

Burning Coal, Burning Cash:
Ranking the States That
Import the Most Coal

2014 Update

Concerned Scientists

What is a Coal State?





Major Producers

Major Consumers

Their economic interests differ

Main Findings of our Analysis

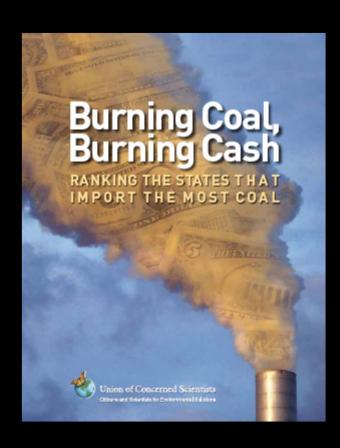
- 37 states were net importers of coal in 2012, paying \$19.4 billion to import 433 million tons of coal from other states and countries
- 8 states spent > \$1 billion on net coal imports
- Between 2008 and 2012, expenditures on net coal imports fell by nearly 25% as more utilities switched to natural gas and renewable energy
- Renewable energy and energy efficiency can cut coal imports, boost local economies, protect consumers, reduce overreliance on natural gas, and lower climate emissions





Our Methodology

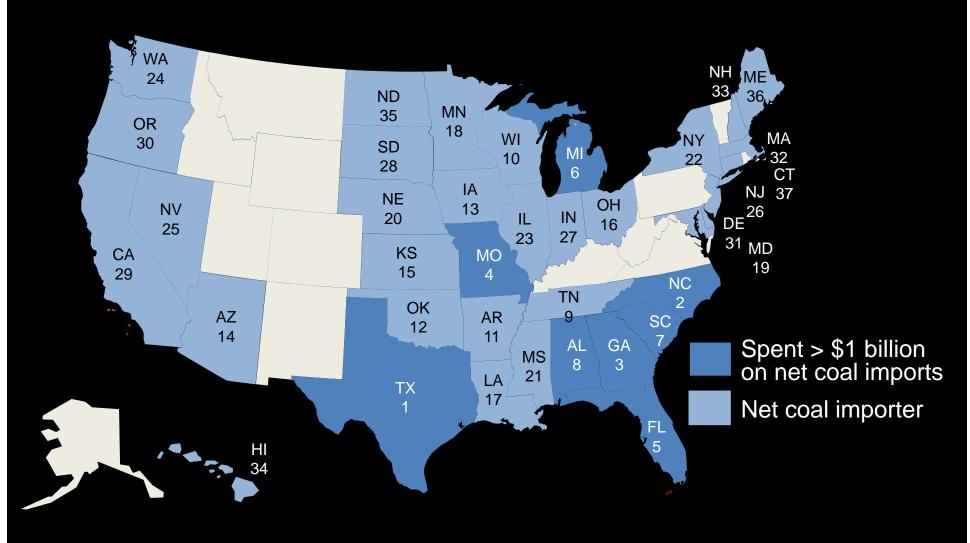
- Update of findings from our 2010 Burning Coal, Burning Cash report
- Based on 2012 data (most recent available)
- Data from publically available reporting of monthly coal deliveries to power plants (accessed through SNL Financial)
- State rankings based on <u>net</u> imports coal imported to a state less any coal exported out of the state from local mines
- Rankings for expenditures, weight, per capita spending, and international imports
- Expenditures include transportation costs



