



Diminishing Returns: The Hidden Costs of Excessive Environmental Regulation

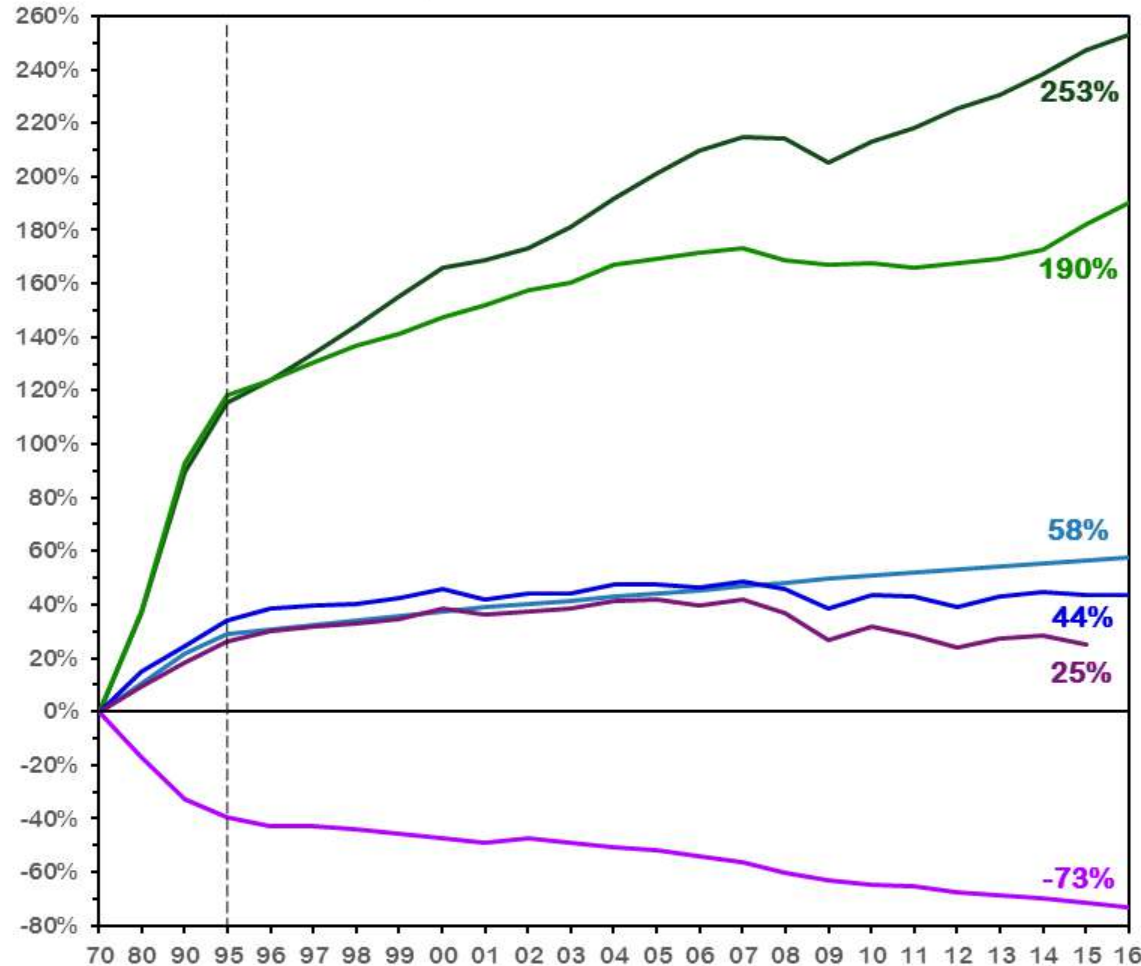
AMERICA FIRST ENERGY CONFERENCE – THE HEARTLAND INSTITUTE

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How Are We Doing? – Part 1

Comparison of Growth Areas and Emissions, 1970-2016



Gross Domestic Product



Vehicles Miles Traveled



Population



Energy Consumption

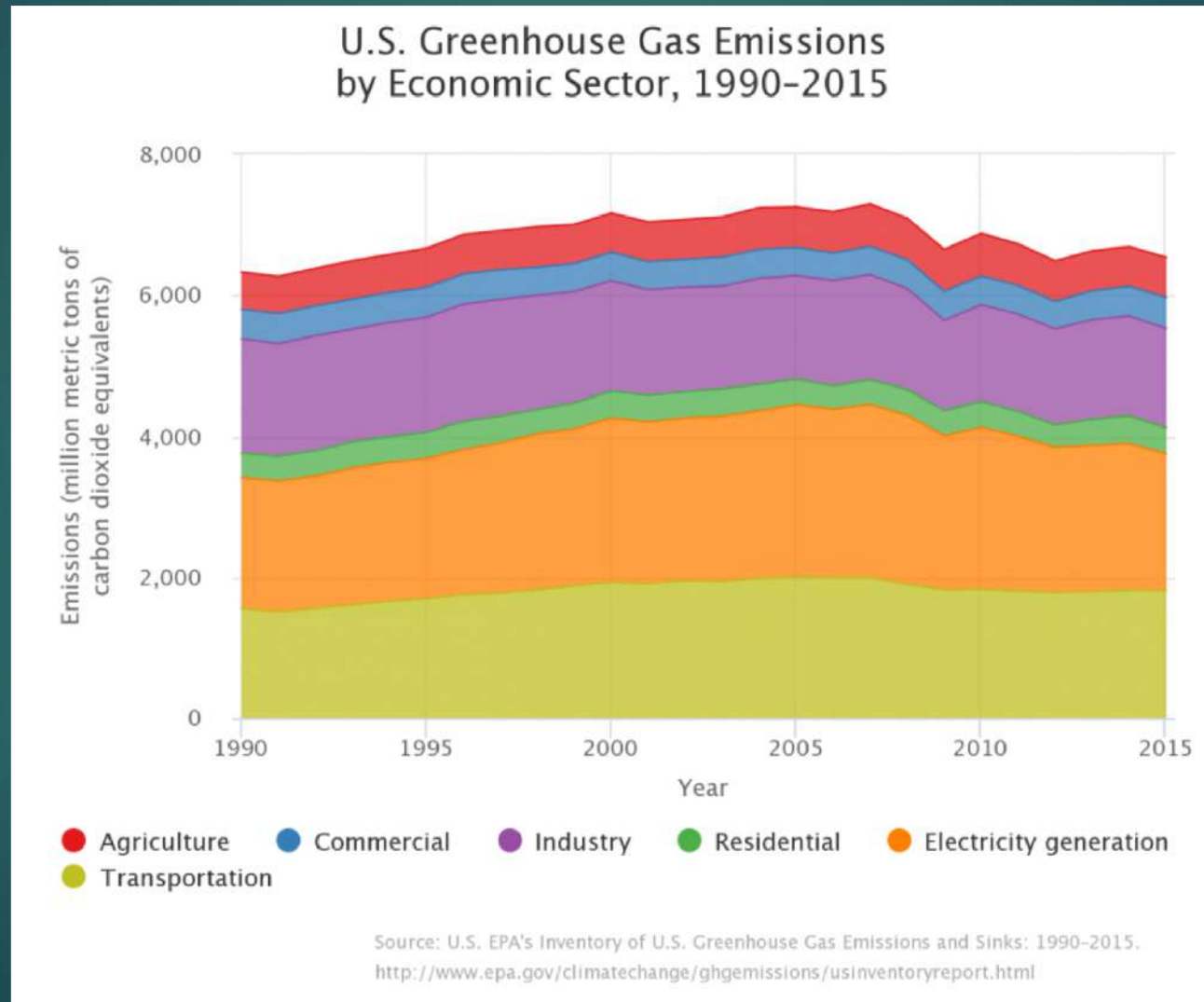


CO₂ Emissions



Aggregate Emissions
(Six Common Pollutants)

How Are We Doing? – Part 2



What Are The Costs To Industry?

▶ Direct Costs

- ▶ Labor
- ▶ Control Device(s)
- ▶ Formulation Changes
- ▶ Permit Fees
- ▶ Utilities/Parasitic Load
- ▶ Penalties
- ▶ Outside Assistance (consultants, lawyers)

What Are The Costs To Industry?

▶ Indirect Costs

- ▶ Diminished productivity
- ▶ Production interruptions
- ▶ Project delays
- ▶ Decreased marketplace mobility
- ▶ Lost opportunities

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▶ **Project delays**

▶ **Decreased marketplace mobility**

▶ **Lost opportunities**

What Is Excessive Regulation?

