



BIPARTISAN POLICY CENTER

U.S. Energy Policy: Future Directions and Challenges

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OVERVIEW OF PRESENTATION

- **BPC's Strategic Energy Policy Initiative (SEPI)**
- **Successes and challenges for the energy sector**
- **Four things to watch going forward**
- **Conclusions**

SEPI LEADERSHIP & COMPOSITION

Leadership

Project Co-Chairs

Byron Dorgan, former Senator (D-ND)
Trent Lott, former Senator (R-MS)

Energy Security Chair

General James L. Jones USMC (Ret.), former U.S. National Security Advisor

Energy & Environment Chair

William K. Reilly, former Administrator of the U.S. Environmental Protection Agency

Composition

SEPI Members

Participants from industry, academia, utilities, public utility commissions, non-governmental organizations

SEPI Overarching Strategic Goal:

The U.S. energy system should provide affordable, secure, and reliable supplies of energy, while ensuring continuous improvement in environmental performance

SEPI developed 50 recommendations for Congress, federal agencies, states, and industry in four core areas:

- Pursue a diverse portfolio of energy resources
- Improve the energy productivity of the economy
- Accelerate innovation and technology improvements across the energy sector
- Improve energy policy governance and accountability

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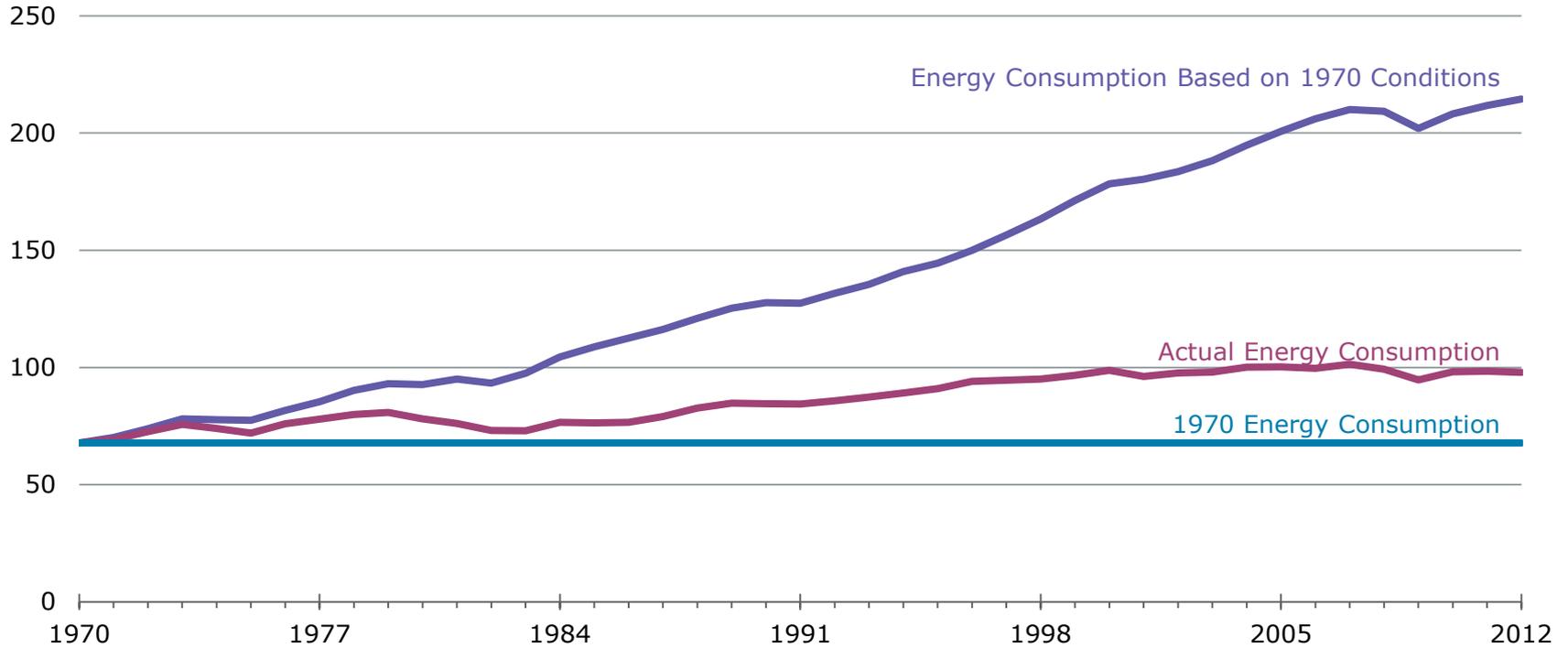
RECENT SUCCESSES IN THE ENERGY SECTOR

The state of U.S. domestic energy sectors, energy productivity, and energy security is the best in many decades as evidenced by the following:

- 1 The energy savings from energy productivity improvements have exceeded the contribution from all new supply resources
- 2 Domestic oil consumption has declined
- 3 Estimates of U.S. natural gas reserves have soared
- 4 Domestic oil, natural gas, and renewable energy production have increased, and energy imports have declined
- 5 The cost-effectiveness of renewable energy has improved and deployment has increased
- 6 Domestic energy-related criteria pollutant and carbon dioxide emissions have declined

