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THE INFLATION REDUCTION ACT & THE EU

THE NEED TO STRENGTHEN THE TRANSATLANTIC TRADE RELATIONSHIP

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Executive Summary

The Inflation Reduction Act (IRA) puts the US on track to achieving its 2030 Nationally Determined Contribution under the Paris Agreement. EU leaders, like Commission President Ursula von der Leyen, welcomed the IRA's final passage and the US living up to its climate promises. But now, the EU, including several member states, have raised concerns over certain provisions that may benefit US producers over foreign ones.

This briefing seeks to explain the political economy dynamics behind both the passage of the Inflation Reduction Act and the European response. As the green transition reaches the implementation phase, trade conflicts are likely to continue, especially as countries try to maximise their share of new clean energy markets. This briefing outlines the challenges facing the transatlantic partnership and what is at stake if the disagreement over the IRA is not resolved.

To address the immediate trade tensions ignited by the IRA, the EU and the US can explore a range of scenarios. These include the US mitigating domestic content requirements for EU companies to the EU bringing the issue before the World Trade Organization (WTO) or implementing retaliatory tariffs. Other options may involve setting up a transparency mechanism in current and future



subsidy regimes, temporarily pausing WTO complaints while dialogue continues, and commissioning an independent assessment on expected changes to investment and trade patterns due to subsidy programmes.

Regardless of how the two sides address the conflict, the present situation underscores the need for the EU and the US to collaborate on long-term measures at the climate and trade nexus. To avoid future trade tensions and maintain the integrity of the transatlantic relationship, the EU and US should:

- > Commit to greater coordination and strategic dialogue on competition issues, as well as on a reform of trade rules for the green transition in fora such as the international climate club or the EU-US Trade and Technology Council (TTC);
- > Develop a joint approach to a longer-term reform of the trade regime and coordinate on green subsidies, including at the WTO. This would ensure a resilient rules-based approach that enables fair market access to clean technologies and market opportunities for emerging and developing economies.

Background

The Inflation Reduction Act (IRA) is the largest climate bill in United States history, with an estimated USD 369 billion in climate spending over the next ten years. The Act places the US on a path to reaching its 2030 climate targets.¹ However, the level of subsidisation in the law and its domestic content requirements have prompted critical reactions from key allies, notably the European Union.

The local content requirements are provisions whereby certain funding opportunities are only possible for electric vehicles and clean energy technologies assembled or sourced domestically or in countries with which the US has a free trade agreement (Canada and Mexico). The EU argues these subsidies contravene international trade rules and discriminate against foreign

¹ Senate Democrats (2022) [Summary: The Inflation Reduction Act of 2022](#)



producers by favouring US companies. Although the EU's concerns over domestic content requirements are warranted, US policymakers argue the measures were necessary to overcome political barriers and pass the Act.

While trade disagreements are normal in the transatlantic relationship, increased friction between the EU and the US on their green transitions could slow down other forms of cooperation in multilateral fora, notably on climate diplomacy in the UNFCCC's COP processes or in bilateral venues like the EU-US TTC.

The Inflation Reduction Act

The IRA is a monumental piece of legislation that will have a make-or-break impact on the US green transition. With it, President Biden hopes to prove America is “back” as a global climate leader. The IRA could bring the US within striking range of the objectives of its Nationally Determined Contribution (NDC) under the Paris Agreement. Models estimate the IRA could cut domestic greenhouse gas emissions by around 40% by 2030 from 2005 levels, as opposed to a 24-35% reduction without it.^{2 3} The Biden Administration passed two other laws with major climate investments that will further support the achievement of the 2030 targets, the CHIPS and Science Act, and the Infrastructure Investment and Jobs Act.^{4 5} To go the full distance of the NDC and reach 50% emissions reductions by 2030, the US will have to combine these three laws with regulations from the executive branch and action at the state level. Without the IRA, however, the US would almost certainly have failed to deliver on its Paris commitments.

