

Introduction

This year's State of the Union address and recent release of the <u>president's budget</u> deliver a clear message on where the Biden Administration stands on climate investments: They are critical and they must be actualized in the near term. Clean energy tax credits — federal subsidies to scale access to clean energy technology — are a critical tool for the administration to use to support and incentivize taxpayers to make the switch to renewable energy sources. If implemented at the scale the administration has proposed (more than twice the scale of previous investments), these tax credits would make significant strides toward reducing the U.S.'s greenhouse gas (GHG) emissions. While tax credits have been proven <u>effective</u> in reducing emissions, receiving the benefits of these credits can often be preceded by a slew of unnecessarily complicated bureaucratic and administrative hurdles.

Direct Pay describes the process of accessing tax credits through direct cash payments rather than as deductions from year-end tax returns, thus making it easier for people and organizations to capitalize on and access clean energy tax credits. The term originated from the <u>Domestic Manufacturing and Energy Jobs Act of 2010</u>, which was introduced in response to the complicated political processes brought forth by <u>Section 1603</u> of the American Recovery and Reinvestment Act of 2009 (<u>ARRA</u>). Section 1603 set a precedent for the Treasury Department replacing tax credits with direct payments to eligible entities that applied for specified energy projects. **Under <u>Section 1603</u>**, **105**,972 projects were funded, \$93.8 billion in private, regional, state, and federal investments were made, and an estimated total of 91.2 TWh of annual electricity generation from funded projects (the equivalence of the energy consumption of roughly 8,440,000 homes) was produced as of March 31, 2017.

Under Section 1603

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The Build Back Better (BBB) agenda goes even further, including \$292 billion in investments for clean energy tax incentives to lower the cost of new clean energy projects, increase accessibility to clean energy for low- and middle-income households, and lower the average family's energy bill by \$500 per year. These clean energy tax credits could also eliminate upward of 8.1 billion metric tons of carbon dioxide (CO2) by 2050, representing a roughly 22 percent cumulative CO2 emissions reduction and saving the U.S. as much as \$1.8 trillion when accounting for the social cost of carbon. The BBB agenda would also create a new pathway toward Direct Pay, allowing taxpayers to fully take advantage of clean energy tax credits and revolutionize our energy systems without forcing them to navigate excessive bureaucratic red tape.

Despite the clear need for increased investment in clean energy, without policy interventions that make these technologies scalable, cost-effective, and accessible to marginalized communities, our technological innovations will be in vain. Data for Progress seeks to explore opportunities for making clean energy technologies more accessible, particularly by exploring Direct Pay as a means for doing so. But first, a quick overview of why clean energy tax credits are so essential.

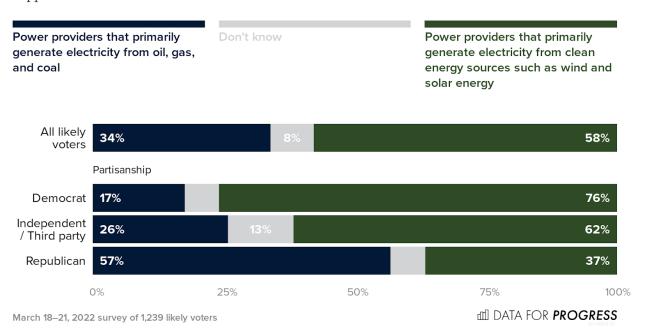
Clean Energy Tax Credits: A Path for Meeting U.S. Climate Goals

To meet the Biden Administration's target of reaching 80 percent clean energy by 2030, we must deploy every tool in our arsenal to empower the U.S. energy sector to operationalize a diverse array of clean energy technologies. With the growing threats of climate change and increasing concern about rising gas prices, coupled with Russia's invasion of Ukraine, there has never been a clearer need to scale up U.S. energy independence by investing in renewable energy sources. Scaling up domestic clean energy production can help shield U.S. energy markets from energy cost vulnerabilities and is an anti-inflation measure. Clean energy is stable energy, reliable energy, and cost-effective energy. Solar and wind energy never run out — unlike fossil fuels, which are finite resources in addition to being polluting and costly. Technologies that reduce GHG pollution and deliver sustainable energy already exist. And voters are ready for the federal government to make a clean energy economy a reality. Recent Data for Progress and Climate Power polling indicates that over two-thirds of all voters (69 percent), including nearly all Democrats (87 percent), two-thirds of Independents (66 percent), and a majority of Republicans (54 percent), say that, in light of Russia's invasion of Ukraine, the federal government should invest in domestic clean energy production. Additionally, over half of all likely voters believe that the federal government should provide more financial support to power providers that primarily generate electricity from clean energy sources like wind and solar, not oil, gas, and coal.

