

# TREATIES

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## HEARING

BEFORE THE

### COMMITTEE ON FOREIGN RELATIONS UNITED STATES SENATE

ONE HUNDRED SEVENTEENTH CONGRESS

SECOND SESSION

—  
APRIL 6, 2022  
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## TREATIES

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WEDNESDAY, APRIL 6, 2022

U.S. SENATE,  
COMMITTEE ON FOREIGN RELATIONS,  
*Washington, DC.*

The committee met, pursuant to notice, at 2:36 p.m., in room SD-106, Dirksen Senate Office Building, Hon. Robert Menendez presiding.

Present: Senators Menendez [presiding], Murphy, Kaine, Van Hollen, Risch, and Johnson.

### **OPENING STATEMENT OF HON. ROBERT MENENDEZ, U.S. SENATOR FROM NEW JERSEY**

The CHAIRMAN. The Senate Foreign Relations Committee will come to order. Today's treaty hearing comes at a time when the importance of strengthening our bonds and reinforcing the rule of law is as clear as ever.

I am grateful to the ranking member for helping make this hearing happen and I also want to thank both panels of highly-qualified experts for appearing today.

Our committee has a critical constitutional role to play in the treaty-making process and what we do directly impacts U.S. national security, law enforcement, businesses, and consumers.

While the treaties on the agenda today cover varied subject matters, they have a common feature. They all make technical updates to frameworks from years past, updates that are required to maximize our engagement with other countries, and in the case of the Tuna Treaty amendments and Kigali, for our industries to stay competitive.

Turning first to the pair of bilateral law enforcement treaties with Croatia, we know that modern criminal networks do not observe international borders. Terrorists, cyber criminals, drug traffickers are not limited to one country or another, and addressing the threat they pose requires intense cooperation.

These treaties with Croatia will improve our law enforcement relationship with Croatia, enhancing the ability to extradite criminals, share information, and exchange evidence for investigations and prosecutions.

Next, we will hear testimony about amendments to the 1987 South Pacific Tuna Treaty. The Tuna Treaty has long been a cornerstone of U.S. economic interests in the South Pacific and our relations with other countries in the region.

Reinforcing those bonds is more important than ever, especially in the face of growing Chinese influence. Our fishing industry and

U.S. consumers have long benefited from access to fishing waters in the Pacific, but our fishing fleet needs a better deal, which these amendments would provide.

For instance, the amendments would make it easier for U.S. fishing vessels to fish on the high seas, and the new amendments would allow U.S. businesses to negotiate commercial fishing arrangements directly with our Pacific Island partners without the Federal Government as a middleman.

The Tuna Treaty has long been vital to U.S. economic interests and our strategic influence in the region, and modernizing it will support even more economic activity and further burnish our relationships with important partners.

Finally, we will look at the Kigali Amendment to the Montreal Protocol. The United States ratified the Montreal Protocol more than three decades ago, and as U.S. companies have innovated and developed new technologies and products, the Senate has approved four amendments to keep up with those advances.

The Kigali Amendment modernizes the Montreal Protocol by addressing chemicals called hydrofluorocarbons, HFCs. HFCs became a commonplace alternative to dangerous ozone-depleting substances in response to the Montreal Protocol.

We know now that they are dangerous in their own right. Beginning with the engagement and encouragement of the George W. Bush administration, U.S. manufacturers have led the development of the next generation of refrigerants and technologies to replace HFCs and President Trump took a major step towards domestic adoption of this next-gen technology by signing the AIM Act into law.

Senate approval of the Kigali will help U.S. businesses, including manufacturers in Texas, Tennessee, and Wisconsin, develop and access global markets, and it is necessary so that they do not get locked out from trade with other partners to the treaty.

We have received an outpouring of support for the Kigali Amendment from the business community, including many letters. This includes letters from Wal-Mart, Carrier, Lennox, and others, and I asked for consent to enter these letters into the record and we will provide them to the clerk.

Without objection, so ordered.

[EDITOR'S NOTE.—The information referred to above can be found in the "Additional Material Submitted for the Record" section at the end of this hearing.]

The CHAIRMAN. Industry estimates calculate that ratifying the Kigali Amendment will help increase U.S. exports by \$5 billion and create 33,000 U.S. manufacturing jobs.

In contrast, our exports and export-related jobs are predicted to contract significantly if we fail to do so. All four previous amendments passed with bipartisan support and I hope this one will as well.

I am pleased that we have an opportunity today to hear from government experts on international cooperation in these areas: Acting Legal Adviser to the State Department, Richard Visek; Deputy Assistant Secretary of State John Thompson from the Oceans,

Environment, and Science Bureau; and Vaughn Ary, the director of the Office of International Affairs at the Department of Justice.

Testifying on our second panel of industry experts we have Mr. Stephen Yurek, CEO of the Air Conditioning, Heating, and Refrigeration Institute, based in Arlington, Virginia, who will testify on the significance of the Kigali Amendment, and Mr. Jim Sousa, president of the America Tunaboat Association and director of GS Fisheries from San Diego, California, who is here to testify on the amendments to the South Pacific Tuna Treaty.

With that, let me turn to the distinguished ranking member, Senator Risch, for his remarks.

**STATEMENT OF HON. JAMES E. RISCH,  
U.S. SENATOR FROM IDAHO**

Senator RISCH. Thank you, Mr. Chairman, for scheduling this hearing. Obviously, treaties is one of the important things that this committee does, and it kind of gets lost with the swamp of the nominations that we have to do, but it is important and deserves our attention.

From the State Department and Department of Justice, we will hear how the Mutual Legal Assistance Treaty with Croatia will help streamline the process for securing the evidence and testimony we need to enforce our laws.

It will also update our current extradition treaty, making it adaptable to advances in criminal law in the United States. The State Department will also discuss the South Pacific Tuna Treaty. This agreement, submitted under the last Administration, established stable and predictable fishing rights for U.S. vessels fishing in the Exclusive Economic Zone waters of certain island nations of the South Pacific.

This treaty updates our existing agreements and strengthens our cooperation and partnership with these island nations, particularly at a time when China is attempting to increase its influence in that part of the Pacific.

Finally, we will hear from the State Department on the Kigali Amendment to the Montreal Protocol. The Senate has consented to ratification of the previous four amendments to the Montreal Protocol with strong bipartisan votes.

With ratification of this treaty, the U.S. will join more than 120 countries in a multi-decade plan to phase down the production and consumption of 18 highly-polluting substances known as HFCs.

The treaty will facilitate the transition to the next generation of refrigerants. This benefits our U.S. industry, which enjoys a strong competitive advantage in the production of successor substances to HFCs.

Finally, I will note that we passed legislation last Congress, the American Innovation and Manufacturing Act, which implements U.S. obligations under this treaty.

With ratification of this amendment, the U.S. can better position itself to uphold our interest as we transition away from these substances to the newer, more efficient substances that will replace HFCs globally.

Thank you, Mr. Chair.

The CHAIRMAN. Thank you, Senator Risch.

We will start with our first panel, and I will start with Mr. Visek from the State Department.

**STATEMENT OF RICHARD VISEK, ACTING LEGAL ADVISER, OFFICE OF THE LEGAL ADVISER, U.S. DEPARTMENT OF STATE, WASHINGTON, DC**

Mr. VISEK. Thank you, Mr. Chairman.

Mr. Chairman, members of the committee, I am pleased to appear before you today to testify in support of two law enforcement treaties being considered by the committee, the Extradition and Mutual Legal Assistance Treaties with the Republic of Croatia.

I am also pleased to be joined on this panel by two distinguished colleagues, Vaughn Ary from the Department of Justice's Office of International Affairs, who will also be testifying in support of these important law enforcement agreements, and Dr. John Thompson from the Bureau of Oceans and International Environmental and Scientific Affairs, who will testify in support of two other important treaties, the Kigali Amendment to the Montreal Protocol and the amendments to the Treaty on Fisheries with certain Pacific Island states.

The agreements with Croatia will modernize and strengthen our law enforcement cooperation relationship with an important European partner and improve our ability to combat trans-border crime including terrorism, other forms of violent crime, drug trafficking, cybercrime, and the laundering of the proceeds of criminal activity.

In addition, these treaties will further our project to conform our law enforcement treaties with member states of the European Union to the standards established in our extradition and mutual legal assistance agreements with the European Union.

The U.S. extradition relationship with Croatia is currently governed by a 1901 treaty with the then Kingdom of Serbia, which is not as effective as the modern treaties we have in force with other countries, and does not contain provisions required by the agreement on extradition between the United States of America and the European Union.

We do not currently have a mutual legal assistance agreement in place with Croatia and the treaty now before you would serve to implement bilaterally the Agreement on Mutual Legal Assistance between the United States of America and the European Union.

Together, these two treaties would establish a modern law enforcement cooperation relationship with Croatia. Updating outdated extradition treaties with modern ones is necessary to create a seamless web of mutual obligations to facilitate the prompt location, arrest, and extradition of international fugitives.

For their part, treaty-based mutual legal assistance mechanisms facilitate our ability to obtain evidence and other forms of assistance in support of our criminal investigations and prosecutions.

As a result, these treaties are an important part of the Administration's efforts to ensure that those who commit crimes against Americans will face justice in the United States.

The new U.S.-Croatia extradition agreement contains several important provisions that will serve our law enforcement objectives. I will touch briefly on these provisions.



First, it incorporates the contemporary dual criminality approach. Whereas the 1901 treaty provides for extradition only for offences appearing on a closed list, the new agreement covers any offence punishable by imprisonment for a period of more than 1 year under the laws of both states.

The dual criminality approach eliminates the need to renegotiate treaties to cover new offenses in instances in which both states pass laws to address new types of criminal activity.

Second, a new Extradition Treaty contains a provision that permits the temporary surrender to the United States of a person facing prosecution or serving a sentence in Croatia.

This provision can be important so that, for example, charges pending against the person can be resolved earlier while evidence is fresh or so he or she can be prosecuted alongside any co-defendants.

Third, the new Extradition Treaty incorporates other improvements that can expedite or streamline extradition processes, including by providing clarity on the materials required for formal extradition requests as well as incorporating a simplified procedure when an individual consents to extradition.

For its part, the new U.S.-Croatia Mutual Legal Assistance Agreement formalized as a framework for cooperation on those issues regulated by the U.S.-EU Mutual Legal Assistance Agreement, such as the identification of bank information, the use of video conference technology, and a process to transmit expedited requests. This agreement will facilitate assistance between our countries in criminal investigations and prosecutions.

For all these reasons, U.S. ratification of these two law enforcement treaties will help us and our colleagues at the Justice Department deepen our law enforcement relationship with Croatia and advance our objective combating transnational crime.

Thank you, once again, for the opportunity to appear before you to address these treaties and I look forward to your questions. Thank you.

[The prepared statement of Mr. Visek follows:]

**Prepared Statement of Mr. Richard C. Visek**

Mr. Chairman, members of the committee, I am pleased to appear before you today to testify in support of two law enforcement treaties being considered by the committee: the Extradition and Mutual Legal Assistance Treaties with Croatia.

The administration appreciates the committee's prioritization of these treaties. Both the Croatia extradition and mutual legal assistance treaties advance U.S. interests. They will modernize and strengthen our law enforcement cooperation relationship with an important European partner, and thereby improve our ability to combat transborder crime, including terrorism, other forms of violent crime, drug trafficking, cybercrime, and the laundering of the proceeds of criminal activity. In addition, these treaties will advance our project to conform our law enforcement treaties with Member States of the European Union to the standards established in the extradition and mutual legal assistance agreements we have concluded with the European Union. The administration supports both of these treaties and urges the Senate to provide its advice and consent to their ratification.

The U.S. extradition relationship with Croatia is currently governed by the Treaty Between the United States of America and the Kingdom of Serbia for the Mutual Extradition of Fugitives from Justice, signed on October 25, 1901 ("the 1901 Treaty"). This treaty is not as effective as the modern treaties we have in force with other countries in ensuring that fugitives may be brought to justice, and it does not incorporate the provisions required by the Agreement on Extradition between the United States of America and the European Union signed on June 25, 2003 ("the

U.S.-EU Extradition Agreement”), and to which the Senate gave its advice and consent in 2008.

We do not currently have a mutual legal assistance agreement in place with Croatia, and the treaty now before you would fill that gap and serve to implement the Agreement on Mutual Legal Assistance between the United States of America and the European Union, signed on June 25, 2003 (“the U.S.-EU Mutual Legal Assistance Agreement”), and to which the Senate gave its advice and consent in 2008.

Both of the treaties before you today are self-executing and were ratified by Croatia in April of 2020. As such, U.S. ratification would allow the parties to bring these instruments into force and immediately begin making use of them for enhanced law enforcement cooperation.

These two treaties would establish a modern law enforcement relationship with Croatia. Replacing outdated extradition treaties with modern ones (as well as negotiating extradition treaties with new partners where appropriate) is necessary to create a seamless web of mutual obligations to facilitate the prompt location, arrest and extradition of international fugitives. Similarly, treaty-based mutual legal assistance mechanisms facilitate our ability to obtain evidence and other forms of assistance in support of our criminal investigations and prosecutions. As a result, these two treaties are an important part of the administration’s efforts to ensure that those who commit crimes against Americans will face justice in the United States.

The new U.S.-Croatia Extradition Agreement contains several important provisions that will serve our law enforcement objectives:

First, it defines extraditable offenses to include conduct that is punishable by imprisonment or deprivation of liberty for a period of more than 1 year in both States. This is the so-called “dual criminality” approach. Our older treaties, including the 1901 Treaty, provide for extradition only for offenses appearing on a list contained in the instrument. The problem with this approach is that, as time passes, the lists grow increasingly out of date. The dual criminality approach eliminates the need to renegotiate treaties to cover new offenses in instances in which both States pass laws to address new types of criminal activity. By way of illustration, so called “list treaties” from the beginning of the 20th century do not clearly cover various forms of cybercrime or money laundering. The new treaty would fix this problem.

Second, unlike the 1901 Treaty, the new extradition treaty contains a provision that would permit the temporary surrender of a fugitive to the United States of a person facing prosecution, or serving a sentence, in Croatia. This provision is important because it can enable pending charges against a person to be resolved while the evidence is still fresh, as well as enable the prosecution of a person together with his or her codefendants.

And third, the new extradition treaty incorporates a number of other improvements over the 1901 Treaty, including procedural improvements that have the potential to expedite extradition processes by streamlining and clarifying the requirements for extradition. For example, the new treaty provides clarity on the materials required to be included in a formal extradition request, allows for direct transmission of provisional arrest requests through Justice Department channels, and sets out criteria for situations where more than one State has requested the extradition of an individual. The treaty also provides for a simplified procedure when an individual consents to extradition.

For its part, the new U.S.-Croatia Mutual Legal Assistance Agreement formalizes a framework for effective cooperation on the issues covered by the U.S.-EU Mutual Legal Assistance Agreement, including provisions on: the identification of bank information relating to individuals suspected or charged with criminal offenses; the establishment and operation of joint investigative teams; the use of video-conferencing technology to take testimony; the ability to make requests by expedited means; and the provision of assistance to administrative authorities that are conducting investigations of criminal activity. The new treaty also contains provisions concerning limitations on use, confidentiality, and grounds for refusal of a request. This treaty is consistent with treaties concluded with other EU Member States with which the United States did not have an existing mutual legal assistance treaty and establishes a crucial framework to facilitate assistance between our countries in criminal investigations and prosecutions.

For all these reasons, U.S. ratification of these two law enforcement treaties will help us and our colleagues at the Department of Justice to deepen an important law enforcement relationship and advance our objective of combatting transnational crime.

The CHAIRMAN. Thank you.  
Mr. Ary, you are next.

**STATEMENT OF MAJOR GENERAL VAUGHN ARY [RET.], DIRECTOR OF THE OFFICE OF INTERNATIONAL AFFAIRS, DEPARTMENT OF JUSTICE, WASHINGTON, DC**

Mr. ARY. Thank you, Mr. Chairman, members of the committee. I am pleased to appear before you today to express the support of the Department of Justice for the Extradition and Mutual Legal Assistance Treaties between the United States and the Republic of Croatia.

It is my privilege to serve as the director of the Office of International Affairs, which is the section within the Justice Department that implements Extradition and Mutual Legal Assistance Treaties for the benefit of all federal, state, and local law enforcement investigations and prosecutions.

As an initial matter, I would like to thank our colleagues at the Department of State for working with us for many years to negotiate these agreements with Croatia.

We work closely with our partners at State to execute our law enforcement treaties, and the Office of International Affairs relies on these treaty relationships to return international fugitives to face prosecution in the United States and to obtain essential evidence.

Prosecutors benefit from this network of treaties and we are grateful to this committee for its work in building and modernizing them to meet the law enforcement challenges of the 21st century.

I would like to highlight three important reasons why the new treaties with Croatia will be vital law enforcement tools for prosecutors across the nation.

First, the new Extradition Treaty will allow extradition for a wider range of serious crimes. The United States and Croatia currently operate under the 1901 extradition treaty between the United States and Kingdom of Serbia. This new treaty replaces a short list of extraditable offenses that is well over a century old.

The more modern dual criminality approach will enable us to extradite individuals for conduct punishable under the laws of both countries by more than a year of imprisonment.

This means the new Extradition Treaty will now cover terrorism, cybercrime, child pornography, money laundering, and other offenses. It also future proofs the treaty by ensuring that new crimes remain covered as the criminal codes of both countries evolve to meet future challenges.

Second, the new treaty includes provisions that make the extradition process more efficient. For example, the new temporary transfer provision means we will be able to seek the extradition of someone imprisoned in Croatia for immediate trial in the United States and return him or her to serve out the remainder of their sentence in Croatia.

