

Summary of EPA Analysis of Impacts of Key Climate Bills on CO₂ Reductions

EPA analyzed impacts of 3 Senate bills on CO₂ reductions:

- S. 1766 – Bingaman-Specter (Low Carbon Economy Act)
- S. 280 – Lieberman-McCain (Climate Stewardship and Innovate Act)
- S. 485 – Kerry-Snowe (Global Warming Reduction Act)

Bills have varying caps:

- Bingaman-Specter: 60% below 2006 levels by 2050
- Lieberman-McCain: 60% below 1990 levels by 2050
- Kerry-Snowe: 65% below 1990 levels by 2050

Concludes each bill has nearly identical impact on global CO₂ concentrations by 2095:

- S. 1766 and S. 280 each reduce global CO₂ concentrations 23 ppm from reference case
- S. 485 reduces global CO₂ concentrations 25 ppm from reference case

Concludes each bill has nearly identical impact on U.S. GHG emissions by 2095:

- S. 1766 would reduce U.S. GHG emission by 326 billion metric tons (BMT) CO₂e
- S. 280 would reduce U.S. GHG emissions by 335 BMT CO₂e
- S. 485 would reduce U.S. GHG emissions by 371 BMT CO₂e

However, bills yield significantly different reductions in U.S. GHG emissions by 2050:

- S. 1766: 87 BMTCO₂e
- S. 280: 102 BMTCO₂e
- S. 485: 126 BMTCO₂e

This analysis does not include economic impacts of achieving the reductions. EPA will release an analysis of the economic impacts of achieving reductions in the Bingaman-Specter bill by November 15, 2007.

Differences in the environmental impacts of the three bills pale in significance when looked at in the context of total global contributions to GHGs, the extent of international cooperation in reducing emissions, and a very long-term time horizon (*i.e.*, 2095).

Key assumptions include:

- For international actions:
 - Developed countries adopt targets of 50% below 1990 levels by 2050
 - Developing countries reduce emission to 2015 levels from 2025-2035, and then to 2000 levels from 2035 to 2050
 - Reductions from international actions are the same under all three bills
- Technology Accelerator Payment (TAP) is not triggered under S. 1766¹

¹ It appears EPA assumes the availability of a significant number of inexpensive offsets since the TAP is never triggered. This would be consistent with previous EPA modeling.