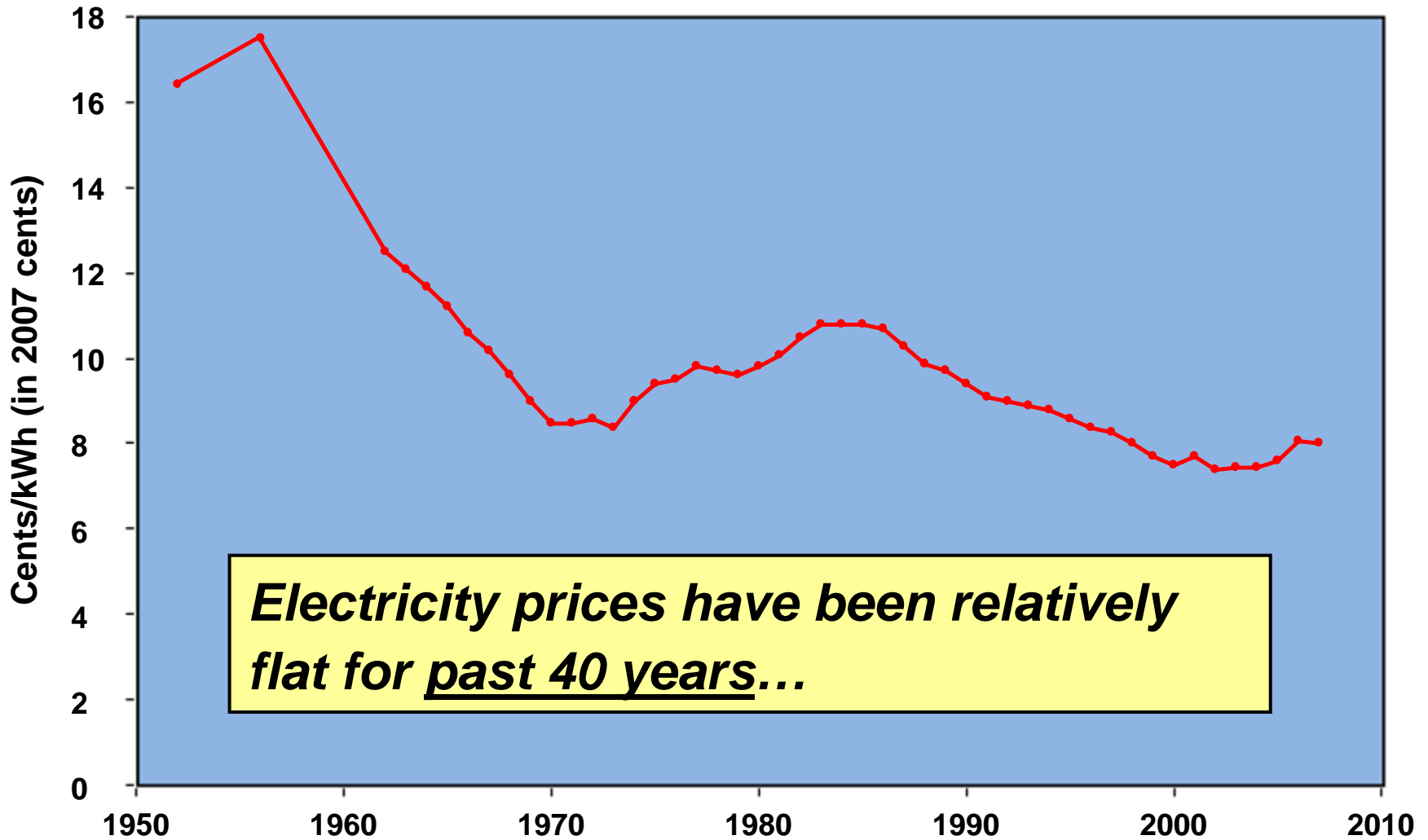
Renewable Challenge



- Scale
- Load Curve & Variability
- Capacity Factor
- Transmission & Reliability
- Price Premium
- Carbon Benefit
- Supply Chain

