

How Broadband Can Build a Globally-Competitive, Green U.S. Economy

Providing broadband connectivity for all Americans is an [essential first step](#) for the United States to transition to an agile, low-carbon economy that is globally competitive in the 21st century. If Congress embraces a robust broadband policy now, we can improve U.S. labor productivity, save Americans billions in energy expenses, and significantly reduce U.S. greenhouse gas emissions.

An [American Consumer Institute](#) report concluded that "the wide adoption and use of broadband applications can achieve a net reduction of 1 billion tons of greenhouse gas over ten years, which, if converted into energy saved, would constitute 11% of annual U.S. oil imports." [According to another study](#), broadband benefits could also yield an estimated \$1.9 trillion in savings from increased efficiencies across a range of industries and decreased energy and fuel consumption. These improvements would create a projected 29.5 million jobs worldwide by expanding businesses' capacity and unleashing funding for new investments.

Unfortunately, with [an estimated 42 million Americans lacking the ability to purchase broadband service](#), and many more with suboptimal connections, we cannot reap the full benefits of such proposals. [The problem is also getting worse due to the near-record high prices for internet services](#) in the U.S. This digital divide hurts our neighbors, our environment, and our economy. If left unchecked, this issue will undermine America's competitive edge and widen the gap between our current plight and future prosperity. Congress must take every step now to ensure that broadband is affordable, reliable, and universally available.

How Broadband Connectivity Improves Lives, Saves Energy, and Preserves Our Environment

- **Smart Work.** With better broadband, we could double the current number of Americans who telework, and [cut greenhouse gas emissions by an additional 42.4 million tons of carbon dioxide, and 2.6 million tons of other pollutants every year](#). As the largest source of energy cost-savings and emission reduction, increased teleworking would also amount to direct savings of nearly \$100 billion, including the cost of 4.4 billion gallons of gasoline each year, due to less commuting.
- **Smart Buildings.** High-speed broadband enables thermostats, lights, TVs, computers, and other electronic devices within homes and businesses to tie into one internet-driven system, allowing them to adjust settings automatically -- to maximize comfort while minimizing costs. These [smart buildings will require a fraction of the energy they currently consume](#).
- **Smart Farming.** [Broadband helps our farmers](#) who depend on data to work. From remote sensors in tractors, irrigation equipment, nutrient application machinery, and harvesters—these applications improve the efficiency of water and the productivity of agriculture. If managed well, farmland can also help capture carbon emissions, too, rather than further contribute to the problem. [According to a 2019 USDA report](#): "Improved fertilizer, soil, and water use can significantly improve water quality with less runoff and reduce climate gas emissions, which is important since agriculture accounts for 10-15 percent of worldwide emissions."