**Brian Deese Remarks as Prepared
October 10 event at Columbia University**[**Climate and Clean Energy Policy in the Post-Inflation Reduction Act World**](https://columbiasocialenterprise.org/civicrm/event/register?id=925&reset=1)

Thank you for having me. Tonight I want to discuss two things:

(1) a mark-to-market on the economic impact of US climate legislation; and

(2) a look-forward on where we need to go on climate and clean energy policy in a post-Inflation Reduction Act (IRA) world.

***1. Mark-to-Market***

The IRA is, in some ways, a simple piece of legislation. It provides long-term, technology-neutral incentives to crowd in private investment to drive down the cost of clean technologies and drive up clean energy capacity. Public incentives make private investment more attractive, but ultimately businesses, rural cooperatives and others must judge whether their investments will pay off. As a result, the law will be as successful as their appetite to invest at a magnitude that meaningfully reduces emissions and increases our energy security.

Fourteen months after the IRA’s passage, what do we know about that appetite? In one word: strong. In the year ending this June, firms and individuals spent $213 billion in clean technologies across the economy, according to the [Clean Investment Monitor](http://cleaninvestmentmonitor.org/) we launched last month at MIT.[[1]](#footnote-0) That’s up 37% from the previous year and 165% from five years ago.

The debate now sits between whether the IRA will catalyze twice the investment than the original Congressional Budget Office score, or 3-4 times. Regardless, it’s safe to say that the IRA has changed the game on private investment in clean technologies.[[2]](#footnote-1)

And it has shifted the climate policy paradigm in two other important ways.

First, the IRA is mainstreaming the policy approach of *making clean energy cheap* rather than *making pollution expensive*.

Traditional economic orthodoxy favors making pollution expensive as an elegant way to internalize the greenhouse gas externality. My friend [Jim Stock](https://scholar.harvard.edu/sites/scholar.harvard.edu/files/stock/files/stock_driving_deep_decarbonization_imf-fd_sept_2021.pdf) explained, “The prospect of cheap green energy requires a fundamental shift in how we think about climate policy – from how we can make it more expensive to be dirty to how we can make it cheaper to be green.”

Taxing carbon has proved to not only be politically treacherous, but substantively incomplete.[[3]](#footnote-2) For example, an investment in EV chargers has an order of magnitude larger impact on accelerating EV uptake than a respective gas tax increase. As my friend and former colleague [Larry Summers](https://www.cgdev.org/blog/world-fire-larry-summers-pressing-need-new-global-financing-through-mdb-reform) recently said, “as much as requiring carbon pricing is important, I believe even more important is the dissemination of economically competitive renewable energy.”[[4]](#footnote-3)

Second, the IRA shifted the dominant economic challenge in climate policy from insufficient demand to insufficient supply.

This is an abrupt shift. In the last decade, if you worked on an issue like electric buses as I did, you immediately ran into problems: too few buyers, too little confidence from suppliers in existing demand and no federal resources to support production or purchases. Today, the challenge is the opposite: every municipality wants to buy, there are abundant federal resources, but insufficiently available e-buses. The question now is: how do we radically scale *supply* into the market? The same dynamic presents across technologies and sectors.

These changes reflect dramatic progress from the pre-IRA period. But they demand new policy approaches. The IRA has rewritten the script; our policy and political playbook must change as well.

I’ll use the remaining time to outline two areas to prioritize going forward:

(1) We need an American Building Agenda – to build clean energy systems and infrastructure at historic speed and scale; and

(2) we need a global Climate Marshall Plan – to make sure that as we drive down the price of zero-carbon technology, we drive up its adoption around the world.

***An American Building Agenda***

First, there is a growing recognition that we must build things much faster and fairer in America. We’ve all seen eye-popping statistics – like the fact that we need to build [enough solar](https://www.nytimes.com/2022/09/20/podcasts/transcript-ezra-klein-interviews-jesse-jenkins.html) to cover all of Connecticut, Rhode Island and Massachusetts combined.[[5]](#footnote-4)

But, net zero requires more than new stuff – more batteries, more electrolyzers. It requires building new systems. That should start with getting to “yes” on siting and permitting projects. There are critical legislative and administrative steps here, and the details matter. But at the core of this agenda, we need a new coalition to build America’s clean energy economy – activists, policy specialists, private sector innovators and investors.