The EU concerns over the IRA

² (2021) **United States Nationally Determined Contribution**

³ Larson, John et al. (2022) **A Turning Point for US Climate Progress: Assessing the Climate and Clean Energy Provisions in the Inflation Reduction Act**

⁴ The White House (2022) **CHIPS and Science Act Will Lower Costs, Create Jobs, Strengthen Supply Chains, and Counter China**

⁵ U.S. Congress (2021) **Infrastructure Investment and Jobs Act**



Though a game-changer for US climate policy, the IRA could lead to a significant trade dispute with the European Union. The EU is facing a multitude of crises resulting from Russia’s invasion of Ukraine, including high energy prices and rising inflation. The situation has put significant strain on European industry and raised concerns over its future. The IRA’s domestic content provisions, in addition to the law directly subsidising additional production capacity, could steer industrial actors away from Europe and towards North America to be able to benefit from funding. European officials argue the law not only violates international trade rules, benefiting US producers over foreign competitors, but could also negatively impact the bloc’s green transition.⁶ Some EU Member States, such as France and Germany, are accusing the US of discrimination and calling for a robust European response in the form of more green subsidies and the consideration of a Buy European policy, which would require manufacturers to use domestic products and materials to qualify for subsidies.

A challenge to the transatlantic partnership

The EU and the US for the most part take different approaches to decarbonisation. Under the EU Green Deal, the EU deploys a diverse policy mix of regulations, targets and investments. The EU’s “Fit for 55” package, a plan for reaching at least 55% in emissions reductions by 2030 compared to 1990 levels, aims to ensure a socially fair transition, maintain and strengthen the competitiveness of EU industry, and reinforce the EU’s role as a global leader on climate action. The EU notably uses obligatory target setting, carbon pricing, regulation, and product standards as the main tools for decarbonisation, in addition to green consumption subsidies. In the US, a climate bill had eluded advocates for decades until the IRA. The bill supports the clean energy transition using an industrial policy approach with heavy public spending through production and consumption subsidies.

These different approaches are now affecting trade relations. To guarantee the strength of the transatlantic partnership, it will be key for the US and EU to reach a resolution on this trade tension, as they have done in the past.⁹ There is political will on both sides of the Atlantic to achieve this. After the recent visit of

⁶ World Trade Organization, [Agreement on Subsidies and Countervailing Measures](#)



French President Emmanuel Macron to the White House, President Biden stated that “there’s a lot we can work out” regarding Europe’s qualms with the IRA. Biden also said that the legislation can be tweaked to “make it easier for European countries to participate”.⁷ In addition to any potential modifications to the bill, the US and the EU should pursue opportunities for positive cooperation on decarbonisation through venues such as the TTC, the Global Arrangement on Sustainable Steel and Aluminium, and the G7 Climate Club.^{10 11 12}

Now or never – Why the IRA is what it is

The IRA was the US’s only chance of enacting a climate bill. Democrats rallied to pass the legislation shortly before the August recess and the November mid-term elections, when they lost the majority in the House of Representatives. To take advantage of this final political opportunity to adopt an ambitious spending package, they had to make compromises with all members in the Party – conservative and progressive Democrats – leaving everyone somewhat unsatisfied. In a razor-thin majority of 50 Democratic seats to 50 Republican, with Vice President Kamala Harris casting the tie-breaking vote, members like Senator Joe Manchin (at whose behest significant support for fossil fuels was included in the IRA) played an outsized role in the negotiations.⁸

Striking the balance – meeting the concerns of influential advocates

Though seen as the primary barrier to a climate bill, Senator Manchin was not the only Democrat to appease with the IRA. Democratic Senators and Representatives with mandates to support workers, domestic manufacturing, and healthcare would not have agreed to the IRA unless it contained measures in line with their policy objectives. The foundation of the Democratic party promotes climate policy as good for the American worker. As such, a democratic climate bill without significant preference for domestic workers and industry would not have passed. Enter local content requirements.

