



Balancing Energy & Legislation

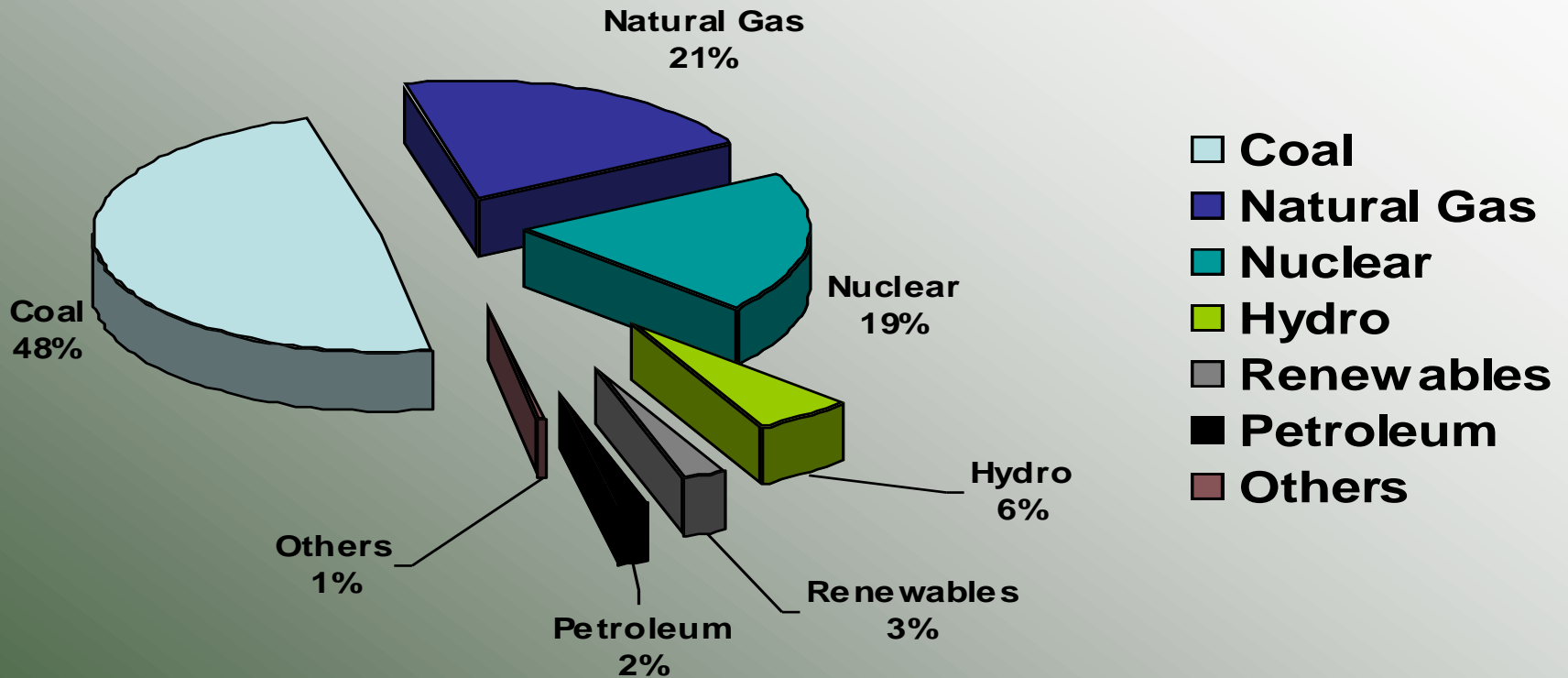
February 26, 2010

Mobile, Alabama

Agenda

- The Current State of American Energy
- Potential for Fundamental Change
- A Resource-Driven Approach
- Questions & Answers