This requires dispensing with old impulses. The impulse to localism, to protect local interests at the expense of public goods and the national building effort. And the impulse of traditional American environmentalism, which for the better part of 50 years, was understandably trained on blocking and slowing down pollution-based building.

These instincts must evolve – and quickly. We need to change “say no and protect local” to a national effort with local roots that says “yes yes yes” to building clean.[[6]](#footnote-5) Let’s organize people and places to see the joy, wisdom and pride of building the clean energy economy.

[Senator Schatz](https://slate.com/business/2023/04/brian-schatz-senate-housing-yimby.html) is right when he said, “There’s nothing intrinsically progressive about stopping progress.” Just as the last generation was called to action by the phrase “think globally, act locally,” this generation must aspire to “think urgently and build massively.”

We also need to distribute zero-carbon electricity more effectively and consume it more efficiently.The IRA supports historic demand. We now need to be equally momentous on the supply side – eliminating regulatory barriers and aligning incentives that will enable a fast build-out of the grid and transportation charging system.

An efficient, safe grid is an economic and national security priority.[[7]](#footnote-6) Accept that and technical reforms become no-brainers: dismantling the byzantine “interconnection cue” obstacles;[[8]](#footnote-7) giving FERC the authority to designate national transmission corridors; mandating interregional, proactive, scenario-based, and long-term planning processes; and requiring the use of grid-enhancing technologies.[[9]](#footnote-8) All of this is hard. But now with the demand and funding in place, we can make huge progress quickly. For example, we don’t have to wait to be energy efficient on the grid.[[10]](#footnote-9)

Finally, we need to inject competition into American energy markets so zero-carbon technologies reach the grid and consumers actually benefit from rapidly-dropping prices. Utilities stand behind many obstacles to building clean energy. Their markets are too often uncompetitive.[[11]](#footnote-10) And in many cases, utilities use their entrenched market power to prevent clean technologies from competing on a level playing field.[[12]](#footnote-11)

Lack of competition is a major barrier to entry for innovative and cheaper climate solutions like virtual power plants. When I speak to investors the most common refrain is that, yes, permitting and siting are an issue, but the core problem is uncompetitive energy markets. Because if you can’t compete, you can’t get paid and you don’t invest. That results in less clean energy innovation and higher prices for consumers.

Ultimately we may need federal legislation to drive toward a single comprehensible market that allows competition and consumer choice. In the meantime, we, as consumers, must agitate to inject competition into America’s utility markets. We should seek out strange bedfellow coalitions for energy market competition – as we’ve seen on monopoly competition harms in other sectors like tech and agriculture.

***Climate Marshall Plan***

Turning to the other half of the equation, or actually the other 90% and growing: we must be just as bold in enacting new policy architecture that accelerates global deployment of clean technologies. It’s time for a Climate Marshall Plan.

In his special address to Congress in 1947, [President Truman](https://www.presidency.ucsb.edu/documents/special-message-the-congress-the-marshall-plan) explained that “[t]he United States has taken the lead in world-wide efforts to promote industrial…reconstruction…, for we know that enduring peace must be based upon increased production and an expanding flow of goods and materials among nations for the benefit of all.”

Today, America is leading, with the IRA, an historic industrial expansion in clean energy – with [massive potential](https://media-publications.bcg.com/BCG-Executive-Perspectives-US-IRA-Global-Implications.pdf) to promote global development and prosperity.

Our public investments here at home could lead to [potential](https://media-publications.bcg.com/BCG-Executive-Perspectives-US-IRA-Global-Implications.pdf) [savings](https://www.economist.com/by-invitation/2023/01/24/brian-deese-john-podesta-and-jake-sullivan-on-the-inflation-reduction-act) of more than $120 billion worldwide by 2030. The IRA could ultimately bring [emissions reductions](https://rhg.com/research/emerging-climate-technology-ira/) in the rest of the world that are 2-4 times larger than in America.

But while this potential is within reach, it is not self-executing. Speeding the deployment of clean energy to the world – and supporting the developing word’s ability to become more resilient to climate change’s unavoidable impacts – requires an effort on the level of President Truman and Secretary Marshall’s ambition 75 years ago. This means at least three things:

First, we need to harmonize our efforts to make-clean-cheap to achieve maximal deployment and more resilient supply chains while avoiding unproductive trade disputes and subsidy races. We should be welcoming of additional public investment that drives deployment of clean energy – and do the hard diplomatic work of building new frameworks to accelerate and improve their impacts across jurisdictions.