National Findings

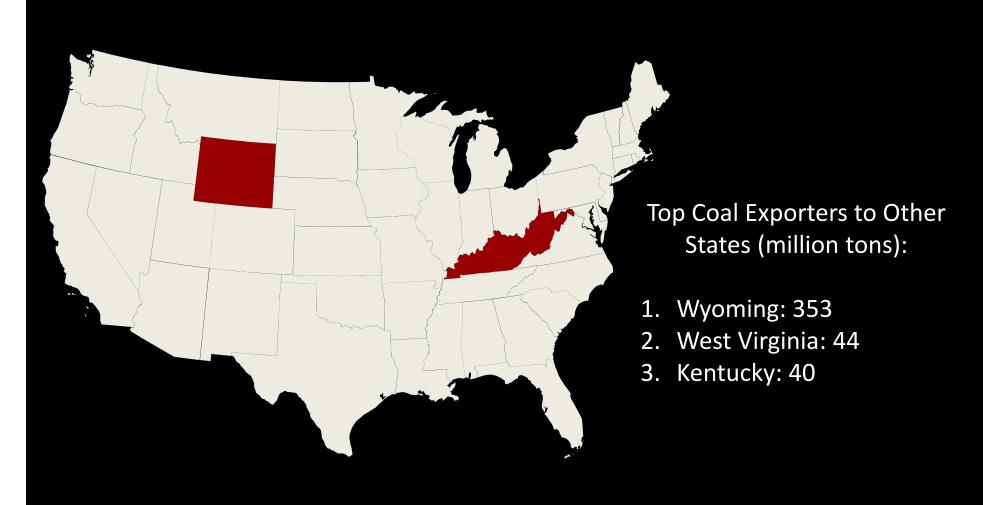
37 States are Net Importers of Coal (2012)

8 states spent > \$1 billion each on net coal imports



Note: Three states – Idaho, Rhode Island, and Vermont have no coal power plants.

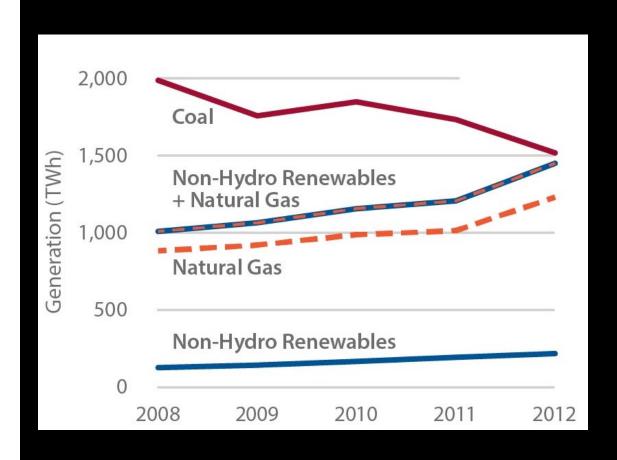
82% of Coal Exports to Other States Originating from just 3 States (2012)



Most Coal Import-Dependent U.S. Power Providers (2012)

Power Provider	Expenditures on Net Coal Imports (billion \$)
(1) Southern Company	2.24
(2) Duke Energy Corporation	2.22
(3) Tennessee Valley Authority	1.40
(4) NRG Energy, Inc.	1.26
(5) American Electric Power Company, Inc.	1.25
(6) Ameren Corporation	1.12
(7) FirstEnergy Corp.	1.09
(8) Xcel Energy Inc.	0.63
(9) Dominion Resources, Inc.	0.60
(10) DTE Energy Company	0.60

Coal generation is declining

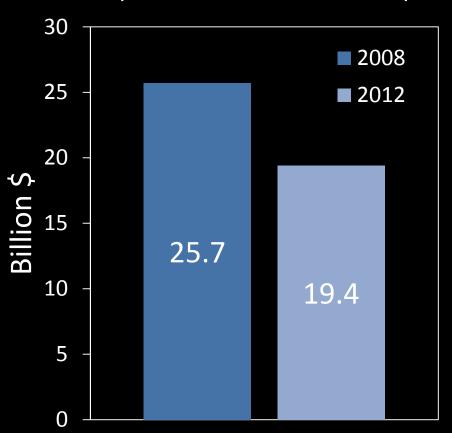


- Coal-fired electricity fell from almost half of the U.S. power mix in 2008 to 37 percent in 2012
- Contributions of natural gas and renewable energy to the U.S. power supply are growing