The simplified extradition provision allows a person sought in extradition to consent to surrender, resulting in a more expeditious transfer to the requesting country, and the new treaty also modernizes provisions for providing supplemental information and the authentication of extradition documents.

Third, the new MLAT with Croatia will augment the tools available to U.S. authorities for investigating and prosecuting modern crime. The new MLAT will authorize the identification of bank information relating to persons suspected of a criminal offense, the use of video conferencing technology to take testimony, and the expedited transmission of requests for assistance.

These new provisions will add to the evidence-gathering tools available and build upon the strong cooperative law enforcement relationship we have with our Croatian counterparts.

In addition to being vital law enforcement tools, these treaties give effect to agreements that the United States made with the European Union in 2003. Since then, the United States and the member states of the EU have updated their extradition and mutual legal assistance relationships, all but one.

Croatia joined the European Union in 2013 and is the only EU member state that has not yet implemented new agreements. The treaties with Croatia now before this committee accomplish that goal.

For these reasons, Mr. Chairman, we join the State Department in respectfully requesting the prompt and favorable consideration of these important law enforcement treaties.

I would be pleased to answer any questions.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Ary follows:]

**Prepared Statement of Mr. Vaughn A. Ary**

Mr. Chairman and members of the Committee, I am pleased to appear before you today to present the views of the Department of Justice on the extradition and mutual legal assistance treaties between the United States and the Republic of Croatia. These treaties directly advance the interests of the United States in fighting terrorism and transnational crime and were negotiated jointly by the Departments of State and Justice. Accordingly, the Department of Justice joins the Department of State in urging the Committee to report favorably to the Senate and recommend its advice and consent to ratification of these treaties.

The Departments of Justice and State have prepared and submitted to the Committee detailed analyses of these treaties in the Letter of Submittal. The Department of State has elaborated further on the provisions of the treaties that improve upon the existing extradition treaty framework currently in force between the United States and Croatia. I will address why the treaties are important for U.S. authorities engaged in the investigation and prosecution of terrorism and other serious crime.

THE U.S.-CROATIA EXTRADITION AGREEMENT

The United States and Croatia currently operate under the 1901 extradition treaty between the United States and the Kingdom of Serbia (the 1901 treaty). Croatia is a successor state to that antiquated treaty. This treaty does not adequately meet the law enforcement challenges that we face in the 21st century. For example, the 1901 treaty applies a "list" approach to offenses for which extradition may be granted, with the list having been established more than a century ago.

In 2003, the United States and the European Union (EU) signed the U.S./EU Extradition Agreement and the U.S./EU Mutual Legal Assistance Agreement. These agreements were designed to modernize and streamline the extradition and mutual legal assistance relationship between the United States and individual EU Member States. The Senate gave advice and consent to ratification of those agreements in 2008 and they entered into force in 2010. The United States and the Member States of the EU have updated their extradition and mutual legal assistance relationships to reflect the obligations undertaken between the United States and the European Union. Croatia joined the European Union in 2013 and is the only EU Member State with which the United States has not yet implemented the modern provisions of the U.S./EU Extradition and Mutual Legal Assistance Agreements. The treaties with Croatia now before this Committee accomplish that goal. The new extradition

treaty with Croatia replaces a number of provisions in the 1901 treaty to expand the scope of offenses, streamline procedures and facilitate broader cooperation in extradition matters.

The new extradition treaty with Croatia replaces the old list of extraditable offenses with a modern “dual criminality” approach that expands the scope of criminal conduct that will be subject to extradition. This dual criminality approach makes subject to extradition conduct that is punishable under the laws of both countries by deprivation of liberty by more than one year or for a more severe penalty. Application of the dual criminality standard will now bring within the scope of offenses covered by the new extradition treaty conduct constituting terrorism, cybercrime, child pornography, money laundering and other offenses. This expanded reach is critical to effective law enforcement in 2022 and beyond. Moreover, this improvement will ensure that, in the future, extradition will be possible with respect to the broadest possible range of serious offenses, without the need to update treaties repeatedly as new forms of conduct are criminalized.

Other aspects of the new extradition treaty will facilitate the ability of the United States to prosecute offenders effectively. These include the new provisions on requests from more than one state, temporary surrender, and simplified extradition. These modern provisions will expand the reach of the United States to extradite and prosecute offenders in a timely fashion. The provision regarding requests from more than one state will allow the treaty partners to apply fair criteria when deciding to surrender a person sought in extradition by more than one country. This provision, originally negotiated with the EU in the U.S./EU Extradition Agreement, was intended to position the United States on equal footing with EU Member States that may be using the EU Arrest Warrant as the mechanism for extradition among EU countries. In a world where transnational crime is prevalent and multiple countries may target the same actors, this provision is intended to ensure that the United States is not adversely impacted when competing for the extradition of the same person. Similarly, the temporary transfer provision of the new treaty would allow for the transfer for prosecution of a person who is also being proceeded against, or is serving a sentence, in Croatia. This modern mechanism allows for an expeditious resolution of criminal charges before significant delays cause either prejudice to defendants, or prosecution evidence to become stale. The simplified extradition provision allows for persons sought in extradition to consent to their surrender and transfer to the requesting country as expeditiously as possible. This is another way that the new treaty will facilitate the prosecution of offenders.

Finally, the new treaty imports from the U.S./EU Extradition Agreement other provisions intended to make the extradition process work more expeditiously. As my State Department colleague has noted, these include provisions on the authentication and transmission of extradition documents and provisional arrest requests, providing supplemental information, the submission of sensitive information and the transit of persons in custody. All of these provisions will improve the everyday handling of extradition request between the United States and Croatia.

As noted previously, because these provisions in the new extradition treaty with Croatia originate in the U.S./EU Extradition Agreement, they are not novel for the United States. In fact, such provisions are already found in our extradition treaties with other EU Member States. Moreover, those provisions from the 1901 extradition treaty with Croatia that are left undisturbed in this new treaty already are in force and simply maintain the status quo. We expect that the inclusion of the U.S./EU provisions in the new extradition treaty with Croatia will yield the intended benefits that we have already experienced with other EU countries.

#### THE U.S.-CROATIA MUTUAL LEGAL ASSISTANCE AGREEMENT

Although the United States and Croatia are not parties to a mutual legal assistance treaty (MLAT), they do have an active and cooperative relationship in the area of mutual legal assistance in criminal matters. The Department of Justice believes that the MLAT with Croatia will further strengthen that relationship.

Like the extradition treaty, the MLAT with Croatia has its origin in the U.S./EU Mutual Legal Assistance Agreement. Unlike the extradition treaty, however, the MLAT with Croatia does not revise a previous text. Rather, the MLAT with Croatia applies only the provisions of the U.S./EU Mutual Legal Assistance Agreement. In this regard, the Croatian treaty is not unique. The United States concluded similar MLATs with several other EU Member States, specifically, Bulgaria, Denmark, Finland, Malta, Portugal, the Slovak Republic, and Slovenia.

The MLAT with Croatia will augment the tools available to U.S. authorities investigating and prosecuting modern crime. The MLAT with Croatia authorizes the identification of bank information, including accounts and transactions, relating to

persons suspected of or charged with a criminal offense; the formation of joint investigative teams; the use of video conferencing technology to take testimony; the expedited transmission of requests for assistance; and assistance to administrative authorities conducting investigations with a view to criminal prosecution or referral of the conduct to criminal investigation or prosecuting authorities. All of these provisions will facilitate criminal investigations and prosecutions. In addition, the MLAT contains provisions on limitations on use to protect personal and other data, protecting confidentiality, and grounds for refusal of assistance. Among all of these, the provision on the grounds for refusal is the only one that does not originate with the U.S./EU Mutual Legal Assistance Agreement. This provision is critical to permit the requested state to decline to assist in appropriate circumstances. The provision adopted in the Croatian MLAT includes an essential interest denial, a standard basis for denial in all the MLATs of the United States. In this way, too, the MLAT with Croatia comports with existing U.S. legal requirements and practice.

#### CONCLUSION

The Department of Justice appreciates the Committee's support in our efforts to strengthen the network of treaties that assist us in combatting crime. The modern provisions in these new treaties with Croatia will allow us to advance the protection of our citizens and hold accountable those who commit crime. Accordingly, we join the State Department in urging the prompt and favorable consideration of these law enforcement treaties.

The CHAIRMAN. Thank you.  
Secretary Thompson.

#### **STATEMENT OF DR. JOHN THOMPSON, DEPUTY ASSISTANT SECRETARY FOR ENVIRONMENT, BUREAU OF OCEANS AND INTERNATIONAL ENVIRONMENTAL AND SCIENTIFIC AFFAIRS, U.S. DEPARTMENT OF STATE, WASHINGTON, DC**

Dr. THOMPSON. Chairman Menendez, Ranking Member Risch, thank you for having me here today and for the opportunity to testify in support of amendments to two treaties that are vital to ensuring our continued prosperity and advancing the interests of American workers and important sectors of the U.S. economy.

I am Dr. John Thompson, Deputy Assistant Secretary for the Environment. The Administration requests that the Senate review the following treaty amendments with a view to providing advice and consent to the ratification as soon as possible: the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer and amendments to the Treaty on Fisheries between the Governments of Certain Pacific Island States and the Government of the United States of America, or the Tuna Treaty.

The Montreal Protocol on Substances that Deplete the Ozone Layer, which the United States ratified in 1988, is one of the world's most successful international environmental agreements. The Kigali Amendment adds a new class of chemicals known as hydrofluorocarbons, or HFCs, as controlled substances under the Protocol.

The Kigali Amendment will gradually drive global markets towards lower production and consumption of HFCs and towards the use of more environmentally benign replacement technologies.

Industry estimates indicate U.S. ratification would support 33,000 new manufacturing jobs in the United States and \$12.5 billion in new investments in the U.S. economy over the next decade.

This includes achieving a substantial increase in the U.S. global export market share for heating, ventilation, air conditioning, and refrigeration equipment, which is especially important, given the

rapid growth and sales of these products in many developing countries.

The United States will benefit economically from Kigali ratification because we have the most innovative and dynamic business community in the sectors that use HFCs and their alternatives.

U.S. companies are not the only ones developing alternatives to HFCs. Our competitors in the EU, Japan, Mexico, China, and elsewhere are developing their own technologies.

If the United States does not join Kigali, our industry risks losing out on this growing global export market and we may also face a ban on HFC trade with parties to the amendment starting in 2033, which is not far away in an industry that looks many years ahead when planning investments.

Joining Kigali maximizes our ability to continue to protect U.S. interests in the Montreal Protocol's governing body. Congress has already taken the actions needed to provide sufficient domestic authority to implement the Kigali Amendment through the American Innovation in Manufacturing Act, or AIM Act. We do not envision the need for further rulemaking for the United States to meet the obligations it would have under the Kigali Amendment beyond what is already planned to implement the AIM Act.

Amendments to the Tuna Treaty—the Tuna Treaty has been a cornerstone of U.S. cooperation with the Pacific Islands for over three decades and is a vital component of the wide range of U.S. engagement and financial assistance to the region.

The Tuna Treaty serves broad U.S. diplomatic interests by providing a multilateral framework to cooperate with the Pacific Island parties on one of their highest policy priorities and by supporting security, stability, and prosperity.

Both the Tuna Treaty and a related economic assistance agreement with Pacific Island parties reinforce the goals of the U.S.-Indo-Pacific strategy to preserve a free and open Indo-Pacific, drive regional prosperity, and bolster Indo-Pacific security.

The Tuna Treaty provides fishing access for U.S. commercial purse seine vessels to fish for tuna within the Exclusive Economic Zones of 16 Pacific Island parties in the western and central Pacific Ocean.

The United States and the Pacific Island parties concluded 7 years of negotiations and adopted amendments to the Tuna Treaty on December 3, 2016.

These amendments to the Tuna Treaty make it a more viable and sustainable model to manage U.S. fishing access to areas under the national jurisdiction of Pacific Island parties.

The 2016 amendments to the Tuna Treaty are supported by U.S. fishing stakeholders. The United States and the Pacific Island parties have historically viewed the Tuna Treaty not simply as a fisheries agreement, but as a foundation of the economic and political relationship between the United States and the Pacific Island parties.

In February, when Secretary Blinken met with Pacific Island leaders, several of them commented on the importance of the Tuna Treaty to their relationship with the United States and to their economies.

I appreciate your consideration of the Kigali Amendment and the amendments to the Tuna Treaty, and I am happy to respond to any questions you may have.

[The prepared statement of Mr. Thompson follows:]

**Prepared Statement of Dr. John Thompson**

Chairman Menendez, Ranking Member Risch, and members of the Committee, thank you for having me here today and for the opportunity to testify in support of amendments to two treaties that are vital to ensuring our continued prosperity and advancing the interests of American workers and important sectors of the U.S. economy. I am Dr. John Thompson, Deputy Assistant Secretary of State for the Environment within the Bureau of Oceans and International Environmental and Scientific Affairs. I am pleased to represent the State Department today in support of both treaties, particularly given the Department's long and productive working relationship with the impacted business community. I look forward to engaging the Committee and answering your questions. The Administration requests that the Senate review the following treaty amendments, with a view to providing advice and consent to their ratification as soon as possible:

- Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer; and
- Amendments to the Treaty on Fisheries Between the Governments of Certain Pacific Island States and the Government of the United States of America (Tuna Treaty).

KIGALI AMENDMENT TO THE MONTREAL PROTOCOL

I am pleased to testify on the Kigali Amendment to the Montreal Protocol, which was adopted in October 2016 as the 5th Amendment to the Protocol.

The Montreal Protocol on Substances that Deplete the Ozone Layer, which the United States ratified in 1988, is one of the world's most successful international environmental agreements. The United States is Party to the Montreal Protocol and its four previous amendments, all of which received the Senate's advice and consent to ratification. There are currently 131 Parties to the Kigali Amendment, including most of our major trading partners such as Canada, Mexico, Japan, the EU, China, and India.

The Kigali Amendment adds a new class of chemicals known as hydrofluorocarbons, or HFCs, as controlled substances under the Protocol. HFCs came into use as replacements for ozone-depleting substances being phased out under the Protocol. The principal features of the Kigali Amendment closely parallel the Montreal Protocol's provisions for other controlled substances. They provide for the gradual phase down of the production and consumption of 18 types of HFCs, subject to certain exemptions, and establish related requirements for licensing systems, reporting, technical and financial assistance, destruction of byproducts, and restricting trade in HFCs with non-Parties. Through these measures, the Kigali Amendment will gradually drive global markets towards lower production and consumption of HFCs, and towards use of more environmentally benign replacement technologies.

To reap the economic benefits of the Kigali Amendment, the U.S. must ratify it. The sectors that use HFCs and their alternatives, primarily the refrigeration and air-conditioning sectors, produce \$178 billion in output each year in the United States. Industry estimates indicate U.S. ratification would support 33,000 new manufacturing jobs in the United States, and \$12.5 billion in new investments in the U.S. economy over the next decade. This includes achieving a substantial increase in the U.S. global export market share for heating, ventilation, air conditioning and refrigeration equipment, which is especially important given the rapid growth in sales of these products in many developing countries.

The United States will benefit economically from Kigali ratification because we have the most innovative and dynamic business community in the sectors that use HFCs and their alternatives. At each stage of the Montreal Protocol's history, U.S. companies benefited by being leaders in innovation, having developed alternatives to the prior generation technology. The Kigali Amendment is again facilitating a transition to a next generation of technology to the benefit of innovative American companies that hold a strong competitive advantage in these sectors, and to the benefit of the environment.

U.S. companies aren't the only ones developing alternatives to HFCs; our competitors in the European Union, Japan, Mexico, China, and elsewhere are developing



their own technologies. Because these jurisdictions are Parties to the Kigali Amendment, their companies are recognized as stable long-term suppliers of alternative technologies that Kigali Parties across the world will need in order to meet their obligations to phase down HFC production and consumption. If the United States does not join Kigali, our industry risks losing out on this growing global export market, and we may also face a ban on HFC trade with Parties to the Amendment starting in 2033, which is not far away in an industry that looks many years ahead when planning investments. Joining Kigali maximizes our ability to continue to protect U.S. interests in the Montreal Protocol's governing body.

Congress has already taken the actions needed to provide sufficient domestic authority to implement the Kigali Amendment through the American Innovation and Manufacturing Act (AIM Act). The first HFC allowance allocation and trading rule that EPA issued in September 2021 under the AIM Act established the baseline and phase down schedule for HFCs and put in place most of the key elements required to implement Kigali obligations, including those related to production, consumption, byproducts, and reporting. EPA provided the methodology to issue allowances (i.e. licensing) for the first phasedown step and is now developing the proposed rule for subsequent reduction steps set out under the AIM Act. EPA intends to promulgate one or more additional rules under the AIM Act concerning the allocation and trading system for years beyond 2023. We do not envision the need for further rule-making for the United States to meet the obligations it would have under the Kigali Amendment beyond what is already planned to implement the AIM Act. The United States already has the domestic regulatory plan to phase down HFCs consistent with what would be required under the Kigali Amendment, but without ratification we will not realize its full benefits.

Joining the Kigali Amendment can produce economic benefits here at home by promoting and rewarding the innovation of American companies and workers. We can achieve this outcome because we worked so closely with the U.S. business community throughout the multiyear process of negotiating the Amendment, during which we had strong and unwavering support from their associations. The Chamber of Commerce; the National Association of Manufacturers; the American Chemistry Council; the Air-Conditioning, Heating, and Refrigeration Institute; and the Alliance for Responsible Atmospheric Policy all strongly support ratification, and they represent the vast majority of U.S. industry that use or produce HFCs or their alternatives. I can think of no better way to recommend this treaty for your consideration than to highlight their strong endorsement.