Voters Want the Federal Government to Support Power Providers That Use Clean Energy

The federal government currently offers financial support to power providers.

What type of power provider do you think the federal government should provide more financial support to:



While the U.S. already has access to an array of clean energy technologies, including solar, hydropower, wind, and geothermal energy sources, studies show that we must deploy them at a far larger scale than we currently are in order to meet our climate goals of keeping global warming below 1.5 degrees Celsius as per the terms of the Paris Climate Agreement. While it's difficult to quantify the costs of inaction or insufficient engagement on scaling clean energy technologies, the U.S. is only projected to achieve 51 percent clean energy by 2030 without additional policy intervention — a number that falls well below the 80 percent target the Biden Administration set last year. Clean energy tax credits have thus been raised as a means for reducing U.S. carbon emissions, reducing domestic energy costs, lessening our reliance on foreign oil and gas, and bolstering our national security and diplomatic strength — as detailed in a recent Data for Progress blog by Senator Ron Wyden. Scaling up clean energy also has a number of environmental and public health co-benefits, as a reduction in GHG emissions can lead to improvements in air and water quality. These tax credits also make clean energy projects more accessible and more feasible by lowering their costs, thus increasing the potential for diversifying our domestic energy resources. One viable avenue for doing so is by creating a mechanism that codifies Direct Pay into future clean energy laws.

While clean energy tax credits have proven effective in mainstreaming clean energy projects, there are a number of barriers preventing taxpayers from fully capitalizing on their benefits. Direct Pay is an opportunity to eradicate some of these barriers, and has already had demonstrable success in doing so.

Direct Pay: The Key to Unlocking the Full Benefits of Clean Energy Tax Credits

A number of taxpayers, both businesses and smaller-scale clean energy developers, have <u>struggled</u> to take advantage of clean energy tax credits and thus pass savings down to consumers. Due to their insufficient levels of taxable income, those seeking to develop clean energy projects must work with a series of collaborators and middlemen, including banks, known as tax equity investors, to provide the capital needed to develop the clean energy projects in order to reap the full benefits that the tax credits can offer. This proves to be a significant barrier for entry into the clean energy economy that the administration is trying to build, particularly for providers that deliver electricity to rural Americans, public power utilities, and other not-for-profit entities that are tax exempt and often under-resourced and thus have a difficult time taking advantage of these tax credits.

Section 1603 helped <u>address</u> these issues, allowing renewable energy developers to avoid bringing in tax equity investors by permitting them to claim a portion of the initial cost of the clean energy projects (typically about 30 percent of the initial investment) in the form of a grant (a direct payment). This was critical in light of the devastating recession in 2009, as financial hardships decreased the number of clean energy developers that would meet the financial threshold to qualify for clean energy tax credits. Because these developers could apply for a direct payment of funds via a grant, they were able to more quickly scale up clean energy productions than if they were to work with tax equity investors. The program ended in 2011, paving the way for over 105,000 renewable energy projects and offering an important first glance at the efficacy of Direct Pay for scaling clean energy production.

Direct Pay further serves as a solution to these issues by cutting out the middleman and allowing taxpayers to treat qualifying tax credits like an overpayment of taxes. If Direct Pay were implemented, recipients would get a tax refund in the form of a direct cash payment from the Treasury Department rather than going through other, more complicated means for monetizing tax credits, like working with tax equity investors. This also allows for clean energy developers to avoid the added costs of paying investors to help start up renewable energy projects, thus making it easier for lesser-resourced developers to benefit. It is unlikely, however, that Direct Pay would completely eliminate the need for tax equity investors, particularly in the case of large-scale clean energy projects requiring major capital investment.

