

The background of the cover is a photograph of a large container ship at sea. The ship is viewed from a high angle, showing its deck and the side. The deck is covered with stacks of colorful shipping containers in shades of orange, red, and blue. Several yellow cranes are visible on the deck, extending over the water. The sky is a pale, hazy blue, and the water is a calm, light blue-grey. In the top left corner, there is a red rectangular box containing the text 'CLIMATE LEADERSHIP COUNCIL' and a black rectangular box containing the text 'CENTER FOR CLIMATE & TRADE'.

CLIMATE
LEADERSHIP
COUNCIL

CENTER FOR
CLIMATE &
TRADE

The Case for Climate and Trade

BY CATRINA RORKE

Foreword by Ambassador Charlene
Barshefsky, James Connaughton,
and Jennifer Hillman

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FOREWORD

By Ambassador Charlene Barshefsky, James Connaughton, and Jennifer Hillman

Despite broad international agreement to hold warming well below 2°C and decarbonize the global economy, greenhouse gas emissions continue to climb. Since 2005, annual worldwide carbon emissions have grown by 6.5 billion tons—a 25% increase.¹

World leaders have met 26 times as part of the United Nations Framework Convention on Climate Change Conference of Parties process yet continue to fall well short of reaching global agreement on a glidepath to realize shared climate goals. In the United States, despite decades of debate, we still have not legislated a national target, timetable, or strategy for addressing climate. Balancing the interests of essential stakeholders across environment, labor, business, consumers, and national defense continues to be a challenge. Similar political dynamics plague many other countries despite sincere desires to unlock greater climate ambition.

Nevertheless, domestic emissions in the U.S. and other major developed economies are flat or declining, a sign of climate progress driven by innovation, market forces, and a broad set of mandates at the federal, regional, state, and local levels. Much work remains, though, to achieve emissions reductions targets—and global emissions continue to rise. This reveals a hard truth about global efforts to address climate change: as major developed economies continue to decarbonize at home, they import huge amounts of carbon in the form of goods manufactured in carbon-intensive countries and consumed within their borders. This is the “carbon loophole,” and it is significant.

Since 2005, a quarter of global emissions have been embedded in internationally traded goods. Without trade policies in place to encourage emissions reductions, we are leaving an enormous decarbonization opportunity on the table. As the following report makes clear, if imports to the U.S. and other major economies were as carbon

efficient as domestic production, we would lower global carbon emissions more than 5%.

Understandably, appetite is growing to close the carbon loophole. Governments around the world are exploring ways to use their market power to hold countries accountable for their emissions and ensure the right market incentives are in place for domestic industries to lower their emissions while remaining globally competitive. The European Union is set to become the first economy to adopt such a policy as early as next year. The Biden Administration announced last year a first-of-its-kind agreement with the European Union to prioritize trade in low-carbon steel and aluminum.

These moves to harmonize climate and trade policy reflect a new approach in the global effort to address climate change. Up until now, countries have focused on securing shared climate goals backed up by individual nations’ pledges to cut emissions. In this new phase, countries are turning to their trade relationships, strategic alliances, and market leverage to reward their carbon-efficient manufacturers and encourage more climate ambition overseas. It’s a new breed of climate diplomacy, grounded in economic strength and diplomatic muscle, and it’s here to stay.

Driving this shift is the sense that traditional climate diplomacy hasn’t worked well enough or fast enough. There’s also a growing recognition that we won’t get far decarbonizing the global economy with policies that merely shift emissions around to different parts of the world—often from carbon efficient countries to markets that require much higher emissions for the same economic activities. Political leaders are beginning to grasp the huge political and economic upsides of policies that lower global emissions by encouraging more investment and production within carbon-efficient countries, among which the United States is a clear leader.

A nascent body of research from the Climate Leadership Council has spotlighted the enormous carbon- efficiency advantage that the U.S. and other climate- ambitious economies hold over major exporters like China and India. By leveraging our “carbon advantage,” the United States can enhance the competitiveness of domestic industries and create more opportunity for workers all while encouraging cleaner production at home and abroad. This powerful combination of benefits opens doors to new constituencies for climate action, encouraging broader public support for decarbonization.

At the same time, global energy demand is only growing and the developing world is hungry for affordable, reliable energy. U.S. innovators are well-positioned to serve this expanding market with technologies pioneered and manufactured in the United States and can deploy low-carbon energy and industrial technologies at scale and speed to our international partners. Well-crafted trade policies can support the export of clean, innovative U.S. products and can accelerate both global decarbonization and global development.

These advantages alone are enough to justify a more harmonized approach to climate and trade. But there is also a compelling strategic case to consider. As this report goes to print, Vladimir Putin’s war rages on in Ukraine and Russia continues to wield its energy exports to coerce countries around the globe. Russia also carries a very poor environmental record. Its industries emit four times as much carbon as U.S. industries to make the same products. Although not the primary purpose of climate and trade policies, there is a corollary benefit to the U.S. working with like-minded partners to discourage trade in carbon-intensive goods: we will reward efficient producers in our home economies and beyond, while diminishing the financial strength and coercive power of Russia and other bad actors that have not invested in reducing carbon emissions.

While the logic of merging climate and trade is clear—and the appetite to do so is great—we need the right tools to be successful. Policymakers need better information, more analysis from experts, and constructive input from stakeholders so they can advance policy design at the climate-trade nexus. Likewise, we must improve data and methodologies so we can accurately assess the carbon embedded in products and harmonize across the domestic climate policies of individual nations. Equally important, we must encourage greater international cooperation, build bridges to allies and other climate ambitious countries, and account for the economic circumstances of countries that do not yet have the resources to invest in rapid decarbonization.

