

## Remarks by Deputy Secretary of the Treasury Wally Adeyemo at Carnegie Endowment for International Peace on the Inflation Reduction Act

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### *As Prepared for Delivery*

Thank you, Ian, and thank you Tino, for inviting me to join you today for the launch of Carnegie California. As you all know, Andrew Carnegie created the Endowment in 1910 to advance the cause of peace and international cooperation as he saw the storm clouds of war beginning to form along the horizon. Today, I am here to address the ways that climate change is an existential threat to not just peace and international cooperation, but also to humanity.

In response to this threat, President Biden signed into law the boldest step our country has ever taken to confront the existential threat of climate change—the Inflation Reduction Act. The IRA not only positions the U.S. to meet our climate goals but provides the public and private sectors with the tools to improve our energy security and secure our economic future.

On Monday, just miles away from here, the President made clear that government alone cannot solve this problem. Transforming our economy to address the climate crisis will require trillions of dollars in private capital to develop new technologies, build manufacturing and supply chain capacity, and deploy renewable resources. That’s why the vast majority of the resources devoted to addressing the climate crisis will be distributed through tax credits and incentives administered by the Treasury Department—to help crowd in the private investment we need. The IRA’s incentives have the ability to unlock more than \$3 trillion in investments and support as many as 1.7 million clean energy jobs in the U.S. by 2030.

I serve as the Chief Operating Officer of the Treasury Department, and at Secretary Yellen’s direction, my colleagues and I are laser-focused on providing the guidance and tools needed to make sure Americans reap the benefits of the IRA—giving families, consumers, nonprofits, governments, and businesses the certainty and resources they need to help accelerate clean energy innovation and deployment.

Global green investment totaled \$1.1 trillion last year, and about half of that investment came from investments in China’s domestic clean energy transition. Earlier this week, President Biden

highlighted the stakes of climate action and outlined our vision for a clean energy future. Today, I want to delve into the details of how the IRA will help ensure America and our allies lead the green economic transformation moving forward and explain our strategy to accomplish three economic objectives.

First, to do our part to prevent the catastrophic risks posed by climate change from materializing. Second, to ensure our transition to the clean energy economy enhances our energy security. And third, to create good, green jobs across the country by positioning the U.S. at the center of this economic transition.

The challenge climate change presents is not new. In fact, we have been grappling with it for decades but without the resources we need to address this threat. The IRA has finally given us many of the tools we need to fight a battle humanity cannot afford to lose.

I don't need to belabor the point with this audience that climate change's long-run existential threat also comes with dire risks in the immediate term. Beyond these environmental harms, as a Treasury official, I would be remiss not to point out that climate change is already exacting an enormous economic cost.

Climate and weather-related disasters cost the U.S. alone more than \$160 billion last year. Recently, in California, the risks have become so great that insurers including State Farm—the largest home insurer in the state—have stopped selling coverage. We are also seeing insurers pull back in Florida where home insurance rates are now four times the national average, making housing less affordable.

We cannot only focus on making clean energy cheap and reliable. This transition must also improve our energy security. The United States cannot produce all of the inputs required to build a clean energy economy. Take critical minerals, the basic materials needed for a range of clean technologies, from electric vehicle batteries to the permanent magnets in wind turbines. The International Energy Agency estimates that the world is already on track to double critical minerals demand by 2040—and more still will be needed to meet our climate goals.

The United States will need to build new supply chains to access these inputs and other technologies that power the clean energy economy.

Today, the supply chains for these minerals and the downstream technologies they feed into are dominated by companies in one country: China. As of 2022, Chinese mine production represented 65% of the global market for graphite and 70% for rare earths. Chinese refining accounted for 77% of global cobalt refining capacity and more than half of global lithium refining capacity. And China

also produces 77% percent of battery cells globally. This dominant position is the result of years of strategic investments by Beijing.

We know too well the pain that dependence can cause when it is abused. In the 1970s, Americans saw oil prices nearly quadruple in a matter of months as the result of OPEC's oil embargo.

And while the worst of these risks may seem like a distant memory to us due to our position as a net oil exporter today, our allies in Europe are still suffering from Russia's weaponization of natural gas supplies over the last year, inflicting pain on millions of innocent people in retaliation for Europe's support of Ukraine.

We cannot afford to go from a world where our closest allies are completely reliant on Russia for gas to a world where we are all completely reliant on China for batteries.

Finally, any economic shift of this magnitude entails risk—risk that the gains from it accrue primarily to those starting from a position of economic advantage; risk that the communities whose economic lives are closely tied to the fossil fuel industry are left behind in the transition; and risk that those most impacted by climate change are the last to see the benefits of the investments we are making.

As we embark on this economic transition, it is incumbent on all of us to ensure the opportunity this transition creates reaches all Americans. That's exactly the approach we have taken as we have begun to implement the IRA—to balance the urgency of achieving our climate ambitions with the need to safeguard our energy security and the imperative to build a clean energy economy that benefits communities across the country.

