United States Senate

March 23, 2022

The Honorable Joseph R. Biden President of the United States The White House 1600 Pennsylvania Avenue, NW Washington, DC 20500

Dear President Biden,

We write today to thank you for your administration's strong support of the Ukrainian people following Russia's unprovoked invasion, and for your efforts to build a strong international coalition to impose sanctions on the Russian government, including the recent ban on Russian fossil fuel imports. We encourage you to pursue additional measures that would further reduce U.S. and European dependence on Russia and other authoritarian petrostates, while also saving money for Americans, protecting public health, and combatting the climate crisis.

Through existing executive and statutory authorities, such as the *Defense Production Act* (DPA) and Defense Security Cooperation Agency sales, the U.S. can support and increase manufacturing capacity and supply chain security for technologies that reduce fossil fuel demand and fuel costs, such as electric heat pumps, efficient electric appliances, renewable energy generation and storage, and other clean technologies.² Combined with our continued efforts to pass a legislative package that includes \$555 billion in climate justice and clean energy investments, these executive actions would provide additional support for our national security, climate action, and consumer protection goals. We encourage you to examine all possible routes to support and deploy clean energy and energy-efficient electric technologies as part of our near-term domestic and international response to the economic upheaval caused by Russia's war on Ukraine.

There is no separating Russian fossil fuels from the corruption and human rights abuses of President Vladimir Putin's regime. Approximately 40% of Russia's state revenues come from its oil and gas sector. Europe serves as Russia's main market for its oil and natural gas exports,

¹ Jeff Stein et al, *U.S. to ban oil imports from Russia as White House explores drastic plans to buffer economy from energy shock*, Washington Post (Mar. 8, 2022), https://www.washingtonpost.com/politics/2022/03/08/biden-bans-russian-oil-imports/.

² Jean Su and Maya Golden-Krasner, *The Climate President's Emergency Powers*, Center for Biological Diversity (Feb. 2022), https://www.biologicaldiversity.org/programs/energy-justice/pdfs/Climate-Emergency-Powers-Report.pdf at p26.

President Joseph R. Biden March 23, 2022 Page 2 of 5

visited Mar. 14, 2022).

making the continent Russia's main source for revenues.^{3,4} Last year, the United States imported 670,000 barrels per day of crude oil and refined petroleum products from Russia, which accounted for about 7% of U.S. imports of oil and refined products.⁵ Until the United States and European countries eliminate their dependence on Russian fossil fuels, they will be tied to Russia's war efforts.

In tandem with banning Russian fossil fuel imports, your administration could deploy existing authorities, including the DPA and military sales, to accelerate the production and deployment of electric appliances to help reduce U.S. and European demand for Russian energy. One way to do this would be to support the manufacture and installation of electric heat pumps in buildings throughout the United States and Europe. With guaranteed federal contracts and other financial incentives, U.S. manufacturers will have the support they need to ramp up their production of electric heat pumps and key components—creating thousands of jobs, boosting local economies, saving money for consumers, reducing unhealthy emissions, and destroying President Putin's oil and gas-based business model.

Currently, Americans rely heavily on oil and methane to heat their buildings and operate appliances—methane gas and petroleum accounted for 42% and 8% respectively of residential sector end-use energy consumption in 2020.⁶ According to the U.S. Energy Information Administration (EIA), "the residential and commercial sectors accounted for about 22% and 18% respectively [...] of total U.S. energy consumption in 2020." Around 5.3 million households in the United States use heating oil as their main source of space heating. The widespread adoption of more energy-efficient electric heat pumps could reduce our oil consumption by 71 million barrels of oil a year, in addition to cutting demand for natural gas.

Within the heat pump sector alone, a federal investment of \$600 million over five years could help the United States develop 30 manufacturing plants and produce three million heat pumps a year by 2025, according to estimates. ¹⁰ These electric heat pumps—which are typically at least

³ Council on Foreign Relations, *Russia's Energy Role in Europe: What's at Stake With the Ukraine Crisis*, https://www.cfr.org/in-brief/russias-energy-role-europe-whats-stake-ukraine-crisis (last visited Mar. 14, 2022).

⁴ U.S. Energy Information Administration, *Russia*, https://www.eia.gov/international/analysis/country/RUS (last

⁵ U.S. Energy Information Administration, *U.S. Imports by Country of Origin*, https://www.eia.gov/dnav/pet/pet_move_impcus_a2_nus_ep00_im0_mbblpd_m.htm (last visited Mar. 14, 2022).
⁶ U.S. Energy Information Administration, *Use of Energy Explained*, https://www.eia.gov/energyexplained/use-of-energy/homes.php (last visited Mar. 14, 2022).

⁷ U.S. Energy Information Administration, *Frequently Asked Questions: How Much Energy Is Consumed in U.S. Buildings?* (May 3, 2021), https://www.eia.gov/tools/faqs/faq.php?id=86 (last visited Mar. 14, 2022).

⁸ U.S. Energy Information Administration, Heating Oil Explained, https://www.eia.gov/energyexplained/heating-oil/use-of-heating-oil.php (last visited Mar. 14, 2022).

⁹ U.S. Energy Information Administration, *Fuel Oil and Kerosene Sales 2020* (Table 5. Volume distribution of distillate and residual fuel oils), https://www.eia.gov/petroleum/fueloilkerosene/pdf/foks.pdf (last visited Mar. 14, 2022).

