

To: Interested Parties From: Lena Moffitt, Evergreen Action Chief of Staff, and Trevor Dolan, Evergreen Action Communications & Policy Research Manager Date: Monday, April 4, 2022 **RE: 15 Key Climate Investments in Reconciliation to Reduce Demand for Russian Oil and Gas**

Russia's unprovoked invasion of Ukraine has sent already-volatile international oil and gas markets <u>spiraling</u>, pushing energy prices to <u>historic highs</u> and enriching fossil fuel companies at the expense of American working families. As a result of our dependence on fossil fuels, America's economy and household prosperity have long been vulnerable to geopolitical shocks and the whims of petro-dictators abroad.

The climate spending in the House-passed reconciliation bill would kickstart the transition to a 100% clean energy economy, securing <u>the only long-term solution</u> to the oil and gas market's intrinsic volatility. Last week, Senate holdouts <u>expressed</u> <u>readiness to negotiate</u> on a reconciliation bill with a focus on climate.

This memo lays out 15 key investments from the reconciliation bill that will accelerate the clean energy transition and <u>reduce US demand</u> for fossil fuels, <u>insulate</u> <u>working families</u> from price spikes, stop enabling petro-dictators like Vladimir Putin, and cut pollution to avert the worst consequences of climate change. These 15 measures were passed by the House last year as part of the Build Back Better Act, and should be carried over into a new reconciliation package as a way to reduce America's dependence on Russian oil and gas. The measures are incredibly popular: <u>over two-thirds of voters</u> agree that in light of the Russian invasion, America should invest in domestic clean energy production.

The policy firm Energy Innovation recently released modeling on the oil and gas demand reductions that would be driven by the full \$555 billion climate package. According to their <u>analysis</u>, those investments would ultimately cut demand to much more than offset Russian oil and gas imports, insulating the country from price swings driven by international conflict. **The takeaway is clear: passing bold investments in electrification and clean energy offers the best pathway to cut U.S. demand for fossil fuels, protect American families' bottom lines, and end our dependence on authoritarian petrostates.**

This memo lays out five key sectors to heavily cut dependence on oil and gas. These five sectors are:



- 1. Investing in Clean Energy,
- 2. Deploying Electric Vehicles,
- 3. Electrifying Buildings,
- 4. Decarbonizing Heavy Industry, and
- 5. Mobilizing American-Made Clean Energy.

Across these five sectors, 15 House-passed climate investments are critical to reducing Putin's power and increasing American-made clean energy. The entire \$555 billion climate package would be a downpayment on a just transition to a secure clean energy economy; the 15 policies here are only the selection that most directly bear on US demand for fossil fuels, and serve as the backbone for an ambitious electrification and clean energy agenda. Without these investments, the United States can look forward to lasting dependence on oil and gas, and continued vulnerability to Russian influence over those global commodities. But if President Joe Biden and Senate Majority Leader Chuck Schumer bring the \$555 billion package over the finish line, they will make a historic step toward cutting carbon pollution emissions, protecting the U.S. economy from the whims of petro-dictators like Vladimir Putin, and ensuring that America's clean energy future doesn't relive the fossil fuel energy crises of the past.

1. Investing in Clean Energy

Clean energy investments are key to reaching President Biden's goal of cutting greenhouse gas pollution by 50% by 2030, and are critical for reducing domestic power sector dependence on natural gas. Natural gas <u>makes up</u> 38% of utility-scale electricity generation in the United States, and Energy Innovation <u>found that</u> out of the full \$555 billion climate package, spending on clean energy would make the most substantial cuts to American natural gas demand. The House-passed reconciliation bill includes a full suite of clean energy investments, totaling <u>well over</u> \$340 billion. A few representative examples of those policies include:

<u>Clean Electricity Production and Investment Tax Credits</u>: This suite of tax credits, known as the PTC and ITC, <u>would incentivize</u> the production of clean energy and investments in new clean generation capacity. The PTC and ITC are foundational tools for bringing new clean energy sources online and leveraging private sector investments in clean energy. An extension of the PTC and ITC <u>would support</u> 600,000 American jobs over the coming decade, and hasten the development of utility-scale clean energy resources.



