

Highlights of ICF International analysis:

“GHG Impact of Economic Stimulus Package”

Greenpeace commissioned ICF International to analyze the Obama Administration's proposed *American Recovery and Reinvestment Bill of 2009* (H.R.1) debated and passed by the House of Representatives in January.

Greenpeace concludes from ICF's analysis that the energy provisions of the stimulus package would have a net positive global warming impact, reducing greenhouse gas emissions by at least 61.5 million metric tons of carbon dioxide per year. Spending money immediately on energy efficiency upgrades to homes and buildings is the most efficient use of stimulus money to solve global warming and create green jobs and reduce energy bills. Provisions like renewable energy loan guarantees will likewise provide good green jobs and long term climate benefits.

ICF was able to do detailed analysis of two portions of the proposed economic stimulus package entitled Clean, Efficient, American Energy and Modernize Roads, Bridges, Transit and Waterways. We excluded from the analysis those portions of the stimulus package where the greenhouse gas impact was impossible to determine (e.g. homeland security, Medicaid, unemployment benefits).

Energy Funding

ICF was able to quantify the carbon footprint for roughly \$24 billion of \$51.9 billion detailed in the energy portion of the stimulus package. It was calculated that this \$24 billion investment would eliminate approximately 61.5 million metric tons of annual carbon dioxide emissions, about 1% of current annual US emissions.

This is the same as:

- Eliminating the carbon dioxide produced by the electricity used by 7.9 million American homes, about 8 times the number of households in the city of Chicago.
- Taking nearly 13.3 million cars off the road.

For the remaining \$28 billion in slated energy spending, the majority of the itemized provisions were determined likely to have a net positive global warming benefit, but could not be quantified with details provided in the legislation. For instance, several provisions provide for research that will likely deliver long term global warming benefits (e.g. smart grid and battery research). Some provisions would have less certain environmental benefits (like the GSA Federal Fleet- ethanol question).

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Weatherizing homes and buildings and improving the energy efficiency of buildings provide the largest net greenhouse gas reductions and cost savings in the stimulus package. These provisions also proved the easiest to quantify. Some ICF findings include:

- Smart Appliances - Retiring old refrigerators would likewise deliver large carbon benefits and in turn, save consumers on electric bills.
- Helping consumers install florescent light bulbs would provide immediate payback in terms of carbon and energy savings.
- Local Government Energy Efficiency Block Grants generates an annual \$3 billion in energy savings with a \$6.9 billion investment.
- Energy Efficiency Housing Retrofits generate \$1.25 billion in savings on a stimulus investment of \$2.5 billion and save 87.6 million metric tons of carbon dioxide over the life of the programs' energy efficiency improvements.
- Home Weatherization spending of \$6.2 billion investment could reduce carbon dioxide emissions by at least 8 million metric tons annually and 131 million metric tons over the lifetime of the insulation improvements.

Transportation Funding

ICF analyzed the potential impact of \$30 billion slated for highway construction under the provision entitled Modernize Roads, Bridges, Transit and Waterways.

- Spending all the stimulus money on new highways would have roughly 10-50 times the annual carbon impact of the same money spent on public transportation (light rail) or the repair of existing roads.
- In the worse case scenario, new highways would generate over 250 million tons of net additional CO2 emissions over the lifetime of the road. In contrast, public transit projects of the same capacity would generate only 4 million tons of net carbon dioxide over its lifetime
- After construction phase related emissions, public transit saves up to 15 million tons over its lifetime.