⁷ President Biden (2022) [Remarks by President Biden and President Macron of France in Joint Press Conference](#)

⁸ Pahwa, Nitish (2022) [Critics Call Dems’ Climate Bill a “Devil’s Bargain” on Climate. Here’s What the Devil is Getting](#)



The Democratic Party relies heavily on labour union support. President Biden in particular has a long history of supporting, and depending on, unions. Over the last decade, a strong alliance between labour unions and climate advocates emerged, which was crucial to the passage of the IRA. Previous attempts to approve a climate bill failed in part due to the perceived threat of a loss in manufacturing jobs. This time, climate advocates joined forces with labour unions to change the messaging around US climate legislation, arguing the green transition will create well-paid, secure, union jobs. Indeed, President Biden and the Democrats secured the support of most major labour unions, including the United Steelworkers, United Auto Workers, the AFL-CIO, and Utility Workers Union of America, among others.^{9 10 11} The narrative bringing climate and workers together is also evidenced by the provisions' pairing with labour protection requirements.¹²

The pairing of local content requirements to clean energy subsidies is not unusual in the US or other countries like Canada and India. Some of the highest-profile climate-related WTO disputes, most recently between the EU and the United Kingdom, have to do with these issues.¹³ As countries move beyond the decarbonisation of the power sector and onto that of industry and transport, it is likely that trade disagreements over subsidy schemes and implementation measures will continue.

In order to pass, the IRA also had to reflect the serious concerns of Democrats and Republicans alike on the overreliance on China for the supply of critical raw materials needed for the energy transition. The local content requirements, in addition to the more explicitly anti-China “foreign entity of concern” provisions, are cited by Congressmembers as addressing supply chain and national security threats.

⁹ United Steel Workers (2022) [USW Applauds House Passage of Inflation Reduction Act](#)

¹⁰ United Auto Workers (2022) [UAW Statement in Support of Inflation Reduction Act](#)

¹¹ BlueGreen Alliance (2022) [Letter to Senate on Inflation Reduction Act](#)

¹² White House (2022) [The Inflation Reduction Act Supports Workers and Families](#)

¹³ Peters, Jonny and Velasco, Ignacio Arroniz (2022) [Climate diplomacy and trade: three priorities for delivering green trade and WTO reform](#)



Budget reconciliation

Key to understanding the Democrats' approach to climate policy is a process called budget reconciliation. As Democrats held 50 seats in the Senate while legislating the IRA, they were exposed to Republican filibusters (a process that can prevent proposed legislation from passing), which require a 60-vote supermajority to overcome, a near political impossibility.¹⁴ The budget reconciliation process is an avenue to pass laws while avoiding this hurdle, as it requires a simple majority.¹⁵ However, only spending and taxation measures can be included, which is why command-and-control regulatory measures popular in many countries are absent in the US climate landscape.

Concerns over the future of European industry

The EU has strongly opposed several provisions in the IRA, most notably the domestic content requirements for the clean energy and electric vehicle subsidies. Early on, a European Commission spokesperson said the US should “remove these discriminatory elements from the bill and ensure that it is fully compliant with the WTO,” referring to the requirements as an “unnecessary and damaging new trade barrier.” The spokesperson also ensured the EU “will take the necessary steps to defend its interests.”¹⁶

The EU's public comments to the US Treasury Department on the implementation of the IRA listed nine of the tax credits as being problematic, not only electric vehicle subsidies. Beyond the domestic content requirements, the comments criticised the lack of spending or production caps linked to the subsidies, which could redirect investment from Europe to the US, a concern expressed by EU Commissioner for the Internal Market Thierry Breton.¹⁷

High energy prices were already causing fears of deindustrialisation in the EU before the passage of the IRA. With skyrocketing energy costs, manufacturers

¹⁴ The Transatlantic Climate Bridge (2022) **Filibuster**

¹⁵ The Transatlantic Climate Bridge (2022) **Budget Reconciliation**

¹⁶ Chalmers, John and Jin, Hyunjoo (2022) **EU, South Korea say U.S. plan for EV tax breaks may breach WTO rules**

¹⁷ *Ibid.*



risk being forced to make tough decisions on relocation or shutting down operations.¹⁸ The IRA has further exasperated these fears. There have already been reports of clean energy companies deciding to shift production to North America to not only take advantage of the lower energy prices, but also reap the benefits of the IRA.