The Center for Climate and Trade launched to fill this critical gap. We will convene stakeholders to foster greater public discussion and exploration. We will work with scholars to answer questions around data, administration, and law. And we will promote cooperation with our allies, climate-ambitious countries, and emerging markets. The goal: a menu of options for policymakers seeking to enact climate and trade policies that leverage the power of the global market economy toward a decarbonized and healthier planet.

It’s a difficult task before us, and the landscape is shifting quickly. We hope you’ll join us in the work ahead.

Ambassador Charlene Barshefsky served as U.S. Trade Representative under President Bill Clinton.

James Connaughton was chairman of the White House Council on Environmental Quality under President George Bush.

Jennifer Hillman served as a judge on the World Trade Organization’s seven-member Appellate Body.

EXECUTIVE SUMMARY

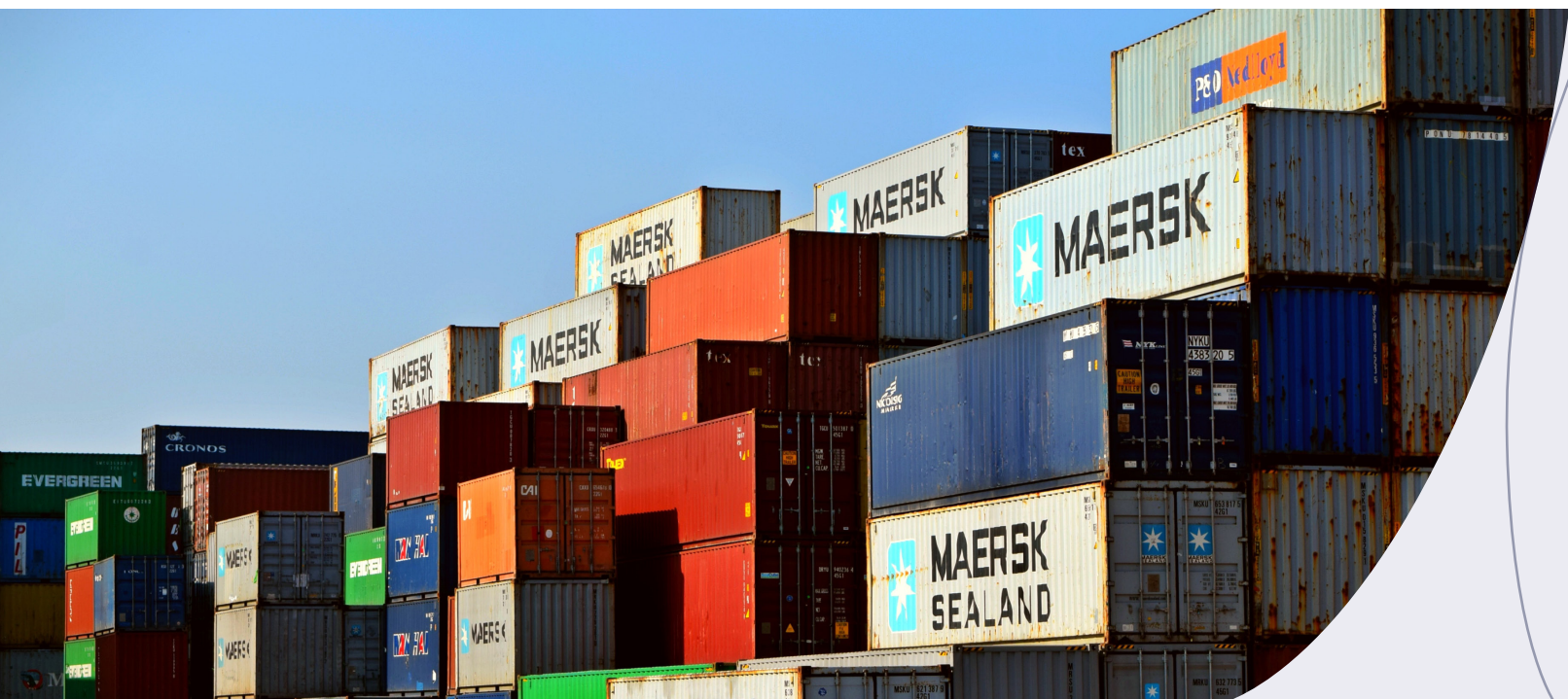
Major economies have made great strides cleaning up their industries and transforming their energy systems in recent decades, so much so that the United States, the European Union, Japan, the United Kingdom, and Canada have seen their annual emissions stabilize or decline since 2005.² And yet global emissions continue to rise.

What seems like unequivocal climate progress in these countries is masking a troubling trend: most advanced economies have offset domestic emissions reductions by fueling emissions growth elsewhere, importing large amounts of carbon-intensive products from overseas. This so-called “carbon loophole” flips the prevailing narrative about climate progress on its head.

Simply placing the blame for rising global emissions on developing economies does not tell the full story; the consumer appetites of large, wealthy countries are driving emissions growth overseas. Likewise, focusing exclusively on domestic emission reductions risks finding “solutions” that merely shift emissions to less efficient countries.