Sources: U.S. EIA, 2013; SNL 2013

Coal imports are also declining

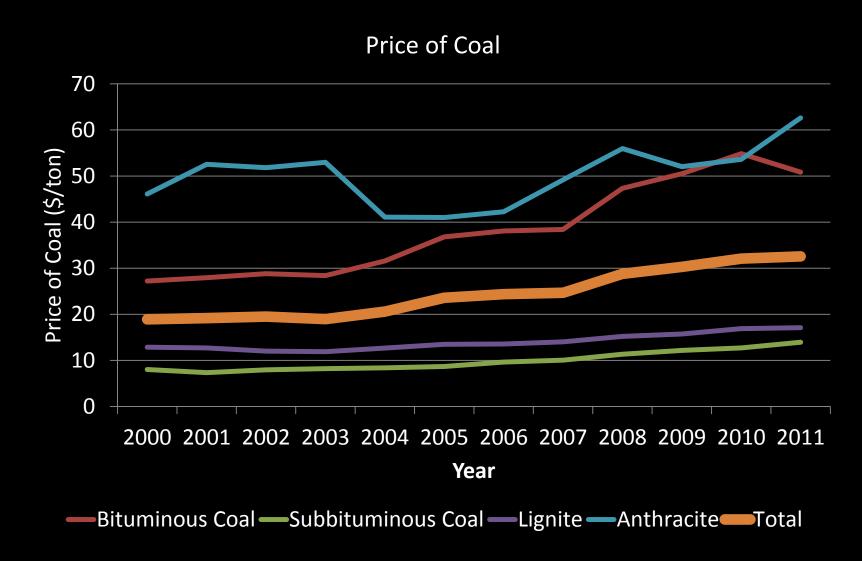
Total Expenditures on Net Coal Imports



Between 2008 and 2012:

- Expenditures on net coal imports fell by nearly 25%
- Net coal imports by weight declined by 30%
- Expenditures on coal imports from other countries down by 75% – from 16 states spending \$1.8 billion in 2008, to seven states spending \$464 million in 2012

Coal prices are rising



State-level Rankings and Findings

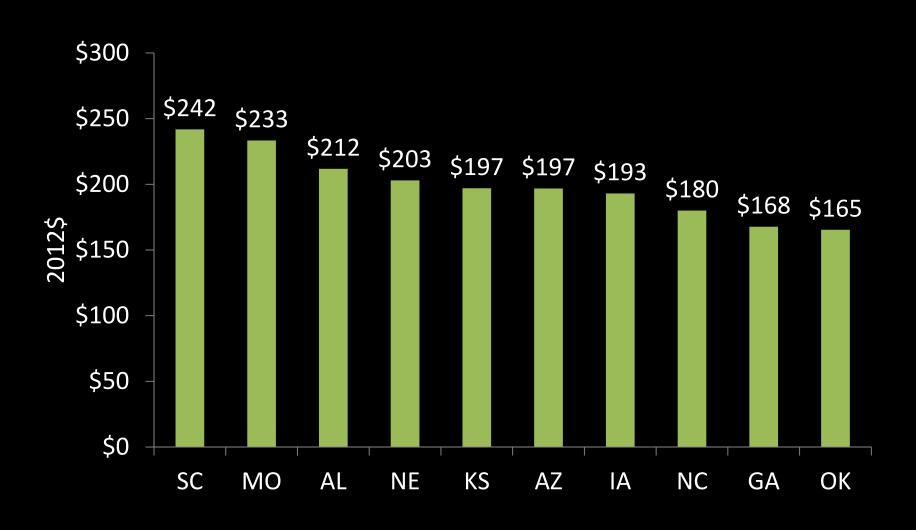
The 10 Most Coal-Dependent States: Expenditures on Net Coal Imports (2012)