The BBB agenda includes a new proposal, <u>Section 6417</u>, that would offer a Direct Pay option for renewable energy and electricity projects by allowing taxpayers to treat the tax credit as a tax payment, thus allowing them to receive a refund on their tax returns and more seamlessly access these funds. Section 6417 would allow Direct Pay to apply to clean energy projects that seek to scale wind, solar, hydrogen, and other clean energy technologies. It would also apply to projects related to <u>advanced manufacturing</u> and <u>carbon dioxide removal and carbon capture</u>, which, if approached through a progressive lens, could prove critical for reducing U.S. carbon emissions while creating good-paying jobs.

Tax credits that would qualify under Section 6417 include:

- Section 48 Investment Credit
- Section 45 Production Credit
- Section 45BB Clean Electricity
 Production Credit
- Section 48F Clean Electricity
 Investment Credit
- Section 45Q Credit
- Section 30C Credit for Alternative Fuel Vehicle Refueling Property Credit
- Section 48C Advanced Energy Project Credit

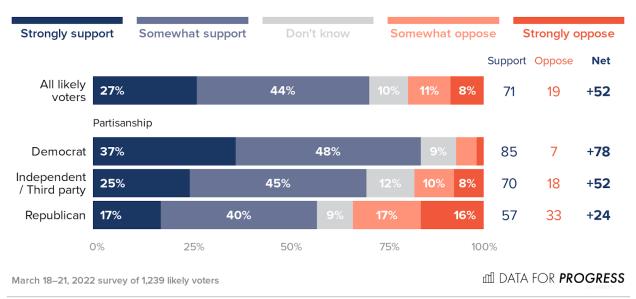
- Section 45W Zero-Emission
 Nuclear Power Production Credit
- Section 45X Clean Hydrogen
 Production Credit
- Section 48D Transmission
 Property Credit
- Section 48E, Advanced
 Manufacturing Investment Credit
- Section 45AA Advanced
 Manufacturing Production Credit
- Section 45CC Clean Fuel Production Credit

Not only would Direct Pay make tax credits more effective, it's popular too. Recent Data for Progress polling indicates that a bipartisan majority of voters strongly support reforming clean energy tax credits to make them more directly accessible. Seventy-one percent of likely voters support this idea, including 70 percent of Independents and 57 percent of Republicans, in addition to 85 percent of Democrats.

Voters Support Reforming Clean Energy Tax Credits

The U.S. government has a series of tax credits to lower the cost of new clean energy projects. Under the current system, most businesses can't take advantage of their clean energy tax credits directly and must strike deals with banks to get the benefits.

Would you support or oppose reforms that would make it easier for power providers to access the government's clean energy tax credits?



Section 1603 of the ARRA helped the U.S. enter a new stage of economic growth and recovery following the recession through clean energy tax credits. Section 6417 has the potential to do the same by establishing Direct Pay as a means for more easily actualizing the benefits of these tax credits. While the concept of Direct Pay is indeed popular with voters, its implementation faces many challenges.

Barriers to Direct Pay

Although it is clear that Direct Pay would increase the accessibility of many clean energy tax credits, there are numerous barriers to entry preventing clean energy technologies from being more accessible to American households and businesses. The BBB agenda, which includes nearly \$300 billion in investments for clean energy tax incentives, is currently in legislative limbo with the path forward unclear. This means that a number of clean energy tax credits that were extended or implemented in the Consolidated Appropriations Act of 2021 are set to expire soon. The climate provisions of the BBB agenda (including investments for clean energy), however, remain highly favorable with not only voters, but legislators, who are eager to secure a political win that lowers energy costs and catalyzes domestic clean energy production. It is crucial that Congress prioritizes passing this critical climate legislation, and includes language in it that establishes Direct Pay as a mechanism for actualizing clean energy tax benefits.

Opponents of Direct Pay argue that clean energy tax credits are an economic risk and that the benefits of clean energy tax credits are <u>over-exaggerated</u>. There are numerous studies, however, illustrating the <u>cost-effectiveness</u> of the tax credits put forward by the BBB agenda. Reallocating funding for fossil fuel subsidies (as discussed below) could help alleviate the financial burden associated with expanding clean energy investments.

