



A Current Snapshot: The United States' Energy Needs and Supply Chain

Capitol Hill Ocean Week 2010

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Office of Oil and Natural Gas

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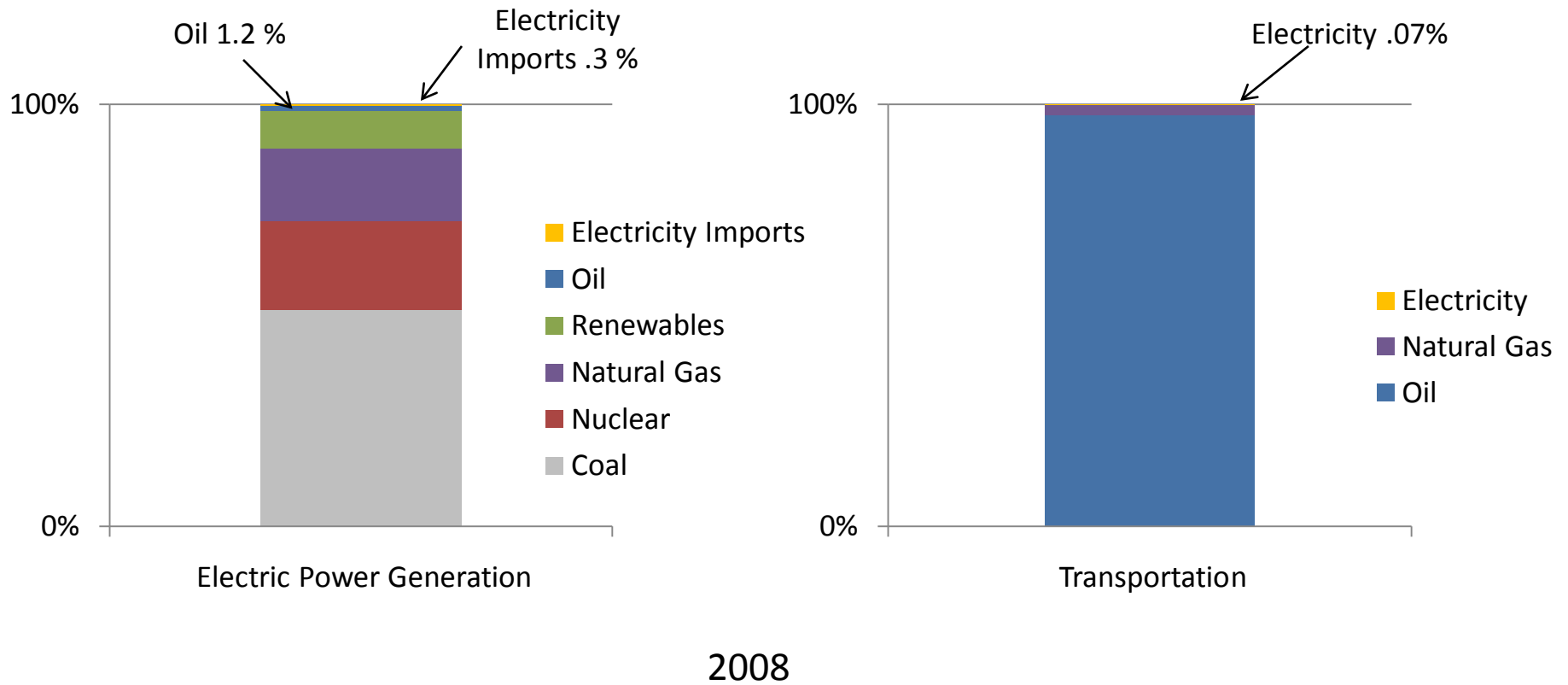