Individual member states, who will be the ones driving the charge for an EU response, are reacting as well. French President Emmanuel Macron and German Chancellor Olaf Scholz are calling for a strong European response that could include the EU ramping up its own subsidies.¹⁹ President Macron has repeatedly called for a Buy European Act pointing to a possible EUR 8 billion loss in green investments due to the IRA.^{20 21} In the past, Germany has rejected measures seen as hindering free trade flows, such as domestic content requirements, but German leaders are beginning to change their tune. Robert Habeck, German Federal Minister for Economic Affairs and Climate Action, recently signalled support for a Buy European scheme.²²

Responding to pressure from France and Germany, European Commission President von der Leyen made headlines early December 2022 by expressing support for an ‘adaptation’ of EU’s state-aid rules to strengthen EU industrial policy.²³ But the EU developing its own industrial policy is not a completely agreed upon course of action. Competition Chief and European Commission Executive Vice President Margrethe Vestager cautioned against the US approach, warning that a subsidy race between the EU and US would be expensive for European taxpayers.²⁴ The diverging opinions over the response to the IRA have resurfaced long-held differences in the bloc over the role of the state.

¹⁸ Alderman, Liz (2022) **‘Crippling’ Energy Bills Force Europe’s Factories to Go Dark**

¹⁹ Von der Burchard, Hans and Caulcutt, Cleo (2022) **Scholz and Macron threaten trade retaliation against Biden**

²⁰ Valero, Jorge (2022) **US Suggests EU Consider Using Export Limits to Target China**

²¹ Caulcutt, Clea (2022) **Emmanuel Macron calls for ‘Buy European Act’ to protect regional carmakers**

²² Von Der Burchard, Hans (2022) **Germany’s Habeck backs ‘Buy European’ response to US trade threat**

²³ President von der Leyen, (2022) **Speech by President von der Leyen at the College of Europe in Bruges**

²⁴ Leali, Giorgio (2022) **EU’s free-trading Vestager warns against subsidy war with America**



Meanwhile, US Trade Representative Ambassador Katherine Tai has said the US supports the idea that the EU increases its own subsidies for clean manufacturing. Ambassador Tai insisted that the US vision for industrial policy should also complement those of its allies and ensure resiliency among partners. This includes weaning off dependencies that have been economically harmful in the past.²⁵ The EU already has an ambitious set of green subsidy schemes as part of the European Green Deal and climate action programmes at the member state's level. Ramping up green subsidies in the EU as the US suggests will not be a simple or quick solution to the current disagreement.

Until a diplomatic solution or an overhaul of the EU's industrial policy materialises, the feared effects of the IRA on investment flows from Europe to the US, combined with the energy crisis, inflation and a looming recession, might lead to European industry taking an economic hit and fleeing to less costly shores.²⁶

Scenarios for transatlantic trade relations post-IRA

The EU and the US have various options on the table to resolve, or at least soften, trade tensions around the IRA. Both sides face the difficult task of striking a balance between maintaining the Congressional intent of the law while fairly addressing the EU's concerns. The options outlined below aim to address the US and EU's immediate interests, weigh their benefits and downsides, and consider their feasibility. To ensure the strength of other trade partnerships, the US can consider extending any EU-US solution to major allies, like Japan and Korea.

- > **The US re-opens the IRA to include EU producers.** This option would be highly controversial in Congress. Democrats would have to re-open President Biden's signature legislation before the Congressional term ends in December, which they would want to avoid with Republicans taking over control of the House of Representatives in January. Senior Democratic leaders have already said that reopening the law is out of the question, and

²⁵ Financial Times (2022) [Top US trade official urges EU to join forces on subsidies amid green deal tensions](#)

²⁶ Wettengel, Julian (2022) [Last major German solar cell maker surrenders to Chinese competition](#)

one Democratic Senator from Michigan went as far as to invite EU carmakers to build more plants in the US.²⁷ The White House also confirmed President Biden will not seek a legislative change from Congress.²⁸