While some may argue that clean energy technologies have been built and implemented already without the assistance of Direct Pay and other tax credits, and that the system should therefore be left alone, we are at a critical moment in clean energy deployment in which a strategy of "all of the above" is necessary. No one solution alone will deliver the scale and pace of decarbonization necessary to mitigate the worst effects of the climate crisis and deliver social, economic, and environmental benefits to Americans. With the release of the <u>president's budget</u> and revamped negotiations on clean energy on the Hill, now is an opportune time to use the shortcomings of the clean energy tax credits of the past to inform tax credit reform going forward, allowing for improved accessibility of clean energy technologies and more cost-savings potential for taxpayers. Support for reforming clean energy tax credits remains high with voters, even when they are presented with negative messaging about these reforms. Almost two-thirds of likely voters, including 79 percent of Democrats, 67 percent of Independents, and 49 percent of Republicans, are in favor of reforming clean energy tax credits.

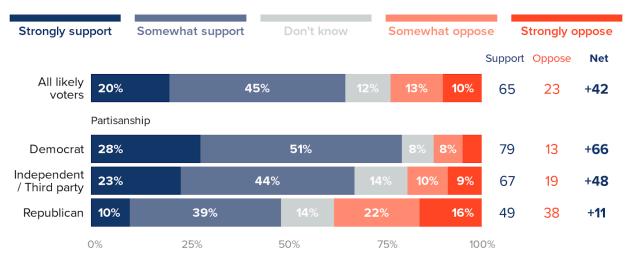
Support for Reforming Clean Energy Tax Credits Remains High, Even With Negative Messaging

Some lawmakers have proposed reforming the current system of clean energy tax credits to allow businesses to directly receive funding from the government to finance their clean energy projects.

Supporters of these reforms say that if communities want to build new clean energy projects, they should not have to rely on Wall Street bankers and lawyers who slow down the process.

Opponents of these reforms say that developers have successfully built new clean energy projects across the country using these tax credits and we should leave the system alone.

Knowing what you know now, do you support or oppose these reforms for clean energy tax credits?



March 18–21, 2022 survey of 1,239 likely voters

DATA FOR PROGRESS

Despite the barriers Direct Pay faces, it is undeniable that there is a growing political appetite for seeing clean energy technologies being developed at scale in a cost-effective and accessible way. Data for Progress provides the following policy recommendations to help inform opportunities for doing so.

Policy Recommendations

In order to effectively and equitably deploy clean energy technologies, Congress and the Biden Administration must:

- **PASS LEGISLATION** to establish lasting and robust incentives for clean energy, provide guidance for Direct Pay as a mechanism for making clean energy accessible, and establish common language for codifying Direct Pay into future clean energy tax credits. Relevant legislation includes:
 - <u>The Build Back Better Act</u>, which establishes Section 6147 to codify Direct Pay into clean energy tax credits;
 - <u>The GREEN Act</u>, which provides tax incentives for renewable energy investments and energy efficiency programs;

- The Renewable Energy Investment Act, which would allow for direct payment of up to 85 percent of the value of tax credits for energy property and for electricity produced from certain renewable resources for most taxpayers, and 100 percent for tribal governments. This would expand the potential for investment in eligible clean energy projects across the country;
- The Clean Energy for America Act, which provides tax incentives for investments in clean electricity, transportation, fuel production, and energy efficiency. The bill also establishes workforce development requirements for the energy sector and eliminates certain fossil fuel subsidies; and
- The <u>Energy Security and Independence Act</u>, which invests \$100 billion in reinvigorating the domestic clean energy industrial base using the Defense Production Act and creates a domestic renewable energy industrial base task force to coordinate an all-of-government approach that engages environmental justice communities, manufacturers, scientists, engineers, planners, and labor unions to plan and implement a transition to 100 percent renewable energy.
- END COSTLY FOSSIL FUEL SUBSIDIES AND REALLOCATE FUNDS TO CLEAN ENERGY TAX CREDITS. The U.S. spends \$20 billion annually in bailouts for the fossil fuel industry, keeping the costs associated with fossil energy artificially low. By divesting from fossil fuels and reallocating this funding into clean energy systems, including funding for clean energy tax credits, and systemizing Direct Pay as an established mechanism for these tax credits, we can meet the nation's ever-growing energy needs. Recent Data for Progress polling illustrates that voters support ending fossil fuel subsidies and other financial incentives for fossil fuels by a +24-point margin (54 percent support, 30 percent oppose).
- **PRODUCE COMPREHENSIVE EDUCATIONAL GUIDANCE** responsible for educating those interested in Direct Pay and clean energy tax credits and other similar financial incentives, particularly in rural and underserved communities. This guidance should be free, multilingual, and widely available both online and in print in federal and local IRS offices.
- PROVIDE ADDITIONAL FUNDING FOR PROGRAMS THAT SUPPORT LOW-INCOME
 AND MARGINALIZED COMMUNITIES in accessing clean energy and energy efficiency, such as
 incentives under the Low Income Home Energy Assistance Program (LIHEAP) or incentives for a
 federal network of community shared solar projects.