Fortunately, the U.S., EU, and other like-minded countries have begun to explore new tools to address global emissions and align disparate domestic interests. Emerging research and new policy debates have shown that climate ambition and economic interests can be achieved simultaneously by leveraging trade instruments as an element of climate policy. This policy nexus is underdeveloped: until 2021, no country had enacted a climate regime that connected to trade policy or articulated a trade policy consistent with domestic climate goals. Governments are seeking novel solutions that will invigorate their economies while bending the curve on global greenhouse gas emissions.

While policies that straddle climate and trade are complex, and only just beginning to take shape, they hold considerable promise. Four areas of opportunity for U.S. policymakers are emerging:



01

The environmental opportunity

A quarter of global emissions are embodied in goods traded internationally, meaning they were released during the good's production. There are no trade policies currently in place to incentivize a greater share of production by cleaner firms—or cleaner production by companies who lag behind. Correcting this omission offers enormous environmental upside. For example, if all U.S. imports were as carbon efficient as what we make at home, we would lower consumption-related emissions by 600 million tons—more than a 10% cut. If all imports to a future “climate club” of the U.S., EU, Japan, UK, and Canada were produced with an equivalent carbon intensity as those importing nations, global annual emissions would fall by 1.8 billion tons—a roughly 5.5% reduction in global emissions. And with the right incentives in place, there can be a clear economic reward—domestically and abroad—for driving emissions ever lower.

02

The competitiveness opportunity

The global economy is 80% more carbon-intensive than the U.S. economy, on average. And yet, we have no policies in place to reward cleaner firms or encourage more ambitious climate policies globally. Assessing a trade policy at our border would level the playing field and benefit more carbon-efficient firms. Thankfully, U.S. businesses and workers in sectors across the economy are already among the most efficient in the world. Recent modeling shows that aligning climate and trade policies would enable U.S. steel manufacturers to monetize their carbon efficiency and require foreign companies to bear the costs of their higher emissions. This would cut imports in half and boost sales and profits to U.S. firms. Climate policy can drive a manufacturing resurgence, if designed appropriately.

03

The geopolitical opportunity

A global economy that favors lower-carbon goods would advantage the economies and firms most effectively addressing the climate challenge. A corollary benefit to climate and trade policies is this: a global economy that rewards greater carbon efficiency will strengthen the market and geopolitical position of those doing the most to address climate change. Too often countries like Russia and China use their positions as major global suppliers of strategic resources to advance geopolitical interests that clash with our own. They are also often among the most carbon-intensive economies. Climate-aligned trade policy can diminish the competitive and strategic position of economies that use exports to exact international leverage.

04

The opportunity for international cooperation

All Group of Seven (G-7) nations are independently considering policies to align climate and trade interests. Together, these countries—the U.S., along with Canada, France, Germany, Italy (and other European Union member states), Japan, and the United Kingdom—represent more than half the global economy and are essential customers to major exporting economies. By collaborating on climate and trade policies, climate leaders can introduce a powerful new signal to the international system and incentivize companies globally to compete for market share on the basis of lowering carbon emissions.

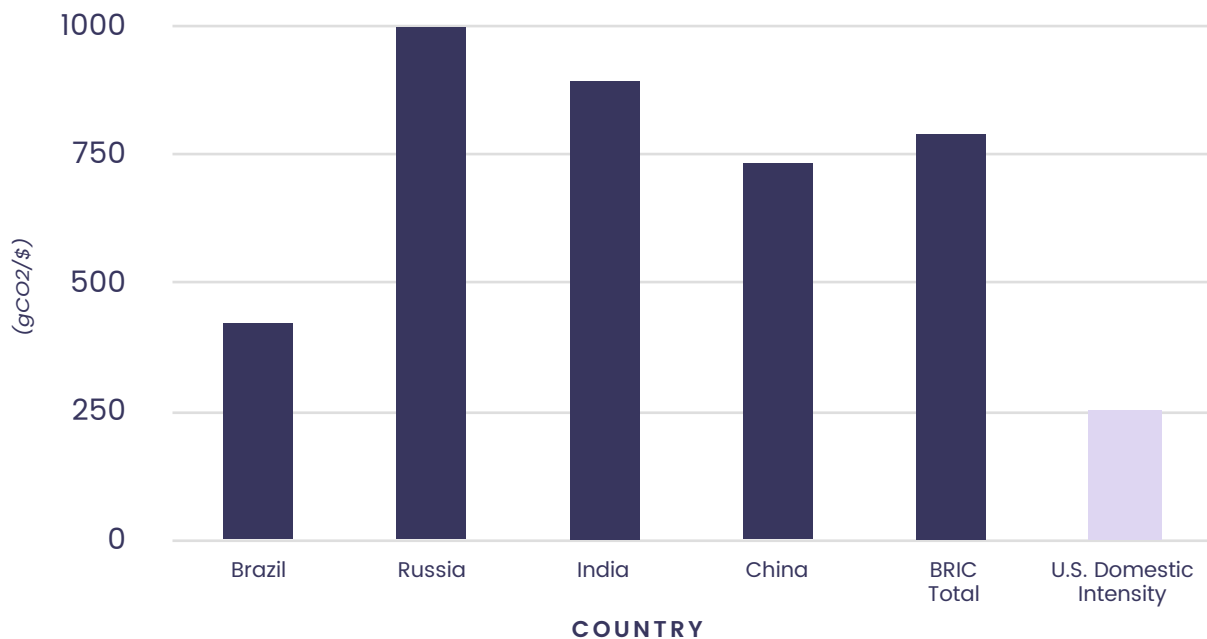
INTRODUCTION

THE CARBON LOOPHOLE

The United States has made significant strides lowering emissions over the past twenty years. Annual domestic greenhouse gas emissions have fallen 13% since 2005, and the U.S. has cut its emissions more than any other country.^{3,4} Two forces are behind this progress. First, the U.S. economy has become more efficient and less carbon-intensive. Myriad factors have contributed to our improved carbon efficiency. We have displaced the highest-emitting energy sources with lower-emitting sources like natural gas and renewables across our energy system. We have also made significant energy efficiency investments across major economic sectors.