#### AMENDMENTS TO THE TUNA TREATY

The Tuna Treaty has been a cornerstone of U.S. cooperation with the Pacific Islands for over three decades and is a vital component of the wide range of U.S. engagement and financial assistance in the region. We appreciate your consideration of these amendments given the continued importance of the Tuna Treaty to our stakeholders and to our broader engagement with our Pacific Island partners in support of the Biden Administration's recently released Indo-Pacific Strategy.

The Tuna Treaty, which entered into force in 1988, serves broad U.S. diplomatic interests by providing a multilateral framework to cooperate with the Pacific Island parties on one of their highest policy priorities and by supporting the security, stability, and prosperity of this strategically located part of the Indo-Pacific region. Both the Tuna Treaty and a related Economic Assistance Agreement with Pacific Island parties, which supports development projects and programs in the region, reinforce the goals of the U.S. Indo-Pacific Strategy to preserve a free and open Indo-Pacific, drive regional prosperity, and bolster Indo-Pacific security.

The Tuna Treaty provides fishing access for U.S. commercial purse seine vessels to fish for tuna within the Exclusive Economic Zones (EEZs) of 16 Pacific Island parties (Australia, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu) in a vast area of the western and central Pacific Ocean. Approximately 60 percent of the world's tuna catch occurs in the western and central Pacific Ocean, mostly in waters under the jurisdiction of these Pacific Island parties—many of which are small island developing states.

Though the role of the Tuna Treaty as part of our broader relationship with the Pacific Islands has evolved in recent years, the United States and the Pacific Island parties have historically viewed the Tuna Treaty not simply as a fisheries agreement, but as a foundation of the economic and political relationship between the United States and the Pacific Island parties. In February, when Secretary Blinken met with Pacific Islands leaders, several of them commented on the importance of the Tuna Treaty to their relationship with the United States and to their economies.

Using mechanisms like the Tuna Treaty to strengthen our relationships with Pacific Island parties is critically important, now more than ever, and especially on issues of mutual interest and concern, including maritime security; monitoring, control, and surveillance; countering illegal, unreported, and unregulated fishing; and blue carbon and blue economies. The Tuna Treaty is a central component for continuing economic cooperation with the Pacific Region, particularly as it weathers changes from declining fishing vessels and tourism revenues from COVID-19. In the long run, maintaining a strong relationship with our Pacific Island partners—with a focus on resilience—is a strategic priority, and will overlap with development of maritime security, digital technologies, and the blue economy.

The Tuna Treaty is unique in that it is the only truly multilateral framework for fisheries access and cooperation in the Pacific, as well as the most transparent access agreement of any kind in the region. Beyond fishing access, the Tuna Treaty supports the sustainable management of fisheries stocks in this region and provides for broad cooperation between the United States and Pacific Islands on some of their highest priorities, including on maritime security to combat illegal, unreported, and unregulated fishing. Along with our Pacific Island partners, we will continue to lead by example together in this region to advance sustainable, responsible, and transparent fisheries, including working to address issues that impact the entirety of the seafood supply chain.

The United States and the Pacific Island parties concluded 7 years of negotiations and adopted amendments to the Tuna Treaty on December 3, 2016. These amendments to the Tuna Treaty make it a more viable and sustainable model to manage U.S. fishing access to areas under the national jurisdiction of Pacific Island parties. The 2016 amendments to the Tuna Treaty are supported by U.S. fishing stakeholders, who participated on U.S. delegations to negotiate the amendments, and by the Pacific Island parties. The Parties are currently applying the 2016 Tuna Treaty amendments on a voluntary basis pursuant to a nonbinding memorandum of understanding while awaiting their entry into force.

The new business model envisioned by the 2016 amendments has proven adaptable to changing circumstances, many of which we could not have foreseen during the 2016 negotiations. The flexibility that the 2016 amendments to the Tuna Treaty offer to all Parties has helped us weather shifting dynamics. This added flexibility has been useful in addressing the many challenges presented by the COVID-19 pandemic, which has significantly affected not only the operation of U.S. fishing vessels in the region, but also the economies and revenues of the Pacific Island parties.

We request the advice and consent of the Senate so the United States can ratify the Tuna Treaty amendments and build upon the foundation of this agreement to benefit the U.S. and our diplomatic and strategic relationships in the Pacific Islands region to preserve a free and open Indo-Pacific.

I appreciate your consideration of the Kigali Amendment and the amendments to the Tuna Treaty and will now take any questions you may have.

The CHAIRMAN. I thank you all for your testimony. We will start at a series of 5-minute rounds. Let me start with myself.

I understand that efforts to phase out HFCs have been supported for a few decades on a bipartisan and multi-stakeholder basis. For example, that U.S. industry began to develop HFC alternatives with the support and encouragement of the George W. Bush administration.

The U.S. industry was heavily engaged in ensuring that Kigali is favorable to our business and competition interests and that President Trump, with broad bipartisan support, signed into law the AIM Act, which provides the authority to implement Kigali.

Mr. Thompson, is that accurate?

Dr. THOMPSON. Yes, Chairman, it is.

The CHAIRMAN. In 2019, President Trump signed into law Senator Kennedy of Louisiana's American Innovation and Manufacturing Act, which phases down HFCs in the United States, consistent with the Kigali Amendment.

Mr. Visek, I understand no additional authorities beyond the AIM Act are needed for the U.S. Government to comply with Kigali. Is that accurate?

For the record, you said that is accurate. The only reason I want you to put your microphone on is we have a recording going on. I want to make sure the record reflects it.

Then I also understand the EU, Japan, South Africa, India, China, Vietnam, Mexico, Canada, are all among the 130 parties to Kigali and new prohibitions under Kigali will kick in for parties beginning in 2033, which will impact trade with nonparties.

Secretary Thompson, under the provisions in Kigali on trade between parties and nonparties, what do U.S. businesses stand to lose if we do not ratify?

Dr. THOMPSON. Thank you, Chairman.

The description you have provided of the nonparty trade provisions in the Kigali Amendment are—they are accurate and, in fact, we do stand to lose quite a lot because effective January 1, 2033, parties under the Kigali Amendment will be required as a default to prohibit trade in HFCs with nonparties.

As you said, most of our major trading partners are already in the Kigali Amendment. A number of others we know are joining in the years coming, and so this default trade ban could have the potential for significant disruption for U.S. businesses that would continue to trade HFCs at that time, which is what is expected because the HFC controls are a phase down, not a phase out.

Even in 2033, there will still be a substantial amount of HFC trade that U.S. businesses would want to be involved in. Thank you.

The CHAIRMAN. By not ratifying, we hurt U.S. businesses and, at the same time, we—ultimately, instead of being at the table to set those standards for trade, we will not be there. Is that a fair statement?

Dr. THOMPSON. That is correct.

The CHAIRMAN. Okay. Let me turn to the question of the Tuna Treaty. You described in your comments how they are central to the health of our diplomatic relationship with other countries in the region.

How does this effort counter Chinese influence, Secretary Thompson?

Dr. THOMPSON. Thank you, Chairman.

I would say—so there are several ways where this, I would say, directly counters Chinese influence. I think the first category is in the economic competitiveness area. This is a very strong economic tool because it—the changes that we have here, a lot of what we are talking about are the benefits to the U.S. fleet.

They also strongly benefit the Pacific Island parties themselves. These Pacific Island parties have economies that are highly dependent on the fisheries industry and so this really is a cornerstone of our economic engagement with them.

We are not the only ones fishing in these waters. We have distant water fleets from other countries, in particular, China, that are operating there as well. It is vital for our economic diplomacy that we continue to be involved there.

Secondly, I would say, this is a—the model that we operate by is well understood, clear, and transparent and it is to some extent a gold standard for transparency and sustainable fishing in the area.

Some of these other countries, including China, do not operate by the same rules and I think, oftentimes, the way we do it is used to set the benchmark for other countries, including China, to operate in a more transparent and appropriate way.

Then, finally, I would say we also use this agreement as the foundation for a broader cooperative engagement with the Pacific Island countries and for a wide range of assistance in areas like security, countering illegal, unregulated, and unreported fishing, sustainable fisheries, as well as maritime surveillance.

So we also garner benefits from that as well, in particular, as it relates to countering China.

Thank you.

The CHAIRMAN. Thank you.

Senator Risch.

Senator RISCH. Thank you, Mr. Chairman.

I have got just a couple of questions here, and I do not want you to take these as being contentious. I just—I want to understand where we are headed here.

On the HFC question, China can claim Article 5 developing country status, which gives it a longer period of time to phase down, as opposed to the United States.

Is that going to—is that going to cause us difficulty going forward, where they can use this in what I would think of would be an anti-competitive nature?

What is the situation on that?

Dr. THOMPSON. Thank you, Ranking Member Risch.

You are correct. China, looking back at the long history of the Montreal Protocol, they are, in fact, classified as an Article 5 party because—in part because those classifications were made many years ago, and it is accurate they do have additional time to make the reductions in HFC production and consumption because of that.

I think, overall, we do not believe it really gives them a competitive advantage because, fundamentally, what the Kigali Amendment is doing is it is pushing global markets away from HFCs and towards HFC alternatives, and if you look at the nature of these businesses now, China is actually quite strong in the HFC production and consumption business.

They are the world's largest producer and consumer of HFCs, whereas where we are pushing these markets towards alternatives, U.S. industry has a competitive advantage in that area and we are the world's leader in developing and deploying alternatives.

So I think, overall, you are right, there are some accommodations there. I think at a strategic level where this amendment is pushing these technologies is absolutely to the benefit of U.S. businesses and that is why we have heard so much from them.

Senator RISCH. That is clarifying. Thank you. I appreciate it.

One more question on China having to do with tuna fishing. Do they operate under a similar treaty with these countries or not?

Dr. THOMPSON. My understanding is they do not have a similar multilateral arrangement with these governments and that is part of what I was talking about. The arrangements that they operate under are far less clear and transparent in nature.

Senator RISCH. I get that. I cannot imagine they would not take advantage of that situation, whether it be seasons or amount of catch or anything else.

With all due respect, you said that these would be—my words, not yours—trendsetting or the gold standard or what have you. I cannot imagine China would look to us for that kind of guidance, but one can always be hopeful.

In any event, it does—it has got to be done. I understand that, and I hope it works better than what I think it is going to work.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

I understand Senator Van Hollen is with us virtually. He is not with us virtually.

Okay. Senator Johnson.

Nobody is there? Okay. Our list has expired, it seems.

I just have one—two final questions.

Secretary Thompson, the fishing industry has played a role in developing these amendments to the Tuna Treaty?

Dr. THOMPSON. Absolutely, Chairman. We work very closely with them throughout the negotiations of the amendment, sir.

The CHAIRMAN. In what way do those changes benefit the U.S. fishing industry?

Dr. THOMPSON. Sir, if you could just give me one moment.

The CHAIRMAN. Sure.

I am sure our second panel can answer that, but—

Dr. THOMPSON. Thank you, Chairman, and sorry for the delay.

The CHAIRMAN. No problem.

Dr. THOMPSON. There are several beneficial aspects of this that I can go through quickly. I think the next panel can speak in more detail.

First, I would say that portions of the high seas are no longer covered under the treaty area which is deleted in these amendments. That means the amendments will eliminate a requirement under the treaty for U.S. vessels to obtain a license to fish on portions of the high seas.

Secondly, individual vessel owners make commitments each year to purchase up front fishing days in the waters of the Pacific Island parties. Under the previous model, the entire U.S. purse seine fleet was obligated to contribute towards a lump sum total price for fishing access each year.

The new, more flexible, model empowers individual vessel owners to decide how many days to buy or not buy, depending on their own economic and operating conditions, and to be individually accountable for those commitments.

Finally, I would say the new model for fishing access also empowers U.S. industry to negotiate and purchase additional bilateral days with individual island parties and they get to do that directly, removing U.S. Government officials from serving as intermediaries in what are really purely commercial negotiations.

Thank you.

The CHAIRMAN. Thank you.

Okay. Now I understand Senator Van Hollen is online. Senator Van Hollen?

Senator VAN HOLLEN. Thank you. Thank you, Mr. Chairman, and thank you, all of you, for your testimony on these different proposals.

I have a couple questions regarding the Kigali Amendment.

Dr. Thompson, according to a 2021 report from the U.S. Department of Energy, we see that energy efficiency technologies and services employ over 2.1 million Americans and that efficiency workers manufacture, sell, and install products, build well-insulated buildings, and weatherize homes to save energy and reduce energy bills, and in order to phase down HFCs in refrigerants and installation materials, we will rely on this technological innovation of our domestic manufacturing workforce.

A study from the University of Maryland, my home state, their study on inter-industry forecasting project estimates that joining Kigali and its global implementation will result in 33,000 new domestic manufacturing jobs.

Can you share any insights you have on how ratifying the Kigali Amendment and introducing new, more efficient—energy efficient technologies can support the expansion of our energy efficiency workforce?

Dr. THOMPSON. Thank you, Senator, and I am familiar with the study that you cite.

I would, perhaps, say two things. I think, first, you mentioned the 33,000 additional jobs. We have seen the same estimate and I think that stems from a couple of things.

One, as I said before, the Kigali Amendment is really pushing global markets towards technologies where the U.S. is a global leader and we are going to be advantaged without a doubt by that, and that should help us increase our market share in exports of this type of equipment, especially to developing countries and many of those developing countries are still growing rapidly and, in particular, in air conditioning and refrigeration are—have rapid growth in those particular industries in terms of consumers purchasing those products.

There is, as you said, a strong energy efficiency linkage here that will play out over time. Maybe what I would say is, going back a little bit, under the Montreal Protocol, as we have done previous technology transitions, the Montreal Protocol is really primarily focused on the refrigerant transition, but in doing so what we have seen much more broadly is that that modernization effort to move to new technology and new refrigerants has also resulted in each new generation with improved energy efficiency in equipment.

So I think there are, certainly, as a part of this opportunities to see energy efficiency improvements and to also see some of the strength in job—U.S. jobs to support those gains.

Thank you.

Senator VAN HOLLEN. Thank you, and that addition in American jobs in this area, as you say, will be matched by U.S. exports. I mean, these are areas—these technologies are areas where U.S. businesses are playing a leading role.

That same University of Maryland report that I cited also estimates that the global implementation of Kigali will result in \$8.4 billion a year of increased U.S. exports and \$12.5 billion of increased economic output per year.

Are those figures in line with your own internal estimates?

Dr. THOMPSON. Thank you, Senator. I think, certainly, we would concur with the direction of those benefits. We have not conducted our own internal estimate of those specific figures.

In fact, we have looked at that study and we have consulted extensively with industry throughout the negotiations of the Kigali Amendment and, in fact, that that was a major driver of what we wanted to achieve in those negotiations was to have this push towards more environmentally benign technologies and to do it in a way that benefited U.S. businesses and the U.S. economy.

Thank you.

Senator VAN HOLLEN. Thank you. I appreciate it.

Thank you, Mr. Chairman. That is all I have.

The CHAIRMAN. Thank you.

Senator Van Hollen, would you have cited that report if it was not the University of Maryland?

Senator VAN HOLLEN. I am not sure, if it was from New Jersey. Mr. Chairman, I am happy to share the credit with—

[Laughter.]

The CHAIRMAN. We are very happy the University of Maryland did that research. I think it speaks very strongly to the case. Thank you very much.

All right. No other members seeking recognition, with the thanks of the committee this panel is excused and we will bring up our second panel.

Having heard from government experts on the importance of international cooperation in these areas, I want to welcome our two industry experts, each to testify on the Kigali Amendment and the South Pacific Tuna Treaty.

Our witnesses know firsthand how U.S. manufacturers and business in their sectors will benefit from the Senate approving the Kigali Amendment and the amendments to the Tuna Treaty, respectively, and the risks of not approving them.

Stephen Yurek is the CEO of the Air Conditioning, Heating, and Refrigeration Institute—AHRI—based in Arlington, Virginia, one of the largest trade associations in the nation, representing more than 300 heating, water heating, ventilation, air conditioning, and commercial refrigeration manufacturers within the global HVACR industry.

Jim Sousa is a long-serving director of GS Fisheries and president of the American Tunaboat Association—ATA—which represents the owners and operators of the large-scale tuna purse seine fleet that operates in the Pacific Ocean.

With that, and our thanks for your appearance and sharing your expertise, let me first turn to Mr. Yurek. Your full statement will be included in the record. You can summarize it more or less in 5 minutes. We would appreciate it so we can ask you questions.

You are recognized.

**STATEMENT OF STEPHEN YUREK, PRESIDENT AND CEO, AIR-  
CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE  
[AHRI], ARLINGTON, VIRGINIA**

Mr. YUREK. Thank you, Chairman Menendez, Ranking Member Risch, and members of the committee for inviting me to testify today.

My name is Stephen Yurek and I am the president and CEO of the Air Conditioning, Heating, and Refrigeration Institute. AHRI's 320 members manufacture safe, efficient, and innovative air conditioning, space heating, water heating, and commercial refrigeration equipment for sale in North America and for export around the world.

With a U.S. annual economic activity of approximately \$256 billion and employing more than 1.3 million people, I urge the United States Senate to provide its advice and consent and approve the Kigali Amendment, paving the way for its ratification by the United States.

AHRI and its member companies strongly support U.S. ratification of the amendment along with numerous other major U.S. industry associations, including the American Chemistry Council, the National Association of Manufacturers, and the U.S. Chamber of Commerce.