On this score, while much was made of early disagreements across the Atlantic, there has been significant progress. The United States is pursuing constructive arrangements with Europe, Japan, Korea and Canada, plus allied countries in Asia through the IPEF. These arrangements should harmonize subsidies across jurisdictions wherever feasible – and ensure full transparency of public investment frameworks.

Second, we should bring our international trade and climate frameworks closer together so that trade and tariff regimes encourage rapid decarbonization from emissions-intensive foreign producers. Industrial decarbonization is a first place to start, and there is growing [bipartisan](https://www.foreignaffairs.com/united-states/tariff-climate-pollution-environment#:~:text=The%20foreign%20pollution%20fee%20legislation,Financing%20Corporation%20to%20support%20responsible) [support](https://www.coons.senate.gov/news/press-releases/senators-coons-cramer-introduce-legislation-to-study-global-emissions-intensity-and-hold-countries-with-dirty-production-accountable#:~:text=The%20PROVE%20IT%20Act%20would%20obtain%20high%2Dquality%20data%20to,to%20those%20around%20the%20globe.).

One can envision a [framework](https://www.foreignaffairs.com/united-states/green-gridlock) that aligns tariffs on producers who fall outside a Paris-aligned emissions threshold, while allowing flexibility for different approaches to decarbonization. The [Global Arrangement on Sustainable Steel and Aluminum](https://www.nytimes.com/2022/12/07/business/economy/steel-tariffs-climate-change.html) provides a real-life template. This model should explicitly support the least-developed countries – through reinvesting carbon fees into sustainable development projects or providing special access to cleantech exports. Overall, trade policy can leverage varying domestic climate strategies to diffuse cheap clean technology globally and accelerate investment across markets in a mutually-supportive and trade-expanding manner.

Third, we need to massively increase the quantity and quality of finance to deploy low-cost clean technology in the developing world. We should dispense with traditional bureaucratic constraints and demand swift, norm-breaking reforms.

To start: U.S. development finance capabilities must be scaled, starting with the DFC, which *today* has the capability to do $10-20 billion more in climate lending. The World Bank should increase its climate support by 50% – with a focus on guarantees, risk insurance and climate infrastructure. The Green Climate Fund must be radically overhauled for speed and scale. We need new tools – like foreign exchange risk mitigation, advanced purchase commitments and intellectual property transfer agreements – to knock down the actual practical impediments to deployment.

We must move beyond the stayed “climate finance” conversation, where public and private institutions pledge large goals and then wring their hands at how hard it is to summon those resources or deploy them in practice. The politics of reform are hard, but easier than the politics of new money. And success on the former is the key to unlocking the latter.[[13]](#footnote-12)

**Conclusion**

I will end with this: later this year we have the first Global Stocktake, the report card of the Paris Agreement. Because of the IRA, it will show the United States is on track for its climate goals – a historic and necessary condition. It will also show that the world is not close to being on track to avoid the worst impacts of the climate crisis.

Our task is clear. Last decade’s charge was to demonstrate that the world could rally together around common climate objectives. This decade’s charge is to build the systems to deploy the zero-emissions solutions that will realize those objectives. Let’s get to work.