- ▶ Punishment doesn't meet the crime
- ▶ Adds little/no value to state of the environment
- ▶ Drives away business
- ▶ Needlessly complex
- ▶ Imposes or allows for unnecessary delays
- ▶ Overvalues risk and/or undervalues reward and vice-versa
- ▶ Discourages innovation

So You Want To Build A New Power Plant? – Part 1

- ▶ Typical Preconstruction Environmental Issues
 - ▶ Wetlands
 - ▶ Endangered species
 - ▶ Historical artifacts
 - ▶ Affect on Class 1 areas (e.g.: National Parks)
 - ▶ Wastewater and stormwater
 - ▶ Traffic study
 - ▶ Hazardous material handling
 - ▶ Air quality construction permit

So You Want To Build A Power Plant? – Part 2

Step	Cumulative Days
▶ Prepare, submit construction permit application	90
▶ Permitting authority review	180
▶ Draft permit review by USEPA	240
▶ Draft permit to public notice	270
▶ Public notice end/public meeting notice issued	300
▶ Public meeting comment period ends	380
▶ Responses to public comments published	440
▶ Permit issued	450
▶ Permit appeal (state level) resolved	510

So You Want To Build A Power Plant? – Part 2

Step	Cumulative Days
▶ Appeal to Environmental Appeals Board (permit stayed)	540
▶ EAB resolves appeal in favor of project (stay removed)	900
▶ Judicial appeal filed	930
▶ Developer gives up	1,000