Ratification serves critical business needs for American manufacturers and workers. There is no credible scenario where the failure of the United States to ratify Kigali helps American manufacturers and workers.

To the contrary, failure to ratify materially harms their interests and compromises their future. This amendment will drive the growth of U.S. businesses, stimulate investment in the U.S. economy, sustain U.S. technology leadership, open export markets to U.S. products, protect U.S. workers and consumers, and ensure U.S. interests shape future international agreements.

To sustain their advantage and expand their share of the global market, U.S. manufacturers have invested billions in next-generation technologies and spent more than a decade advocating for worldwide phase down of HFCs.

Today, American factories manufacture market-leading next-generation products and a federal law is phasing down domestic HFC production and consumption under the American Innovation and Manufacturing Act of 2020.

Ratifying Kigali extends the commercial advantages of the AIM Act to U.S. products in export markets around the world. These export markets represent the most significant growth opportunity for U.S. manufacturers.

With ratification, the U.S. share of these export markets is projected to increase by more than \$6 billion annually, supporting approximately 17,000 new U.S. manufacturing jobs.

Kigali represents a successful effort by the United States, with the support of American manufacturers, to establish the policy platform for international trade by creating and maintaining a level playing field in the global market, which favors superior performing American-made products.



Failure to ratify would close those markets to U.S. manufacturers after 2032 since the Montreal Protocol prohibits trade with countries not a party to the protocol or its amendments.

Ratification signals support for U.S. technology leadership, encourages global competitors to follow our lead, and assures capturing the projected economic benefits for the U.S. industry, workers, and the overall economy.

The Montreal Protocol and all four prior amendments were ratified by the United States with broad bipartisan support under both Republican and Democratic administrations.

Fear of higher costs accompanied past refrigerant transitions, but, in fact, equipment prices did not increase materially over the course of those transitions since refrigerants comprise such a small part of the overall system cost.

Studies show no significant increases in equipment prices even if substitute refrigerant costs are multiples of the current costs.

The AIM Act phases down HFCs in the United States. The Kigali Amendment phases down HFCs around the world. The world's leading producers of substitutes for HFCs are in Louisiana, New Jersey, Texas, and elsewhere in the United States.

The world's fastest growing markets for refrigerators and air conditioners are overseas. U.S. ratification of the Kigali Amendment forces those markets into HFC substitutes.

This is a viciously competitive, globally integrated industry, and ratification increases the U.S. share of overseas markets and benefits U.S. manufacturers.

Again, the AIM Act helps U.S. manufacturers within our borders. The Kigali Amendment helps U.S. manufacturers overseas. Both are essential to sustaining U.S. competitiveness and technology leadership.

Thank you for the opportunity to testify today and I am available to answer any questions.

[The prepared statement of Mr. Yurek follows:]

#### **Prepared Statement of Mr. Stephen R. Yurek**

##### INTRODUCTION

Chairman Menendez, Ranking Member Risch, and Members of the Committee, thank you for inviting me to testify on this important topic. My name is Stephen Yurek, and I am the President and CEO of the Air-Conditioning, Heating, and Refrigeration Institute (AHRI).

AHRI has 320 member companies that manufacture quality, safe, efficient, and innovative residential, commercial, and industrial air conditioning, space heating, water heating, and commercial refrigeration equipment and components for sale in North America and in export markets around the world.

It is an internationally recognized advocate for the heating, ventilation, air conditioning, and refrigeration (HVACR) industry and certifies the performance of many of the products manufactured by its members. In North America, the annual economic activity resulting from the HVACR industry is approximately \$256 billion. In the United States alone, AHRI's members, along with distributors, contractors, and technicians, employ more than 1.3 million people.

I am here to testify as to the importance of the Kigali Amendment to the Montreal Protocol and to urge the United States Senate to exercise its duty under Article II of the Constitution to provide its advice and consent and approve the Kigali Amendment, paving the way for its ratification by the United States.

##### AMERICAN MANUFACTURERS STRONGLY SUPPORT KIGALI RATIFICATION

AHRI and its member companies strongly support U.S. ratification of the Kigali Amendment. Numerous other major U.S. trade and industry associations similarly

support ratification, including the Alliance for Automotive Innovation, the Alliance for Responsible Atmospheric Policy, the American Chemistry Council, the Association of Home Appliance Manufacturers, the Heating, Air-conditioning & Refrigeration Distributors International, the National Association of Manufacturers, the Plumbing-Heating-Cooling Contractors—National Association, the Semiconductor Industry Association, and the U.S. Chamber of Commerce.

Ratification serves critical business needs for American manufacturers and workers. There is no credible scenario where the failure of the United States to ratify the Kigali Amendment helps American manufacturers and workers. To the contrary, failure to ratify materially harms their interests and compromises their future.

The Kigali Amendment will drive the growth of U.S. businesses, stimulate investment in the U.S. economy, sustain U.S. technology leadership, open export markets to U.S. products, protect U.S. workers and consumers, and ensure U.S. interests will shape future international agreements.

#### KIGALI RATIFICATION STRENGTHENS U.S. COMPETITIVENESS IN KEY EXPORT MARKETS

##### *Hydrofluorocarbons (HFCs)*

Hydrofluorocarbons (HFCs) are compounds used as refrigerants, foam-blowing agents, etchants, solvents, propellants, and fire suppressants. HFCs were commercialized in the 1990s as substitutes for ozone depleting substances (ODSs) including chlorinated and brominated chemical compounds such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and halons which were phased out under the Montreal Protocol.

In the United States, an estimated 230,000 tons of HFCs are produced and imported each year. Of this amount, the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry uses an estimated 70 percent for refrigeration and air conditioning applications in American homes and businesses.

The Kigali Amendment provides for a global phase down of the production (*i.e.*, manufacture) and the consumption (*i.e.*, imports net of exports) of HFCs.

##### *HFC Substitutes & Export Markets*

The market for next generation products and equipment (*i.e.*, HFC substitutes), is globally integrated, highly competitive, and rapidly growing.

To sustain its technological advantages and expand its share of the global market, U.S. manufacturers have invested billions in next generation technologies and—beginning in the mid-2000s—spent more than a decade advocating for a worldwide phase down of HFC production and consumption. This culminated in the adoption of the Kigali Amendment to the Montreal Protocol in October 2016.

Today, American factories now manufacture market-leading next generation equipment and refrigerants, and federal law is phasing down domestic HFC production and consumption under the American Innovation and Manufacturing Act of 2020 (AIM Act). These are unambiguous wins for American manufacturing and pro-business domestic policymaking.

Ratifying the Kigali Amendment extends the commercial advantages of the AIM Act to U.S. HVACR products and equipment in export markets around the world, while U.S. manufacturers lead in new technology development. These advantages are necessary to expanding the U.S. share of these markets, the largest of which are projected to grow by at least 6 percent per year between now and 2030.<sup>1</sup> These export markets represent the most significant growth opportunity for U.S. manufacturers of HVACR equipment.

With Kigali ratification, the U.S. share of these export markets is projected to increase from 7.2 percent to 9 percent.<sup>2</sup> This translates to an increase in net exports worth \$6 billion annually, supporting approximately 17,000 of the 33,000 new manufacturing jobs created by the AIM Act.<sup>3</sup> Failure to ratify Kigali risks shrinking the U.S. share of export markets to 6.2 percent.<sup>4</sup>

This is because, while many of the fastest growing export markets still use HFCs or HFC predecessors, U.S. ratification will draw these markets into the Kigali Amendment and drive them out of HFCs and toward next generation technologies, many of which are made in the United States.

##### *U.S. Leadership in Multilateral Forums*

The Kigali Amendment represents a successful effort by the United States, with the support of American HVACR manufacturers, to establish the policy platform for international trade in HFCs and HFC substitutes. If the United States does not ratify the Kigali Amendment, these opportunities for market growth will be lost and the next round of international trade practices will be more heavily influenced by foreign competitors—to the detriment of American economic, trade, and competitive interests.

U.S. ratification also prevents foreign governments and international institutions from favoring HFC substitutes made by foreign competitors. Indeed, failure to ratify means foreign competitors can tilt the playing field toward next generation technologies made outside the United States.

That is, as transitions in refrigerant technologies occur, U.S. ratification allows the United States to use its standing within the Montreal Protocol and related international forums to maintain a technology neutral policy landscape for next generation technologies. This creates and maintains a level playing field in the global HVACR market, which favors superior-performing American-made products and equipment.

#### *Prohibition on Trade With Non-Parties*

The Montreal Protocol prohibits trade with countries not party to the Protocol or its amendments. This applies to countries not party to the Kigali Amendment after 2032, meaning U.S. manufacturers could lose access to export markets in about a decade.

However, as a practical matter, because importing countries want to be assured continuous access to Kigali-compliant products and services, continued uncertainty associated with U.S. ratification could cause U.S. manufacturers to lose market share sooner.

Ratifying the Kigali Amendment eliminates the risks of trade disruption and loss of market access for U.S. manufacturers.

#### *Protecting American Investments in Innovation*

American companies hold patents both in the United States and abroad on next generation refrigerant technologies. Foreign competitors have benefitted from the delay in U.S. ratification of the Kigali Amendment, as they know the clock is running for intellectual property protection on American-made products and equipment. Their enthusiasm for a global HFC phase down will increase significantly once the HFC substitutes made by American companies lose their patent protection.

The failure to ratify the Kigali Amendment—and thereby ensure its enforcement beyond U.S. borders—serves to undermine American investment in innovation and proprietary technologies. Conversely, U.S. ratification of Kigali signals support for U.S. technology leadership, encourages global competitors to follow our lead, and assures capture of the projected economic benefits U.S. industry, workers, and the overall U.S. economy.

### THE MONTREAL PROTOCOL CONSISTENTLY ATTRACTS BROAD BIPARTISAN SUPPORT

#### *Overview*

For the past three decades, the U.S. HVACR industry has benefited from the unwavering bipartisan support of presidential administrations and leadership in Congress in the development, implementation, and administration of sensible federal policies involving refrigeration and air conditioning products and equipment.

Indeed, there are few areas where American companies can make multi-billion-dollar investments in research and development fully confident the policy landscape will evolve in step with American innovation and technology leadership.

Fortunately, the U.S. HVACR industry has significant experience with refrigerant transitions. In the 1980s, the issue of stratospheric ozone depletion led to our industry making substantial investments in R&D to develop new classes of refrigerants that had no effect on the ozone layer—largely, HFCs.

In transitioning to HFCs in the 1990s and early 2000s, we introduced improvements in equipment design and performance, especially greater energy efficiency.

By leading the way with innovation and technology, we addressed an important environmental issue, expanded our market share at home and abroad, and provided American consumers with world-leading refrigeration and air conditioning equipment without meaningful increases in cost. Indeed, new equipment generally costs less to operate, due to energy efficiency gains made in conjunction with the transition, and also less to service and maintain, due to smaller refrigerant charge sizes and fewer leaks.

The transition from HFCs into next generation refrigerant technologies—many of which are made in the United States—represents an opportunity to continue to lead the world in these technologies and reap the benefits this leadership affords to American manufacturers, workers, consumers, and economy.

#### *The Montreal Protocol*

In the 1980s, the U.S. HVACR industry worked constructively with the Reagan administration and the George H. W. Bush administration to develop policies capable of guiding an orderly transition into next generation refrigerant technologies.

These policies took the form of the Montreal Protocol on Substances that Deplete the Ozone Layer, negotiated by President Reagan in 1987 and ratified by the United States Senate in 1988 by a vote of 83–0.<sup>5</sup> The Montreal Protocol was implemented in the United States under Title VI of the Clean Air Act, which was signed into law by President George H. W. Bush as part of the Clean Air Act Amendments of 1990.<sup>6</sup>

All four prior amendments to the Montreal Protocol were ratified by the United States with broad bipartisan support. The London Amendment of 1990 was ratified by the United States in November 1991 and entered into force in 1992. The Copenhagen Amendment of 1992 was ratified by the United States in November 1993 and entered into force in 1994. The Montreal Amendment of 1997 was ratified by the United States in October 2002 after having entered into force in 1999. The Beijing Amendment of 1999 was ratified by the United States in October 2002 after having entered into force in 2002.

#### *The Kigali Amendment*

The origins of the Kigali Amendment date to the George W. Bush administration in the mid-2000s, in response to multi-billion-dollar investments by the U.S. HVACR industry in the development of next generation refrigerant technologies. These technologies had the potential to replace the HFCs, with the promise of performing better in equipment and facing fewer and less stringent regulatory requirements. At that time, HFCs were regulated under the Kyoto Protocol and included in proposed cap-and-trade bills before Congress, which would have saddled HVACR manufacturers with disproportionately costly compliance obligations and potentially undermined the competitiveness of our domestic manufacturing base.

By contrast, phasing down the production and consumption of HFCs under the Montreal Protocol represents a practical, common sense regulatory approach that could be modeled on the successful transitions from earlier generations of refrigerant technologies, including CFCs, HCFCs, and halons. At the time, this was a radical idea. The Bush administration, in partnership with our industry, was an early champion of this approach and after a decade of multilateral negotiations spanning both a Republican and a Democratic administration culminated in the Kigali Amendment to the Montreal Protocol.

### KIGALI RATIFICATION HELPS PROTECT AMERICAN CONSUMERS

#### *Overview*

For decades, consumers and business owners have benefitted from the technological innovation of the U.S. HVACR industry. Fears of higher costs accompanied past transitions from CFC and HCFC refrigerants, but in fact refrigerant and equipment prices did not increase materially over the course of those transitions.<sup>7</sup> Indeed, such fears proved to be unfounded.

#### *Past Transitions Produced Innovation in Equipment Design and Improved Performance*

Consumers and business owners rarely noticed the CFC and HCFC transitions, as the refrigerant represents less than 1 percent of the overall cost for air conditioning systems in homes<sup>8</sup> and chiller systems for commercial buildings.<sup>9</sup> In addition, supplies of CFC and HCFC refrigerants remain available to this day for servicing older equipment.<sup>10</sup>

The next generation of equipment is more energy efficient, uses smaller amounts of refrigerant, and has fewer leaks—meaning it costs less to run and to service. Indeed, we anticipate that many consumers and business owners will choose to replace older equipment due to improvements in energy efficiency, irrespective of the type of refrigerant used.

#### *Predictions of Consumer Harm in Past Refrigerant Transitions Proved Totally Wrong*

When HFC–134a was introduced in the early 1990s, the predictions for its long-term pricing were between \$4 and \$12 per pound (\$7 to \$20 per pound in today's dollars, adjusted for inflation).<sup>11</sup> Today, bulk HFC–134a is priced at approximately \$3 per pound in today's dollars.<sup>12</sup>

Also, in the early 1990s, some predicted the cost of recharging an automobile's AC system would be \$200 by the middle of the decade (\$318 in today's dollars, adjusted for inflation).<sup>13</sup> Today, that cost is between \$123 and \$156 in today's dollars.<sup>14</sup>

#### *Consumers and Small Business Owners Benefit From an Orderly Transition Out of HFCs*

Many U.S. manufacturers have already announced new product and equipment lines using next generation refrigerants, such as HFOs. With an orderly transition

from HFCs, the average price among all refrigerants is expected to be approximately \$7 per pound.<sup>15</sup> HFO refrigerants are currently priced 2 percent to 7 percent higher than HFCs, but are expected to be priced approximately the same early in the transition.<sup>16</sup>

Experience with past transitions has shown that as a transition progresses, manufacturing costs and consumer prices are reduced due to economies of scale, with larger facilities coming online to produce new classes of refrigerants to meet growing demand. Plus, some next generation refrigerants are simpler versions of current products, which also yields reductions in cost.

Moreover, new hydrofluoro-olefin (HFO)-based products and equipment can be up to 18 percent more energy efficient, which further lowers operational costs.<sup>17</sup> New products and equipment will have smaller refrigerant charge sizes and lower leak rates, which also lowers maintenance and servicing costs.<sup>18</sup>

Because refrigerants comprise such a small part of overall system cost, estimates show no significant increases in equipment prices even if substitute refrigerants costs are multiples of current HFC costs.<sup>19</sup>

#### CONCLUSION

The AIM Act phases down HFCs in the United States. The Kigali Amendment phases down HFCs around the world. The world's leading producers of substitutes for HFCs are in Louisiana, New Jersey, Texas, and elsewhere in the United States. The world's fastest growing markets for refrigerators and air conditioners are overseas. U.S. ratification of the Kigali Amendment forces those markets into HFC substitutes. This is a viciously competitive, globally integrated industry, and ratification increases the U.S. share of overseas markets and benefits U.S. manufacturers.

The AIM Act helps U.S. manufacturers within our borders. The Kigali Amendment helps U.S. manufacturers overseas. Both are essential to sustaining U.S. competitiveness and technology leadership.

#### Notes

<sup>1</sup>“Economic Impacts of U.S. Ratification of the Kigali Amendment.” *Industry Forecasting at the University of Maryland (INFORUM) and JMS Consulting*, 2018.

<sup>2</sup>*Id.*

<sup>3</sup>*Id.*

<sup>4</sup>*Id.*

<sup>5</sup>“The Montreal Protocol on Substances that Deplete the Ozone Layer, done at Montreal on September 16, 1987, to the Vienna Convention for the Protection of the Ozone Layer.” *United States, Congress, Senate*. Government Printing Office, 1988, 100th Congress.

<sup>6</sup>“S.1630—Clean Air Act Amendments of 1990.” *United States, Congress*. Government Printing Office, 1990, 101st Congress.