My goal today is to explain how we are pursuing these three objectives in tandem and how the many pieces of the IRA fit together in support of that approach.

One of the most important outcomes of the Inflation Reduction Act is that it positions the U.S. to make good on the President's climate commitments.

With robust implementation of the IRA, the U.S. can reduce greenhouse gas emissions by 40 percent below 2005 levels by 2030 and reach net zero by no later than 2050.

In order to accomplish these goals, we must do three things: one, accelerate the deployment of clean and affordable electricity; two, lower the cost of green products for American families and businesses; and, finally, invest in the clean technologies of the future. The IRA will accomplish these goals using a combination of incentives on both the supply and demand side of the equation.

On the supply side, the IRA will boost clean energy deployment and further drive down electricity costs. The success of vehicle electrification, clean hydrogen, and other elements of our climate strategy depend on greening the underlying sources of power these technologies rely on.

That's why the IRA's combination of tax credits is designed to support the rapid build-out of established technologies like solar and wind while also providing technology-neutral incentives to facilitate the development of new energy sources. Of course, some sectors of our economy are hard-to-abate by their nature—areas like iron, steel, shipping, and chemicals. To help ensure these vital industries remain competitive while we pursue our climate goals, the IRA also includes substantial credits for carbon capture and clean hydrogen—to help develop and deploy these technologies through U.S. leadership.

Within a few years, these incentives, coupled with ongoing efforts to upgrade our electric grid infrastructure, have the potential to double the rate of new wind installations and increase by a factor of five the rate of new solar installations. American households will be among the main beneficiaries of this reliable—and relatively inexpensive—clean energy. One analysis found that the Inflation Reduction Act could ultimately lower a typical household's electric bill by around \$200 per year.

On the demand side, we are providing consumers incentives that will lower the cost of deployment and encourage the adoption of clean technologies in their homes and lives. This is why the IRA includes tax credits and rebates for critical items that Americans use every day, including energy-efficient appliances, doors, and windows; heat pumps; and electric vehicles. Those who use the IRA's incentives to purchase EVs will see their fuel costs go down by about 60 percent.

These incentives on the supply and demand side will work alongside regulatory actions to speed the deployment of these technologies, such as the EPA's new proposed standards for vehicle pollution.

And together, this combination of technology-neutral support for green energy alongside regulatory action will accelerate the development of the next generation of climate innovations.

These actions will not only benefit the U.S. As the supply of these technologies scales up and their costs come down, people around the world will be able to take advantage. The Inflation Reduction Act's investments could reduce the costs of certain emerging technologies by as much as 25 percent. This, in turn, will help other countries reach their climate goals and help stretch the resources they invest even further. Time and time again, America's foundational investments in innovation have led to breakthroughs that help not only our country but the world.

This week, Secretary Yellen is in Paris to push for changes to our global development finance architecture to enable international financial institutions to more effectively use their financial resources to address climate change. The IEA estimates that to reach net-zero emissions by 2050, the world will need to increase its annual clean energy investment between two and three times by 2030—to \$4 trillion dollars. With the IRA, the U.S. is making important strides, but a global approach is the only way to fully meet our climate goals.

This brings me to the next pillar: strengthening our energy security. Today, we are dependent on fossil fuels that are harmful to the planet and often priced in ways we can't control. But we risk ending up with a similar challenge tomorrow if we do not build sustainable and diversified clean energy supply chains.

The undeniable truth is that the US cannot build a clean energy economy alone. We need to work with other countries to develop the critical minerals and clean energy manufacturing needed to build a net-zero global economy. As a Carnegie Endowment report on critical minerals recently put it: “partnerships among democratic states would be able to produce enough minerals to enable the world to limit warming to 1.5 degrees Celsius.” But it will require “extraordinary technological and financial cooperation.”

Our partnership with allies and partners to build clean energy supply chains must accomplish two goals: eliminating chokepoints and enabling our companies to compete in a market where Chinese firms and state-owned enterprises have long dominated by virtue of excessive subsidies and lower environmental and labor standards.

In order to contain temperature increases below 1.5 degrees Celsius, we will need China to continue investing in a clean energy ecosystem. But the Inflation Reduction Act gives the U.S. the tools we need to build our own green economy, one with resilient supply chains that do not require us to rely on any one country for our energy security.

This is why, for example, the IRA makes part of the clean vehicle tax credit available only if the vehicle's battery is built with critical minerals sourced or processed in the U.S. or our free trade partners. One of the United States' greatest strengths is our network of alliances and partnerships, which we must leverage to help us build reliable clean energy supply chains to support our green economic transition.

It's no secret that some of our foreign partners initially had reservations about the IRA and viewed it as advancing America's interests at the expense of others. The reality could not be further from this. The IRA's goal is not for the U.S. alone to bear the costs or the benefits of these investments—they must be shared.