Transmission Investment Tax Credit: Cleaning up America's grid will <u>require building</u> 150,000 - 200,000 gigawatt-miles of new transmission infrastructure; limited transmission lines are already <u>becoming a bottleneck</u> for renewable energy projects. A transmission investment tax credit would <u>accelerate that growth</u>, support 650,000 jobs, and enable 30,000 megawatts of renewable energy—all of which serves the goal of decreasing the share of natural gas power on the grid.

<u>Greenhouse Gas Reduction Fund (AKA Clean Energy Accelerator/Green Bank)</u>: The \$29 billion Greenhouse Gas Reduction Fund <u>would provide</u> vital low-cost financing for clean energy infrastructure projects, as well as state, local, and tribal programs that invest in clean energy and electric vehicle charging infrastructure. The Fund's financing would leverage billions in private clean energy investment, accelerating the deployment of clean energy infrastructure and the shift away from natural gas.

In addition to alleviating American demand for natural gas, transitioning to clean energy will bring meaningful relief to frontline communities suffering the consequences of air pollution from fossil fuel-fired power plants. Low-income communities of color, segregated through institutionalized redlining practices, <u>experience more intense air pollution</u> and consequently <u>suffer higher rates</u> of disease and mortality. Investing in clean energy would mitigate that air pollution and provide financial relief to low-income households, who are <u>overburdened by energy costs</u> and could see an <u>energy savings</u> of up to \$500/year if the United States takes ambitious climate action. Those benefits alone are justification for a full, rapid transition to a 100% clean energy economy. Factoring in the advantages of decreasing domestic natural gas demand and U.S. dependence on global natural gas markets, the case for clean energy investments like those listed above—in conjunction with other <u>tax</u> <u>credits</u> and <u>funding</u> from the full \$555 billion climate package—is clear.

2. Deploying Electric Vehicles

According to Energy Innovation's <u>modeling</u>, increasing the share of electric vehicles (EVs) on American roads is key to cutting U.S. demand for oil. Out of the entire \$555 billion climate package, EV investments will make the biggest dent in oil demand. In 2021, the United States imported close to 73 million barrels from Russia. By 2025, reductions from the package's EV tax credits would entirely offset those imports. By 2030, the growth in EV sales would cut U.S. oil demand by 180 million barrels per year.

Increasing EV sales is a matter of equity. Low-income U.S. households spend <u>an</u> <u>astronomical</u> 13.1% of their annual income on gasoline — three times the budget share of the average household. These families have historically suffered the most from



fossil fuel price shocks, and making EVs more accessible can help protect their long-term financial stability. EV investments will also mitigate the carbon pollution driving climate change. Cars and trucks are <u>the most climate-polluting</u> segment of the transportation sector, which is the most climate-polluting sector in the US economy. But to see those investments pay off, Congress must pass them now. Slow fleet turnover, with cars <u>lasting about</u> 11-12 years on the road, means it will take time to transition America's cars and trucks to EVs. Among other necessary investments in EVs, the House-passed reconciliation bill includes:

EV Tax Credit 30(D): The 30(D) EV tax credit helps consumers purchase new EVs—<u>ideally</u> as a refundable credit or point-of-sale rebate, so buyers can receive the money immediately, and the benefit is not dependent on their tax liability. 30(D) is critical to ensuring private buyers are able to opt for an EV when looking for their next car.

<u>Alternative Fueling Credit for EV Infrastructure 30(C)</u>: To facilitate a full transition to EVs, the Biden administration must ensure drivers have ready access to charging infrastructure. The 30(C) credit subsidizes businesses installing new EV charging stations, advancing the construction of a network towards <u>President Biden's goal</u> of 500,000 chargers nationwide.

Federal Fleet Electrification: As of 2019, only 4,475 of the more than 645,000 vehicles in the federal fleet—less than 0.7%—<u>were electric</u>. President Biden <u>committed</u> to exclusively purchasing EVs for the federal fleet, and the House-passed reconciliation bill would have advanced that goal by funding the General Service Administration <u>green procurement program</u> with \$4.225 billion. The federal government's purchasing power is unparalleled, and advancing full fleet electrification would generate significant new demand in the EV market.