The second part of the explanation clouds the picture of our climate progress; a significant share of U.S. emissions is associated with goods produced overseas and imported to the U.S. This implies that the U.S. has outsourced emissions – in large part to less carbon-efficient manufacturers. When we factor in these emissions related to our consumption choices, total U.S. emissions are 15% higher than when considering our domestic production alone.⁵

EXPORT CARBON INTENSITY FROM KEY ECONOMIES



Source: Authors' Calculations based on OECD's Trade in Embodied CO2 Database (TECO2), 2021. https://stats.oecd.org/Index.aspx?DataSetCode=IO_GHG_2021#.

This finding is not unique to the U.S. In the European Union and the United Kingdom, accounting for traded carbon increases emissions estimates by about 13% and 31%, respectively.⁶

Many developed countries have reduced their domestic emissions, and yet the reductions have been more than eclipsed by increases in emerging markets. Brazil, Russia, India, and China, known as the BRIC countries, have accounted for 90% of global emissions growth since 2005.⁷ Their economies are as much as four times more carbon-intensive than the U.S. economy, on average.⁸ And much of their emissions growth has been driven by the expanding production of goods—from basic inputs like fuels or steel to finished goods like solar panels and clothing—for export to developed countries.

Since 2005, a quarter of global emissions have been embodied in these internationally traded goods.⁹ We call this the “carbon loophole.”¹⁰ Accounting for emissions in the carbon loophole poses a challenge to narratives about decarbonization in climate-ambitious countries and calls into question whether each country’s direct emissions is the most accurate metric for measuring climate progress. A consumption-based approach may be a better way to align objectives and incentives, as the ultimate goal is lowering global emissions, regardless of where they occur.

Three quarters of U.S. imports come from countries that are more carbon-intensive.¹¹ Yet current trade rules do not reward clean domestic firms for their investments in decarbonization, nor do they incentivize high-emitting firms to catch up to their more efficient global competitors.¹² The existing rules of global trade confer an unfair advantage to high-emitting firms that don’t have to address the costs and consequences of their environmental impact.

Currently, the global community is failing to address these traded emissions, and the costs of inaction are mounting. It’s not only a matter of unchecked carbon emissions. Government officials are signaling concern that the current trade regime undermines domestic efforts to promote economic growth, lift wages, and secure critical supply chains.¹³ Faith in the global trading system is eroding, prompting governments to turn to protectionist instruments that distort international trade.¹⁴

This is adding urgency to efforts to harmonize climate and trade policy. The European Union has introduced a carbon border adjustment mechanism (CBAM,) and Canada, Japan, the U.S., and the UK are exploring opportunities to address the greenhouse gas emissions embodied in traded goods.¹⁵ As the largest consumer markets in the world, these economies have the power to harness global trade to accelerate a low-carbon future. But they require new tools and fresh thinking to succeed.

This paper explores the wide-ranging benefits available if the U.S. leads the international community in establishing a new set of policies that align climate and trade interests: meaningfully addressing climate change; rewarding the most carbon-efficient firms; securing the global economy; and shaping a new model for international cooperation.

**FAITH IN THE GLOBAL
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PROMPTING GOVERNMENTS
TO TURN TO PROTECTIONIST
INSTRUMENTS THAT DISTORT
INTERNATIONAL TRADE.**

THE ENVIRONMENTAL OPPORTUNITY

MAXIMIZING GLOBAL EMISSIONS REDUCTIONS

Climate-aligned trade policy can target a substantial portion of the 25% of global carbon emissions that is embodied in traded goods by signaling to foreign producers to ratchet up their climate ambitions or risk losing market share to cleaner competitors. And with most of the global economy already moving in this direction, climate and trade policy will inevitably have a substantial influence over the production practices of foreign exporters vying for international market share.

For instance, the U.S. has made tremendous investments in decarbonization, yet domestic emissions reductions have been offset by emissions increases abroad. Three fourths of U.S. imports now come from countries that are more carbon-intensive than the U.S. If all imports were as efficient as what we make at home—either through cleaner producers recapturing market share or exporting manufacturers matching domestic carbon efficiency—we'd cut emissions by 600 million tons, a more than 10% cut to our consumption-related emissions.¹⁶

If the U.S. and the EU were to partner and reduce the carbon intensity of their respective imports such that they matched their domestic emissions intensity, global annual emissions would be reduced by 1.4 billion tons.¹⁷ And if a carbon club of likeminded carbon-efficient economies—like the U.S., EU, Japan, UK and Canada—came together, the impact would be even larger. Matching importing nations' carbon efficiency in a potential G-7 carbon club would drive global CO₂ emissions down by 1.8 billion tons—roughly a 5.5% cut to global emissions.¹⁸

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As another example, today, China is the world's super exporter, accounting for 15% of global export¹⁹ and more than 30% of global greenhouse gas emissions.²⁰ And because Chinese producers are three times as carbon-intensive as American firms, establishing trade incentives for less carbon-intensive production could yield huge benefits for the climate and for the U.S. economy. Consider, if cleaner U.S. manufacturers displaced all of China's exports—or China's exports could match U.S. carbon efficiency—globally-traded carbon emissions would fall by more than 1.3 billion tons. We could eliminate 13% of the carbon embodied in trade and reward the cleanest actors.²¹

These illustrative examples demonstrate the emission reductions opportunities that trade tools can help unlock to reduce global emissions. Indeed, given the scale of emissions embodied in international trade, linking climate and trade policies are likely essential for achieving midcentury deep decarbonization or net zero targets.