- > **The US Treasury Department issues the EU a waiver.** The EU formally requested a general waiver or exception from the US Treasury Department for the implementation of the IRA.²⁹ Granting a waiver would be politically difficult for Congress given the clear language on the domestic content requirements in the law. If Members feel the Administration has overreached by granting a waiver to allies like the EU, with whom the US does not have a free trade agreement, Congress could conduct oversight proceedings on the Treasury Department. With Republicans taking over the House of Representatives next year, the Biden Administration is already expecting a slew of oversight hearings on the IRA which can slow down its implementation. President Biden is unlikely to give a divided Congress any reason for more.
- > **The EU and the US commission impact assessments on IRA impacts on EU manufacturing.** To more effectively identify the areas in need of a diplomatic solution, the EU-US Task Force on the IRA – launched in October 2022 to address the EU’s concerns with the bill – could first commission economic impact assessments on how the IRA is projected to impact EU manufacturing. This is a low-stakes option that could help both sides target their diplomatic efforts and can easily be combined with other solutions.
- > **EU strengthens its domestic industrial policy.** The EU could ramp up its own green subsidies. Industrial policy is a shared competence between the EU and Member States, meaning any move towards a more active EU industrial policy would first require buy-in and a mandate from the European Council. Moreover, financing such a scheme would also require changes to the EU's fiscal rules, requiring a unanimous decision by the Council. European Commission President Ursula von der Leyen recently expressed interest in considering fiscal rule changes to allow for more green subsidies in the EU.

²⁷ Bade, Gavin and Palmer, Doug (2022) **Congressional Democrats: Not a chance of reopening climate law**

²⁸ Jean-Pierre, Karine (2022) **Press Gaggle by Press Secretary Karine Jean-Pierre En Route Boston, MA**

²⁹ European Union (2022) **Submission by the Europe Union on the Inflation Reduction Act**

³⁰However, opinions vary on whether this response will lead to a “race to the top” with regard to green subsidies or impose heavy costs on European taxpayers and negatively impact relationships with third countries. France has also pushed for a ‘Buy European’ scheme, which has some support from Germany, but other EU Member States do not agree.

- > **US and EU strike an IRA-CBAM deal.** The US and the EU could make carveouts for one another in the IRA and the Carbon Border Adjustment Mechanism (CBAM). The US Treasury Department could issue a general waiver or exception to the IRA for the EU and, in return, the EU could modify its CBAM legislation to exempt the US from carbon pollution fees at the European border. However, providing the US with such an exemption would violate WTO rules, making this option infeasible for the EU. In addition, the EU views the CBAM as an environmental measure and, as such, would be unwilling to offer an exemption in exchange for concessions in other negotiations. This option is also unrealistic for the US, as Congress may view this as administrative overreach. The move would also be seen as unfair to the rest of the world, as it would disadvantage other countries and especially emerging economies.
- > **The Biden Administration finds a solution to include EU producers through the IRA implementation process.** Exactly how the domestic content requirements will take shape depends on further rulemaking, which the Treasury Department is now exploring as it develops guidance. There could be some flexibility in the implementation rules, but the Administration will have to strike a balance to not attract oversight proceedings from Congress, especially with a Republican-led House of Representatives. This seems the most likely option after President Biden announced a willingness to “tweak” the legislation so that European countries can participate in the subsidy scheme.³¹
- > **EU takes the US to the WTO.** The EU could bring this dispute before the WTO. Though straightforward legally, this solution could undermine the transatlantic relationship and drag on for an extended period of time (likely

³⁰ President von der Leyen, (2022) [Speech by President von der Leyen at the College of Europe in Bruges](#)

³¹ President Biden (2022), [Remarks by President Biden and President Macron of France in Joint Press Conference](#)



resolving itself when a different Congress is in power). Moreover, the US continues to block the appointment of new judges on the Appellate Body for the WTO's dispute settlement system, further complicating this route.³² Further, this option does not benefit climate action if the end result is the US being forced to forego green subsidies.

- > **EU institutes retaliatory tariffs but cooperation continues.** The EU could choose to implement retaliatory tariffs. If the EU and the US do not reach a resolution, this option becomes more likely. Doing so would further elevate tensions. As such, this course of action is not currently being strongly pursued as resolution talks are ongoing.
- > **EU does nothing.** This option would harm EU domestic constituents and companies, the transatlantic relationship and the EU's reputation. The EU and its member states would likely face significant backlash, which would compound with the current repercussions of high energy prices. As such, this option is infeasible.

Greening the global trade regime

The scenarios mentioned above should be bolstered by longer-term measures to transform the system governing international trade. As the EU and the US ramp up green subsidies, it will be crucial to engage with emerging and developing economies to not exclude the rest of the world from new fast-growing clean tech markets, which is a major incentive for these countries to deliver on net-zero targets.