<sup>7</sup>“Refrigerants: Market Trends and Supply Chain Assessment.” *Clean Energy Manufacturing Analysis Center*, 2020. <https://www.nrel.gov/docs/fy20osti/70207.pdf>. See also “The High Cost of Cool: The Economic Impact of the CFC Phaseout.” Lieberman, Ben. *Competitive Enterprise Institute*, 1994, <https://cei.org/sites/default/files/Ben%20Lieberman%20-%20The%20High%20Cost%20of%20Cool%20The%20Economic%20Impact%20of%20the%20CFC%20Phaseout%20in%20the%20United%20States.pdf>.

<sup>8</sup>“TECHNICAL SUPPORT DOCUMENT: ENERGY EFFICIENCY PROGRAM FOR CONSUMER PRODUCTS: Residential Central Air Conditioners and Heat Pumps.” Docket No. EERE-2014-BT-STD-0048-0098. *Department of Energy*, 2016, Table 8.2.39. “Consumer Life-Cycle Cost Impacts of Energy-Efficiency Standards for Residential-Type Central Air Conditioners and Heat Pumps.” Rosenquist et. al. *Lawrence Berkeley National Laboratory*, 2001, <https://eta.lbl.gov/publications/consumer-life-cycle-cost-impacts>.

<sup>9</sup>“Purchasing Energy-Efficient Water-Cooled Electric Chillers.” *Department of Energy, Office of Energy Efficiency & Renewable Energy*, <https://www.energy.gov/eere/femp/purchasing-energy-efficient-water-cooled-electric-chillers>.

<sup>10</sup>“Purchasing Energy-Efficient Air-Cooled Electric Chillers.” *Department of Energy Office of Energy Efficiency & Renewable Energy*, <https://www.energy.gov/eere/femp/purchasing-energy-efficient-air-cooled-electric-chillers>.

<sup>11</sup>“The High Cost of Cool: The Economic Impact of the CFC Phaseout.” Lieberman, Ben. *Competitive Enterprise Institute*, 1994, <https://cei.org/sites/default/files/Ben%20Lieberman%20-%20The%20High%20Cost%20of%20Cool%20The%20Economic%20Impact%20of%20the%20CFC%20Phaseout%20in%20the%20United%20States.pdf>.

<sup>12</sup>“How Much is R-134a Refrigerant Per Pound in 2019?” Johnson, Alex. *RefrigerantHQ*, 2019, <https://refrigeranthq.com/how-much-is-r-134a-per-pound-in-2019/>.

<sup>13</sup>*Id.* at 15.

<sup>14</sup>“AC Recharge Costs—Know what price you should pay to get your vehicle fixed.” *Repair Pal*, 2019, <https://repairpal.com/estimator/air-conditioning-recharge-cost>.

<sup>15</sup>“Consumer Cost Impacts of U.S. Ratification of the Kigali Amendment.” *Industry Forecasting at the University of Maryland (INFORUM) and JMS Consulting*, 2018.

<sup>16</sup>*ibid.*

<sup>17</sup>A comparative study on the performance of HFO-1234yf and HFC-134a as an alternative in automotive air conditioning systems.” Daviran et. al. *Applied Thermal Engineering*, Volume 110, 2017. <https://doi.org/10.1016/j.applthermaleng.2016.09.034>. pp. 1091–1100.

<sup>18</sup>Decision XXIX/10 Task Force Report on Issues Related To Energy Efficiency While Phasing Down Hydrofluorocarbons. *Report of the Technology and Economic Assessment Panel. Montreal Protocol on Substances that Deplete the Ozone Layer*, May 2018. [https://ozone.unep.org/sites/default/files/2019-04/TEAP\\_DecisionXXIX-10\\_Task\\_Force\\_EE\\_May2018.pdf](https://ozone.unep.org/sites/default/files/2019-04/TEAP_DecisionXXIX-10_Task_Force_EE_May2018.pdf)

<sup>19</sup>*Id.* at 11.

The CHAIRMAN. Thank you very much.  
Mr. Sousa.

**STATEMENT OF JIM SOUSA, PRESIDENT OF THE AMERICAN TUNABOAT ASSOCIATION, DIRECTOR AT GS FISHERIES, SAN DIEGO, CALIFORNIA**

Mr. SOUSA. Chairman Menendez, Ranking Member Risch, distinguished members of the committee, I am Jim Sousa, president of the American Tunaboat Association, which represents the U.S. Pacific purse seine tuna fleet that operates under the Tuna Treaty.

A large majority of the ATA members are multigenerational family businesses with a long history in the U.S. fishing industry. My own family has been involved in the industry for over 90 years, starting with my grandfather, who came to San Diego in 1931.

Even before that, my family was a family of fishers dating back to the origins in Portugal generations ago. The same is true for many of my ATA colleagues whose families share that same fishing heritage, whether they came from Portugal, Italy, Croatia, Japan, or elsewhere.

Mr. Chairman, ATA strongly supports the South Pacific Tuna Treaty and the amendments to the treaty you are considering here today. We urge this committee and the full Senate to take the necessary steps to provide advice and consent to ratification.

For the small island developing states across the Pacific, fisheries’ resources are often the most significant natural resource available to support their economic development.

Engagement in the fisheries sector is often seen by the Pacific Island states as a litmus test for the commitment of other states to support their development aspirations.

Swift action by this committee and the full Senate will demonstrate the commitment of the United States to maintaining relationships established under the treaty framework.

This is particularly important now as China continues to expand its influence and presence across the Pacific. Because ATA vessels fish widely across the Pacific Ocean, we see the impact of China’s activities in the region firsthand.

Maintaining a strong and economically viable U.S. fishing fleet in the region is vital to the United States’ efforts to counter China’s growing influence across the Pacific.

Mr. Chairman, in addition to a range of technical changes, the amendments before the committee resolve two fundamental problems that have previously threatened not only the future of the treaty, but the future of the U.S. fleet itself.

First, the amendments remove the requirements that the U.S. industry payment be paid as a collective lump sum. Historically, the U.S. fleet paid a lump sum to the Pacific Island states for access to fish under the treaty.

In late 2015, some U.S. vessel owners were unable to pay their share of the collective licensing fees and, as a result, the entire U.S. fleet was shut down.

Under these amendments, each vessel is responsible for a specific payment. If a vessel cannot pay, it does not get a license, but the other vessels in the fleet will not be adversely affected.

Second, the amendments remove the provision that U.S. vessels must have a treaty license to fish in the western and central Pacific Ocean, including large areas of high seas that previously fell within the defined treaty licensing area.

Among other things, U.S. vessels no longer need a treaty license to fish these areas of the high seas. This is a critically important change for the U.S. fleet that, absent action by the Senate, has not yet been fully implemented.

Although some changes are being implemented on a provisional basis, Senate action remains vital. Without this action and appropriate amendments to the implementing legislation, the U.S. fleet may never fully realize the benefits the U.S. delegation worked so hard to achieve through the 2016 negotiations.

Ensuring full range of these benefits is critical to the future of the U.S. fleet, which, as a result of these and other issues, has seen the number of vessels decrease substantially in recent years.

Mr. Chairman, if you may allow me, I will conclude with my personal observation.

My first trip to the Pacific Islands was in 1989. At that time, the Pacific Island leaders were of an older generation that showed great respect for the United States due to the sacrifices of this country in liberating the Pacific Islands during World War II and in helping rebuild the destruction left behind in many places.

Today, Mr. Chairman, the United States is viewed in a different way by a new generation. In many places, this generation sees China rather than the United States as more committed to the future of the Pacific Islands. This perception is something that must be addressed and reversed.

Thank you for the opportunity to testify before you today. I am happy to answer any questions.

[The prepared statement of Mr. Sousa follows:]

**Prepared Statement of Mr. James Sousa**

Chairman Menendez, Ranking Member Risch, Distinguished Members of the Committee: I am Jim Sousa, President of the American Tunaboat Association (ATA). ATA represents the owners and operators of the large-scale tuna purse seine fleet that operates in the Pacific Ocean under the Treaty you are considering here today. The large majority of ATA Members are family-owned, multi-generational businesses that have a long and distinct history as a significant component of the U.S. fishing industry. Speaking personally, my own family has been involved in the industry for over 90 years, starting with my grandfather who came to San Diego in 1931. Even before that, my family was a family of fishers dating back to their origins in Portugal generations ago. The same is true for many of my ATA colleagues whose families share that same fishing heritage, whether they came from Portugal, Italy, Croatia, Japan, or elsewhere.

Mr. Chairman, ATA strongly supports the South Pacific Tuna Treaty and the amendments to the Treaty you are considering here today. The industry's commitment to the Treaty is reflected in the fact that over the past decade, industry payments to the Pacific Islands for access under the Treaty total hundreds of millions of dollars. We urge this Committee and the full Senate to take the necessary steps to provide advice and consent to ratification, and for the Congress to pass cor-

responding amendments to the relevant implementing legislation to ensure that the benefits of these Treaty amendments can be fully realized by all parties.

Since its inception in 1987, the Treaty has provided the basis for the U.S. purse seine fleet to fish across wide areas of the Pacific Ocean in close cooperation with the Pacific Island States that are parties to the Treaty. As a result, the Treaty has served as more than just a fisheries access agreement; it is a cornerstone of the economic and political relationship between the United States and the Pacific Island States that are parties to the Treaty. For the small island developing States across the Pacific, fisheries resources, and tuna in particular, are often the greatest, if not the only, natural resource available to support their economic development. As a result, engagement in the fisheries sector is often seen by the Pacific Island States as a litmus test for the commitment of other States to support their development aspirations. Through its history, the Treaty has been the single most important means of engagement between the United States and these Pacific Island States on a wide range of fisheries issues and related matters.

Swift action by this Committee and the full Senate will be a clear demonstration of the commitment of the United States to maintaining the relationships established under the Treaty framework during these last 35 years. This is particularly important now as China continues to expand its influence and presence across the Pacific, often using the fisheries sector as the opportunity for engagement. Because ATA vessels fish across wide swaths of the Pacific Ocean, we see the impact of China's activities in the region firsthand. China is actively implementing a specific set of policies, programs, subsidies, and investments focusing on the fisheries sector because they recognize the importance of this sector to the economic development and food security of these small and vulnerable island States. Maintaining a strong and economically viable U.S. fishing fleet, operating throughout the region, is vital in helping the United States' efforts to counter China's growing influence across the Pacific region.

Mr. Chairman, the amendments to the Treaty being considered by the Committee today were negotiated to address specific deficiencies in the Treaty that, just a few years ago, threatened not only the future of the Treaty, but the very future of the U.S. fleet. In early 2016, due to what appeared to be an irreconcilable impasse in negotiations to extend the Treaty, the United States notified the Pacific Islands Parties of its intent to withdraw from the Treaty. In response, the Pacific Island States quickly reengaged in negotiations to resolve outstanding differences. Those negotiations, which were concluded in June of 2016, resulted in the amendments before the Committee today. In addition to a range of technical changes, these amendments resolve two fundamental problems of the Treaty that had previously put the U.S. fleet in an increasingly untenable negotiating position.

First, the Amendments remove the requirement that the U.S. industry payment be paid as a collective lump sum. Historically, the U.S. fleet made a lump sum payment to the Pacific Island States for access to fish under the Treaty. In 2008, that sum began to increase dramatically as the Pacific Island States implemented a new "Vessel Day Scheme" to maximize their revenue from the fisheries in waters under their jurisdiction. In late 2015, some vessel owners were unable to pay their share of the collective licensing fees for the following year and, as a result, the entire *U.S. fleet* was shut down.

The amendments resolve this problem by no longer requiring a lump sum payment from the industry. Instead, each vessel is responsible for a specific payment. If a vessel can't pay, it doesn't get a license, but the other vessels in the fleet will not be adversely affected.

Second, the amendments remove the provision that U.S. vessels *must* have a Treaty license, issued by the Treaty Administrator at the Forum Fisheries Agency, in order to fish in vast portions of the Western and Central Pacific Ocean, including large areas of the high seas that previously fell within the defined Treaty "Licensing Area" (see map at Figure 1). These high seas areas have been important and productive fishing grounds for the U.S. fleet, and they provide a critical alternative to the increasingly high cost of access to fish in waters under the jurisdiction of the Pacific Island States. The amendments modify the definition of "Licensing Area" so that U.S. vessels no longer need a Treaty license to fish these areas of the high seas. Additionally, the amendments allow U.S. vessels to fish with a Treaty license or to make separate commercial arrangements outside the Treaty with individual Pacific Island States for access in waters under their jurisdiction under agreed terms.

These two aspects in the original Treaty allowed the Pacific Island States to dictate negotiating terms on a "take it or leave it" basis, which often left the industry with no choice but to agree or be shut down. The amendments resolve these problems by providing U.S. vessels with more options, greater flexibility, and the ability to negotiate for fishing access on more equitable terms.



Although some of the changes described above are being implemented on a provisional basis, action by the Senate for advice and consent to ratification remains vital. Without this action and appropriate amendments to the implementing legislation, the U.S. fleet may never fully realize the benefits the U.S. delegation worked so hard to obtain through the 2016 negotiations. Ensuring the full range of these benefits is critical to the future of the U.S. fleet which, as a result of these and other issues, has seen the number of vessels decrease substantially in recent years.

Another key aspect of the Treaty, Mr. Chairman, is the relationship between the U.S. tuna purse seine fleet and the U.S. Pacific Territory of American Samoa, which serves as the home port for the large majority of the U.S. fleet. The economy of American Samoa is overwhelmingly dependent on the tuna industry, which provides over 80 percent of the private sector employment and over 90 percent of exports from the territory. Without a viable U.S. flag tuna fleet based in Pago Pago, the effect on American Samoa's tuna dependent economy would be devastating. Conversely, without a StarKist plant in American Samoa, the operation of the U.S. fleet in the region would not be economically viable.

Mr. Chairman, let me also comment on the state of the conservation and management of the tuna resources in the Western and Central Pacific Ocean that are the target species for the U.S. fleet operating under the Treaty. The press and popular media often highlight the depletion of fisheries resources due to overfishing and adverse impacts of fishing activities on non-target species such as marine mammals, sharks, rays, sea turtles, and other marine life. What never seems to make the press reports is the good news. And the good news here is that all species of tropical tunas being fished in the Western and Central Pacific Ocean (skipjack, yellowfin, and bigeye tunas) are rated as fully sustainable by the International Seafood Sustainability Foundation (ISSF). This means the level of fishing effort by vessels of all countries is below the level that would threaten sustainability of these stocks, and the biomass of the stocks is above the level that would put the stocks at risk. These stocks are managed under the authority of the Western and Central Pacific Fisheries Commission (WCPFC) of which the United States is a full member. In addition to strict fisheries management requirements, the WCPFC has a full range of requirements designed to minimize the impacts of the fishery on the non-target species listed above.

The U.S. fleet is held to the highest standards of accountability and compliance, not only with the requirements of the WCPFC, but with the full range of U.S. laws including the Magnuson-Stevens Fishery Conservation and Management Act, the Marine Mammal Protection Act, the Endangered Species Act, Coast Guard safety and environmental requirements, and other applicable U.S. law and regulations. Moreover, ATA Members are actively engaged with conservation groups to trial new fishing gear and techniques to minimize fishing impacts on non-target species, including improved handling and release techniques for shark, rays, and other species. ATA Members have also adopted a comprehensive policy regarding "industry best practices" for labor standards and working conditions for vessels crews. The absence of a U.S. fleet operating in the region, would simply mean that the United States would import more tuna from countries whose vessels operate at nothing approaching the standards of U.S. vessels.

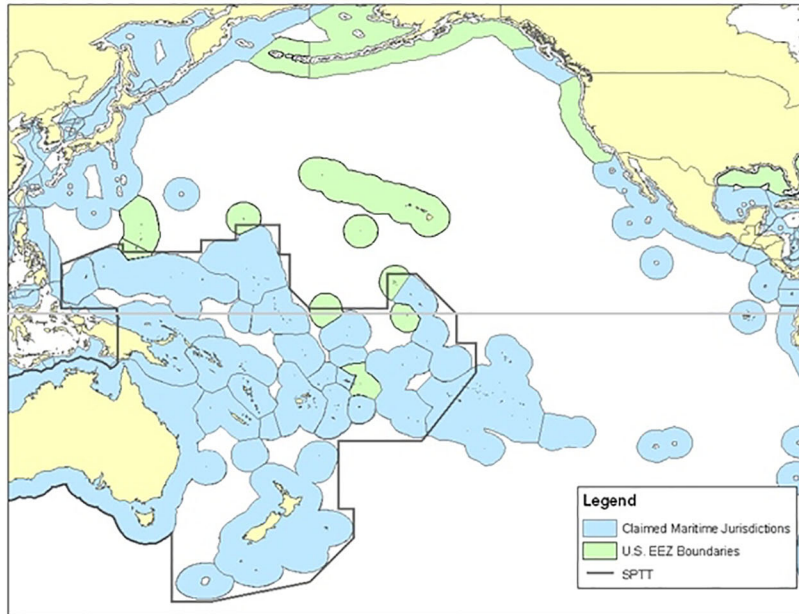
Finally, Mr. Chairman, I hope you will allow me to conclude with a personal observation. My first trip to the Pacific Islands was in 1989. At that time, the Pacific Island leaders were of an older generation, that showed great respect for the United States due to the sacrifices of this country in liberating the Pacific Islands during World War II and in rebuilding from the destruction left behind in many places. Today, Mr. Chairman, the United States is viewed in a different way by a new generation. In many places, this generation sees China, rather than the United States, as more committed to the future of the Pacific Islands. This perception is something that must be addressed and reversed.