U.S. DEPARTMENT OF
ENERGY

Oil and
Natural Gas

Our Economy Relies on Fossil Fuel

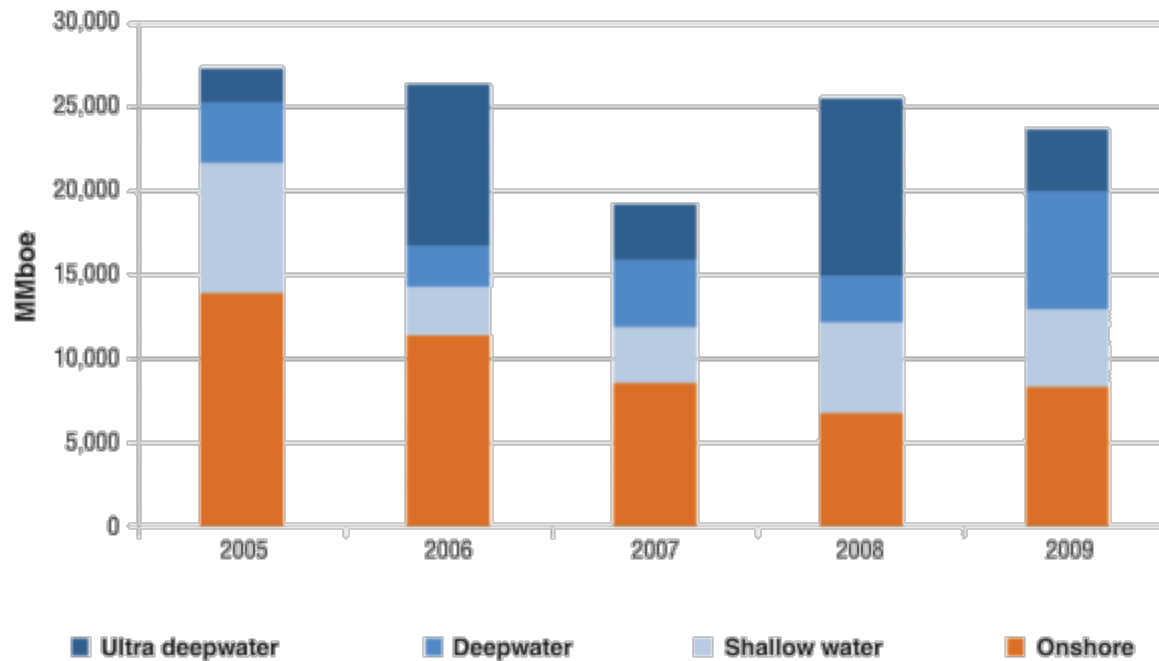
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Source: EIA, Annual Energy Outlook, 2010