Further, with climate incentives at the international borders of major consumer economies, firms will compete on the basis of carbon efficiency and drive up demand for low-carbon solutions and faster deployment of promising climate-friendly technologies worldwide. Investments in lower carbon production methods to 'win' in the global market will also lower emissions associated with goods produced for domestic customers.

Trade policies are legally enforceable, introducing to international decarbonization efforts a set of binding policies that can wring emissions from the global economy. Companies seeking international consumer markets would face strong incentives to lower their emissions if the most desirable consumer markets systematically prefer cleaner products. Ambitious countries could set incentives for international carbon efficiency; recalcitrant countries would lose leverage and the ability to hold back global climate progress.

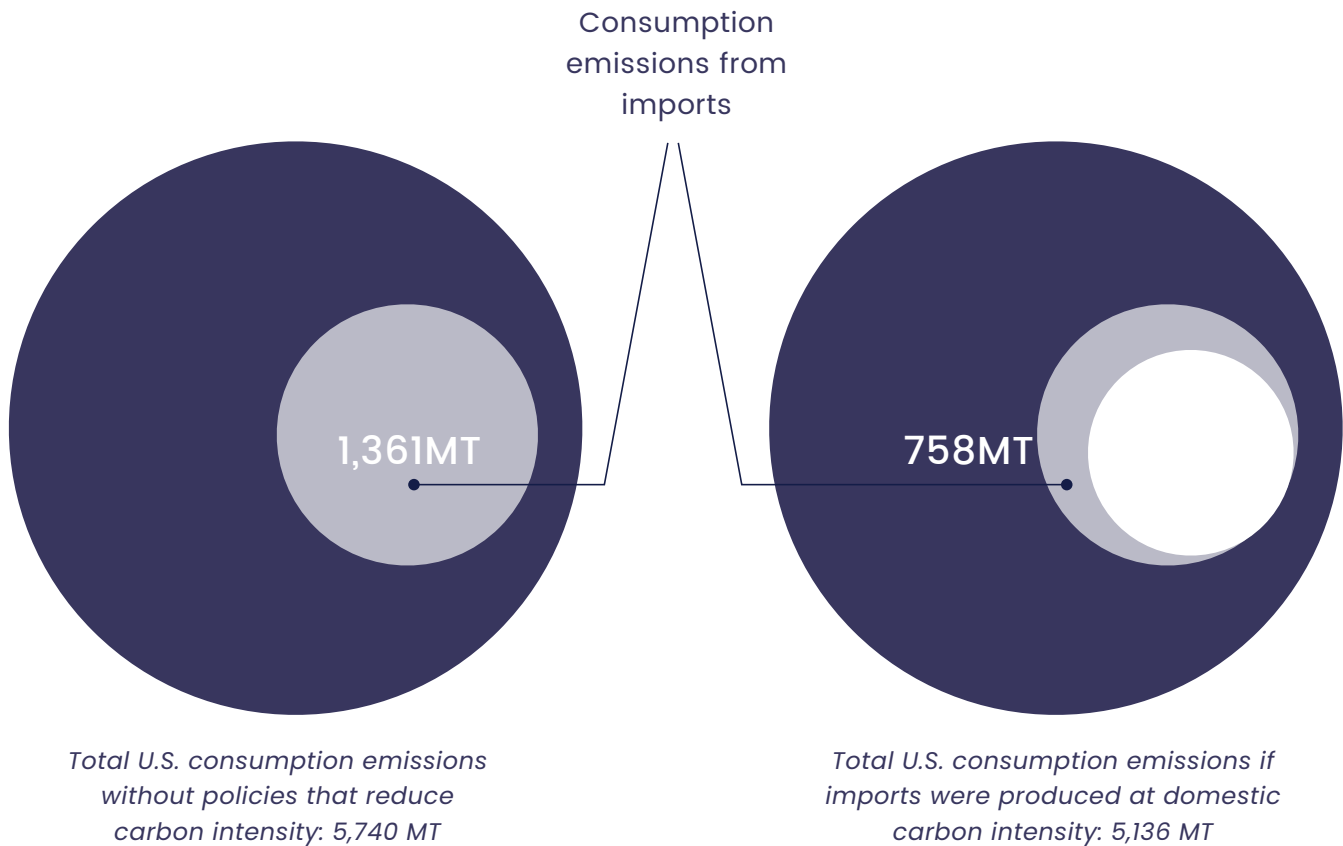
BY INTRODUCING
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REDUCTIONS AT HOME.



More immediately, policies that address traded emissions reflect a competitive advantage for domestic industries that have begun to decarbonize. At the same time, new systems of accountability for emissions—no matter where they're located—would provide countries and companies with the data to ensure that their procurement policies and supply chains are sustainable. Cleaner-operating firms would gain a competitive edge, see a sharp uptick in their market share, and have a financial incentive to become ever-more carbon efficient.