Current U.S. Energy Mix



Some Perspective



Plant Miller
3,000 MW



SCRs at
Plant Miller
30 MW



FP & L DeSoto
Solar Plant
25 MW

Potential for Change

Federal Legislation

- Renewable Energy Mandate
- Cap & Trade
- Carbon Tax

EPA and Other Legal Action

- Carbon as a Harmful Substance
- Coal Ash Regulation

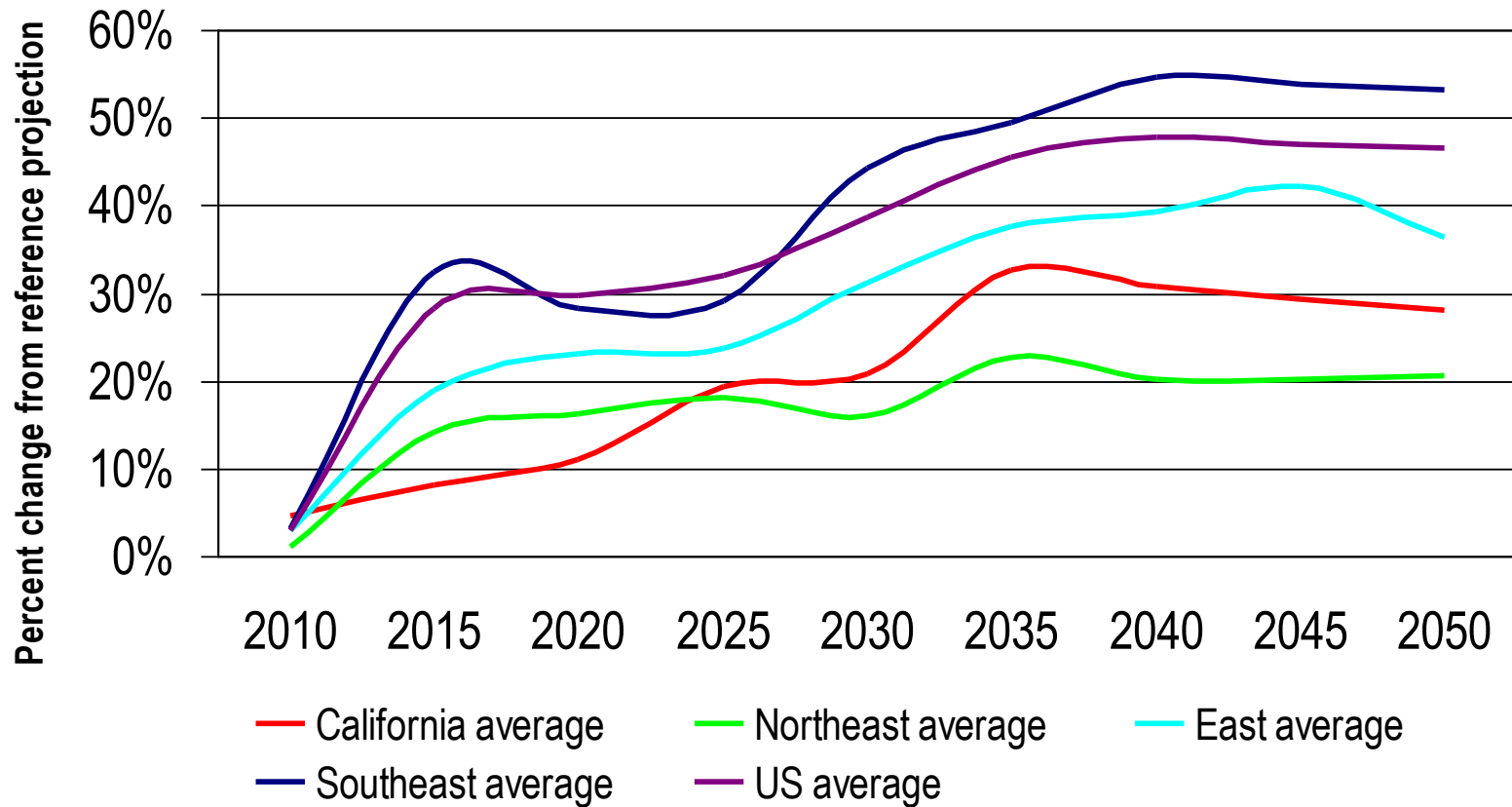
Renewable Energy Mandate

- Present in all major bills offered in 2009.
- Calls for between 15% and 25% of net electricity sales to come from approved renewable sources.
- Defines renewable energy and does not fully count some sources such as hydroelectricity. Disregards nuclear.
- Usually provides allowances for energy efficiency gains.
(Waxman-Markey allows a quarter of the mandate)

Cap and Trade

- Establishes a cap on CO₂ for all electricity generators.
- Creates a system that doles out allowances to various parties for sell to the electric industry.
- Establishes a moving price for each ton of carbon emitted, to be set by the marketplace.
- Impacts consumers in high-carbon states more than consumers in low-carbon states.