As countries become more ambitious on climate action, the world will likely see an influx of trade measures aimed at supporting low-emission products and shielding domestic manufacturers from paying green premiums. Trade conflicts around green subsidies could become the norm instead of the exception. To prevent further trade tensions at the trade and climate nexus, the EU and the US should commit to better communication and coordination on competition concerns that may surface on the road to net-zero.

³² Lester, Simon (2022) [Ending the WTO Dispute Settlement Crisis: Where to from here?](#)



There are already structures in place where the EU and the US work on areas of mutual concern regarding trade. The EU-US Trade and Technology Council was established in 2021 to avoid a revival of the trade tensions and tariff wars that occurred under the previous administration. Within the Council, both sides are launching a new green trade agenda called Transatlantic Initiative on Sustainable Trade.³³ The EU and the US can use this initiative to set common principles for the use of green subsidies on both sides of the Atlantic. They can also extend those talks to the WTO to engage with developing countries and ensure they can benefit from green subsidy reforms.

A subsidy race between wealthy regions such as the EU and the US could disproportionately benefit incumbents and hinder fair competition, which could negatively impact third countries. Developing economies especially may not have the budgetary capacity to heavily subsidise their clean industries. To prevent them from being left behind in the green transition, the EU and the US should not only coordinate on subsidies, but also offer access to clean technologies for third countries. An international climate club or the Transatlantic Green Technology Alliance (first pitched at the 2021 EU-US Summit but currently inactive) could provide a framework for low-emission technology transfers to emerging economies.³⁴

The two sides also have ample opportunities to work together on the climate and trade nexus across a number of multilateral venues, such as the G7 and the World Trade Organization. At the G7 Summit hosted by Germany in 2022, G7 partners announced the intention to establish an international climate club to accelerate climate action, focusing on industrial decarbonisation and reducing risks of carbon leakage.³⁵ The EU and the US can use the climate club as a forum to agree on the level of green subsidisation.³⁶

³³ Executive Vice-President Dombrovskis (2022) **Opening Remarks by Executive Vice-President Dombrovskis at Stakeholder Session ahead of the Third EU-US Trade and Technology Council**

³⁴ Jackson, Sarah (2022) **Jumpstarting the Transatlantic Green Technology Alliance**

³⁵ G7 (2022) **G7 Statement on Climate Club**

³⁶ Shawkat, Aylin and Vangenechten, Domien (2022) **Heavy industry focus needed for G7 climate club**



As countries move from setting climate targets to implementing them, governments will only be able to carry out the decarbonisation policies their political economies allow. US politics required policy makers to pass a spending bill with heavy subsidisation and strong messaging around good-paying, domestic clean energy jobs. Other countries may use carbon pricing, command-and-control regulation or a policy mix to reach their emissions reduction targets. Regardless of the tools used, retaining flexibility and a commitment to high standards in the policies put in place to rapidly decarbonise economies is key.

Trade tensions between the US and the EU over the IRA's domestic content requirements underscore the need for a green overhaul of rules in the international trade regime. In a world of increasing climate asymmetry, calls of protectionist foul play with policies like the IRA and the CBAM will become the norm rather than the exception. Global trade rules need to absorb this emerging dynamic and provide a framework for countries to embark on ambitious decarbonisation pathways while avoiding economic dislocation, protecting workers and creating new industries with well-paid jobs, in addition to providing opportunities for third countries to reap in the benefits of a green trade regime.



Annex: A summary of recent US climate measures

While the IRA is known as the US's flagship "climate bill," the CHIPS and Science Act and the Bipartisan Infrastructure Law also contain significant provisions to address the climate crisis. Below is a summary of the climate measures in each bill.