1. At this level, clean investment nationwide is larger than the individual GDP of 18 of the 50 U.S. states. Clean investment was 4.1% of total private investment in “structures, equipment and durable consumer goods” in the year spanning 2022-Q3 through 2023-Q2. [↑](#footnote-ref-0)
2. We also know that this surge in clean investments does not appear to be crowding out other investments. For example, construction manufacturing more than doubled in real terms since the end of 2021; and [this boom is almost entirely due](https://home.treasury.gov/news/featured-stories/unpacking-the-boom-in-us-construction-of-manufacturing-facilities) to electrical, electronic and computer investments. At the same time, growth in other manufacturing segments is running consistent with baseline trends. [↑](#footnote-ref-1)
3. [Rhodium and UChicago](https://epic.uchicago.edu/wp-content/uploads/2022/02/EPIC_RHO_BBBMemo.2.9.22.pdf) have assessed that clean energy tax credits deliver benefits 3-4 times the costs and found that this policy is more cost effective than most others in the U.S. climate policy toolkit. [↑](#footnote-ref-2)
4. This does not mean that pricing should be abandoned. Indeed, proponents of the make-clean-cheap strategy often forget that the Biden Administration is also creating ambitious implied prices on carbon in the power and transport sectors through regulatory tools and that the IRA includes the first-ever fee on methane emissions. [↑](#footnote-ref-3)
5. [A 2050 net-zero middle-of-the road renewables scenario](https://netzeroamerica.princeton.edu/img/Princeton%20NZA%20FINAL%20REPORT%20SUMMARY%20%2829Oct2021%29.pdf) requires breaking the record for capacity installations every single year for the next 30 years. And [if electricity transmission](https://repeatproject.org/docs/REPEAT_IRA_Transmission_2022-09-22.pdf) is not expanded fast enough, over 80% of the potential emissions reductions delivered by IRA in 2030 will be lost and power sector emissions may actually increase. [↑](#footnote-ref-4)
6. My friend [Bill McKibben](https://www.motherjones.com/environment/2023/04/yimby-nimby-progressives-clean-energy-infrastructure-housing-development-wind-solar-bill-mckibben/) coined this as “YIMBY enthusiasm.” [↑](#footnote-ref-5)
7. Headlines like “[Batteries And Renewables Are Saving Texas During The Heat Wave](https://www.forbes.com/sites/anandgopal/2023/07/02/batteries-and-renewables-are-saving-texas-in-the-heat-wave/?sh=b8709af21dde)'' are testimonies to the saving-grace nature of cleantech, in both mitigating climate change and adapting to extreme heat waves and cold freezes. [↑](#footnote-ref-6)
8. The interconnection wait line is [getting longer](https://emp.lbl.gov/queues): it was less than two years for projects built in the early 2000s and the median project built in 2022 waited for 5 years. [↑](#footnote-ref-7)
9. Grid-enhancing technologies lessen grid congestion, which occurs in the face of transmission constraints and can lead to generator curtailment. Grid congestion costs in 2022 are estimated to have been [triple that of 2020](https://gridstrategiesllc.com/wp-content/uploads/2023/07/GS_Transmission-Congestion-Costs-in-the-U.S.-RTOs1.pdf). [↑](#footnote-ref-8)
10. Last year, [DOE](https://www.energy.gov/sites/default/files/2022-04/Grid%20Enhancing%20Technologies%20-%20A%20Case%20Study%20on%20Ratepayer%20Impact%20-%20February%202022%20CLEAN%20as%20of%20032322.pdf) found that deploying grid-enhancing technologies can increase line capacity by almost 50%, reduce electricity curtailment by 43%, and save tens of millions of dollars for households by alleviating grid congestion. A study by the [Brattle Group](https://www.brattle.com/insights-events/publications/grid-enhancing-technologies-shown-to-double-regional-renewable-energy-capacity-according-to-study-by-brattle-consultants/#:~:text=On%20a%20national%20scale%2C%20the,new%20large%2Dscale%20transmission%20lines) found that using GETs in Kansas and Oklahoma could double renewable energy on the grid and the returns would pay for the expenses in just six months. [↑](#footnote-ref-9)
11. We have seven wholesale electricity markets, each with a different set of rules, and some regions composed of monopoly utilities, with no competition at all [↑](#footnote-ref-10)
12. [Only 13 states](https://www.eia.gov/todayinenergy/detail.php?id=55820) have active state- or district-wide retail choice programs for residential customers. Additionally, utilities are typically structurally disincentivized against energy efficiency measures and rooftop solar. [↑](#footnote-ref-11)
13. And in the meantime, there is plenty to do at home to make the United States an exporter of clean technologies and an innovative finance provider. U.S. commercial diplomacy needs to be overhauled; the top priority of the Department of Commerce’s Foreign Commercial Service should be exporting American made-cheap clean technology and marketing our federal resources. Our three finance agencies – DFC, EXIM, USTDA – can increase risk capacity, mobilize more private capital, mainstream climate considerations and bolster their capacity to deliver on climate. Creative “country packages” – collaborations between governments, private sector, philanthropy, and MDBs to provide finance in return for more ambitious and accelerated climate action – like the [Just Energy Transition Partnerships](https://www.whitehouse.gov/briefing-room/statements-releases/2022/11/15/indonesia-and-international-partners-secure-groundbreaking-climate-targets-and-associated-financing/) can precipitate real dollars and real action. [↑](#footnote-ref-12)