ENERGY PRODUCTIVITY

Energy Demand and Supply: Energy Productivity Contribution
Quads of Total Primary Energy



CHALLENGES IN THE ENERGY SECTOR

The U.S. must confront a number of economic, environmental, and political challenges:

- 1 Affordable energy is still a challenge for many households and businesses and energy costs are a huge political consideration
- 2 The oil and gas boom comes with environmental challenges
- 3 The electric grid faces hurdles in upgrading infrastructure and integrating new renewable sources
- 4 Public research and development (R&D) spending in energy is insufficient for the challenges ahead
- 5 **Climate change**

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FOUR THINGS TO WATCH ON CLIMATE/CLEAN ENERGY

- **What will be the impact of existing Obama Administration Initiatives?**
- **Will Congress pass new laws to address climate change and clean energy?**
- **What can be done by U.S. states and other sub-national entities?**
- **What can be done under existing federal laws (Clean Air Act)?**

- **The Recovery Act provided significant new investment in low carbon energy including:**
 - Smart grid
 - Renewable energy
 - Energy efficiency
 - Carbon capture and storage
 - Nuclear power
 - Electric vehicles
 - Energy storage
- **Key Question: What will be the legacy of these investment?**

WILL CONGRESS PASS NEW LAWS?

- **Concern/debate about debt is the main political driver**
- **Proposed policies**
 - Carbon tax as part of debt/tax reform?
 - Clean energy standards?
 - Increased energy R&D spending?
 - Other programs?
- **Key Question: In the short-term, can Congress still do big things?**

ACTIONS BY STATES AND OTHER SUB-NATIONAL ENTITIES?

- States, cities, and other sub-national entities will continue to be a testing ground for climate, clean energy policies
- Policies
 - Renewable energy standards (29 states)
 - Cap and trade (California and RGGI states)
 - Electricity policy (distributed generation, net metering, energy efficiency)
 - City-wide initiatives: over 1000 mayors vowing to reduce emissions below 1990 levels
- Key question: Is it enough to let a “thousand flowers bloom”?

Clean Air Act Regulation of GHGs

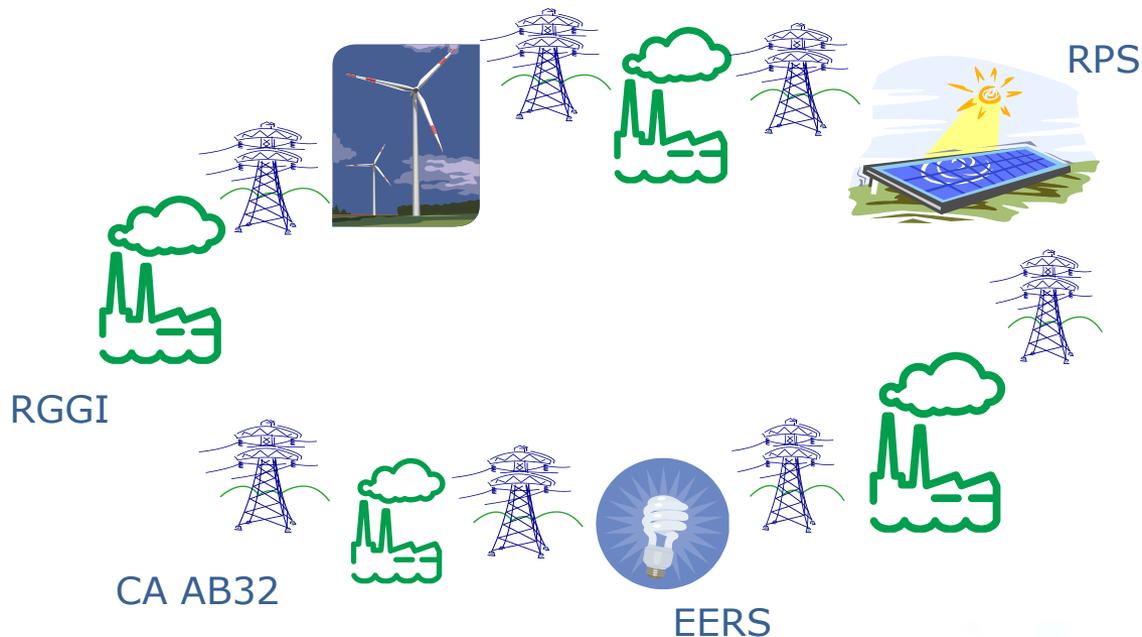
- Supreme Court decision *Massachusetts v. EPA*
- EPA Endangerment Finding: GHGs endanger public health and welfare
- First CAA regulation of GHGs: mobile source tailpipe standards
- March 2012 proposed GHG standards for *new* power plants
- Expected: performance standards for *existing* power plants

Examples of Potential Forms for Existing Source Standards: "best system of emission reduction"

Per stack emission rate(s)
(e.g., lbs CO₂/MWh)



System-wide (e.g., averaging/trading; inclusion of renewables & energy efficiency; tapping states' best efforts to reduce GHGs)



Key Questions: When? How effective?

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CONCLUSIONS

- What does “all of the above” really mean?
- The politics and geopolitics of energy production
- Impacts of the Clean Air Act GHG rules
- Markets vs. government role