Finally, there are profound political benefits. If climate policy becomes widely recognized as an engine of growth for the U.S. economy, we can break the logjam on ambitious domestic climate action. And we can make domestic climate policy the catalyst for more ambitious international action. By introducing trade policies aligned with domestic climate ambition, we can leverage the power of the U.S. economy to drive down carbon emissions abroad while incentivizing greater emissions reductions at home.

REDUCING THE CARBON INTENSITY OF IMPORTED GOODS WOULD CUT U.S. CONSUMPTION EMISSIONS BY 603MT



Source: Authors' Calculations based on OECD's Trade in Embodied CO2 Database (TECO2), 2021. https://stats.oecd.org/Index.aspx?DataSetCode=IO_GHG_2021#.

THE COMPETITIVENESS OPPORTUNITY

LEVERAGING AMERICA'S CARBON ADVANTAGE

The competitiveness opportunities for the U.S. economy from uniting climate and trade policy are vast and span industries. The global economy is 80% more carbon-intensive than the U.S. economy, on average. From raw materials to finished goods, the U.S. is a cleaner manufacturer than overseas competitors.²² This is America's "carbon advantage."

and trade policy can cut imports of carbon-intensive steel in half, boost sales of U.S.-made product by 10%, and increase profits for clean U.S. firms roughly 40%.²³ Appropriately designed, climate policy can reward and encourage more investment in carbon-efficient firms, boosting economic investment and lowering global emissions.

TABLE 1. RELATIVE ECONOMY-WIDE CARBON INTENSITIES

U.S.	Brazil	Canada	China	EU	India	Mexico	Russia	World
1.0	1.1	1.3	3.2	0.9	3.8	1.4	4.2	1.8

Source: Catrina Rorke and Greg Bertelsen, America's Carbon Advantage, Climate Leadership Council, September 2020.

- U.S. Carbon Advantage (foreign competitors less carbon efficient)
- U.S. Carbon Disadvantage (foreign competitors more carbon efficient)
- U.S. Carbon Advantage or Equivalent

U.S. companies have achieved this progress by switching to low-carbon energy sources, improving energy efficiency, and adopting advanced manufacturing methods and technologies. But the current global trading system advantages dirtier firms that cut costs at the expense of the climate. Trade policies can both reinforce environmental policies and yield a competitive advantage for economies with a carbon advantage.

Research has demonstrated that the carbon advantage can be a lever for achieving climate goals and boosting clean U.S. industry. Even in carbon-intensive sectors like steel, policies that harmonize climate and trade policy can create new value for clean U.S. firms. A climate

Further, collaborating with other climate-ambitious countries to preference low-carbon supply chains will uncover more markets for clean U.S. products abroad. Emerging markets are expected to grow twice as fast as advanced economies in the coming decades.²⁴ As these countries grow, so will their energy demands; global energy use is expected to grow nearly 50% by mid-century.²⁵ This growth can jeopardize global decarbonization goals or, with the right incentives in place, can encourage deep decarbonization. Trade measures should appropriately account for carbon emissions; favor the lowest-carbon versions of energy, commodity, and consumer goods; accelerate international demand for clean technologies developed by innovative firms;

and encourage developing countries to forge closer ties with climate-ambitious economies.

Too often, talk about the clean energy economy and workforce neglects to include the essential incumbent industries and their workers—steel, aluminum, chemicals, and others—that are and will be essential to economic success and climate progress. By aligning our trade and climate policies, we can elevate our economy and bring new benefits to U.S. manufacturers and much of our labor force as it exists today. Across sectors, U.S. industries are more carbon-efficient than their foreign competitors and would thrive under properly designed policies to lower global emissions.

By leveraging America’s carbon advantage we can flip one of the most common critiques of climate policy on its head. Climate ambition and economic ambition shouldn’t conflict; with the right policy choices, they can be mutually reinforcing. Lawmakers can construct climate policies that turn the American economy of today into the engine that drives global decarbonization into the future.

**ACROSS SECTORS, U.S.
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THE GEOPOLITICAL OPPORTUNITY

SECURING SUPPLY CHAINS

Climate and trade policies that leverage the carbon advantage present an opportunity to correct a fundamental shortcoming of the international system: the current rules of global trade benefit carbon-intensive firms. In doing so, climate and trade policies can unlock an unintended benefit: securing supply chains and addressing a geopolitical imbalance.

Some of the most carbon-intensive economies have a stranglehold on trade in strategic sectors. In some cases, these economies are led by authoritarian regimes who use fuel and commodity exports as tools to advance their geopolitical interests, which are often antithetical to those of the U.S., its allies, and its partners.

Russia occupies a dominant role as an oil and gas supplier to the European energy market while carrying an abysmal environmental record on methane and other greenhouse gas emissions.²⁶ In the wake of Russia's invasion of Ukraine, the consequences of this energy dominance have frustrated the European Union's diplomatic response.

Strategic vulnerabilities extend beyond fuels: China is far and away the largest supplier of key decarbonization technologies like solar panels and batteries. These technologies, and important inputs like rare earth elements, are necessary for the fight against climate change, yet are produced in China with far more emissions than by competitors.

