# HIGH SPEED INTERNET

## AND THE ENVIRONMENT



### **OVERVIEW**

Making affordable high speed Internet accessible to everyone creates many solutions to America's growing energy problems. Broadband reduces our carbon footprint while promising substantial economic pay-offs. By including universally accessible, high speed Internet as an essential part of our energy plan, the United States can build a green economy, greatly reduce energy use and greenhouse gas emissions, and spur economic growth by creating new environmental jobs.

#### **CURRENT CHALLENGES**

Unfortunately, many Americans do not realize that high speed Internet enables solutions to many of our most challenging environmental problems. Although the U.S. consumes more energy than any other country, we trail behind many industrialized nations in broadband proliferation. As one of the world's biggest polluters, the environmental benefits of high-speed Internet can not be fully realized while approximately 20 million Americans (6-8 million households) currently lack access to broadband and millions more are priced out of the market.

#### **BENEFITS OF HIGH SPEED INTERNET**

- Telemedicine, long-distance and business communication programs, and e-commerce are all high speed Internetbased applications that replace basic everyday carbonintensive activities with carbon-neutral alternatives. The Climate Group finds that broadband-enabled travel substitution could save \$20–40 billion annually in gross fuel savings in the U.S. by 2020.
- Smart meters, smart buildings, and smart grids built with high speed Internet capabilities can increase control over home and building energy consumption, reducing energy

use and cost. The Climate Group also finds that a national smart grid could reduce carbon dioxide emissions in America by 230- 480 million metric tons per year by 2020.

- A study by the American Consumer Institute found that the U.S. could achieve a net reduction of 1 billion tons of greenhouse gas over 10 years, which if converted into energy saved would constitute 11 percent of annual U.S. oil imports if we invested in broadband-enabled energy efficiency.
- A \$50 billion investment in smart grid technology would create 239,000 new U.S. jobs, according to the Information Technology and Innovation Foundation. Smart communications networks, sensors, and information technology can create an intelligent and connected power grid that will deliver electricity more efficiently, while twoway communication systems like "smart meters" and "smart appliances" allow households and businesses to control and substantially reduce energy consumption.

#### RECOMMENDATIONS

- Affordable high speed Internet access promises energy savings, environmental benefits, and substantial monetary savings. To get there, we need to invest in the expansion of access to affordable high-speed broadband to all Americans.
- Programs to support investment in smart grid, smart meters, and smart appliances will increase energy efficiency and reduce greenhouse gases.

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