Congress must provide major investments in clean energy tax credits as part of budget reconciliation legislation. As shown in an analysis published last month by Senate Majority Leader Chuck Schumer (D-NY), clean energy tax credits, across a range of sectors and technologies, are some of the most important investments federal lawmakers can make this year to reduce the greenhouse gas pollution that is driving climate change. Specifically, clean energy tax credits and a new Clean Electricity Payment Program (CEPP) combined would achieve almost 3/5 of the greenhouse gas pollution reductions in legislation under consideration in Congress. Schumer’s analysis argues that this legislation could help unlock a 45% reduction in domestic greenhouse gas pollution by 2030—a major part of the 50–52% reduction to which the U.S. is now committed, under the Paris agreement, to help avoid the worst impacts of climate change.

In addition to helping to address the climate crisis, new and extended clean energy tax credits—for clean electricity, transportation, manufacturing and industry, and buildings—will also create many new good-paying jobs for American workers. They will support existing and emerging technologies in domestic industries that are poised for rapid growth. They will help reduce the toxic fossil fuel pollution that poisons American communities, particularly low-income communities and communities of color. And they will help ensure American industry leads the global market for clean technology. Federal lawmakers cannot afford to miss this moment to invest, through the tax code, in bold climate action and in building a just and thriving clean energy economy.

Below, we detail the most essential clean energy tax credits that Congress must include in the final budget reconciliation bill this year, with long-term extensions over the coming decade. Importantly, as called for in the Evergreen Action Plan, everywhere possible these tax credits should also include reforms to make them more accessible, equitable, and effective. This includes by turning them into direct pay, tying them together with labor standards that ensure good union jobs, and expanding incentives for low-income individuals and for projects built in disadvantaged communities—including low-income communities, communities of color, and Tribal nations—as well as energy transition communities. And, in addition to the clean energy tax credits, this document discusses many of the
giveaways to fossil fuel corporations that Congress should repeal, to bring greater accountability to the federal tax code, help reduce pollution, and raise revenue to reinvest in good jobs in the clean energy economy. The sections are as follows:

1. **Clean Electricity** (including renewable energy generation, storage, and transmission)
2. **Clean Transportation** (including incentives for electric vehicle purchases and charging infrastructure, and sustainable aviation fuels)
3. **Clean Manufacturing & Industry** (including advanced energy manufacturing, including for battery, solar and wind supply chains, along with industrial carbon capture and hydrogen)
4. **Clean Buildings** (including residential and commercial incentives for energy efficiency and electrification)
5. **Ending Fossil Fuel Subsidies** (including ending subsidies in the tax code, a polluter pays climate fund, methane pollution fee, and carbon border adjustment)

Fortunately, President Biden and Congressional Democrats have recognized the critical importance of passing robust clean energy tax credits this year. In Spring 2021, President Biden called for a robust suite of clean energy tax credits in his *American Jobs Plan* and *Made in America Tax Plan*. In a press conference at the White House on June 24, 2021, Biden singled out clean energy tax credits as an essential part of budget reconciliation legislation. Earlier this year the Senate Finance Committee, led by Chairman Ron Wyden (D-OR), advanced the *Clean Energy for America Act* that includes many of the most essential tax incentives discussed herein. And last year House Democrats advanced their own clean energy tax credit measure, the *Green Act*, which was re-introduced this year and is expected to inform action in the Ways & Means Committee in September.

While President Biden and some in Congress have suggested these credits may add up to $300 billion over the coming decade, others have suggested their budget score may be greater—perhaps as much as $500 billion. While this investment seems significant, it is eminently affordable considering the return-on-investment in jobs and economic growth. Especially when compared against the astronomical costs of unabated climate change, which are just beginning to truly reveal themselves, as evidenced in this year’s heat waves, wildfires, floods and hurricanes. To confront this crisis Congress must provide major climate investments in reconciliation. In addition to these tax credits the bill must include the CEPP, federal rebates for building electrification, a Clean Energy Technology Accelerator, environmental justice investments, funds for industrial decarbonization, and more.

**In order to meet this critical climate moment, Democratic members of the House Ways & Means and Senate Finance Committees must lead Congress in passing long-term extensions of these clean energy tax credits in reconciliation**, with appropriate reforms, regardless of their final score.
1. Clean Electricity

- **Clean/Renewable Electricity Production and Investment Tax Credits (PTC and ITC):** Clean electricity is essential to decarbonizing the entire economy, and along with a Clean Electricity Payment Program (CEPP), robust and complementary clean electricity tax incentives are the most essential climate policies that Congress must advance in reconciliation. These tax credits should be extended for a decade at their full 2019 levels, made available as direct pay, and reformed to contain optionality between the PTC and ITC. The credits should also be tied together with labor standards, to ensure federal dollars support good jobs through prevailing wages and labor contract neutrality. And they should be expanded for renewable energy projects in disadvantaged and energy transition communities, while ensuring no incentive for projects that result in increased criteria pollution in disadvantaged communities. The Rhodium Group estimates that these tax credits could support 600,000 American jobs over the coming decade. There are two different main proposals for extending these credits: the Senate Finance Committee has advanced the Clean Energy for America Act that would create and extend for a decade a new technology-neutral Clean Electricity Tax Credit, while the Green Act in the House would extend the existing Renewable Energy PTC and ITC.