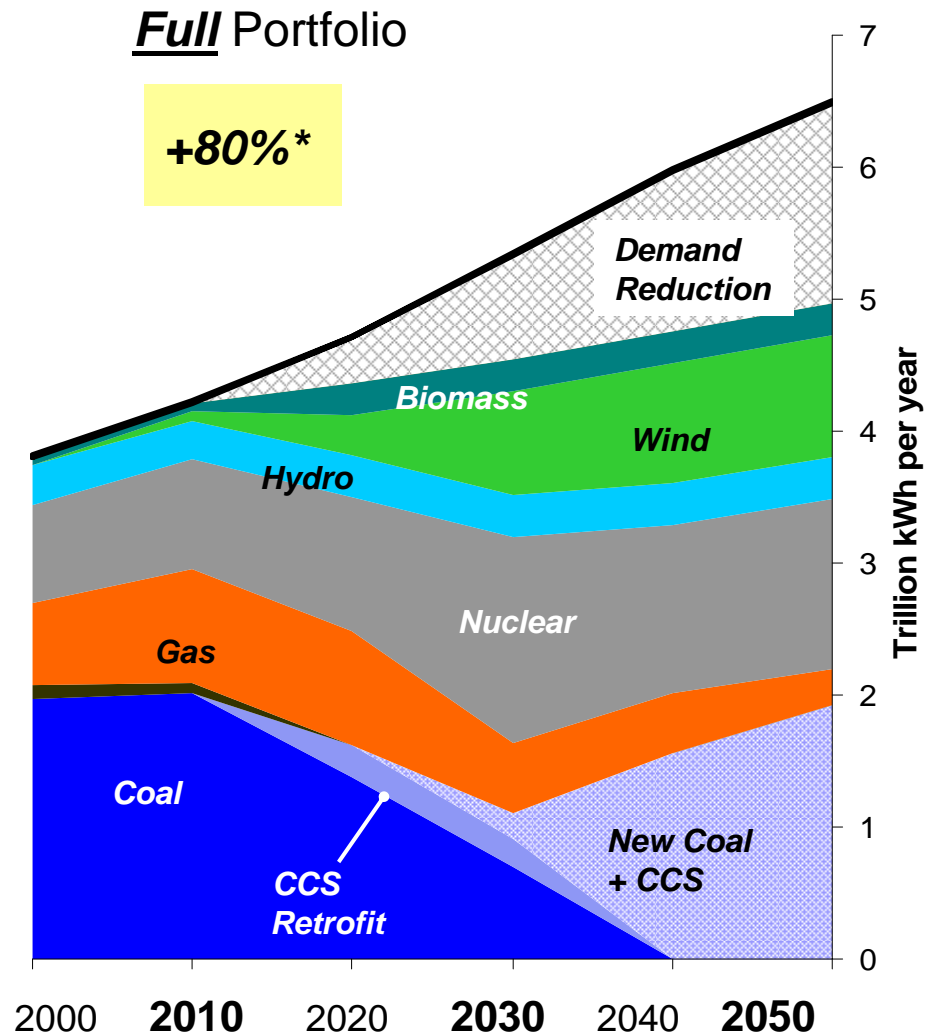
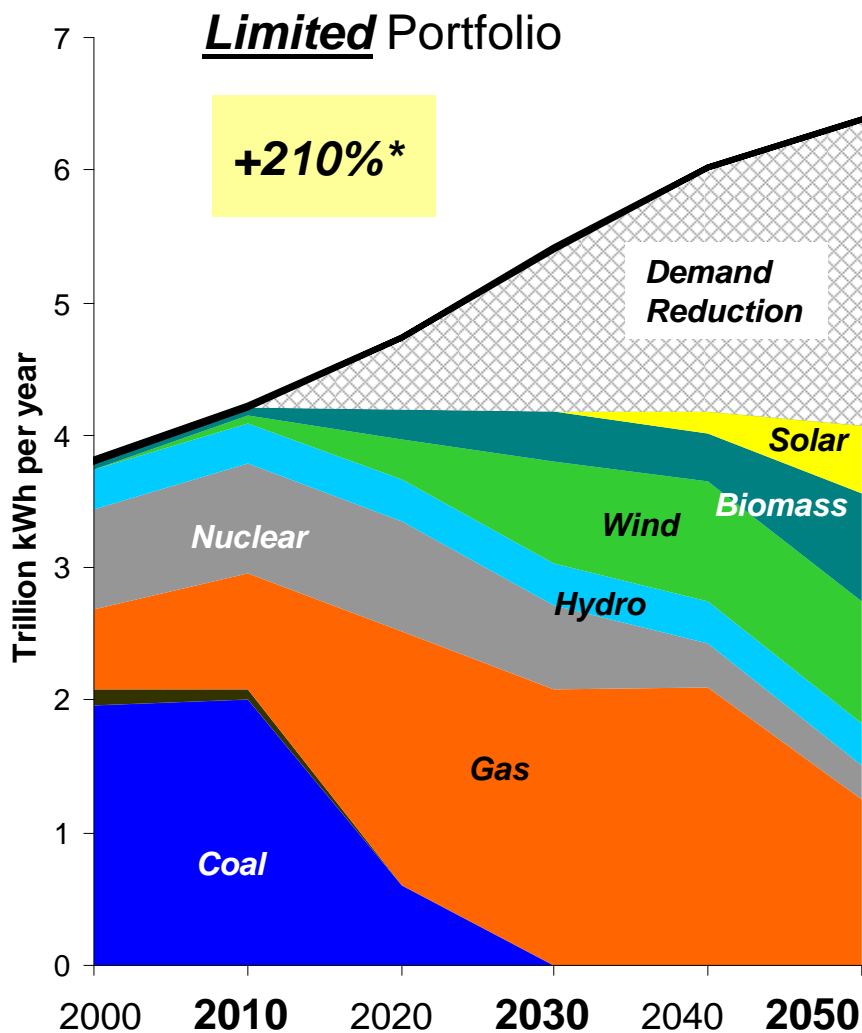
The Cost Challenge