While the EV transition is key to reducing demand for oil and cutting carbon pollution, there is also immense value in investing in other clean modes of transportation. In many contexts, public transportation is a more <u>efficient and accessible</u> mode than personal cars. The reconciliation bill's <u>\$10 billion</u> for Passenger Rail Improvement, Modernization, Emissions Reduction Grants would be a meaningful investment in expanding public transportation options. To holistically tackle air quality issues and eliminate carbon pollution, we need investments to electrify and clean up the entire transportation sector—including passenger vehicles and other modes.

3. Electrifying Buildings



In the United States, buildings are a major consumer of fossil fuels. Fossil fuel appliances burn approximately 25% of all <u>natural gas</u> and 5% of <u>all oil</u> consumed nationwide each year. Electrifying building systems will be necessary to cut back on oil and gas demand and imports of Russian fossil fuels. Buildings investments also offer an important opportunity to address disparities driven by U.S. energy prices. This past winter, heating costs were <u>projected to</u> increase by 54% for propane, 43% for home heating oil, 30% for natural gas—and only 6% for electric heating. In a country where the poorest households can <u>spend more than</u> 10% of their annual income on utility bills, electrification would be a financial lifeline.

Several investments in the \$555 billion climate package would help lower home energy costs while driving down demand for fossil fuels, including:

<u>High-Efficiency Electric Home Rebate Program:</u> This rebate program would provide homeowners and landlords <u>an incentive</u> to replace natural gas-fired appliances with electric alternatives, like high efficiency electric heat pumps. Of the program's \$6 billion in funding, \$3.8 billion would be set aside specifically to support electrification for tribal communities and low- to moderate-income households.

HOPE for HOMES Program: This program, funded at \$9 billion, <u>would provide</u> \$500 million to support training new energy efficiency contractors and \$8.5 billion in rebates for homeowners to invest in whole home energy efficiency improvements. New insulation, high-efficiency heat pumps, <u>and other retrofits</u> would make American households dramatically more efficient, reduce natural gas demand, and lower utility bills for thousands of American families.

Residential Energy Efficiency Tax Credit 25(C), Energy Efficient Home Credit (45L), Commercial Energy Efficiency Tax Deduction 179(D): These three complementary tax credits <u>would improve</u> energy efficiency in residential and commercial buildings. The credits would incent homeowners, landlords, and commercial building owners to pursue electrification of fossil-fuel appliances and high efficiency building designs that reduce or eliminate natural gas fuel usage.

These buildings investments can bring immediate and tangible benefits to American households' budgets. By making electrification and energy efficiency retrofits more widely accessible, the buildings investments would cut back on natural gas consumption, reduce carbon pollution, clean up local air pollution, create jobs, and provide American households with long-term energy security and cost savings.

4. Decarbonizing Heavy Industry



American heavy industry <u>burns 33%</u> of all natural gas consumed in the United States. The sector is also expected to emit a <u>growing share</u> of carbon emissions globally as easier-to-abate sectors electrify and go clean. For those reasons, it is critical to begin decarbonizing heavy industry now, to reduce demand for natural gas and cut the carbon pollution driving climate change. Electrifying industrial processes and converting to cleaner fuels can advance that goal.

The House-passed reconciliation bill includes numerous investments in cutting industrial emissions. The following policies in particular would drive toward the goal of reducing demand for natural gas:

Advanced Industrial Facilities Deployment Program: This Department of Energy Program, funded for \$4 billion in the climate package, <u>would support</u> firms installing and implementing advanced industrial technology at energy-intensive industrial and manufacturing facilities. The program's mandate is not confined to funding energy efficiency, electrification, or fuel switching, but all three would fall under its broad umbrella, and at Secretary of Energy Jennifer Granholm's discretion the program could prioritize grants advancing those goals.

Hydrogen Tax Credit: Hydrogen is a promising alternative fuel source in some high-heat industrial processes, but hydrogen production <u>is still carbon-intensive</u> and expensive. The House-passed reconciliation bill's Hydrogen Tax Credit would help the green hydrogen industry mature, improve production efficiency, and drive down costs so that it becomes a viable alternative energy source for industrial processes.