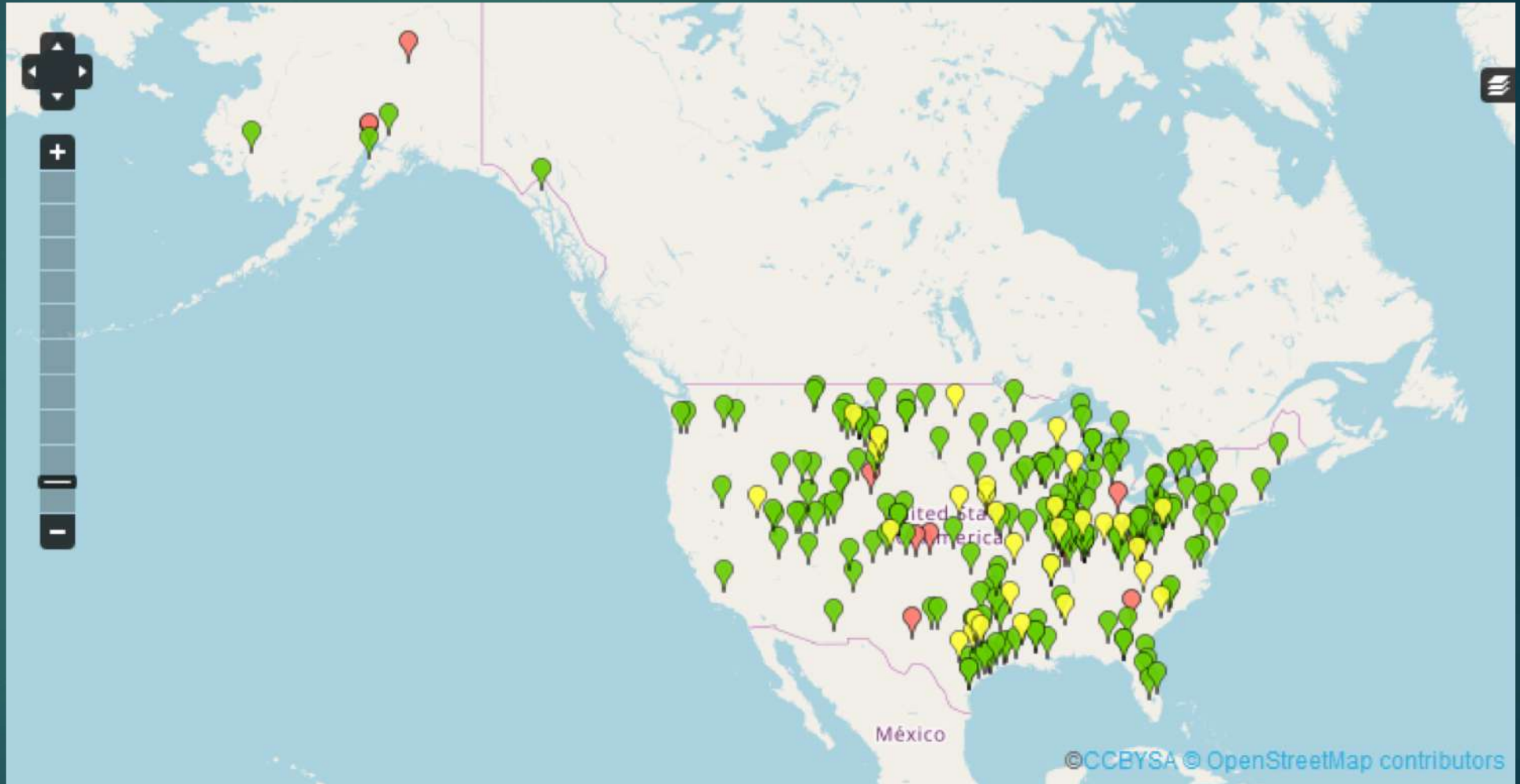
Let's Review

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Sierra Club's War on Coal

~~192
Projects~~

~~100 GW +
Modern
Power~~

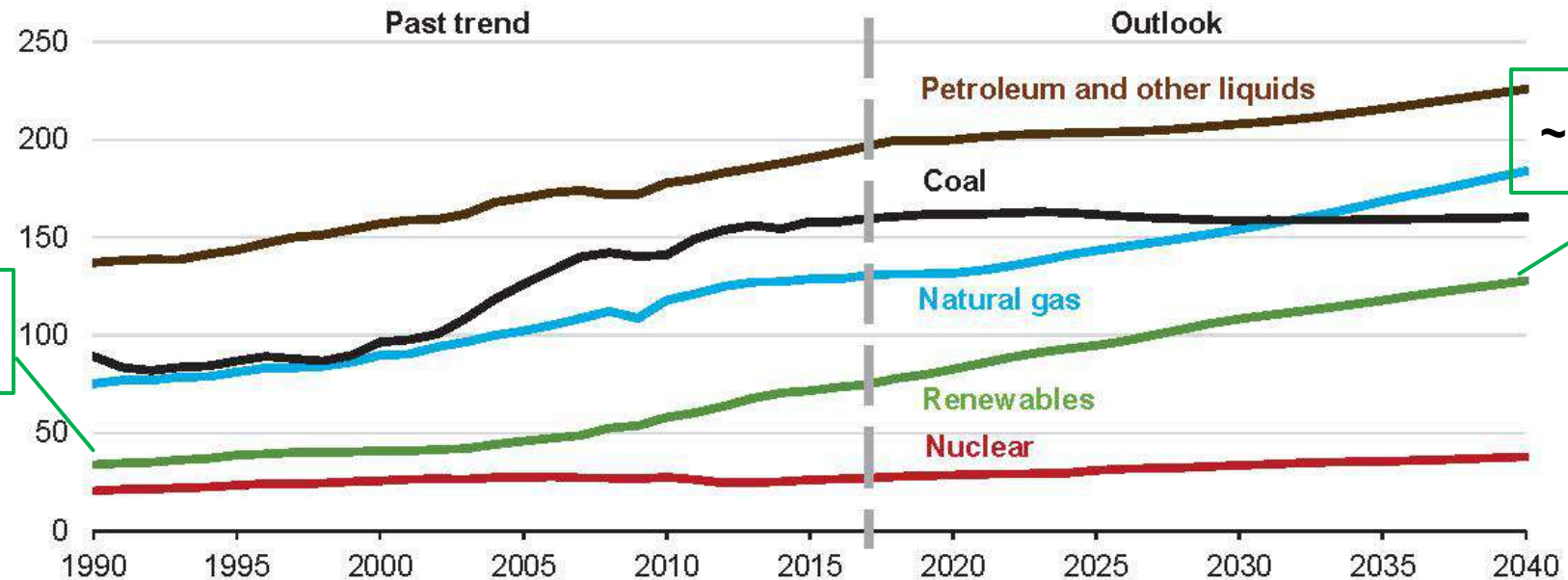


<http://content.sierraclub.org/coal/environmentallaw/plant-map>

Reality

Energy consumption increases over the projection for all fuels other than coal in the Reference case with renewables being the fastest-growing energy source

World energy consumption by energy source
quadrillion Btu



Source: EIA, International Energy Outlook 2017

State/District Level Regulation

Generic Red

- ▶ Quicker turn-around
- ▶ Simpler processes
- ▶ More open to innovation
- ▶ Less aggressive enforcement
- ▶ Penalties typically lower
- ▶ Distinguish between procedural mistakes and environmental harm

Generic Blue

- ▶ Slower turn-around
- ▶ More complex processes
- ▶ Often discourage innovation
- ▶ More aggressive enforcement
- ▶ Penalties typically higher
- ▶ Little or no distinction between procedural mistakes and environmental harm

Contact Information

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Questions & Discussion