¹⁰ Rewiring America, *Memorandum From Rewiring America To All Interested Parties: Electrify for Peace Policy Plan* (Mar. 9, 2022), https://www.rewiringamerica.org/policy/electrify-for-peace-policy-plan

President Joseph R. Biden March 23, 2022 Page 3 of 5

three times more efficient than oil or natural gas-powered cooling and heating appliances¹¹ — could then be sold domestically and to our European allies to destroy demand for Russian fossil fuels, decrease our nations' greenhouse gas emissions, and save money for consumers. Through advancements in heat pump technology, "cold-climate, electric heat pumps have the potential to save an average U.S. family as much as \$500 annually on their utility bills, reducing exposure to volatile fossil fuel prices."¹²

The adoption of electric heat pumps would also significantly reduce European reliance on Russian energy. A recent report from the International Energy Agency (IEA) has shown that accelerating the adoption of electric heat pumps by doubling the current installation rates in the European Union (E.U.) could reduce Russian gas use by 2 billion cubic meters in the first year and by as much as 11 billion cubic meters after just three years. ^{13, 14} The E.U. already has plans to advance the electrification of its buildings by deploying 10 million heat pumps in the next five years. ¹⁵ As European Commission President Ursula von der Leyen said, "We must become independent from Russian oil, coal and gas [...] The quicker we switch to renewables and hydrogen, combined with more energy efficiency, the quicker we will be truly independent and master our energy system." ¹⁶ According to a letter from 13 European energy groups and trade associations, the European electricity grid can handle 50 million heat pumps. ¹⁷ The United States can help facilitate the accelerated deployment of electric heat pumps in Europe by ramping up production here through the use of the DPA Title III program or the Department of Defense's Foreign Military Sales program, which could acquire U.S.-made electric heat pumps and key components to sell to the E.U. and the United Kingdom. ¹⁸

We also ask that you engage the E.U. and other countries to discuss eliminating and minimizing trade barriers and expanding market access for U.S.-made clean energy equipment that advances

¹¹ Entek Corporation, *No Contest: Electric and Gas vs. Oil*, https://www.entekhvac.com/no-contest-electric-and-gas-vs-oil/ (last visited Mar. 14, 2022).

¹² Department of Energy, *DOE to Partner with Heating Industry to Improve Performance and Energy-Efficiency of Cold Climate Heat Pumps*, https://www.energy.gov/articles/doe-partner-heating-industry-improve-performance-and-energy-efficiency-cold-climate-heat (last visited Mar. 14, 2022).

¹³ International Energy Agency, A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas, https://www.iea.org/reports/a-10-point-plan-to-reduce-the-european-unions-reliance-on-russian-natural-gas (last visited Mar. 14, 2022).

¹⁴ Rewiring America, *Memorandum From Rewiring America To All Interested Parties: Electrify for Peace Policy Plan* (Mar. 9, 2022), https://www.rewiringamerica.org/policy/electrify-for-peace-policy-plan

¹⁵ European Commission, *Questions and Answers on REPowerEU: Joint European action for more affordable, secure and sustainable energy*, https://ec.europa.eu/commission/presscorner/detail/en/qanda_22_1512 (last visited Mar. 14, 2022).

¹⁶ European Commission, *REPowerEU: Joint European action for more affordable, secure and sustainable energy*, https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1511 (last visited Mar. 14, 2022).

¹⁷ Letter from European Heat Pump Association to the European Commission, https://www.ehpa.org/fileadmin/red/03. Media/Position papers/Final the lights will stay on with 50 million he at pumps.pdf (last visited Mar. 14, 2022).

¹⁸ Department of Homeland Security, *Defense Production Act Authorities* (Jul. 6, 2021), https://www.fema.gov/disaster/defense-production-act/dpa-authorities#DPA_TitleIII_(last visited Mar. 23, 2022).

President Joseph R. Biden March 23, 2022 Page 4 of 5

electrification, such as heat pumps, electric vehicles, and other clean energy technologies. Producing efficient electric products and exporting those goods to the E.U. and other foreign markets would help many countries lower their dependency on fossil fuels, and thereby strengthen their own energy security. This would mirror the Lend-Lease Act program implemented during World War II, through which the United States sent critical supplies to Allied nations invaded by Germany. ¹⁹ If you decide to employ the DPA or the Defense Security Cooperation Agency for this purpose, it will be critical to ensure that in doing so, we do not disrupt domestic supply chains or increase inflation. We also urge you to ensure that contracts for this manufacturing under the DPA be given only to companies that use union labor.

Due to the humanitarian, energy, and economic crises caused by Russia's invasion of Ukraine, we urge you to use all the tools and authority at your disposal to provide relief to our residents and allies and take preemptive steps to limit future instability caused by climate change and conflict funded by fossil fuel profits. In addition to our ongoing efforts to pass a robust set of climate justice and clean energy investments through Congress, we must take bold action to invest in energy efficiency and cut fossil fuel demand through electrification wherever possible. The United States is uniquely poised to be the global renewable energy leader that finally breaks our fossil fuel addiction and creates a safe and secure clean energy economy. We encourage you to build upon our continued efforts in Congress to achieve these goals by using existing purchasing, grant, and loan authorities through the DPA and the Defense Security Cooperation Agency to spur American manufacturing and the deployment of clean energy and energy-efficient electric technologies in the United States and Europe. By doing so, you could bolster our national security, create good-paying American jobs, fight the climate crisis, and build a just, resilient, American-led international clean energy economy. We thank you for your leadership and your consideration of this request.

Sincerely,

Edward J. Markey United States Senator

Elizabeth Warren Inited States Senator

¹⁹ Jeff Stein et al, *U.S. to ban oil imports from Russia as White House explores drastic plans to buffer economy from energy shock*, Washington Post (Mar. 8, 2022), https://www.washingtonpost.com/politics/2022/03/08/biden-bans-russian-oil-imports/.

President Joseph R. Biden March 23, 2022 Page 5 of 5

Martin Heinrich

United States Senator

Cory A. Booker United States Senator

Jeffrey A. Merkley United States Senator