For all of these reasons, Mr. Chairman and Distinguished Members of this Committee, ATA and its member companies and vessels express once again our strong support for the Treaty amendments and urge quick action to bring them into full legal effect as soon as possible.

Thank you for the opportunity to testify before you today.

Figure 1. Previous delineation of the “Treaty Area,” prior to the 2016 Amendments.

#### South Pacific Tuna Treaty Boundary



The CHAIRMAN. Thank you. Thank you both. We will start a series of 5-minute rounds.

Let me turn to Kigali, which entered into force in 2019, and while the schedule for phase downs does not begin right away, the barriers to trade restriction and access to markets is just on the horizon.

Mr. Yurek, what risks do you see to your member organization for the United States being a nonparty to Kigali?

Mr. YUREK. I think, as you stated and Dr. Thompson stated, the treaty itself has very high enforcement provisions which would make as of 2033 that there could not be trade. However, this is going to start well before that and the impact on U.S. manufacturers is going to be before 2033.

Since we are going to be exporting our technology and products into those countries that are looking for that expertise, they are going to want to make sure that they are going to then be able to select technologies, products, and other things that are going to be there not just today, but also in the future, and if we are not a party, we will start losing out immediately rather than in 2032. The impact would be great.

The CHAIRMAN. Many, if not most, of your organization’s design and manufacture of equipment and appliances here in the United States, I imagine, that many of those products made in the USA are also built for foreign markets as export goods.

What role has U.S. industry played in the negotiation of Kigali? What about prior amendments to the Montreal Protocol and the protocol itself?

Mr. YUREK. The U.S. industry and the U.S. Government were the leaders and instrumental in the original Montreal Protocol. They were instrumental in all of the amendments, including the Kigali Amendment.

We were talking earlier with Dr. Thompson where it was in 2008, 2009, where the U.S. industry came to the U.S. Government and started the plan to actually come up with the Kigali Amendment that occurred in 2016.

We have been there since the beginning. We have been involved in all the negotiations, and what has been agreed upon in that amendment has been what the U.S. industry wanted as well as the U.S. Government to make sure that not only our technology, but our expertise and the benefit of our U.S. manufacturers and economy would be realized.

The CHAIRMAN. Now, how far ahead are your member companies in manufacturing and marketing to the next generation of what is covered by the Kigali Amendment and as compared to your foreign competitors?

Mr. YUREK. To look at just the refrigerants, the U.S. manufacturers are leading in the alternative refrigerants that are out there. We have spent, just as an industry association, millions of dollars in research to help us get ready for this transition and make sure that we have products as well as refrigerants that would be available not only in the U.S. market, but globally.

So it has been billions that have been spent by U.S. industry in developing this and they want the benefit of being able to sell that technology not only here in the U.S., but also globally.

The CHAIRMAN. If we are in the Kigali and are also helping to set standards we do much better?

Mr. YUREK. We do, and I think the statement, Ranking Member, you were talking about in questioning with Dr. Thompson related to the gold standard, and the U.S. still is in this area.

The U.S. developed the refrigeration technology with Willis Carrier and we have continued to lead in developing that technology and we want to continue to do that in the future as we look at not only implementing Kigali, but also looking at making these products more efficient and addressing the indoor air quality needs that we have seen with the COVID crisis as well, where our products and our technology and expertise is being looked for.

The CHAIRMAN. Studies indicate that consumers may benefit over the long term if we ratify Kigali, and like the Montreal Protocol, Kigali was designed with consumer interests in mind.

Over the long term, do American consumers stand to pay more if we ratify Kigali?

Mr. YUREK. The consumers paying more for our equipment will not be the result of the Kigali Amendment and the changing in refrigerants.

What drives the cost of our products are the raw materials that go into it, which is the copper, the aluminum, the steel and other things, and they are actually going to benefit from the Kigali

Amendment because those raw costs are going up and the expenses.

With the refrigerants they are more productive, they are more efficient, thereby, requiring less of the refrigerant, but also decreasing consumers' energy costs for operating the equipment.

If you look at just Kigali and where the refrigerants are, it is a net benefit. Where they are going to see increases is because of the supply chain issues and the raw materials that go into the products.

The CHAIRMAN. That would happen regardless of Kigali?

Mr. YUREK. Correct.

The CHAIRMAN. If we ratify Kigali, would U.S. consumers need to go out and buy new appliances?

Mr. YUREK. They would not. That is why it is a phased down over a series of years and in making sure, and what the EPA and the AIM Act does for implementation in the U.S. is to make sure that if you buy an air conditioner today or a refrigerator you will be able to use that refrigerator throughout its useful life and not have to replace it early because of a change in refrigerants.

The CHAIRMAN. I have some questions for Mr. Sousa, but I want to turn to the ranking member.

Senator RISCH. I will yield back to you, Mr. Chairman.

I would just say that these have been good panels, these really need to move, and I appreciate the way this has been set up. If I have any more I will submit them for the record.

I will yield time back to you.

The CHAIRMAN. Thank you. I agree with you.

Mr. Sousa, your company and your cohorts are represented by the American Tunaboat Association, have so during the tumultuous years that you have been without the certainty that these amendments would provide.

Can you tell the committee how things have changed during the last 6 years in terms of the increased presence of foreign fishing fleets and how they operate, how your cohorts are leaving for other waters, and if so how that has impacted their catch and profitability?

Mr. SOUSA. Thank you, Mr. Chairman.

We have seen an unfair playing field for the U.S. fleet over the last several years, especially with China.

They do not adhere to the labor standards we do nor to the conservation standards, and it has been something that has put us at a competitive disadvantage, and part of the reason for these amendments within the treaty is to be able to help even the playing field for us, in some ways, because if we have the right to fish in the high seas we can negotiate a deal with some of the island countries.

We have a negotiating point where they cannot hold it over our heads where we cannot fish anywhere, and our concern always is you have an influence like China that gets involved with one of these Pacific Island states and tries to undermine the U.S. fleet by telling them to raise the price of access so high that it is impossible for us to pay it.

The CHAIRMAN. These amendments would actually, as you suggest by your statement, make it easier to fish on the high seas?

Mr. SOUSA. What it allows us to do, Mr. Chairman, is if we have not come to an agreement yet, we can start fishing on the high seas and concurrently continue our negotiations with the Pacific Island countries and come to an agreement on fishing in their waters. Versus right now, if we do not have an agreement, if we do not get the treaty ratifications that are here right now, then we cannot fish anywhere in the western Pacific. We would have to look elsewhere to fish.

The CHAIRMAN. Now, one last question and it is based on your statement. I found it interesting.

You talked about two different generations in the Pacific Island nations and that this one is more inclined towards China.

I find that interesting because from everything I understand about this subject, China does not live under the treaty, does not obey necessarily the treaty. We are more cognizant of appropriate fishing practices and conservation questions.

Why would they look towards China more so when China actually abuses their fishing grounds?

Mr. SOUSA. I think, to try and put it tactfully, they approach them in a financial way that provides them incentive to look the other way, in many instances.

[Laughter.]

The CHAIRMAN. When you do not want to fish anymore, we will send you to the State Department.

[Laughter.]

Mr. SOUSA. Thank you, sir.

The CHAIRMAN. You mean they bribe them. Okay. All right. Thank you. Thank you very much. That makes it clear.

All right. Senator Kaine.

Senator KAINE. Thank you, Mr. Chair. Forgive me, I will probably ask questions that you might have been digging into, but it is good to join you and this is a question for Mr. Yurek.

Those who oppose the Kigali Amendment advance the argument that U.S. consumers might suffer because of a higher cost for new products that do not use HFCs. The market transition away from HFCs is already underway, and that is going to occur whether or not the U.S. ratifies the treaty.

It is an important point to be able to respond to when the issue is raised. Can you talk about the impact of the Kigali Amendment on U.S. consumers?

Mr. YUREK. Yes, Senator.

This is something that we think about every day. As an industry, you want to make sure, one, the products that we manufacture are there to make sure that people are comfortable, safe, and productive, and they also need to be cost effective.

What the Kigali Amendment does and what the AIM Act does is deal with the refrigerants. The amount of costs from the refrigerants is actually less than 1 percent of the entire cost of the system.

Where the biggest cost is is with the raw materials—the copper, the steel, the aluminum—that go into the equipment, and a lot of times you have the technology, but to get higher efficiency requires more copper and steel because you need more heat transfer area.

There is actually a benefit with these changes in refrigerants, as we have seen even with the Montreal Protocol, the prior amendments, as well as the Kigali Amendment.

These new refrigerants are more efficient, thereby, not only requiring less refrigerant, but also reducing the energy costs and the need to have copper, steel, and aluminum.

Overall, the impact will be minimal and, hopefully, that will reduce the energy use and, therefore, the energy costs over the operation of that system.

Senator Kaine. That is the only question I have. I appreciate that answer.

Thank you, Mr. Chair. I yield back.

The Chairman. Thank you. All right. There are no other members seeking recognition now.

I normally do not do this, but because we have your expertise here, is there anything that you have not made in your statements that we have not talked about in the Q&A that you want us to know about these treaties that we have not talked about?

Mr. Yurek. Mr. Chairman, I do not believe there is, other than I think the importance of moving expeditiously through the process, giving the advice and consent of the Senate towards the Kigali Amendment and the other amendments, and moving towards ratification so that we can then continue the implementation and get the benefits that these treaties provide.

The Chairman. Anything else, Mr. Sousa?

Mr. Sousa. Mr. Chairman, probably one last thing that just came to my mind is that the treaty does provide a framework for the U.S. Government to deal with the Pacific Island nations out there in a very efficient manner, because a lot of these meetings are in one area and everyone is there at one time.

I think it is an efficient way for the interaction between multi-governments and it saves a lot of time and effort having to travel around. Thank you.

The Chairman. Thank you. I agree with the ranking member that I think these treaties are important.

They go to economic interests of the United States and, in some cases, they certainly go to the ability of the United States to extend its influence and counter Chinese influence, particularly in the Pacific.

I hope that we can pursue them in short order and that they will be—we have not had a treaty approved for quite some time in the United States Senate. This would be a great breakthrough to be able to do that.

Let me thank our witnesses, once again, for taking the time to give us the insights of the benefits of joining each of these treaties.

The record will remain open until the close of business on Friday, April 8, for senators to submit questions for the record.

With the thanks to the committee, this hearing is adjourned.

[Whereupon, at 3:42 p.m., the hearing was adjourned.]

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## ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

RESPONSES OF DR. JOHN THOMPSON TO QUESTIONS  
SUBMITTED BY SENATOR JOHN BARRASSO

*Question.* If the U.S. ratified the Kigali amendment, would our nation be banned from trading in HFCs with non-parties to the Kigali amendment in 2033?

*Answer.* All Montreal Protocol controlled substances are subject to non-Party trade provisions as set out in Article 4. In the case of hydrofluorocarbons (HFCs) controlled under the Kigali Amendment, each Party to the Kigali Amendment will be prohibited from trading in HFCs with any non-Parties to the Amendment effective January 1, 2033. The Meeting of the Parties to the Montreal Protocol could decide to defer the applicability of this prohibition if it determines that a non-Party is complying de facto with the Protocol's phase-down and reporting requirements for HFCs.

One hundred thirty-one Montreal Protocol Parties, including most major U.S. trading partners, have ratified the Kigali Amendment. These Parties already account for the vast majority of global HFC consumption and production outside the United States, and we expect most other countries will join the Amendment by 2033. If the United States were not to ratify the Kigali Amendment, all of those Kigali Amendment Parties would be prohibited from trading in HFCs, including those contained in innovative HFC blends, with the United States, subject to the exception described above. This exception has on occasion been applied by Montreal Protocol Parties on a year-to-year basis for non-Party trade in other substances controlled under the Protocol, though in the case of HFCs, U.S. industry has raised concerns about expected negative impacts to U.S. exports if the United States were to remain a non-Party to the Kigali Amendment, even if we were to seek such an exception for trade in HFCs.

*Question.* Please list the countries the U.S. currently trades with in HFCs.

*Answer.* The primary countries the United States trades with in HFCs are Mexico, the Netherlands, Canada, Saudi Arabia, India, Japan, the United Arab Emirates, Brazil, the United Kingdom, China, Belgium, France, Germany, the Republic of Korea, and Argentina. This is not an exhaustive list because a number of countries trade only in small amounts and not every year.

*Question.* What is the position of the United States on exemptions of certain HFC uses from our phase down requirements?

*Answer.* The Kigali amendment allows the parties to exempt certain HFC uses from its phase down requirements. The mechanism to apply the exemptions has not been created.

Article 2J(5) of the Montreal Protocol, as amended by the Kigali Amendment, provides that the phasedown levels specified for HFCs will apply save to the extent that the Parties decide to permit the level of production and consumption that is necessary to satisfy uses agreed by the Parties to be exempted uses. In 2016, the Meeting of the Parties to the Montreal Protocol decided to consider mechanisms for certain exemptions for HFC production and consumption, including for essential uses and critical uses, in 2029.

It is expected that any potential need for such exemptions under the Kigali Amendment may become clearer over time, as countries begin to reduce HFC production and consumption in accordance with the Kigali Amendment. The United States supports considering the potential need for exemptions under the Kigali Amendment in 2029 based on the best information available at that time. We have not taken a position on whether or not such exemptions are needed and would only plan to do so when the issue arises later this decade.

Finally, it is important to recall the Kigali Amendment provides for a phasedown, rather than a complete phaseout, of the consumption and production of HFCs. This additional flexibility as compared to earlier transitions under the Montreal Protocol already envisions that certain uses for HFCs may continue well into the future irrespective of the consideration of any exemptions.

*Question.* How would the United States define "essential uses and critical uses"?

*Answer.* The Parties to the Protocol have decided to consider the potential need for HFC exemptions in the future, as noted in Answer 3, but have not taken any decisions yet to define how HFC essential or critical use exemptions would operate under the Protocol. The United States has not taken a position on essential or critical uses for HFCs beyond expressing support for the already-planned consideration of any potential need for such exemptions in 2029. We would expect to take a posi-

tion on any such exemptions at that time, taking into account the provisions of the AIM Act that relate to essential uses.

The Montreal Protocol created a Multilateral Fund for grants and concessional loans to cover the costs incurred in converting to technologies that do not rely on controlled substances.

*Question.* How much funding in total has been provided to the Multilateral Fund under the Montreal Protocol?

*Answer.* Total contributions to the Multilateral Fund by all Parties to the Montreal Protocol amount to approximately \$4 billion.

*Question.* What countries have received grants and concessional loans from the Multilateral Fund under the Montreal Protocol?

*Answer.* The Multilateral Fund of the Montreal Protocol provides technical and financial assistance to those Parties that qualify under the criteria set out in Article 5 of the Montreal Protocol. There are 147 countries categorized as “Article 5” Parties under the Protocol, three of which do not receive assistance through the Multilateral Fund: the United Arab Emirates, Singapore, and Republic of Korea. The criterion for a developing country to have Article 5 status under the Protocol is based on its per capita consumption of controlled substances at the time of entry into force of the Montreal Protocol for that country.

1. Afghanistan	51. Georgia	101. Panama
2. Albania	52. Ghana	102. Papua New Guinea
3. Algeria	53. Grenada	103. Paraguay
4. Angola	54. Guatemala	104. Peru
5. Antigua and Barbuda	55. Guinea	105. Philippines
6. Argentina	56. Guinea Bissau	106. Qatar
7. Armenia	57. Guyana	107. Republic of Korea
8. Bahamas	58. Haiti	108. Republic of Moldova
9. Bahrain	59. Honduras	109. Rwanda
10. Bangladesh	60. India	110. Saint Kitts and Nevis
11. Barbados	61. Indonesia	111. Saint Lucia
12. Belize	62. Iran (Islamic Republic of)	112. Saint Vincent and the Grenadines
13. Benin		113. Samoa
14. Bhutan	63. Iraq	114. Sao Tome and Principe
15. Bolivia (Plurinational State of)	64. Jamaica	
16. Bosnia and Herzegovina	65. Jordan	115. Saudi Arabia
17. Botswana	66. Kenya	116. Senegal
18. Brazil	67. Kiribati	117. Serbia
19. Brunei Darussalam	68. Kuwait	118. Seychelles
20. Burkina Faso	69. Kyrgyzstan	119. Sierra Leone
21. Burundi	70. Lao People's Democratic Republic	120. Singapore
22. Cabo Verde	71. Lebanon	121. Solomon Islands
23. Cambodia	72. Lesotho	122. Somalia
24. Cameroon	73. Liberia	123. South Africa
25. Central African Republic	74. Libya	124. South Sudan
26. Chad	75. Madagascar	125. Sri Lanka
27. Chile	76. Malawi	126. Sudan
28. China	77. Malaysia	127. Suriname
29. Colombia	78. Maldives	128. Syrian Arab Republic
30. Comoros	79. Mali	129. Thailand
31. Congo	80. Marshall Islands	130. Timor-Leste
32. Cook Islands	81. Mauritania	131. Togo
33. Costa Rica	82. Mauritius	132. Tonga
34. Cuba	83. Mexico	133. Trinidad and Tobago
35. Côte d'Ivoire	84. Micronesia (Federated States of)	134. Tunisia
36. Democratic People's Republic of Korea	85. Mongolia	135. Turkey
37. Democratic Republic of the Congo	86. Montenegro	136. Turkmenistan
	87. Morocco	137. Tuvalu
	88. Mozambique	138. Uganda
		139. United Arab Emirates
		140. United Republic of Tanzania



38. Djibouti	89. Myanmar	141. Uruguay
39. Dominica	90. Namibia	142. Vanuatu
40. Dominican Republic	91. Nauru	143. Venezuela (Bolivarian Republic of)
	92. Nepal	
41. Ecuador	93. Nicaragua	
42. Egypt	94. Niger	144. Viet Nam
43. El Salvador	95. Nigeria	145. Yemen
44. Equatorial Guinea	96. Niue	146. Zambia
45. Eritrea	97. North Macedonia	147. Zimbabwe
46. Eswatini (the Kingdom of)	98. Oman	
	99. Pakistan	
47. Ethiopia	100. Palau	
48. Fiji		
49. Gabon		
50. Gambia		

*Question.* How much funding was provided by the United States to the Multilateral Fund under the Montreal Protocol?