Buy Clean Spending: Support for federal Buy Clean initiatives is included throughout the \$555 billion climate package. Those <u>provisions prioritize</u> government procurement for contractors who can demonstrate relative advantage in the climate and environmental impacts of their products and processes. If the Biden administration is able to leverage the full purchasing power of the federal government to buy low-carbon steel, cement, and other industrial products, they can meaningfully push the industrial sector to decarbonize, thus lowering natural gas demand.

5. Mobilizing American-Made Clean Energy

Cutting across all of these sectors is the need to manufacture more advanced, clean technologies at home in the United States. Batteries, solar panels, electric heat pumps, electric vehicles, and much more—all of the new tech we'll need to replace fossil fuel infrastructure—have to get built, and the \$555 billion package would incent manufacturers to build them in America, using American labor. Developing a domestic clean technology industry not only revitalizes the American manufacturing workforce



and readies America to answer Europe's call for help transitioning of Russian fossil fuels, it also helps America avoid future global supply chain crises by securing a robust domestic clean energy supply chain. Several investments in the House-passed reconciliation bill would do just that:

Advanced Manufacturing Tax Credit 48(C): The 48(C) investment tax credit supports facilities building advanced clean technologies, running the gamut from renewable energy equipment to EV batteries and energy efficient appliances. The tax credit was originally passed as part of the American Recovery and Reinvestment Act of 2009, and in one year provided \$2.3 billion in federal investment to more than 180 facilities manufacturing clean electrified and efficient equipment. Those investments leveraged a further \$5.4 billion in private sector funding to support tens of thousands of jobs across 43 states. Today, with new funding from the House-passed reconciliation bill, 48(C) could support programs targeted at reducing oil and gas demand, like the proposal to export electric heat pumps en masse to European allies.

Advanced Solar Manufacturing Tax Credit: To support America's solar industry, the \$555 billion package offers tax credit incentives for the domestic production of solar panels. Demand for solar is skyrocketing, but China is dominating the solar supply chain, and provides roughly 75% of the world's solar equipment. As the world seeks out power sector alternatives to natural gas, and America looks for opportunities to support European allies and secure its domestic clean energy supply chain, incentivizing the domestic production and global export of solar equipment is a win-win for the US economy and for reducing demand for Russian fossil fuels.

Energy Storage Tax Credit: Advanced energy storage is critical for flexibility on a 100% clean grid, allowing surplus clean energy from peak generation hours to meet electricity demand at other times in the day. Developing grid-scale storage is especially necessary for replacing natural gas-fired power plants, many of which are currently used as "<u>peaker plants</u>" that are cycled up during times of peak energy demand and dispatched again when demand falls. The Energy Storage Tax Credit would accelerate the domestic development and deployment of these cutting-edge energy storage technologies, lowering domestic natural gas consumption and offering another opportunity to export clean tech to European allies seeking to limit their natural gas consumption.

These programs complement other steps the Biden administration and Congress could take to ramp up clean technology manufacturing capacity. President Biden could use his authority under the Defense Production Act to increase the domestic manufacturing of key clean energy technologies—<u>like heat pumps</u>, <u>energy storage</u>, <u>and</u> <u>electric vehicles</u>—that can lower domestic fossil fuel demand and be exported to



European allies where <u>the need to transition</u> away from Russian oil and gas is dire. To generate further funding for these programs, lawmakers can emulate <u>European</u> <u>proposals</u> and institute a tax on fossil fuel companies' <u>windfall profits</u> amid the ongoing energy crisis. There are a number of tools at the administration's disposal, and to ensure we have the capacity to deliver for American families and our European allies we must make ambitious investments in clean tech manufacturing today.

Ambitious Climate Investments Offer Our Best Path Forward

The crisis in Ukraine makes it clearer than ever that the United States must transition away from oil and gas to an electrified, 100% clean economy. In the coming weeks, President Biden <u>will act</u> to aid European allies and mitigate the fallout of the Russian energy crisis; that endeavor must focus on accelerating the deployment of clean energy and efficient technologies, and not on developing new fossil infrastructure. The most important action President Biden and Congress can take toward that end, and to combat Putin's energy crisis and prevent similar future crises, is pass the \$555 billion climate investments package. There is no better moment to kickstart the clean energy transition and insulate the country from future energy crises. President Biden and Majority Leader Schumer must get a deal done, and get the climate provisions of the House-passed reconciliation bill through now.