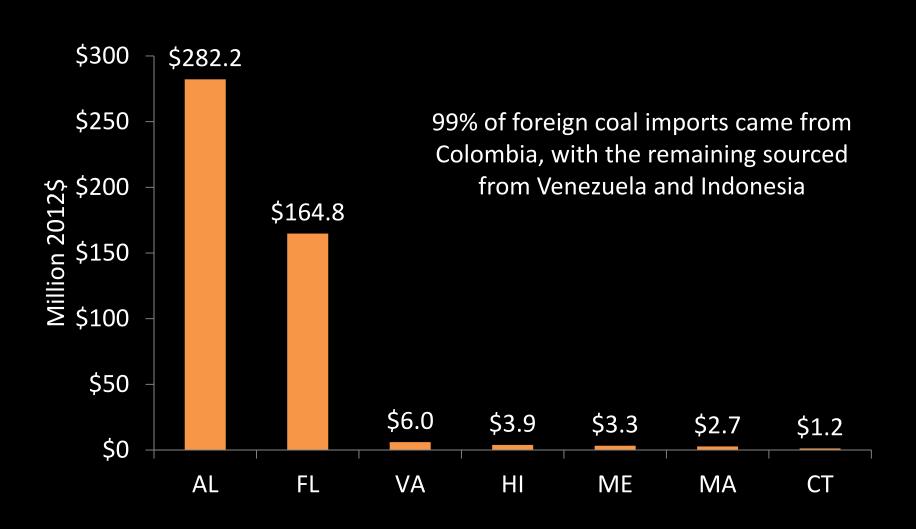
The 10 Most Coal-Dependent States: Net Coal Imports by Weight (2012)



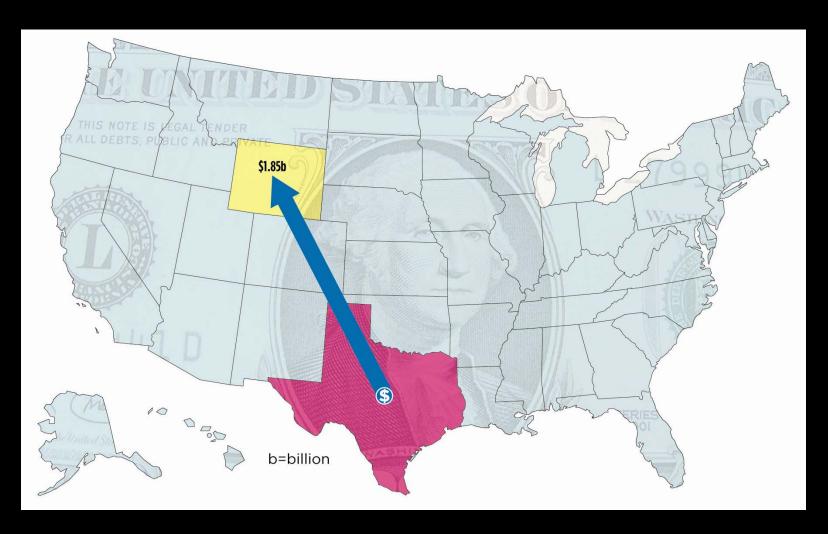
The 10 Most Coal-Dependent States: Per Capita Expenditures (2012)



The Most Coal-Dependent States: Expenditures on International Imports (2012)