Recent strains to global supply chains have accelerated concerns about the implications of globalization on

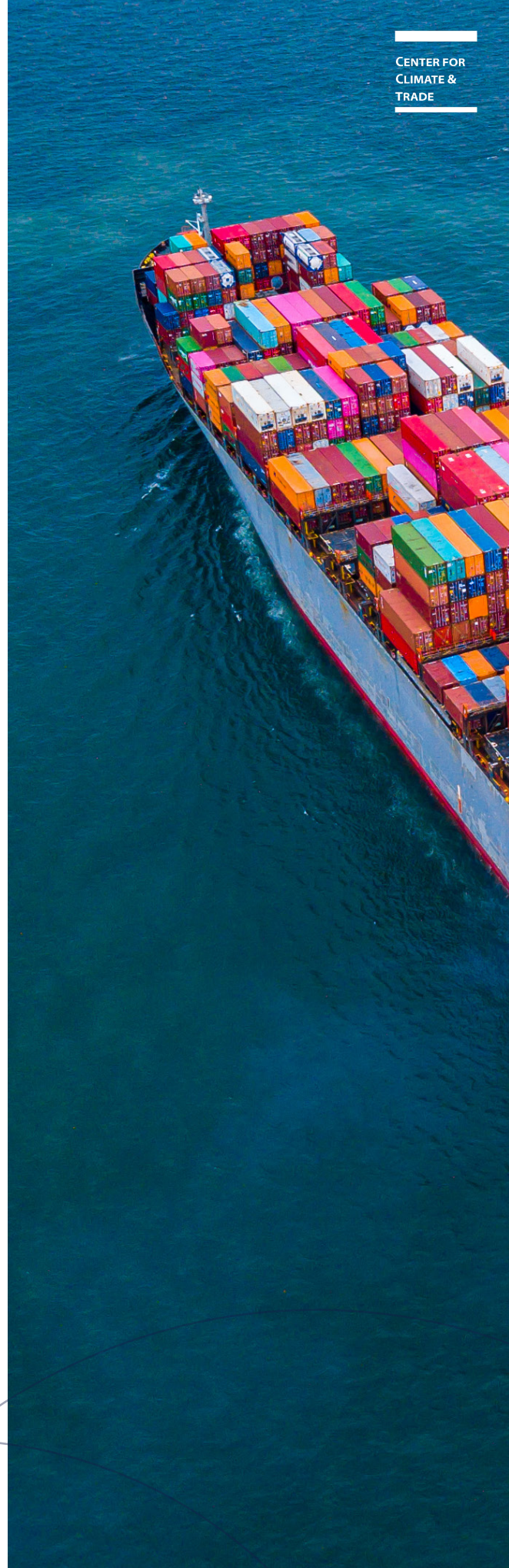
national security, particularly in strategically important commodities like steel and aluminum and components for advanced technologies like battery chemicals.²⁷ This dependency means that supply chain disruptions can upend the U.S. economy. Some disruptions are inevitable, like mismatches in supply and demand or a ship running aground in the Suez Canal. Others are motivated by hostile intent. Russia has demonstrated its willingness to constrain European natural gas supplies; Chinese policies can restrict global resilience in critical rare earth metals.^{28, 29}

Countries that control major supply chains in ways that raise concerns for national security are also among the worst actors on climate. Mining, quarrying, and resource extraction is more than twice as carbon-intensive in China as it is in the U.S. or EU.³⁰ Russia holds an abysmal environmental record on greenhouse gas emissions, with oil and gas operations 70% more methane-emitting than U.S. operations.^{31, 32}

International confidence in reported emissions from these countries is low. And it's possible that emissions intensities understate the differences. Levers that account for the climate emissions in trade will necessarily push supply chain decisions toward economies that openly share their data and meaningfully address climate emissions.

Early interest in these tools is permeating the highest levels of the G-7 and other like-minded countries. By leveraging their combined market power to favor lower-carbon supply chains, these countries can encourage global decarbonization. At the same time, lowering the emissions embodied in traded goods will also deprive high-emitting, strategic suppliers of coercive power.

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THE OPPORTUNITY FOR COOPERATION

TRANSFORMING THE INTERNATIONAL PARADIGM

The United Nations Framework Convention on Climate Change has convened the nations of the world for the last thirty years without securing an agreement sufficient to stabilize and reduce global climate emissions. The World Trade Organization has been regulating and facilitating international trade for twenty-five years; for the last two, its Appellate Body has been unable to settle disputes between members. The international institutions we have relied on to address our global challenges are falling short.

This has left the door open for some countries to undermine the economic success of the cleanest economies and profit at the expense of the climate. Their carbon-intensive products flood the world market, undercutting cleaner businesses and stifling the innovation and investment necessary to deliver meaningful climate breakthroughs.³³ The resulting race to the bottom preserves profits for inefficient firms and reinforces the false assumption that climate progress must come at the expense of economic growth.

This is a primary motivator for the climate-and-trade leaders at the G-7. They are working toward more ambitious domestic climate action. Yet building the political will for major domestic policy change requires sensitivity to existing industries and jobs. Combining climate and trade policy can enhance the competitiveness of the existing economy and expand export opportunities for low-carbon fuels and products. Every G-7 country has a carbon intensity well below the global average. These climate leaders are poised to leverage their attractive consumer markets individually.

But together, they can direct 53% of the world's consumer economy toward decarbonization at home and abroad.³⁴

Aligning trade and climate interests can also challenge international institutions and reinvigorate them and their missions. Global climate negotiations will become more effective with global economic incentives aligned toward decarbonization. International trade negotiations will focus on rewarding carbon-efficient firms and climate-ambitious countries. International development forums will reorient toward carbon-efficient growth, ensuring that development locks in low-carbon, high-tech pathways oriented toward free and open trade with low-carbon markets. And carbon-intensive economies will bear the costs of their inadequate policies.