- **Energy Storage Tax Credit:** Through passage of a federal tax credit for stand-alone energy storage projects, Congress can ensure investment is flowing into these technologies that are critical for a clean, modern, and more resilient electric grid. Energy storage will be especially critical for facilitating the integration of significant amounts of new renewable energy. And, a federal tax credit could help accelerate the expansion of an already fast-growing domestic industry. Specifically, Congress should include energy storage projects as eligible in the clean/renewable investment tax credit, with direct pay at the full credit amount for ten years. Congress should also allow energy storage to qualify for the section 25D residential energy tax credit. Notably, energy storage tax credit legislation—the Energy Storage Tax Incentive and Deployment Act—has been introduced with strong support in both chambers of Congress. And the Clean Energy for America Act includes energy storage as an eligible technology in its clean electricity tax credit.

- **Transmission Investment Tax Credit:** Investing in modern transmission can kickstart the deployment of clean electricity, helping to connect locations with many renewable resources to places with high electricity demand. This is especially true because the power sector does not currently have a functioning way to recover costs of large interstate-highway type transmission lines. A 30% transmission investment tax credit, extended over ten years with direct pay, is critical to meeting the 150,000-200,000 GW-miles of new transmission that are necessary for power sector...
decarbonization. This would also be a major driver of good union jobs: the Electric Power Infrastructure Improvement Act proposed by Sen. Martin Heinrich (D-NM) could support 650,000 good jobs, enable 30,000 megawatts of renewable power, spur private investment, and help consumers save on energy bills.

- **Residential Energy Tax Credit 25(D):** Congress can also promote investment in resilient, distributed renewable energy, and energy justice, by extending the 25D Residential Energy Credit and converting it into direct pay. Like the federal ITC, the 25D credit has facilitated the expansion of solar energy in the U.S., supporting small-scale residential projects. If converted into direct pay, this credit could be made more equitable and accessible for more Americans—especially low-income Americans who do not carry significant tax liability and who often must spend a disproportionate amount of their income on energy. Furthermore, this credit should also be expanded for low-income individuals, based on their receipt of other federal assistance like earned income tax credits, SNAP, LIHEAP or TANF benefits, or enrollment in Medicaid. If necessary, small tweaks could allow this credit to be made more effective, such as providing that homeowners provide proof of installation on federal tax forms.

2. **Clean Transportation**

- **Electric Vehicle Tax Credit 30(D):** Transportation is the most climate-polluting sector of the U.S. economy, and cars are responsible for the majority—approximately 60%—of pollution within this sector. And electric vehicles are the future of the global auto market. To confront this challenge and seize this opportunity, it is essential that Congress extends and expands the Section 30(D) Electric Vehicle (EV) Tax Credit this year, which helps consumers purchase electric vehicles. This credit should be reformed as either a refundable credit or a point-of-sale rebate, such that consumers can receive the money immediately, and the benefit is not dependent on the tax liability. Congress should also eliminate the current cap on manufacturers’ allowable credits, extend the credit to apply to the purchase of a used electric vehicle, and expand the incentive amount for low-income consumers and for cars made in the U.S. with union labor, as called for in the Evergreen/Data for Progress Clean Jumpstart Plan. The Clean Energy for America Act would extend this credit in many of these ways. Congress should also provide a tax incentive for the purchase of heavy duty vehicles for commercial fleets.

- **Alternative Fueling Credit for EV Infrastructure 30(C):** In addition to providing tax incentives to consumers for vehicles as laid out above, Congress should also extend the 30(C) tax credit for building alternative fueling infrastructure. This credit should be improved in several key ways,
including by ensuring the fueling infrastructure supported is truly clean and renewable, removing the per-location cap on chargers, and ensuring the credit is refundable.

- **Sustainable Aviation Fuels Tax Credit**: Lower-carbon fuels are likely the best short-term option for progress toward decarbonizing the aviation sector. To support these emerging technologies, Congress should create a Sustainable Aviation Fuels (SAF) Tax Credit that provides up to $2 per gallon of fuel that reduces aviation emissions 50% or more. In addition to confronting greenhouse gas pollution, this credit can help facilitate expansion of domestic low-carbon fuels industries and jobs, boost rural economies, and improve air quality around airports. Such a credit was proposed in the Sustainable Skies Act introduced in the House by Rep. Brad Schneider (D-IL) and others, and in the Senate by Sen. Sherrod Brown (D-OH) and others.

