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# Environmental Governance: Promoting Health, Economic Progress and Stability

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## Effective Environmental Governance Promotes a Strong Economy

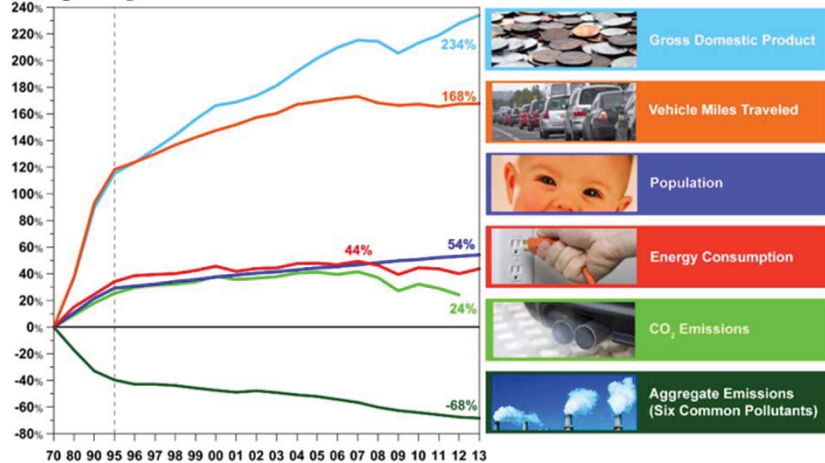
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- Yields health & economic benefits.
- Creates predictability, fair playing field.
- Promotes a stable business climate.
- Spurs technological innovation.
- Increasingly a barometer for broader rule of law, responsiveness, and security.



## Environmental Protection Goes Hand in Hand With Economic Growth

Comparing Growth and Air Emissions in the United States since 1970



Since 1970, regulations have reduced common air pollutants by 70% while U.S. economy more than tripled.



## Climate Change: A Challenge for the Environment, Economy, Security




Relative vulnerability of coastal deltas as shown by the population potentially displaced by current sea-level trends to 2050 (Extreme = >1 million people displaced; High = 1 million to 50,000; Medium = 50,000 to 5,000). Source: IPCC



## Solutions for Transition to a Cleaner Energy Economy Are Here Now



- **Less Pollution:** U.S. has already cut its total carbon pollution
- **Renewables Increasing:** In U.S. since 2009:
  - 3x wind power
  - 30x solar power
  - Solar industry creating jobs at 12x rate of other industries
- **Costs Dropping:** Average cost of solar dropped by 50% since 2010.
- **Innovation Accelerating:** Private-sector companies are scaling up clean energy innovation.
  - Business leaders are coming to see climate action as a business opportunity, not a threat.



# THE CLEAN POWER PLAN

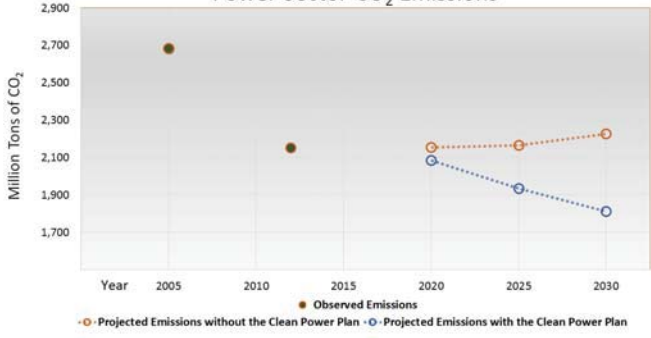
[epa.gov/cleanpowerplan](http://epa.gov/cleanpowerplan) #ActOnClimate #CleanPowerPlan

- Builds on technological advancements & consistent with market trends
- Based on science and the law
- Will reduce carbon pollution from existing power plants by 2030 by approximately 32 percent from 2005
- \$34-54B in benefits

Approach

- Improved efficiency at power plants
- Shifting generation from higher-emitting power plants to natural gas
- Shifting to clean energy renewables

### Power Sector CO<sub>2</sub> Emissions

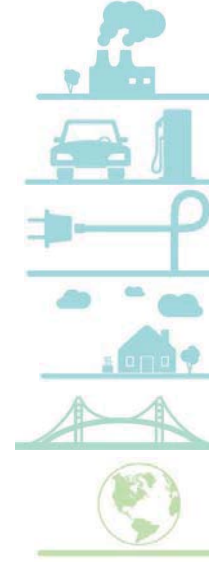


Year	Observed Emissions (Million Tons of CO <sub>2</sub> )	Projected Emissions without the Clean Power Plan (Million Tons of CO <sub>2</sub> )	Projected Emissions with the Clean Power Plan (Million Tons of CO <sub>2</sub> )
2005	2,700	-	-
2012	2,150	-	-
2020	-	2,150	2,100
2025	-	2,200	1,950
2030	-	2,250	1,850



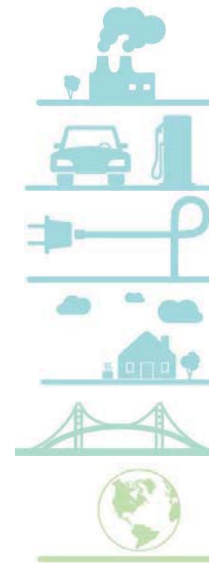
## Clean Power Plan: Unprecedented Level of Public Participation

- Hundreds of outreach meetings
- Over 4 million comments.
- Final regulation benefited tremendously from this wealth of stakeholder input.
  - Range of perspectives: state, local and tribal officials; industry representatives; public health experts; public interest advocates; community leaders; and members of the public.
  - Signaled public support for action on climate change.
  - Comments from utilities helped ensure that plan reflects how electricity moves around the grid.
  - Input from federal partners ensured that rule would not disrupt the energy supply.



## Other EPA Climate Actions

- Improving **fuel economy standards** to send vehicles farther on a gallon of gas
- Lowering **methane** emissions
- Reducing use of **HFCs** and supporting phasedown under Montreal Protocol
- Addressing emissions from **aircraft**
- **Energy Conservation Standards** for Appliances and Equipment
- **Voluntary Energy Standards** under EnergyStar
- **Adaptation** to prepare for impacts of climate change





## Environmental Governance: Key to Sustainability

- Rio+20 & Sustainable Development Goal 16 recognized good governance & Rule of Law as essential for sustainable development
- UNEP decision 27/9 (2013) articulated core features, including:
  - **Information disclosure**
  - **Public participation**
  - **Laws that are implementable and enforceable**
  - **Implementation and accountability mechanisms**
- International cooperation example:  
EPA work with China
  - Expanding disclosure of emissions
  - Stronger penalties for violations,
  - NGO lawsuits against polluters



## International Cooperation on Environmental Governance

- Proposal that UNEP compile national legal models and provide legal implementation assistance
  - Initial focus could be air pollution (WHO estimates 7 million premature deaths annually).
- **Lead Paint Alliance: Voluntary multilateral initiative by UNEP & WHO**
  - Major source of lead exposure, as contaminated dust in homes is ingested or inhaled by children.
  - Reduced productivity from IQ loss due to childhood lead exposure: est. \$950 billion.
  - Alliance toolkit and workshops help countries develop and implement legislation to limit lead paint

