

Mobilizing for a Zero-Carbon America:

A Strategy for Combating Climate Change
And Creating up to 25 Million American Jobs

REWIRING
AMERICA

Overview

From mass unemployment to the threat of climate change, the U.S. will face a number of seemingly unprecedented challenges even after the current public health tragedy has passed. Finding needed solutions won't be easy and will require creative thinking, robust analysis, and political resolve.

The good news is that these challenges also present opportunities, particularly in terms of the economic development and job creation associated with decarbonizing America's economy. Based on an extensive industrial and engineering analysis, a new report entitled "**Mobilizing for a Zero-Carbon America**" demonstrates that an aggressive national commitment to electrify all aspects of our economy would **create up to 25 million good-paying American jobs over the next 15 years and 5 million sustained jobs by mid-century**. Prior studies have looked at decarbonization of particular sectors, but this is the first analysis of the job opportunities that would result from a rapid and total decarbonization of the economy as a whole. Unlike other approaches, which tend to see climate change policy as primarily environmental in nature, the study also imagines the electrification of America as fundamentally **infrastructure designed to power America and its economy in the 21st century**.

The report's vision is both audacious in scope and exciting in possibilities. The authors paint a picture of what the "Maximum Feasible Transition" of America's energy sector would look like and the results are compelling: **up to 25 million new jobs, up to \$2,000 annual savings for the average household on energy costs, dramatically lower carbon emissions, and better health outcomes for American families breathing cleaner air**. The vision is one of American workers in every zip code installing American-made solar panels and hot water heaters in American homes to the health and economic benefit of American families, all done with existing technology backed by the political will to act.

The report is authored by Saul Griffith, PhD, engineer and **MacArthur "Genius Award" Fellow**; and Sam Calisch, PhD, an MIT physicist. It is being issued by **Rewiring America**, a nonprofit launched by Griffith and Alex Laskey (a clean energy entrepreneur and founder of *Opower*) that is dedicated to identifying and promoting policy solutions to bring about the rapid decarbonization of the U.S. economy through electrification.

Key Findings

Electrifies Everything

To meet the challenges of climate change the U.S. needs to move aggressively to transition away from an energy system rooted in fossil fuels to one **almost wholly reliant on clean electricity**.

That means both upgrading how power is generated and transmitted across the grid and aggressively **electrifying heating and cooling equipment** in buildings and engines in vehicles.

Generates millions of new jobs

Based on comprehensive and granular research, the new study finds that in practice such a transition can create up to **25 million jobs in the near-term**.

This transition will also create an estimated **5 million jobs sustained over time**, which is roughly double the number of jobs supported by today's energy industry.

Saves Money Yearly

The study also addresses the economics of a Maximum Feasible Transition, finding that, even though meaningful amounts of capital will need to be invested, the efficiencies associated with electrification will end up saving the average household **up to \$2,000 per year in reduced energy costs**.

Achievable Now, Across the US

The transition can be done using existing technology and American workers. Indeed, work such as retrofitting and electrifying buildings will by necessity have to be **done by American workers in America. No outsourcing**.

The jobs will be created in a range of sectors, from installing solar panels on roofs to electric vehicles to streamlining how we manufacture products. They will also be **highly distributed geographically. Every zip code in America** has hundreds, if not thousands, of buildings ripe for electrification in the years to come.

Prudent, Proven Economic Model

While government investment will be critical to the transition, private capital also has a large role to play. The study estimates the government's share of overall costs to be about \$300 billion per year for 10 years for an approximate total of \$3 trillion, mostly **in the form of loans and/or loan guarantees to spur lending**, akin to similar loan systems that the government has created in the past.

Get In Touch

Creating 25 million jobs turns out to be similar in size and scope to the mobilization of U.S. Industry for World War II. America has done this before and we can do it again. For additional info please visit <https://www.rewiringamerica.org/> or contact info@rewiringamerica.org