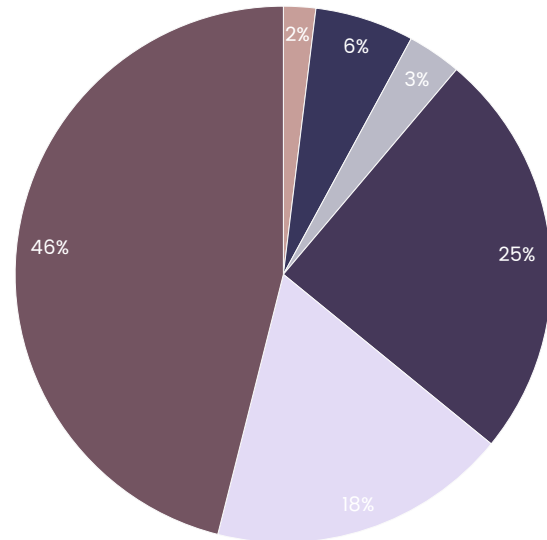
**COMBINING CLIMATE AND
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THE EXISTING ECONOMY AND
EXPAND EXPORT OPPORTUNITIES
FOR LOW-CARBON FUELS
AND PRODUCTS.**

Robust international trade is necessary to support decarbonization and meaningful economic opportunity for poorer countries. Working as it should, international trade and globalization can ensure that technologies, best practices, and other breakthroughs developed in one country can be deployed rapidly and efficiently overseas.

More trade is a promising opportunity for innovators and emerging market economies. Climate-aligned trade policies don't just introduce accountability for high emissions but reward more trade in and deployment of carbon-efficient goods and technologies. They also establish a virtuous cycle for continued innovation and investment in the affordability of decarbonization technologies to support reliable energy, industrialization, and the emergence of middle-class households. The low-carbon future being developed by American innovators can be deployed by our partners everywhere.

Moreover, climate and trade policies can open up more ambitious domestic climate action. In the U.S., as in many other developed countries, convincing lawmakers and the public that it's in our immediate national interest to enact bold policy remains the single greatest hurdle to more ambitious domestic climate policy. Properly aligned climate and trade policies ensure that ambitious climate action is a vehicle for domestic economic prosperity. We can break the logjam on ambitious domestic climate action and in turn help create the conditions for more ambitious multilateral action on the global stage.

COUNTRIES EXPLORING CLIMATE AND TRADE POLICIES MAKE UP MORE THAN HALF OF THE GLOBAL ECONOMY



Share of GDP

- Canada, 2%
- US, 25%
- Japan, 6%
- EU, 18%
- UK, 3%
- Rest of World, 46%

Source: Data from World Bank, author's calculations <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>³⁵

**CLIMATE AND
TRADE POLICIES
CAN OPEN UP MORE
AMBITIOUS DOMESTIC
CLIMATE ACTION.**



CONCLUSION

THE WORK AHEAD

The most effective way to address global climate change is to establish market rewards for the cleanest producers, incentives for ever greater emissions reductions, and accountability for the largest emitters. The U.S. and many major economies are already headed in this direction. They know that aligning climate and trade will secure a stronger economic position in tomorrow's low-carbon economy. The U.S. has the opportunity, now, to step up and lead the way.

The American market system is a powerful engine of growth that is uniquely good at generating opportunity, directing talent and investment in response to market demands, and rewarding entrepreneurship and innovation. Unleashing the full potential of this system to yield discoveries and breakthroughs will ensure that lowering global emissions enhances global prosperity. And new architectures of accountability will ensure that climate ambition is a necessary element of economic success. It's imperative that the U.S. lead the next series of global climate and trade policies. The American market system is uniquely efficient and transparent; a global system that looks more like ours will be cleaner, more open, and more secure.

The U.S. also has a responsibility and opportunity to drive down domestic emissions and widen the U.S. carbon advantage. Trade policies that monetize the U.S. carbon advantage cannot be a substitute for robust domestic climate policies but should ease their implementation and amplify their global impact. Done right, trade policies and

domestic climate action can create a positive feedback loop: the more that international trade rewards carbon efficiency, the more U.S. firms stand to win, and the more market incentive there will be to reduce domestic emissions further.

Successfully designing and implementing a new slate of policies will require input from a broad array of interests, experience, and expertise. We are only beginning to understand how climate, trade, and security intersect and have a short list of policy options to convert our goals to action. We need new, market-oriented policies to measure and disclose emissions, document trade, cooperate with like-minded countries, and press others who aren't doing their part. And we need more insight into how to use the tools of government, industry, and civil society to implement those policies and ensure they're effective.

While the details of a comprehensive climate and trade architecture aren't yet clear, bipartisan interests across labor, environment, foreign policy, and industry are already engaging on solutions. Bipartisan policymakers at the highest levels of government at home and abroad are asking for help developing policy options. Many questions need answering and challenges lay ahead, but the stakes are worth the effort. The opportunities in front of us are clear.

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ABOUT THE CENTER FOR CLIMATE AND TRADE

The Climate Leadership Council's Center for Climate and Trade explores and advances policies that leverage trade relationships and the global market economy towards greater international cooperation and climate ambition.

This report is a work product of the Climate Leadership Council and does not necessarily reflect the views of its organizational partners.

NOTES

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