Conclusion

Clean energy tax credits are one of the most effective tools that we have to combat climate change. At this critical moment for our nation's energy future, we must reform and improve upon the clean energy tax credits we deploy to ensure wide-scale accessibility and implementation for developers as well as communities. Direct Pay is the perfect opportunity to accomplish both goals. By developing innovative ways to scale existing technologies and make them accessible to all Americans, we can finally make good on our pledge to make the U.S. a leader in the ever-growing climate movement.

Bibliography

Cheapest Fossil Fuel on Cost

Budget of the United States Government, Now More Than Ever, Voters Support Majority of Voters Continue to Support Fiscal Year 2023 Ramping Up Clean Energy Production in the Build Back Better Act the U.S. Assessing the Costs and Benefits of Clean Fueling the Climate Crisis: Exposing Big Electricity Tax Credits | Rhodium Group In Light of Alarming New IPCC Report, Oil's Disinformation Campaign to Prevent Voters Are Ready for Government Action Climate Action | House Committee on Oversight and Reform Chairman Levin Releases Draft of Domestic Manufacturing and Energy Jobs Importance of Tax Credits and Role They Act of 2010 | Ways and Means Committee Can Play (Without CEPP) in Cutting Power Should the US Offer Tax Credits to - Democrats Sector Emissions Promote Renewable Energy? - WSI It's Time for Congress to Reform Clean Text - HR5376 - 117th Congress (2021-1603 Program: Payments for Specified Energy Property in Lieu of Tax Credits | Energy Tax Credits 2022): Build Back Better Act U.S. Department of the Treasury. 117th Congress (2021-2022): GREEN Act How to Make Two Vital Tax Incentives 111th Congress (2009-2010): American Even Better | NRDC of 2021 Recovery and Reinvestment Act of 2009 Ditto Calls For House To Keep Direct Pay HR5157 - Renewable Energy Investment Overview and Status Update of the §1603 Energy Tax Credits In Build Back Better Act of 2019116th Congress (2019-2020) Program Act | American Public Power Association S.1298 - 117th Congress (2021-2022): Clean Individual Clean Energy Tax Incentives in Energy for America Act. the Build Back Better Act Build Back Better Green Energy Tax Credit Reforming global fossil fuel subsidies: How Pathways to Paris Proposals: Direct Pay the United States can restart international cooperation The House-Approved Build Back Better FACT SHEET: President Biden Sets 2030 Act: Clean Energy & Infrastructure Greenhouse Gas Pollution Reduction Voters Support Ending Fossil Fuel Target Aimed at Creating Good-Paying Provisions - True Partners Consulting Subsidies Union Jobs and Securing U.S. Leadership on Clean Energy Technologies | The White The CEPP Amplifies the Jobs Impacts of Low Income Home Energy Assistance Program (LIHEAP) | The Administration House the 48C Tax Credit for Children and Families Pivoting to clean energy can shield the US A Progressive Platform for Carbon from wild gas-price swings, White House Removal Community Shared Solar economist says Data for Progress Direct Pay Toplines EXCLUSIVE White House backs 2030 Majority of New Renewables Undercut milestone on path to net zero grid |

116th Congress (2019-2020): Consolidated

Appropriations Act, 2021

Reuters