*Answer.* Of the approximately \$4 billion contributed to the Multilateral Fund, \$936 million was from the United States.

*Question.* How much funding has China received from the Multilateral Fund?

*Answer.* China has received approximately \$1.4 billion in assistance since the inception of the Multilateral Fund in 1990. Since joining the Montreal Protocol more than 30 years ago, China has been classified as an “Article 5” Party, which roughly correlates to being a developing country and having low per capita consumption of certain controlled substances at the time of entry into force of the Protocol. Therefore, China has been eligible to receive assistance from the Multilateral Fund to implement control measures under the Montreal Protocol. The United States led a multi-year effort that concluded in 2019 that has reduced Multilateral Fund assistance to China by approximately two-thirds relative to previous funding levels. We intend to continue to push for reduced funding for China and our influence will be stronger in this regard if we are a Party to the Kigali Amendment.

*Question.* How much more funding from the United States would be required or requested under the Kigali Amendment?

*Answer.* The Multilateral Fund is replenished on a 3-year basis through decisions of the Montreal Protocol’s Meeting of the Parties and informed by analysis of funding needs for the relevant triennium provided by the Protocol’s Technology and Economic Assessment Panel’s (TEAP). Consistent with past practice under the Montreal Protocol, there is no up-front decision on the total amount of assistance to facilitate implementation of HFC control measures under the Protocol. Instead, Parties decide on an amount to replenish the Multilateral Fund every 3 years, relying on the technical and economic analysis provided by TEAP. It is therefore difficult to assess overall funding levels for the entire phasedown timeline, but our preliminary assessment is that the costs for phasing down HFCs under the Montreal Protocol will be similar to those associated with the phaseout of the prior generation of Montreal Protocol controlled substances known as hydrochlorofluorocarbons (HCFCs). Current U.S. contributions to the Multilateral Fund continue to provide support for the phaseout of HCFCs. U.S. contributions to the Multilateral Fund are made on a voluntary basis to support implementation of the Montreal Protocol in its entirety.

*Question.* How much funding would China receive from the Multilateral Fund under the Kigali Amendment?

*Answer.* As noted in the previous answer, there is no up-front decision on the overall amount of Multilateral Fund assistance for phasing down HFCs, or funding for any specific country. Thus, considerable uncertainty about future funding needs for implementation of the Kigali Amendment still exists at this early stage of the process, and Montreal Protocol Parties in the future will decide on the amounts to replenish the Multilateral Fund. However, as a result of prior U.S. efforts referenced in a previous answer, we expect future Multilateral Fund support for China will be substantially lower than it was in past years. U.S. ratification of the Kigali Amendment will put us in an even better position to reduce funding for China.

China is included in the list of Article 5 countries. Under Article 5 of the Montreal Protocol, developing countries have longer timeframes to phase down and phase out listed substances.

*Question.* What are the differences between the requirements, assistance and obligations provided under the Montreal Protocol for the United States versus China?

What are the differences between the requirements, assistance and obligations provided under the Kigali Amendment for the United States versus China?

*Answer.* The United States is subject to the control measures outlined in Article 2 of the Montreal Protocol. The Multilateral Fund is financed by contributions from Parties operating under Article 2 of the Protocol (“non-Article 5 Parties”), which include the United States.

Parties operating under Article 5 of the Montreal Protocol (“Article 5 Parties”) have a delayed schedule for many control measures under the Protocol. In addition, Article 10 provides that Article 5 Parties are eligible for assistance from the Multilateral Fund in implementing those control measures. China is one of 147 Article 5 Parties under the Protocol, based on the criteria in Article 5.

Like prior amendments to the Montreal Protocol, the Kigali Amendment preserves the key features of the Montreal Protocol and extends them to a new class of controlled substances, HFCs. Under the Kigali Amendment, the HFC phasedown schedule for non-Article 5 Parties, such as the United States, includes a freeze at baseline levels in 2019, a 40 percent reduction in 2024, a 70 percent reduction in 2029, an 80 percent reduction in 2034, and an 85 percent reduction in 3036. The Kigali Amendment also extends the scope of the Protocol’s financial mechanism to support implementation of the HFC phasedown.

As a country that meets the criteria set out in Article 5 of the Montreal Protocol, China is one of 147 Article 5 Parties eligible for assistance and a delayed HFC phasedown schedule. Under the Kigali Amendment, China’s HFC phasedown schedule includes a freeze at baseline levels in 2024, a 10 percent reduction in 2029, a 20 percent reduction in 2035, a 30 percent reduction in 2040, and an 85 percent reduction in 2045.

China is the world’s largest producer and consumer of HFCs, and the United States is the world’s leader in the development and deployment of HFC alternatives. As a general matter, the Kigali Amendment will push the global technology market away from HFCs and towards HFC alternatives, to the benefit of the United States.

Under the American Innovation and Manufacturing (AIM) Act, there are domestic restrictions on hydrofluorocarbons, or HFCs, which Congress is able to revisit and consider changing if the costs to the consumer are considered to be too high.

*Question.* Why would the United States need to ratify the Kigali amendment when our nation already has a law to phase down production and consumption of HFCs?

*Answer.* U.S. ratification of the Kigali Amendment would yield substantial economic benefits beyond those from domestic laws, such as the AIM Act. Estimates endorsed by five major industry associations indicate Kigali ratification will support 33,000 new U.S. manufacturing jobs and \$12.5 billion in new investments in the U.S. economy, among other benefits. U.S. industry representatives have also testified ratification will lead to substantially increased U.S. exports to rapidly growing refrigeration and air conditioning markets overseas that will support these jobs. U.S. businesses indicate they are already suffering reputational harm relative to competitors in other countries, such as China, that have joined the Amendment. If we do not join, Parties to the Amendment may also be prohibited from trading in HFCs with the United States starting in 2033, which is not far away in an industry that looks years ahead when planning investments. This could also have the effect of disrupting trade with the United States in innovative HFC blends produced by U.S. companies as next-generation refrigerants. Finally, ratification would put the United States in the strongest possible position in future Meetings of the Parties to the Montreal Protocol to ensure U.S. technologies are not disadvantaged relative to those from China or other competitors as Kigali Amendment implementation proceeds.

*Question.* Would the ratification of the Kigali Amendment make it more difficult for the United States to make changes to domestic laws on HFCs in order to protect American consumers should the cost of the treaty requirements be deemed too high?

*Answer.* The United States is already phasing down HFCs under the AIM Act, and the Kigali Amendment does not require further reductions beyond what is already provided for under U.S. law. Kigali Amendment ratification therefore is not anticipated to impact U.S. consumers because production and consumption controls are already being implemented in the United States. Thus, there should be no incremental cost to consumers from the implementation of Kigali Amendment phasedown requirements as referenced in the question, because the AIM Act already calls for the same reductions as set out in the Kigali Amendment. Moreover, in its rule-

making under the AIM Act, EPA estimated the rule would yield cumulative compliance savings for industry. For historical context, prior Montreal Protocol transitions proceeded with minimal price impacts on consumers. The Kigali Amendment provides even further flexibility through its phasedown approach for HFCs, as compared to the complete phaseout implemented for previous generations of controlled substances under the Montreal Protocol. Montreal Protocol Parties have also decided to undertake technical reviews every 5 years to assess the availability of HFC alternatives and consider challenges in implementation; these reviews could inform consideration of provisions for additional flexibility such as the exemptions referenced in Answers 3 and 4, should countries face such challenges.

*Question.* What are the options for the United States to withdraw from the Kigali Amendment should compliance costs prove too high for American consumers?

*Answer.* Like prior amendments to the Montreal Protocol, the Kigali Amendment preserves the key features of the Montreal Protocol and extends them to a new class of controlled substances, HFCs. The Kigali Amendment does not contain a separate withdrawal clause. Article 19 of the Montreal Protocol provides that any Party may withdraw from the Protocol by giving written notification to the Depositary at any time after 4 years of assuming the obligations specified in paragraph 1 of Article 2A (relating to the control of chlorofluorocarbons, or CFCs). Any such withdrawal would take effect upon expiry of 1 year after the date of its receipt by the Depositary, or on such later date as may be specified in the notification of the withdrawal.

## LETTERS OF SUPPORT FOR THE KIGALI AMENDMENT FROM THE BUSINESS COMMUNITY



Lennox International Inc.  
2140 Lake Park Boulevard  
Richardson, Texas 75080-2254

Doug Young  
President / Chief Operating Officer  
Telephone: 972-497-6659

April 5, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

**Re: Ratification of the Kigali Amendment to the Montreal Protocol**

Dear Chairman Menendez and Ranking Member Risch:

Lennox International Inc. is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. By ratifying this amendment, we will continue America's leadership in the heating, ventilation, air-conditioning and refrigeration (HVACR) industry and broaden America's market leadership globally.

Based in Richardson, Texas, Lennox is a global manufacturing leader of HVACR products. Lennox is a public company that has over 8,000 US - based employees, many of them in production facilities where we make the most efficient HVACR products globally.

American companies and the 2.5 million people employed in the U.S. HVACR industry are poised to benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and increase HVACR exports.

In 2020, Congress passed the American Innovation and Manufacturing Act (The AIM Act), a bipartisan measure, which provided federal authority to implement the terms of the Kigali Amendment. Ratification of the Kigali Amendment is needed to reap the full economic benefits listed above.

Lennox urges you to support ratification of the Kigali Amendment to grow our economy, improve our trade balance, and encourage innovation. Ratification will strengthen America's HVACR technology leadership. I greatly appreciate your attention to this matter and look forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,

Doug Young  
President / Chief Operating officer



April 7, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

***Re: Ratification of the Kigali Amendment to the Montreal Protocol***

Dear Chairman Menendez and Ranking Member Risch:

Dynatemp International, Inc. is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. We will secure America's place as the global leader in several manufacturing industries and give American workers an advantage against competitors in international markets by ratifying this amendment.

Dynatemp is a U.S.-based supplier of residential, commercial, and industrial refrigerants to the domestic heating, ventilation, air conditioning, and refrigerant market. We look forward to working with our channel partners to support and educate technicians on the transitioning from legacy HFC refrigerants to next-generation refrigerants and technology developed by U.S. companies in the U.S.

Right now, American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.





Last Congress, you passed the American Innovation and Manufacturing Act (AIM Act), a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment. The Kigali Amendment must be ratified so the U.S. can continue its leading position in the global HVAC/R market and prevent future trade restrictions with other Kigali signatory countries.

Dynatemp urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance while encouraging further innovation to strengthen America's HVACR technology leadership.

Dynatemp greatly appreciates your attention to this matter and looks forward to working with you to support Senate approval of the Kigali Amendment.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Brad Kivlan, IV".

H. Brad Kivlan, IV  
President

cc: William Gresham, Vice President





3950 Powhatan Road  
Clayton, NC 27520  
Tel: 919-800-0277  
www.fluorofusion.com

April 6, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

***Re: Ratification of the Kigali Amendment to the Montreal Protocol***

Dear Chairman Menendez and Ranking Member Risch:

FluoroFusion Specialty Chemicals, Inc. is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. By ratifying this amendment, we will secure America's place as the global leader in several manufacturing industries and give American workers an advantage against competitors in global markets.

Today, American factories now manufacture market-leading next generation equipment and refrigerants, and federal law is phasing down domestic HFC production and consumption under The American Innovation and Manufacturing Act of 2020 (AIM Act). Over the past two years, FluoroFusion has developed and patented next-generation refrigerant blends in support of the AIM Act's mandated transition away from legacy HFC refrigerants. Failure to ratify the Kigali Amendment jeopardizes the economic benefits of the U.S. HFC phase down by allowing foreign-made products to out-compete American-made products in both domestic and export markets as they transition from HFCs.

Right now, American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.



3950 Powhatan Road  
Clayton, NC 27520  
Tel: 919-800-0277  
[www.fluorofusion.com](http://www.fluorofusion.com)

Last Congress, you passed the American Innovation and Manufacturing Act (AIM Act), a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment.

But to reap its full economic benefits, ratification also is necessary since The Montreal Protocol prohibits trade with countries not party to the Protocol or its amendments. This applies to countries not party to the Kigali Amendment after 2032, meaning U.S. manufacturers could lose access to export markets in about a decade.

FluoroFusion therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's HVACR technology leadership.

FluoroFusion greatly appreciates your attention to this matter and look forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,

A handwritten signature in cursive script that reads 'David P. Couchot'.

David Couchot  
President





April 8, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

Dear Chairman Menendez, Ranking Member Risch, and Members of the Senate Foreign Relations Committee:

The Alliance for Responsible Atmospheric Policy and its member companies and associations are pleased to provide this written statement for the record in the Hearing on the Kigali Amendment to the Montreal Protocol. Alliance members appreciate the scheduling of this hearing on the Kigali amendment and are fully supportive of the Senate giving its affirmative Advice and Consent to this important agreement.

The Alliance for Responsible Atmospheric Policy ("Alliance") is an industry coalition of fluorocarbon producers, user entities and trade associations of companies that rely on these compounds. The Alliance was organized in 1980 and has been a leading voice in the development and implementation of ozone protection policy at the global level as well as domestic implementation under Title VI of the Clean Air Act. Today, the Alliance coordinates industry participation in the development of economically and environmentally beneficial international and domestic policies at the nexus of ozone protection and climate change. A list of members is attached.

The Kigali amendment is part of a treaty known as the Montreal Protocol. The Montreal Protocol, long considered to be one of the most effective treaties ever negotiated, has consistently had strong bipartisan support in the U.S. The original treaty agreement was ratified in 1988. The treaty and four subsequent amendments, all received strong bipartisan support and followed the customary procedural process for Senate Advice and Consent consideration.

The Kigali amendment, which was completed in 2016 with the support of U.S. and global industry, and environmental groups, is a critical element in the path towards effective climate change policy. The amendment, when fully implemented, will reduce the global consumption and production of hydrofluorocarbon compounds (HFCs) by 85% by 2047. HFCs are a family of compounds covered as well by the global climate agreements, but the policy framework and technical work for achieving the transition to the low Global Warming Potential (GWP) technologies have been dealt with under the Montreal Protocol treaty. HFCs were first introduced as substitutes for ozone depleting substances under the Montreal Protocol because it provided the quickest route for protecting the earth's ozone layer.

2111 WILSON BOULEVARD, 8TH FLOOR, ARLINGTON, VIRGINIA 22201  
Phone: 703-243-0344 • Fax: 703-243-2874 • Web: [www.alliancepolicy.org](http://www.alliancepolicy.org)

Full implementation of Kigali is expected to contribute savings of up to 0.5 degrees Celsius of warming, and generate thousands of new manufacturing jobs in the United States upon commercialization of next generation technologies that have a much lower global warming potential (GWP).

This amendment has received great acclaim around the globe, and has already been ratified by more than 125 countries, including all of our major economic trading partners.

The Montreal Protocol has been a successful agreement because of a simple formula-- an effective science and technology and economic assessment process, an inclusive process which affords parties, business and NGOs participation opportunities, a recognition of the needs for developing country economies, and a financial mechanism to spur investment in new technologies that are environmentally effective and economically sensible. Over its first 3 decades of implementation, the treaty has successfully achieved two global-scale technology transitions, and important global environmental benefits for the health and welfare of the global population. These transitions have been successful because they not only achieved the environmental benefits of protecting the earth's ozone layer, but they did so in a manner that allowed all countries to have access to new technologies in a way that was economically realistic and achievable.

Historically, U.S. implementation of the Montreal Protocol has occurred under Title VI of the Clean Air Act. But, in December 2020, the U.S. Congress completed work on the American Innovation and Manufacturing Act, the AIM Act, which provides the statutory authority for U.S. implementation of the provisions of the Kigali amendment, and achieves a gradual transition in the U.S. from high-GWP HFC compounds to low-GWP compounds and technologies over the next 15 years. The AIM Act provides all the authority necessary for the U.S. to implement and comply with the Kigali amendment. Importantly, this means that the amendment itself creates no additional regulatory burden or imposition on U.S. consumers, industry and the U.S. economy.

The AIM Act is similar to the previous Montreal Protocol implementation under the Clean Air Act, but also has improvements based on lessons learned. One key lesson is that the AIM Act and Kigali, achieve a gradual phasedown of the covered HFC compounds, rather than a phase out, recognizing the potential for users that may have difficulty finding effective substitutes and/or avoiding changes that are too economically burdensome.

We are pleased to say that the Alliance has worked in a cooperative manner with many of the leading business groups, including the National Association of Manufacturers, the U.S. Chamber of Commerce, the American Chemistry Council, as well as the major environmental organizations in support of passage and now implementation of the AIM Act. And we are even further pleased that we are working together again in support of Kigali ratification.