New Discoveries are Moving to Deeper Water

Global discovery volumes by terrain



Source: Chakhmakhchev & Rushworth, IHS, May 2010

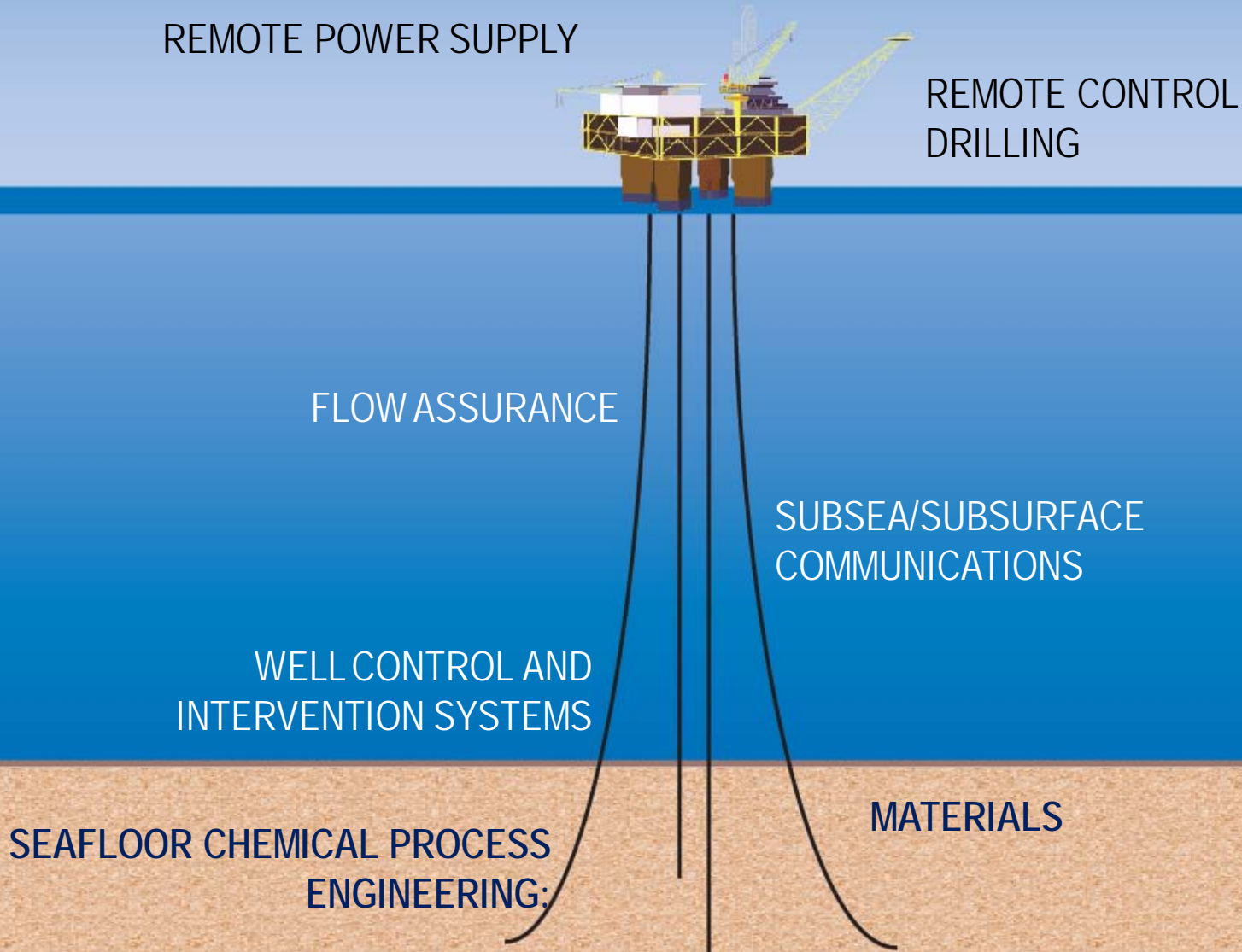
Major Non-U.S. Discovery Volumes by Terrain

Year	Country	Project	Volume	Terrain
2007	Iran	Sefid Zakhur	2,290	Onshore
2007	Ghana	Jubilee	1,400	Deep Water
2007	Iran	Paranj	610	Onshore
2007	Australia	Prelude 1A	460	Shallow Water
2007	India	Dhirubhai 34	370	Ultra Deep Water
2008	Brazil	Jupiter	4,310	Ultra Deep Water
2008	Brazil	Iara	3,500	Ultra Deep Water
2008	Brazil	Guara	1,580	Ultra Deep Water
2008	Saudi Arabia	Arabiyah 1	1,160	Shallow Water
2008	Iran	Kuh-E-Asmari 2	650	Onshore
2009	Iran	Halegan 2	1,580	Onshore
2009	Australia	Poseidon 1	1,240	Deep Water
2009	Brazil	Corcovado	1,060	Deep Water
2009	Israel	Tamar 1	1,050	Ultra Deep Water
2009	Iraq	Shaikan 1	1,040	Onshore

- 60% of largest non-U.S. discoveries have been offshore
- 73% of offshore discoveries have been in deep water
- units

Technology Challenges Increase with Water Depth

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Risk Management Requires Capital and R&D