Price Impact of Cap and Trade



Resource-Driven Approach

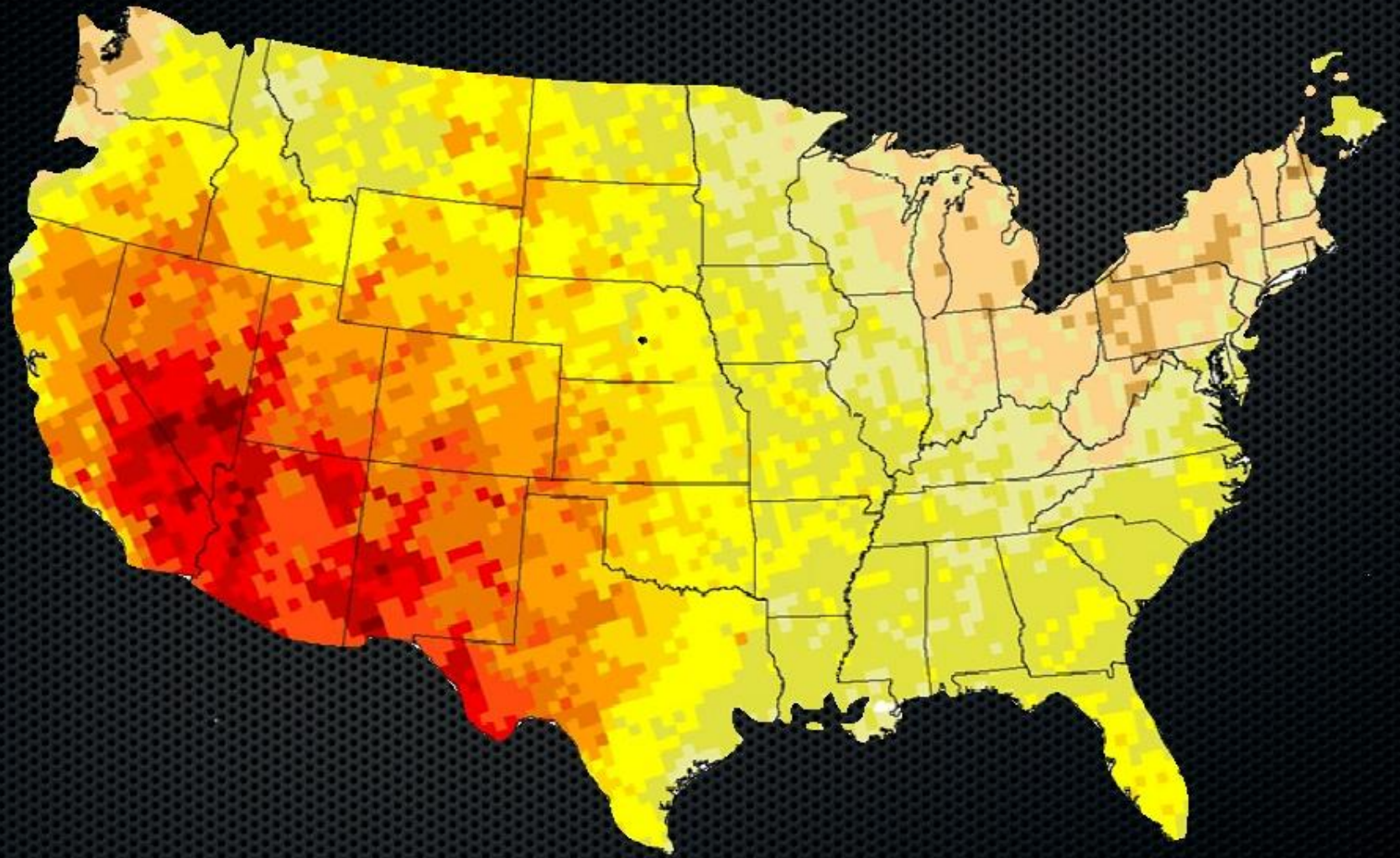
If...

- The U.S. has 225+ years of coal
- Nuclear and Hydro emit no CO₂
- Renewable energies are costly and unreliable

Then...