We are committed to engagement and coordination with our allies and partners to work in lockstep to achieve our climate goals and pursue a shared approach to these investments.

That's why we have supported allies like Canada in developing tax credits for clean electricity investments and clean manufacturing—to facilitate the expansion of Canada's clean energy economy in the service of our shared goals. It's why we are working directly with the EU to accelerate investments we must both make to protect our energy security. Just as overcoming the COVID-19 pandemic required cooperation between our government and those of our allies, and between American companies like Pfizer and foreign ones like Germany's BioNTech, tackling the climate challenge will require innovation at a global scale.

Analysts at the Argonne National Laboratory have concluded that even in an optimistic scenario for U.S. battery capacity development, developing the capacity we need will take more than the U.S. can build on its own—resilience will require partnership. That's why we recently concluded a critical minerals agreement with Japan—a key processing destination. And it's why we are currently negotiating similar agreements with the European Union and the UK.

True energy security requires resilient supply chains built in collaboration with our allies and partners, alongside investments we must make to build our industrial base. Our motto is “both and,” not “either or.”

Finally, even as we build global supply chains, we are also working to ensure American workers benefit from the green transition in the form of well-paying clean energy jobs. For this transition to be sustainable, the economic growth it produces must be equitable—creating millions of good, clean energy jobs that expand the American middle class.

We are seeking to accomplish this goal by providing additional incentives to clean energy firms that (1) create manufacturing jobs in America, (2) pay a living wage, and (3) invest in low-income communities and communities disproportionately impacted by climate change. This is emblematic of what Secretary Yellen calls “modern supply-side economics,” which seeks to unlock our economy's unrealized potential by making investments in our labor market, especially in underserved communities.

The IRA is designed to create well-paying jobs here in America—which has been at the core of the President's economic agenda since Day One and will be one of the IRA's most important legacies. The IRA includes both direct incentives for companies to manufacture their own products in the U.S.—like the Advanced Manufacturing Production Credit—and incentives for companies to buy products manufactured in the U.S. by other companies—like the Domestic Content Bonus, which increases the credits available for projects that rely on inputs made in America.

This approach is already working. Since the IRA passed, nearly 200 new clean economy projects totaling \$83 billion have already been announced in the U.S.

Of course, building out our domestic manufacturing base will take time. But we need to begin deploying sources of clean energy today to meet our climate goals.

This is a delicate balance, one Congress struck through a mix of credits that prioritize deployment in some cases and domestic investment in others. Again, our approach is “both and,” not “either or.”

Second, we are committed to creating jobs where workers’ rights are respected and that pay a living wage. In total, according to academic estimates, the IRA could raise the wages paid to solar and wind workers by \$220 billion per year relative to what they would have earned without it. For many incentives, the maximum amount is only available if companies pay prevailing wages and meet apprenticeship requirements to help expand our green workforce.

And by working with partners and allies, we can build supply chains that reflect these same commitments to strong labor rights, as well as environmental standards.

We are also working to ensure these gains flow to those in need, especially low-income communities and those most at risk from climate change. Even when major economic transitions bring benefits, they can be costly if those gains are spread inequitably—just look at the way cheap goods from China have hollowed out many of our country’s manufacturing communities.

The IRA’s incentives will help us demonstrate what an inclusive economic transition looks like.

We recently released guidance to facilitate the uptake of bonus credits for investments in low-income communities and energy communities—including those with closed coal mines or power plants. These credits will help ensure the communities that kept the lights on during the last century are at the center of economic opportunity during the next one.

The goal of these provisions is to ensure that the communities most exposed to the potential costs of the clean energy transition are poised to benefit from the economic potential it creates. In many cases, this will mean new, green jobs in these communities. In others, it will mean opportunities to access capital and streamlined financing that enable more projects to get off the ground and deliver energy at lower cost.

I’ve recently spoken with a number of community organizations that plan to directly access clean energy tax credits to invest in solar power for their communities—on a trip to Atlanta in March and earlier today, just across the Bay in Richmond. These credits will help these organizations purchase rooftop solar for affordable housing developments, expand their operations, and deliver energy

cost savings to their communities. This is yet another example of how our approach to the IRA is designed to use its many provisions in concert—to pursue all of our objectives for the green economy and to share its benefits as widely as possible.

The Biden-Harris Administration is committed to implementing this landmark law as part of a strategy to build toward America’s clean energy future—one where our environmental, national, and economic security are provided for. I’ll be the first to tell you that we have far more to do. Tackling the challenge of climate change, protecting our long-term energy security, and building an inclusive green economy centered in America will require an evolving approach.

We will be in constant need of new ideas and innovations, from dynamic companies building new technologies to institutions like the Carnegie Endowment forging the intellectual underpinnings of our policy choices. So let me conclude by saying thank you for having me here today, and for all that you have done and will continue to do to support this essential work.

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