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COMMERCIALIZE

PREVENT

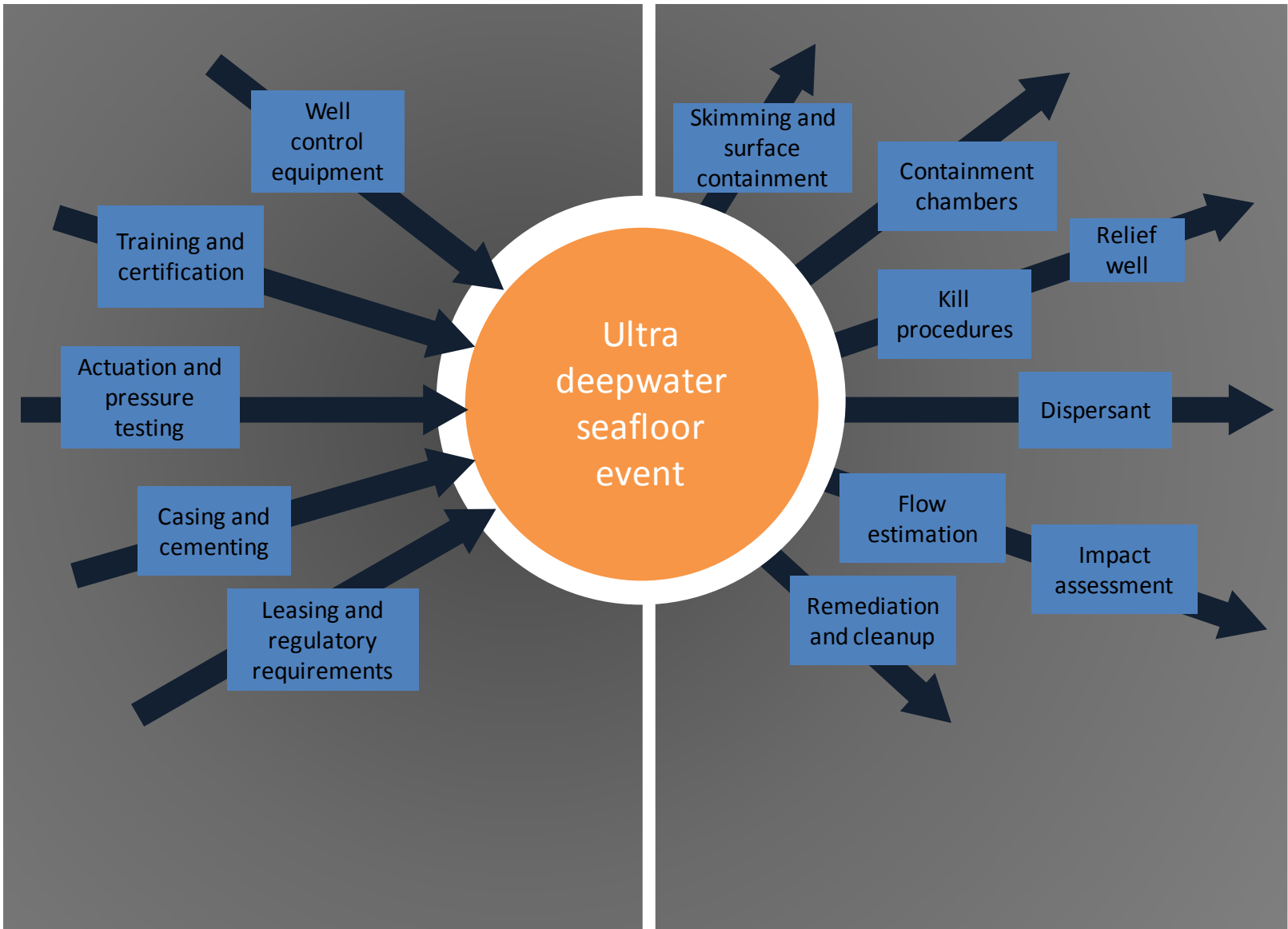
MITIGATE

Find

Assess

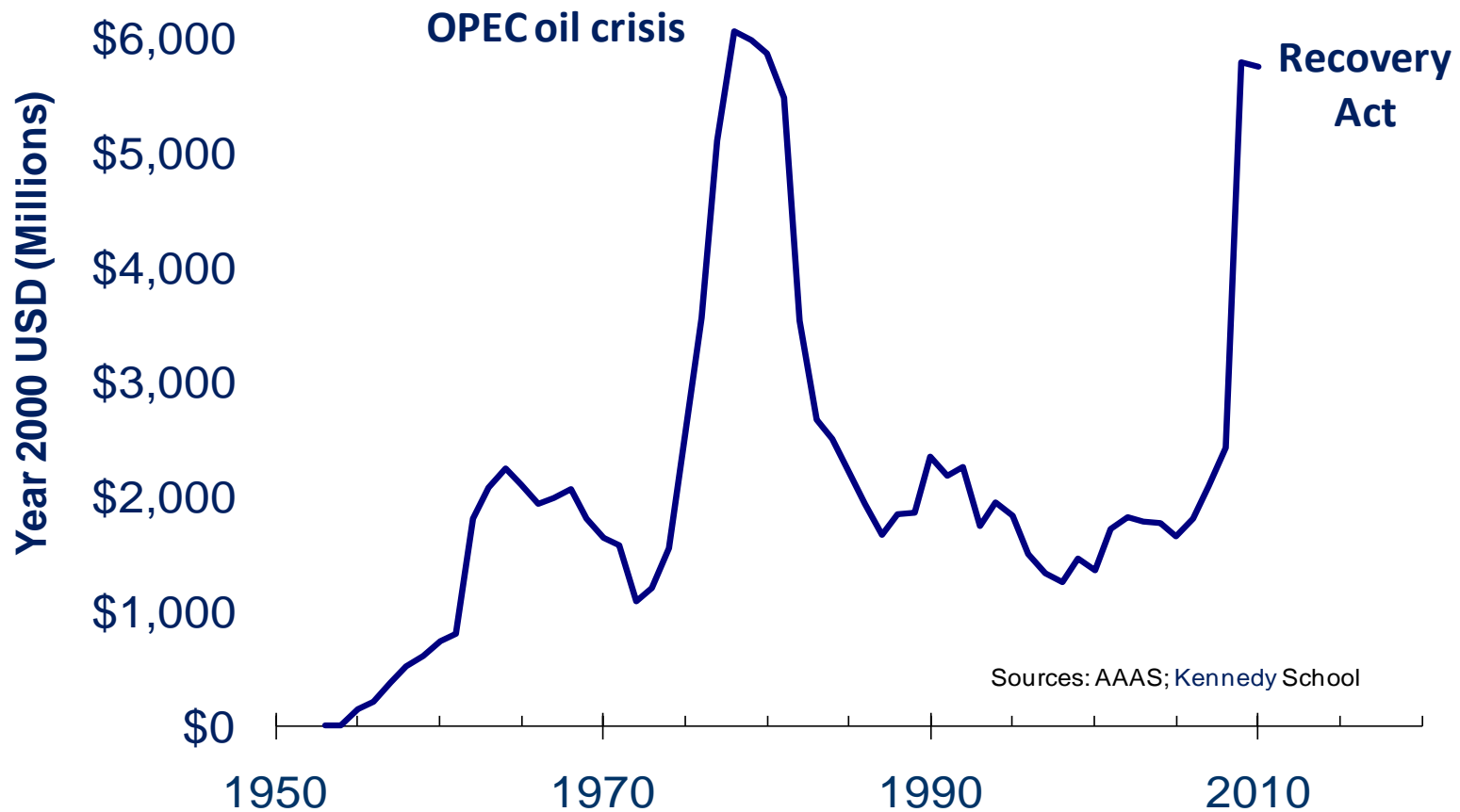
Develop

Produce



Federal Energy RD&D Spending Over Time

Total energy R&D spending by the Department of Energy and predecessor agencies



The U.S. Recovery Act is making an \$80B down payment on a clean energy economy

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The Department of Energy's base budget funding for clean energy technologies is ~\$3 B

The Recovery Act Added:

- \$2.4 B for advanced batteries and transportation infrastructure,
- \$4.5 B for a smarter electrical grid,
- \$3.4 B for carbon capture and storage research,
- up to \$2.5 B for renewable energy and energy efficiency R&D.

Energy

“The nation that leads the clean energy economy will be the nation that leads the global economy. And America must be that nation.”

Innovation

“We need to encourage innovation... And no area is more ripe for such innovation than energy.”



- *State of the Union, January 27, 2010*