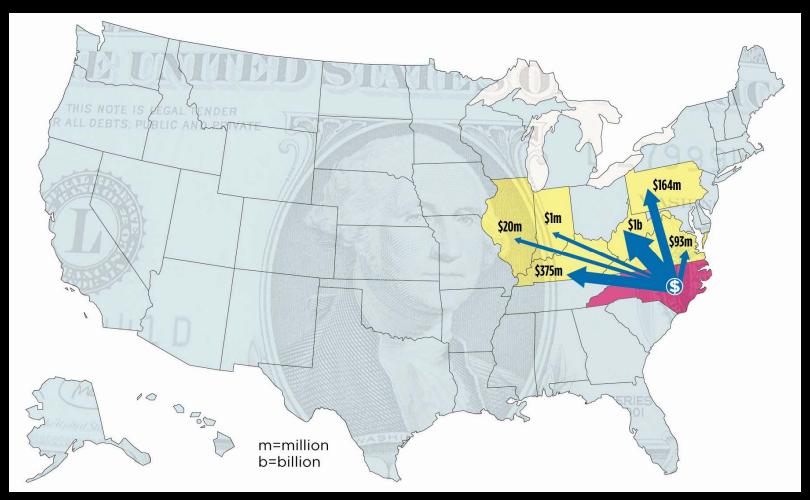


\$1.85 Billion Leaving Texas to Pay for Imported Coal



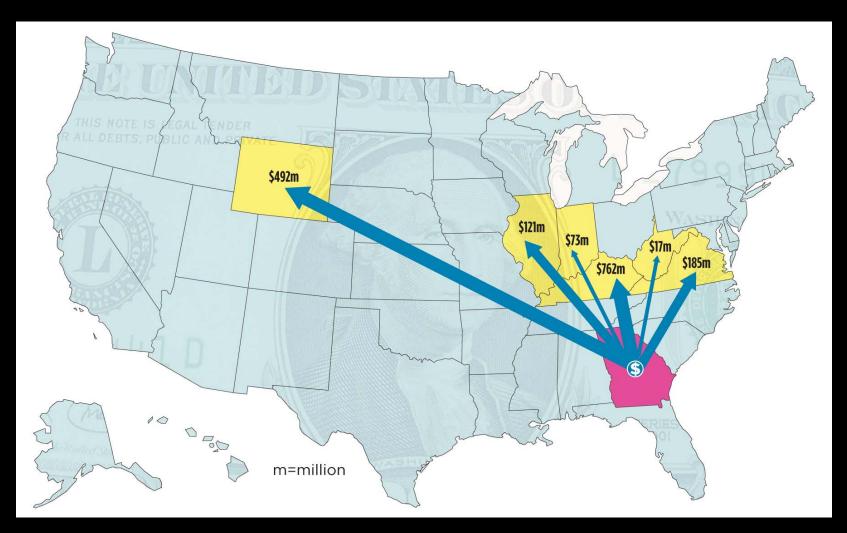
Note: Based on 2012 data. Not all these funds will necessarily land in the state where the mining occurs. Mine owners may divert the profits to parent companies in other locations, for example. Amounts also include the cost of transportation.

\$1.76 Billion Leaving North Carolina to Pay for Imported Coal



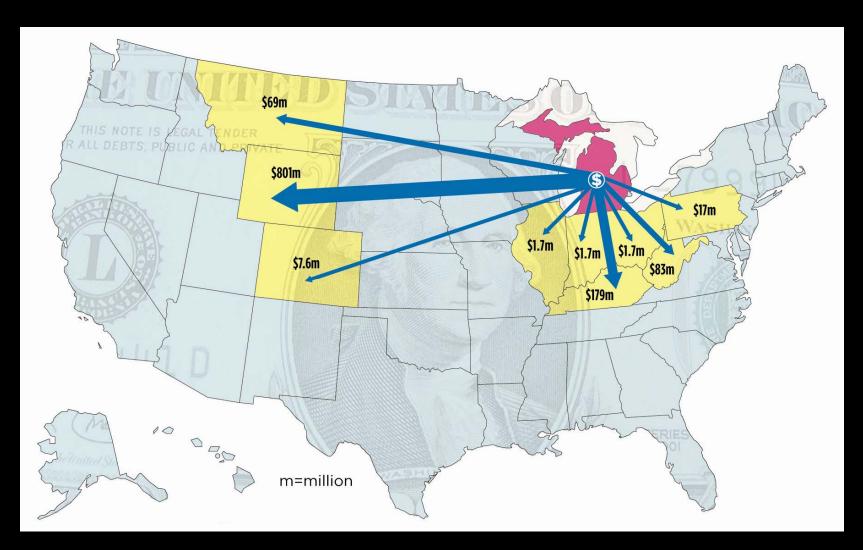
Note: Based on 2012 data. Not all these funds will necessarily land in the state where the mining occurs. Mine owners may divert the profits to parent companies in other locations, for example. Amounts also include the cost of transportation. In addition, North Carolina spent \$600,000 on coal imports from unreported sources.

\$1.66 Billion Leaving Georgia to Pay for Imported Coal



Note: Based on 2012 data. Not all these funds will necessarily land in the state where the mining occurs. Mine owners may divert the profits to parent companies in other locations, for example. Amounts also include the cost of transportation. In addition, Georgia spent more than \$13 million on coal imports from unreported sources.