The Inflation Reduction Act

Signed into law in August 2022, the IRA provides for over 100 climate, energy and environmental investments. This funding is projected to create over 9 million jobs over the next decade in the fields of clean energy and manufacturing, electric vehicles and clean transportation, energy efficiency, environmental justice and natural infrastructure.³⁷

Of significant geopolitical importance are the domestic content provisions. These take several forms: a "bonus" tax credit for the clean energy sector and domestic content and assembly requirements to reap the full tax credit for electric vehicles (EVs). The bonus domestic content tax credit (up to 10% on top of the original credit value) applies to all clean energy projects and facilities that use 100% domestically manufactured iron, steel and a set amount of manufactured goods. Such products satisfy this provision if they achieve domestic content of 40%, which will increase over time (or 20% for offshore wind facilities). Exceptions apply where the inclusion of domestic products raises the total construction costs by more than 25% or the relevant products are not produced in the US in sufficient quantities or to the required quality. It should be noted that US domestic content requirements have existed for some time in several state-level and municipal renewable energy subsidy schemes.³⁸

For clean vehicles, the IRA provides for a maximum tax credit of USD 7,500 for new electric passenger vehicles if final assembly occurs in North America, as of August 2022. Half of this credit is available, starting in 2023, if at least 50% of the battery components are manufactured or assembled in the US or in a country which has a free trade agreement with the US (increasing to 100% by 2029). The

³⁷ The BlueGreen Alliance (2022) **9 million jobs from climate action: The Inflation Reduction Act**

³⁸ Hogan, Megan (2021) **Local content requirements threaten renewable energy uptake**



other half is available, also from 2023, if a minimum 40% of the critical minerals used in the battery are extracted, processed or recycled in the US or in a country which has a free trade agreement with the US. This percentage rises 10% each year before remaining at 80% by 2027. Further, EVs will not qualify if they have battery components or critical minerals sourced from a “foreign entity of concern” (including China) from 2024 and 2025 respectively. Further income and price limits apply to receive the tax credit. All tax credits expire after 2032.^{39 40}

CHIPS and Science Act

The Creating Helpful Incentives to Produce Semiconductors for America Act, or the CHIPS and Science Act, was signed into law in August 2022 and provides USD 280 billion in federal investments to revitalise the US semiconductor industry through research and development. The objective is to strengthen US manufacturing, supply chains and national security, as well as to counter China. The bill provides a 25% tax credit for building and equipping domestic chip plants, and significant research and development funding across multiple federal agencies. This funding is *authorised* but not yet *appropriated*, meaning Congress will have to vote each year to deliver on the promised amounts. The CHIPS and Science Act is the largest publicly funded research and development programme in US history.

Within the bill, USD 54 billion are climate-related authorisations, aiming at the growth of zero-carbon industries and boosting research and development in technologies that can help combat climate change. It also provides for disaster-resilience research and establishes a new federal office for clean energy innovation.

The CHIPS and Science Act includes “clawback” provisions that prohibit funding and tax credit beneficiaries from expanding semiconductor manufacturing in China for 10 years.

⁴⁰ Shepardson, David (2022) **U.S. automakers say 70% of EV models would not qualify for tax credit under Senate bill**



Infrastructure Investment and Jobs Act

Also known as the Bipartisan Infrastructure Law, the Infrastructure Investment and Jobs Act (IIJA) was signed into law in November 2021 and provides USD 1.2 trillion to repair and modernise US infrastructure. This includes improving public transit, expanding internet, fixing roads and bridges, and strengthening drinking water infrastructure. The IIJA also contains various provisions to combat the climate crisis and decarbonise the US economy, such as funding for EV charging systems, electric and low-emission buses and ferries, development of clean hydrogen and battery storage, electricity grid updates, and energy efficiency programmes. The funds will move from federal agencies to recipients in the form of grants, bonds and other investment mechanisms.

The IIJA also builds on the Buy America domestic procurement policy, which requires materials such as steel and cement to be produced in the US, enacting a new provision called Build America, Buy America (BABA). BABA establishes a domestic content procurement preference for all federal financial assistance for infrastructure projects. It requires that, as of May 2022, all iron, steel, manufactured products and construction materials used in a project be produced in the US. The rationale behind BABA is the creation of high-quality jobs along the manufacturing supply chain.

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E3G is an independent climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics and policies into action.

E3G builds broad-based coalitions to deliver a safe climate, working closely with like-minded partners in government, politics, civil society, science, the media, public interest foundations and elsewhere to leverage change.

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We address climate and energy risks locally, regionally and globally; strengthen international efforts within the United Nations framework as well as part of initiatives such as the Transatlantic Climate Bridge; and develop concrete recommendations for action.

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