U.S. Retail Price of Electricity



The Carbon Challenge

EPRI MERGE Analysis: Increase in Real Electricity Prices

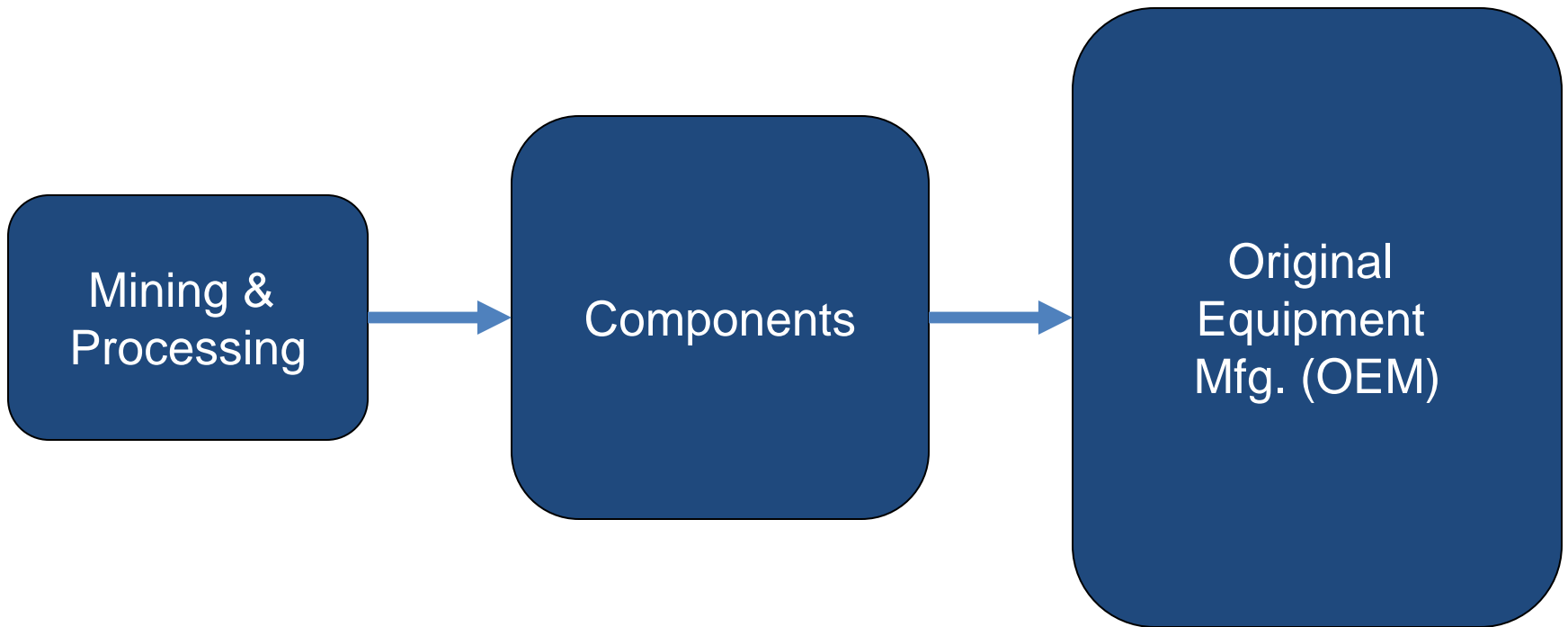


* 2050 Increase in 2007 Wholesale Electricity Cost in 2007\$

Mining: Where It All Begins



Value Added Supply Chain

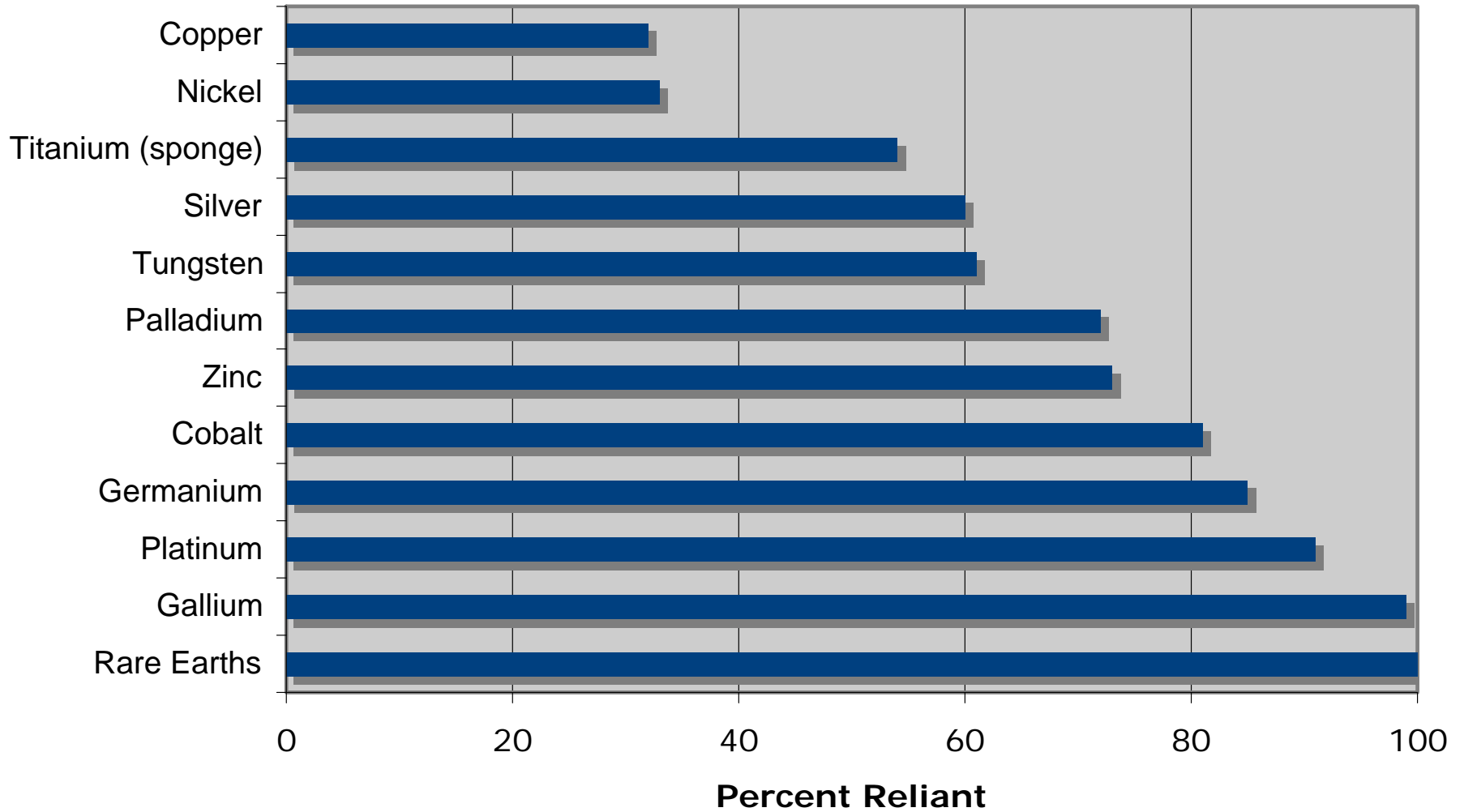


U.S. Mineral Endowment

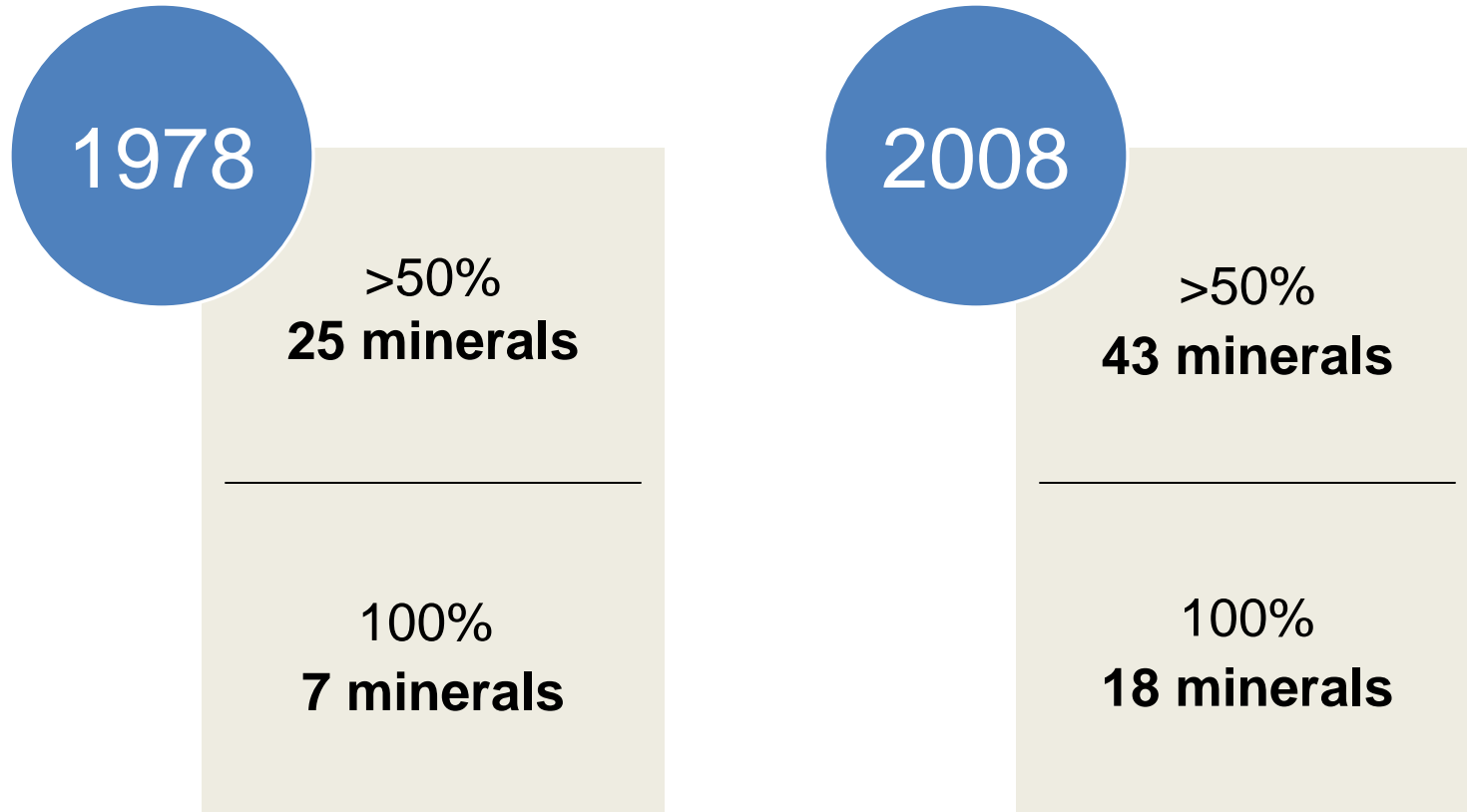
- 185 nations
- 16 nations hold 87% of world's 15 most important metals (based on value)
- U.S. is 3rd after former Soviet Union and Australia
- 11 Western states and Alaska account for 75% of U.S. metals production & they contain 90% of U.S. public lands



U.S. Import Reliance of Selected Critical Metals, 2008



U.S. Mineral Import Reliance



Do We Have a U.S. Minerals Policy to Match our 21st Century Energy Needs?

- **General Mining Law**

“mineral deposits in lands belonging to the United States...shall be free and open to exploration...”

- **Mining & Mineral Policy Act of 1970**

“It is in the national interest to foster...mining...(and) domestic mineral resources...”

- **Federal Land Policy & Management Act of 1976**

“the public lands shall be managed...(to recognize) the nation’s need for domestic sources of minerals...”

- **National Materials & Minerals Policy R&D Act of 1980**

“the continuing policy of the United States (is)...to promote an adequate and stable supply of minerals...to maintain national security, economic well-being and industrial production...”

Above Ground Risk: Access



Above Ground Risk – U.S. Permitting

U.S. is the worst for time required for processing and receiving mining permits. Corporate tax rate is virtually highest rate in the world.

Permitting Delays

(Based on time required to get permits)

Best

Worst

Mexico

United States

Australia

D.R. Congo

Chile

India

Ghana

Russia

U.S. Minerals Policy

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US Energy & Minerals Policy

*“All hat no cattle, that [policy]
just ain’t real ...*

*All hat no cattle ain’t
gonna get it done.”*

– Apologies to Trace Adkins