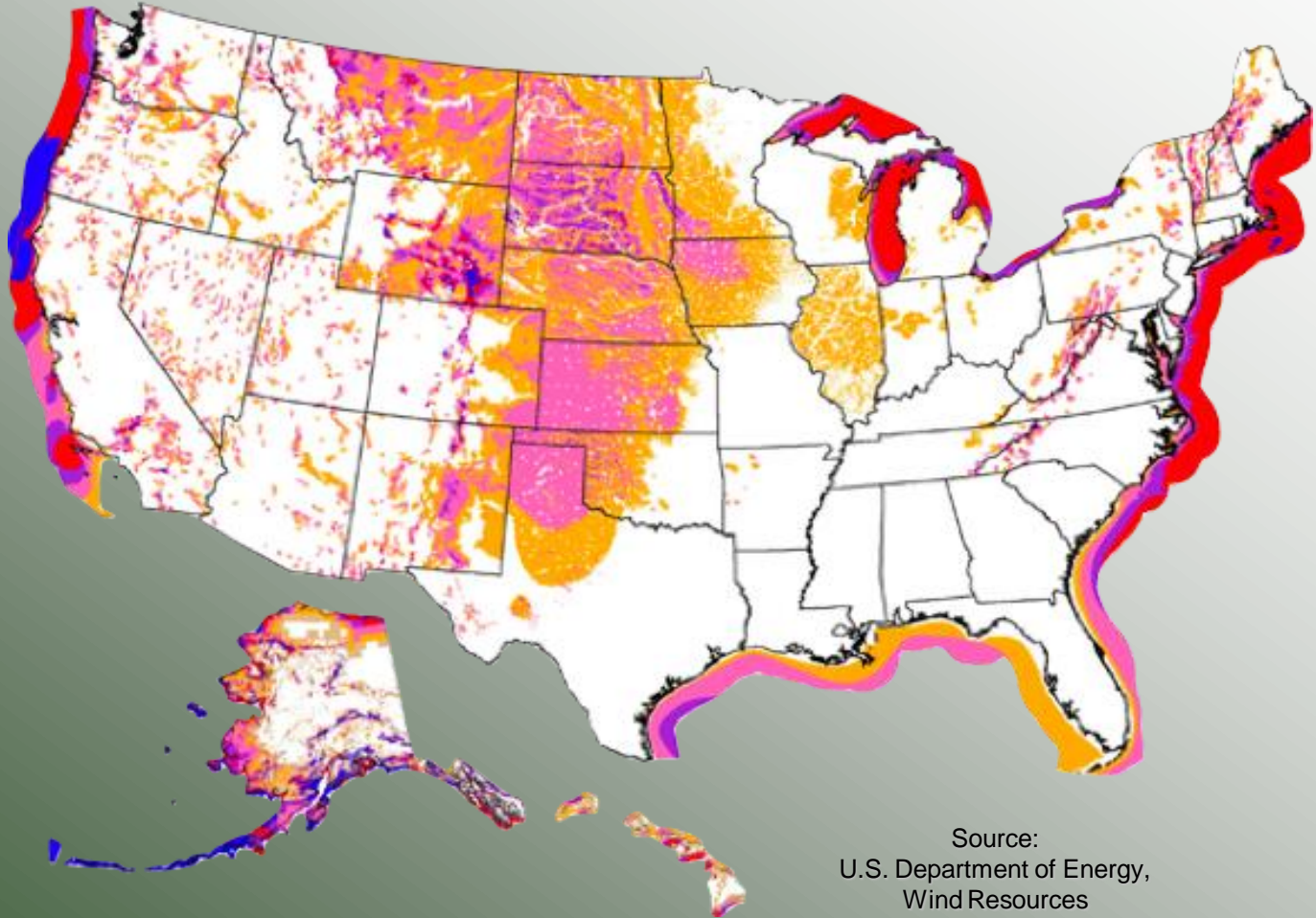
- We should invest more in carbon capture
- We should encourage Nuclear and Hydro
- Avoid mandating renewables and allow regions to choose their best option

Solar Coverage Map of United States



Solar Coverage Source:
National Renewable Energy Laboratory

Wind Resources Map of U.S.



Source:
U.S. Department of Energy,
Wind Resources

Resource-Driven Approach



A 3 MW Wind Turbine Uses -

- 335 tons of Steel
- 4.7 tons of Copper
- 3 tons of Aluminum*
- 2 tons of Rare Earth Elements*

Solar Panel Construction Requires -



- Steel
- Copper
- Rare Earth Elements*
- Aluminum*

Recap

- The most abundant, affordable, and reliable forms of energy in the US. are carbon-based.
- For an energy policy to work, it must provide for reliability and affordability.
- A smart approach is one that puts all solutions on the table and leverages available technology.
- Growing our economy means using more energy, but using it smarter and cleaner.

Questions & Answers