3. **Clean Manufacturing and Industry**

- **Advanced Manufacturing Tax Credit 48(C)**: To seize clean energy’s full economic potential, and assert American leadership in the growing global clean technology industries of the 21st century, Congress should also reauthorize the 48C Advanced Manufacturing Tax Credit. This incentive originally passed as part of the 2009 Recovery Act, and in one year provided $2.3 billion in federal investment that leveraged $5.4 billion in private sector funding to support tens of thousands of jobs across 43 states. However, the credit was immediately oversubscribed, leaving over $5 billion in unmet applications. Sens. Joe Manchin (D-WV) and Debbie Stabenow (D-MI) have developed legislation to renew this successful credit, with a bill that targets at least half of these investments in job creation and economic development in communities at the forefront of America’s energy transition.

- **Carbon Capture Tax Credit 45(Q)**: Carbon capture technologies are very likely to be critical for progress in some of the most difficult-to-decarbonize industrial sectors, like cement and steel. Furthermore, related direct air capture (DAC) technologies that pull carbon pollution out of the atmosphere have been identified by the Intergovernmental Panel on Climate Change (IPCC) as essential in global net-zero climate scenarios. The federal 45Q Carbon Capture Tax Credit can play an important role driving these climate-critical transformations. A targeted 45Q credit should be extended for 10 years and increased to $85 to be maximally effective in these harder-to-decarbonize industrial sectors, and to $175 for DAC technologies. Importantly, however, this credit must be reformed to apply only where captured carbon is not then used for more fossil fuel production, as it is currently used for enhanced oil recovery (EOR)—a reform for which Evergreen has advocated and that would be realized through the Clean
Energy for America Act. Also, at the same time, it must be understood that climate-warming carbon pollution is not the only adverse consequence of fossil fuel combustion. And that CCS facilities should not be placed in overburdened communities, nor provide an excuse to continue harmful fossil fuel use where it can be replaced with clean electrification. This credit should not be available to any project that would increase the emissions of criteria pollution in disadvantaged communities.

- **Advanced Solar Manufacturing Tax Credit:** Offering incentives at key points throughout the supply chain in the production of solar panels, as proposed in the Solar Energy Manufacturing for America Act from Sen. Jon Ossoff (D-GA), is crucial to meeting clean electricity goals and to growing good advanced energy manufacturing jobs. Currently, demand for solar energy is skyrocketing, but China is dominating the solar supply chain, and provides roughly 75% of the world’s solar equipment. This tax credit would create tens of thousands of jobs and spur the U.S. solar industry to expand manufacturing capacity. The incentive would help increase America’s global competitiveness in this critical 21st century industry, enhance U.S. economic and national security, and bring down technology costs.

- **Advanced Battery Manufacturing Tax Credit:** To help seize the full economic growth and security opportunities inherent in the transition to electric vehicles, Congress should create a tax credit for investment in advanced battery manufacturing facilities. This tax credit would strengthen the domestic battery supply chain, and should support cell and pack manufacturing along with mineral processing, anode and cathode production, and battery recycling.

- **Offshore Wind Manufacturing Tax Credit:** A new incentive for offshore wind manufacturing can help the U.S. accelerate this enormous opportunity for building out clean electricity with good union jobs. Specifically, Sen. Ed Markey (D-MA) has proposed new investment and production tax credits for building, retooling, and expanding manufacturing facilities for offshore wind components and subcomponents, including blades, towers, gearboxes, generators, foundations, and related vessels. One analysis has shown that offshore wind manufacturing could readily support over 30,000 jobs annually in the U.S., alongside over 80,000 jobs annually in the development, construction, and operation of offshore wind projects.

- **Hydrogen Tax Credit:** Clean hydrogen is another emerging technology that could play an important role for harder-to-decarbonize segments of industry, electricity, and transportation. Congress should create a new federal hydrogen tax credit, as proposed in President Biden’s American Jobs Plan and Made in America Tax Plan. Specifically, Congress should establish both a production tax credit (PTC, at $3 per kilogram) and an investment tax credit (ITC, at 30%), for project developers to utilize over the coming
decade. Importantly, this incentive must only be allowed for projects utilizing "clean" hydrogen produced using carbon-free electricity as a feedstock.

4. Clean Buildings

- **Residential Energy Efficiency Tax Credit 25(C):** Improving energy efficiency and eliminating fossil fuel use in our residential buildings is essential to achieving our climate goals. The tax credits should be provided as a long-term extension, as they are in the *Clean Energy for America Act*. They should be made available through a direct pay mechanism to increase access, reformed to an annual cap to encourage annual investments, and higher value tax credits should be provided for zero-emission technologies, like heat pumps. This credit’s value could also be increased for low-income individuals, which could be determined by their enrollment in federal assistance programs (e.g. LIHEAP, SNAP, Medicaid), and/or by evidence provided of gas or electricity utility shutoff. Tax credits for fossil fuel appliances should be eliminated as an eligible technology due to their greenhouse gas pollution, air quality impacts and low efficiency compared to other zero-emission technologies.

