



Rewiring America's Federal Policy Framework May 2021

Household electrification has the potential to create millions of new jobs, deliver thousands of dollars in annual energy bill savings for the average American family, and produce dramatically improved health outcomes, particularly in those communities that have long suffered disproportionately from the burning of fossil fuels. Electrification is also the only sufficiently viable decarbonization strategy we currently have for staying inside of 1.5 degrees Celsius warming. Simply stated, we need to electrify all 121 million households in America, which means manufacturing and installing 1 billion machines. It is a tremendous opportunity that will create millions of family sustaining jobs in every zip code in the country, all with technology we have available now.

By our most conservative estimates, nearly **65 million** American households would save money *today* on their energy bills if they had modern electric equipment in their homes. Over 36 million of these families meet the definition of low-to-moderate income (LMI) households. Many of them are families of color who live in older homes with highly inefficient heating systems, and who experience the highest housing and energy cost burdens, have the highest exposure to lead and other health hazards, and are generally more vulnerable to the impacts of climate change. Electrification, in addition to all its other benefits, presents a unique opportunity to help address these social and environmental justice issues, particularly those facing front line and fence line communities, in simultaneous and complementary ways.

Widespread electrification is not without its challenges, however. The upfront costs of modern electric equipment tend to be higher than other options, even if they save money over time. The market for household retrofits is also fragmented and disorganized, making it harder to scale adoption. Awareness is also relatively low. Not enough consumers, contractors, and other intermediaries are sufficiently familiar with the benefits that electrification brings to the table.

Outlined below is a policy framework designed to address these challenges and accelerate household electrification across the United States. The framework is rooted in four key principles:

- 1. Every American household -- including, and especially, low-to-moderate income households -- should be able to afford to switch to modern electric equipment**
- 2. These clean electric appliances should be made in the United States, and the costs of purchasing and installing them should be on par with, or lower than, those of their fossil-fuel counterparts**
- 3. The work of "rewiring America" should be done by local workers earning good wages**
- 4. The electrification process should be as simple and seamless as possible for every household in America**



Principle 1: Every American household -- including, and especially, low-to-moderate income households -- should be able to afford to switch to modern electric equipment

Going electric will result in meaningful savings for the vast majority of American households, even accounting for the fact that making the switch often involves higher up-front equipment costs and installation expenses. Nevertheless, many families simply do not have the available cash currently needed to make these investments or access to financing options. Smart policy will provide flexible financial support to overcome this adoption hurdle, including subsidized financing and, critically, direct, “off the top” assistance for LMI households. This will ensure that, at a minimum, the cost of electrified equipment is no higher than it would be for replacing existing equipment in kind and that no funds need to come “out of pocket” when switching.

Proposed Initiatives:

- Enact the Household Electrification Incentive Program, providing an average grant of \$4,200 to participating households and \$6,000 to LMI households for the purchase and installation of clean and efficient electric appliances and related household equipment (such as upgraded breaker boxes) necessary to make homes “electrification ready.” Together, these products and projects are referred to as “Qualified Electrification Projects” or “QEPs”.
- Promote affordable financing for QEPs through a multi-pronged approach:
 - Enact the Clean Energy and Sustainability Accelerator (aka the national “Green Bank”).
 - Amend Title XVII of the Energy Policy Act of 2005 to include QEPs as eligible projects for the Innovative Energy Loan Guarantee Program, administered by the DOE’s Loan Program Office and amend Section 1704 of Title XVII to provide associated funding.
 - Amend the authority provided by Section 4 [7 USC 904] of the Rural Electrification Act of 1936 to include residential electrification as an eligible lending purpose and provide associated funding to the Rural Utilities Service.
 - Fund and authorize HUD loan programs, VA loan programs, or other broadly accessible mortgage-related lending programs to allow them to finance QEPs for eligible borrowers.
- Amend 25(c) to provide refundable tax credits for QEPs at values that would, at minimum, achieve price parity between QEPs and their fossil-equivalents.
- Raise the cap on the Weatherization Assistance Program (WAP’s) Enhancement and Innovation Program to enable additional pre-weatherization and indoor health work, amending its authority to include home infrastructure upgrades (e.g., breaker boxes, wiring needs, etc.) so participating homes are “electrification-ready.”



Principle 2: These clean electric appliances should be made in the United States, and the costs of purchasing and installing them should be on par with, or lower than, those of their fossil-fuel counterparts

A comprehensive approach to driving down the upfront costs of electrification will include policy support from the supply side as well. Incentives to manufacturers can help drive household adoption and can drive job creation here at home.

Proposed Initiatives:

- Amend Sections 45M and 48C to include the domestic manufacture of QEPs with 1) the requirement that no less than 75 percent of benefits flow through to the customer in the form of lower appliance prices, and 2) with incentive amounts that result in price parity between QEPs and their fossil equivalents.
- Strengthen Federal standards, target key components through technological and innovation investments, and aligned incentives to ensure that every manufactured and installed air conditioner is also a heat-pump.
- Repeal subsidies that artificially inflate price discrepancies between clean electric equipment and fossil-powered machines, including incentives for both consumers and manufacturers.

Principle 3: The work of “rewiring America” should be done by local workers earning good wages

Electrification will also deliver massive job creation. Millions of jobs will be needed to: (i) manufacture and install the 1 billion household machines and appliances that will transform the residential sector; (ii) develop and deploy the clean electricity generation necessary to power them; and (iii) support the broader transition of the American economy to clean energy. Enacted policies should expressly focus on making sure that those opportunities go to local workers -- particularly workers likely to be displaced in the transition -- at good wages and that sufficient workforce capacity exists to get the job done.

Proposed Initiatives:

- Partner with trusted community and labor organizations to identify opportunities across geographies, providing awards to electrification workforce training and placement programs. See [Rewiring Communities](#) for further details.
- Engage and incentivize manufacturers of QEPs to base QEP facilities in the U.S., hire local workers and partner with community and labor organizations to provide opportunities.
- Provide state block grants to state energy offices to undertake electrification-related training and certification programs for workers



Principle 4: The electrification process should be as simple and seamless as possible for every household in America

In addition to the challenge of higher upfront costs, uptake of electrification is often hindered by *how* decisions around replacing relevant equipment are typically made. Few people spend much time thinking about the heating equipment in their basements. That is probably as it should be, but it comes at a cost. Typical homeowners are not going to take the time to learn about the benefits of electrification on a cold January night when the furnace fails. As a result replacing like-for-like often becomes the path of least friction.

That is why smart policy needs to make the process of going electric not just cheaper, but easier as well. That means organizing markets, inviting all stakeholders to identify and address friction points, and bringing trusted organizations and institutions into the process to help build confidence and adoption so that “the whole package” is in front of consumers when they make decisions at the proverbial kitchen table. .

Proposed Initiatives

- Launch the [Rewiring Communities](#) program to provide streamlined grants, financing, and workforce development and other resources to both rural and urban counties across the country.
- Establish an Office of Electrification that sets national standards for electrification projects, incentivizes streamlined local permitting processes, and administers workforce development and other relevant programs on an as-needed basis to provide a one-stop shop for electrification progress.
- Provide tax incentives for companies to create and provide “electrification benefits” to their workers, bringing employers off the sidelines and expanding employee uptake of electrification by tapping into approaches that have proven successful in other areas such as healthcare and continuing education.
- Launch a joint DOE-HUD public awareness campaign that partners with community organizations and other trusted local entities to raise awareness on the benefits of electrification.