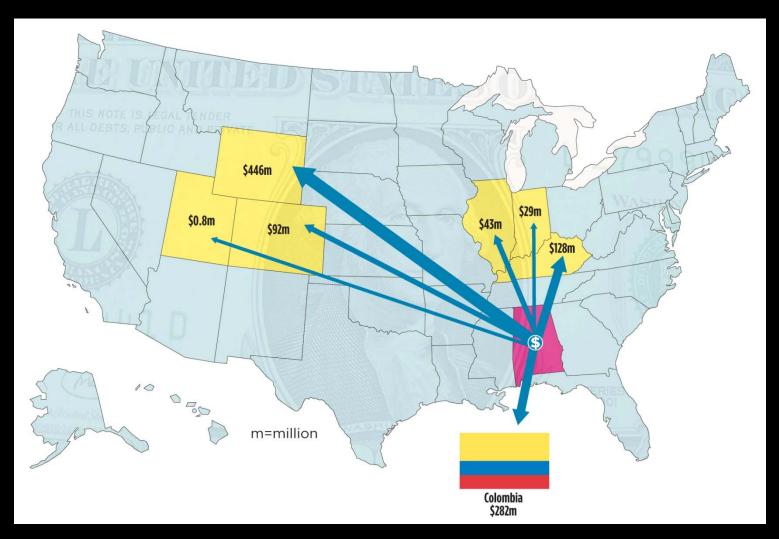
\$1.16 Billion Leaving Michigan to Pay for Imported Coal



Note: Based on 2012 data. Not all these funds will necessarily land in the state where the mining occurs. Mine owners may divert the profits to parent companies in other locations, for example. Amounts also include the cost of transportation.

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\$1.02 Billion Leaving Alabama to Pay for Imported Coal



Note: Based on 2012 data. Not all these funds will necessarily land in the state where the mining occurs. Mine owners may divert the profits to parent companies in other locations, for example. Amounts also include the cost of transportation.

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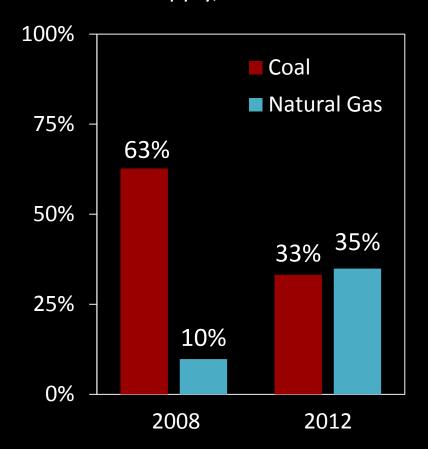
Most States' Spending on Net Coal Imports <u>Declined from 2008</u> to 2012

State	Spending on Net Coal Imports in 2012 (billion \$)	% Change from 2008	2008 Ranking
(1) Texas	1.85	-3%	3
(2) North Carolina	1.76	-25%	2
(3) Georgia	1.66	-36%	1
(4) Missouri	1.41	+23%	10
(5) Florida	1.27	-18%	4
(6) Michigan	1.16	-15%	7
(7) South Carolina	1.14	+4%	11
(8) Alabama	1.02	-33%	6
(9) Tennessee	0.91	-33%	8
(10) Wisconsin	0.84	-1%	12

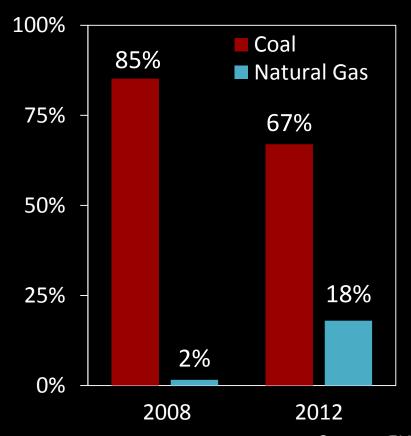
Top 10 most coal
dependent states
remained largely the
same, but fewer states
spent > \$1 billion on
imported coal
(8 in 2012 vs. 11 in 2008)

Many states are making large-scale shifts from coal to natural gas

Change in Share of <u>Georgia's</u> Power Supply, 2008 vs. 2012



Change in Share of Ohio's Power Supply, 2008 vs. 2012



Source: EIA, 2013

Risks of Overreliance on Natural Gas

Natural gas offers some nearterm air quality and cost benefits, but risks include:

- Price volatility
- Public health and safety
- Water and land resources
- Climate change
- Crowding out renewables



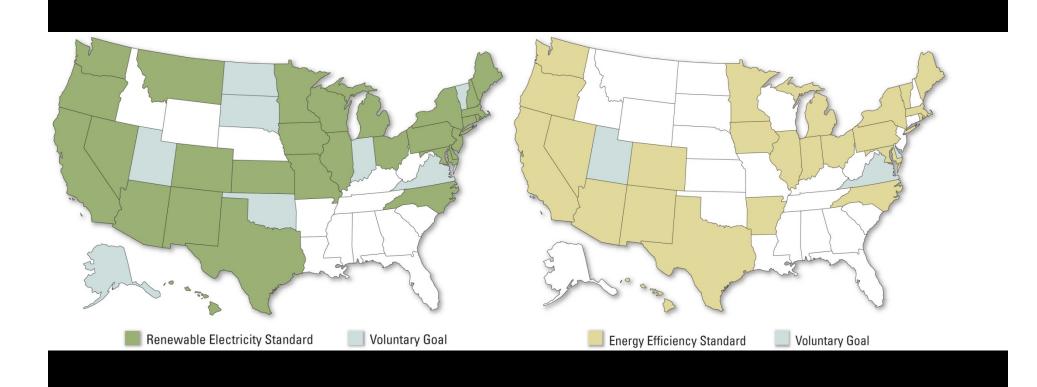




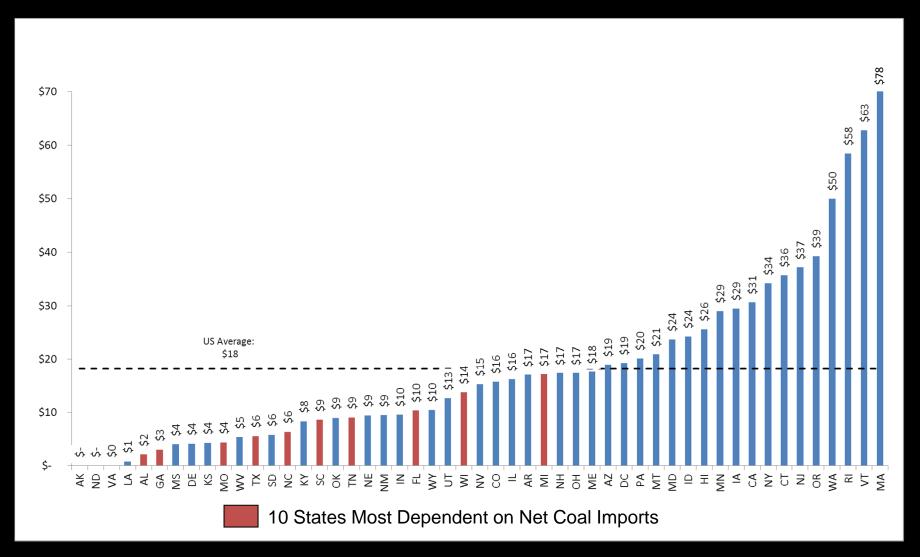
Instead of over-relying on natural gas to replace polluting coal generation, a better solution for consumers and the environment would be to invest more in homegrown renewable energy and energy efficiency.

All states have untapped potential for renewable energy and energy efficiency.

States with Renewable Energy & Energy Efficiency Standards



State spending per person on electricity efficiency programs (2012)



Source: American Council for an Energy Efficient Economy. 2013. The 2013 State Energy Efficiency Scorecard.

Recommendations

- Adopt new and strengthen existing state and federal-level clean energy policies, including
 - Renewable energy standards
 - Energy efficiency resource standards
 - Tax credits
 - Net metering
 - Stronger building codes
 - Increased research & development funding
- Develop Strong EPA Power Plant Pollution Standards, including for carbon dioxide emissions
- Improve resource planning by regional grid operators & utilities



For more information, please contact:

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Photo:PictureQuest

Available online at: www.ucsusa.org/bcbc2014update