- **Commercial Energy Efficiency Tax Deduction 179(D):** To improve energy efficiency in commercial buildings, Congress should increase, and improve, this credit. To incent commercial buildings to pursue full electrification and highly efficient designs, the proposed increased incentive rate and cap should be increased for buildings that achieve higher levels of energy efficiency.

- **Energy Efficient Home Credit 45(L):** This tax credit encourages developers and homeowners to construct new homes with levels of energy efficiency that exceed local building energy codes. In order to drive the deepest decarbonization in new homes, this credit should be extended and reformed to especially encourage the construction of high efficiency all-electric homes, with a new, higher-tier incentive. This new tier should provide a $12,500 tax credit for high efficiency all-electric residential units that achieve certain energy efficiency ratings in the Home Energy Rating Score (HERS) Index, the industry standard way of calculating a home’s energy efficiency.

- **Low Income Housing Tax Credit (LIHTC) Deep Energy Basis Adjustment (DEBA):** To improve energy efficiency and eliminate fossil gas use in the nation’s low-income housing stock, Congress should incent investments in existing building upgrade projects that achieve deep energy savings. To do this, Congress should adjust the Low Income Housing Tax Credit program to
encourage energy efficiency projects in qualified existing buildings that achieve at least a 50 percent reduction in energy use intensity.

5. Ending Fossil Fuel Subsidies

- **End Fossil Fuel Subsidies in the Tax Code**: The federal government must stop bankrolling the climate crisis, as Evergreen explained in January 2021. Currently, the federal government provides billions of dollars in tax incentives to the fossil fuel industry, helping them poison American communities and worsen the climate crisis, all while these companies spend billions of dollars to mislead the American public. Congress must take this opportunity to reform the tax code to repeal fossil fuel subsidies—ending fossil fuel subsidies will help reduce greenhouse gas pollution and provide revenue that can be channeled into building a just and sustainable clean energy economy. Senator Wyden's Clean Energy for America Act contains several key changes—ending credits for enhanced oil recovery, intangible drilling costs, and the use of certain injectants; and closing accounting loopholes, including those that allow fossil fuel companies to use special depreciation methods for pipelines. The End Polluter Welfare Act from Sen. Bernie Sanders (I-VT) and Rep. Ilhan Omar (D-MN) would address an even more comprehensive suite of subsidies, including many outside the federal tax code—abolishing dozens of financial giveaways to corrupt multinational fossil fuel corporations.

- **Polluter Pays Climate Fund**: Modeled after the Superfund program (officially known as the Comprehensive Environmental Response, Compensation, and Liability Act) that ensures that parties who release toxic pollution in our land and water pay for the damage, Sen. Chris Van Hollen (D-MD) has put forward a draft Polluter Pay Climate Fund Act. For decades, the fossil fuel industry has known about the climate crisis, and instead of taking it on, spread lies and misinformation while continuing to pollute. The Van Hollen bill would institute a fee on big polluters based on their share of global greenhouse gas pollution over the last two decades. This program could raise roughly $500 billion, which would communicate to polluters that they must stop worsening the climate crisis, while also raising revenue that can support the transition to a clean energy economy.

- **Methane Pollution Fee**: Methane is about 84 times more potent than carbon dioxide in the first 20 years after it is released, and is currently responsible for about 25% of global warming. And as the recent IPCC report made clear, slashing methane pollution in the short term is absolutely critical to meeting our climate goals. Legislation from Sen. Sheldon Whitehouse (D-RI) directs the Department of Treasury to assess a fee on methane for all companies gathering, processing, or transmitting oil and gas in basins across the country. While unlike most of the proposals in this document,
this fee would not flow through the Senate Finance Committee or the House Ways and Means Committee, it would still raise crucial funds and reduce pollution.

- **Carbon Border Adjustment:** To address global greenhouse gas pollution, protect U.S. industry from being undercut by dirtier businesses, and raise additional revenue, Sen. Chris Coons (D-DE) and Representative Scott Peters (D-CA) have proposed a “carbon border adjustment tax” on imports from countries with high greenhouse gas pollution. This tax could raise between $5 billion and $16 billion annually, and would target petroleum, fossil gas, and coal, as well as pollution-intensive products like steel, iron, cement.

**Conclusion**
Clean energy tax credits are critical—to address the climate crisis, to create good jobs, to help American businesses dominate the global clean technology market, and to build a more just and sustainable clean energy economy. Congress must pass a robust reconciliation package that includes the policies listed above, for the good of all Americans.