Alliance member companies have invested billions of dollars in the development of these next generation low-GWP technologies, that include air-conditioning, refrigeration, foam insulation, fire suppression, medical uses, semiconductor manufacturing, and other uses, and chemical industry companies who have developed the low-GWP substitute compounds. Global markets for these technologies are rapidly expanding, particularly in the air conditioning and refrigeration sector. In a study conducted for the Alliance and the Air Conditioning Heating and Refrigeration

Institute (AHRI), the University of Maryland's InterIndustry Forum (INFORUM),<sup>1</sup> concluded that ratification of the Kigali Amendment and passage and implementation of the AIM would produce significant economic benefits in the United States. These benefits in the decade after adoption included the creation of 33,000 new manufacturing jobs in the U.S., as companies invested to develop and commercialize the new low-gwp technologies; increase U.S. share of the global HVACR export market by 25%, and increase the U.S. balance of trade annually by more than \$12 billion.

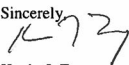
Critics have expressed concern that ratification of Kigali may hurt consumers, limit choice and increase costs. History has shown that this has not happened in previous transitions under the Montreal Protocol. There is no reason to expect that outcome here. According to US Government statistics, the cost of ownership of the products relying on fluorocarbon technologies, including air conditioning, refrigeration and appliances, continues to decline. This is due in large part, to the continued improvements in the technologies, and the increased energy efficiency and performance of these products. And, if anything, consumer choice has continued to expand as a result of the rush to identify improved low-gwp technology opportunities.

Ratification of the Kigali amendment will ensure continued U.S. leadership in this field of global environmental policy, and at the same time provide for continued U.S. technology leadership around the globe. Fluorocarbon technology and air conditioning and refrigeration technologies are signature American technology achievements. Ratification will ensure that this leadership will continue over the next several decades and ensure an economic level playing field as we achieve these projected environmental benefits. The INFORUM analysis shows the potential for our achievement, but ratification is necessary in order for U.S. industry to fully realize this potential. The winners will be U.S. consumers, workers and industries, as well as the environment in which we live.

We appreciate your consideration of the important issues associated with ratification of the Kigali amendment. The Alliance is proud of its extensive history of working in a constructive manner with the U.S. government Administrations throughout the years, and the Congress, as well as with our business and environmental organization colleagues on the phasedown of fluorocarbons, including hydrofluorocarbons ("HFCs"). For the reasons we have outlined, we believe it is important that the Senate provide its affirmative Advice and Consent as soon as possible. It will be an important win for the United States.

Thank you for your time and attention. We will be happy to provide additional information or answer any additional questions that you may have.

Sincerely,



Kevin J. Fay  
Executive Director

ATTACHMENTS: Alliance Membership Roster  
Economic & Consumer Impacts of HFC Phasedown

<sup>1</sup> Economic Impacts of U.S. Ratification of the Kigali Amendment." Industry Forecasting at the University of Maryland (INFORUM) and JMS Consulting, 2018.



**The Alliance**  
for Responsible Atmospheric Policy

**Alliance 2022 Member Roster:**

A-Gas	Heating Air-conditioning & Refrigeration Distributors International (HARDI)
AGC Chemicals Americas Inc.	Honeywell
Air-Conditioning, Heating, and Refrigeration Institute (AHRI)	Hudson Technologies
American Pacific	Hussmann
Arkema	International Pharmaceutical Aerosol Consortium (IPAC)
Atomic Capital	Johnson Controls Inc.
Carrier	Koura Global
Center for the Polyurethanes Industry, ACC	Lennox Int.
Chemours	Midwest Refrigerants
Daikin Americas	Mitsubishi Electric
Daikin Applied	National Refrigerants
Danfoss	Nortek
Dynatemp Int.	Olin BC
Emerson	Rheem Manufacturing Co.
Energizer Holdings	Trane Technologies
Falcon Safety Products	
Golden Refrigerant	





## HFC Phasedown Background

- With regulatory certainty, the technology transition to low-GWP next-generation technology is underway in all major developed countries and is gathering momentum in most major developing countries including India, China, Korea, and Indonesia.
- The transition path in the U.S. is uncertain with no federal action to date. However, a dozen states have started a patchwork of legislation or regulation creating an unpredictable state-based HFC phasedown.
- Investment decisions are being made now on implementation of these next-generation technologies, but under the current circumstances the U.S. market will be fractured and less efficiently served, increasing consumer costs and diminishing U.S. global technology leadership.
- A predictable federal U.S. HFC phasedown positions industry to maintain global technology leadership, create additional manufacturing jobs, and cost-effectively produce these new technologies that benefit consumers.
- The Kigali Amendment to the Montreal Protocol has been ratified by 91 countries and went into effect on Jan 19, 2019, initiating a broad-based orderly phasedown of HFCs.



## Economic Analysis

- Inforum and JMS Consulting previously:
  - Assessed fluorocarbon industry size
  - Conducted scenario analysis, focusing on HVACR, the largest segment
  - Examined consumer costs in residential/commercial air conditioning, the largest uses
- Scenarios compared ratification and implementation of global HFC phasedown requirements in the U.S. versus a “business as usual” case with no mandated U.S. phasedown. The “consistent with global HFC phasedown” case assumes U.S. action, with or without formal ratification by the Senate.
- Analysis incorporated public data, estimates from Inforum models, and industry interviews, using conservative assumptions.
- U.S. HFC phasedown implementation adds American jobs, increases exports, decreases imports, and supports American technology leadership.
- Delays in implementation or ongoing uncertainty due to state actions will inhibit or eliminate the opportunity to achieve the forecast gains
- Life-cycle cost analysis of air conditioning applications shows the transition during HFC phasedown is expected to further reduce consumer costs.

## U.S. Industry Segments (Fluorocarbons)

- Fluorocarbon-using products impact how we live on a daily basis.
- Fluorocarbons are used in commercial HVAC, residential HVAC, commercial refrigeration, household appliances, and motor vehicle air conditioning
- Insulating foams, medical metered-dose inhalers, aerosols, and several other applications make up the remainder of the manufacturing sector



American-made products that preserve the health, safety and comfort of our daily lives



## U.S. Industry Objective

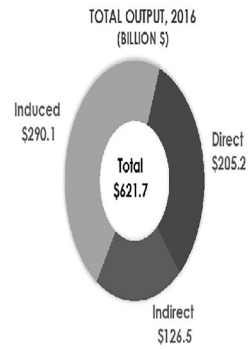
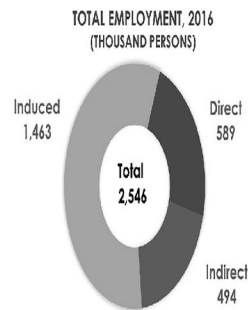
- U.S. industry strongly supports domestic phasedown of HFCs consistent with the Montreal Protocol.
- Heating Ventilation Air Conditioning and Refrigeration (HVACR) and Fluorocarbon technologies are signature American technologies.
- The phasedown being implemented globally under the Montreal Protocol provides a platform for gradual introduction and commercialization of next generation technologies.
- An HFC phasedown in the U.S. opens the door for domestic production to serve the rapidly expanding global market without harming U.S. consumers.
- Implementation of the HFC phasedown is good for American jobs, the balance of trade, and continued American technology leadership.
- The transition during HFC phasedown is expected to reduce consumer costs in the air conditioning industry.



**We urge Congress to implement a U.S. HFC phasedown.**

## U.S. Manufacturing Impact Fluorocarbons in the American Economy

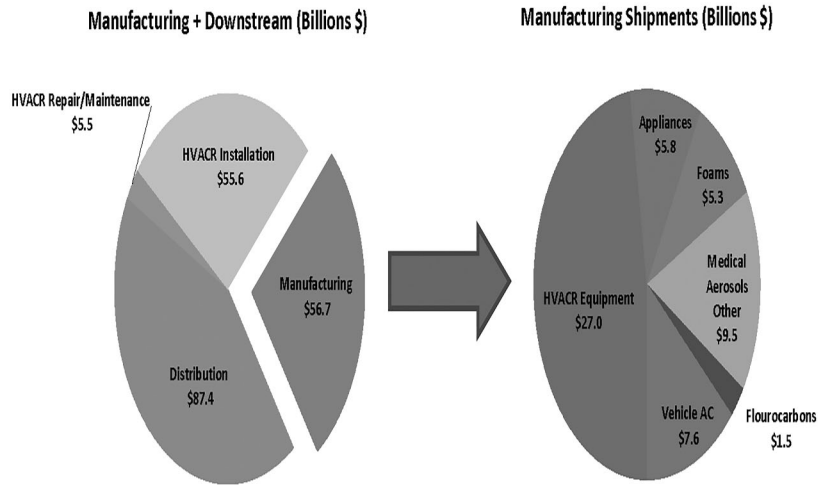
- **Jobs**
  - 589K direct employment
  - \$39B in payroll
  - \$205B in sales
  - 2.5M total employment impact
- **Output**
  - \$621B in economic output, including manufacturing, distribution, service & installation (includes supply chain and induced demand)
- **Manufacturing**
  - \$178B contribution
  - 671K jobs, dominated by HVACR equipment
  - Downstream contracting, wholesale, and service make up the rest



This industry is a significant contributor to American jobs, trade & economic output

# U.S. Industry Segments Manufacturing and Downstream Output

- Current manufacturing output is \$56.7B
- Downstream output in the wholesale, contracting, and repair and maintenance sectors is almost 3X that of manufacturing

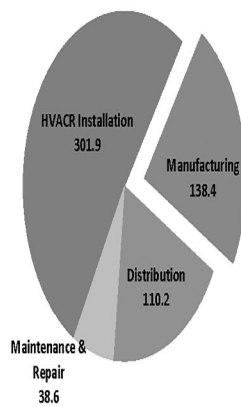


**Downstream output is almost 3X the size of the manufacturing output**

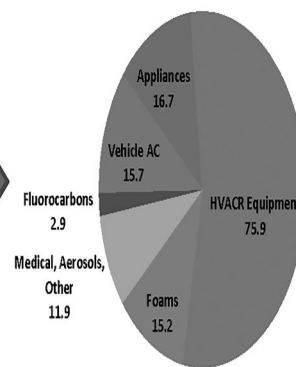
# U.S. Industry Segments Employment

- Current manufacturing impact is 138.4K jobs

Direct Industry Employment - 2016 (Thousands)



Manufacturing Employment 2016 (Thousands)



**Downstream employment is over 3X the size of the manufacturing employment**

## U.S. Industry Growth Prospects

- Over the next 10 years...
  - International HVACR market expected to more than double
  - The cumulative global market will be over \$1 trillion
  - Developed countries are already transitioning to new technologies
  - Developing countries will transition away from ozone-depleting substances and this transition is at its apex between now and 2047
  - Foams, medical applications and aerosols also have large global growth opportunities
- American Innovation
  - Commercialization of next generation technology is essential at this point in the Montreal Protocol transition
  - The U.S. HVACR industry has traditionally led these transitions and it is vital they lead this transition
  - Typical design cycle for the industry is 5-10 years, decisions being made now

**American industry must lead the transition to new technologies to be competitive**

# HFC Phasedown Impact 2027

**Scenarios Compared:**

*"Consistent with Global HFC Phasedown" – U.S. implements HFC phasedown on Montreal Protocol schedule*

*"Business as Usual" – No U.S. phasedown*

**Manufacturing Jobs**

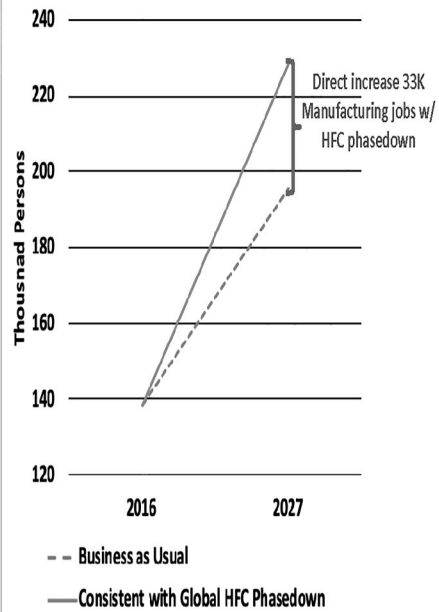
- Current manufacturing impact is **138.4K** jobs
- HFC phasedown increases direct manufacturing jobs by **33K**
- Manufacturing growth translates into an incremental **150K** jobs economy-wide

**Direct Economic Output**

- HFC phasedown improves direct manufacturing output by **\$12.5B**
- Total increased output of **\$38.8B** versus no-phasedown scenario

**Trade Balance**

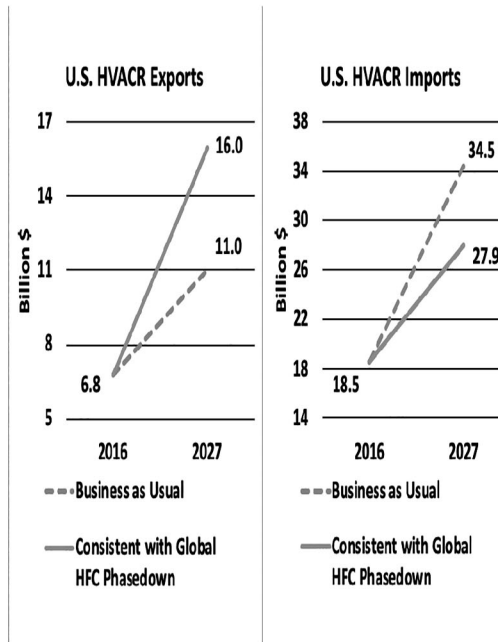
- Positive impact on balance of trade
- Manufacturing impacted directly



**U.S. HFC phasedown essential to jobs growth, industry growth, trade balance**

# HFC Phasedown Impact Global Trade

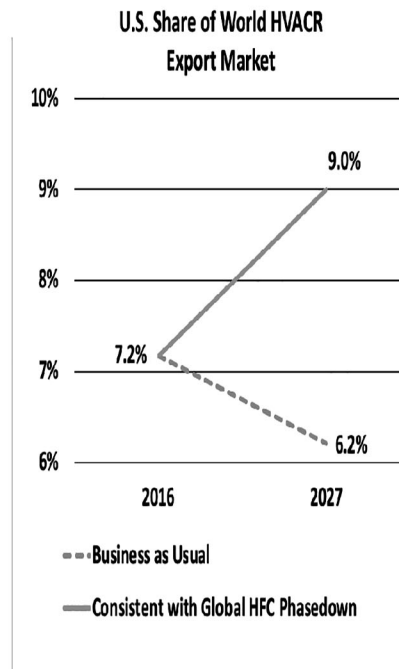
- **Global Trade Impacts**
  - U.S. HFC phasedown will increase U.S. supply to global HVACR markets by \$5.0B
  - Phasedown will inhibit growth of old technology HVACR imports by \$6.5B
  - Fluorocarbon manufacture adds \$1 billion in net trade benefit



**U.S. HFC Phasedown will grow U.S. exports and improve balance of trade**

## HFC Phasedown Impact HVACR Global Export Market

- The HVACR global export market will grow by 6% per year to meet needs of China, India, Latin America, and Africa
- With HFC phasedown, U.S. exports will outperform, increasing U.S. share of global market from 7.2% to 9.0%
- Without HFC phasedown, exports will underperform



**U.S. is a net importer, but gains share of global market with a U.S. HFC phasedown**



A black rectangular banner with a white background on the left side featuring a network of glowing nodes and lines. The text "HFC Phasedown Impact Refrigerant Production & Reclaim" is written in white, sans-serif font on the right side of the banner.

## HFC Phasedown Impact Refrigerant Production & Reclaim

- Fluorocarbon manufacturing would benefit from increased exports if HFC phasedown is enacted and suffer from imports of older refrigerants if not
- \$1B net benefit included in analysis
- Reclaimed HFCs with a U.S. HFC phasedown are estimated to increase reclaim sales by \$0.8 billion and add almost 4,000 jobs. (not included in totals)

## HVACR Technology & Investment

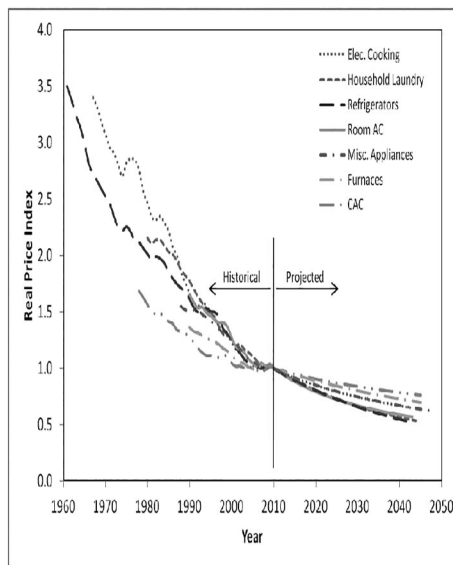
- The American HVACR industry led global innovation, which is driven by domestic demand
- Investments in next generation refrigerants and equipment technologies are already underway
  - In 2015, AHRI members representing 90% of U.S. HVACR manufacturing committed \$5B through 2025 in R&D and capital investment to commercialize high efficiency equipment using next generation refrigerants
  - American investments in R&D and capacity for HFC phasedown-related growth will generate 1,400 additional jobs and \$1B in capital investment if a U.S. HFC phasedown is implemented
  - Without U.S. HFC phasedown, manufacturing and R&D for new technologies will move to international markets to meet local demand for new technologies

U.S. HFC phasedown essential to maintain and expand American leadership

## Key Consumer Costs Continue to Decline

- The 30-year history of the Montreal Protocol shows the industry has used innovations, new technologies, and more sustainable compounds to drive continued reduction of consumer costs.
- Industry innovation, gradual transition schedules, and avoiding impacts on existing equipment owners allowed the industry to accommodate major transition costs over time, minimizing impact on consumer prices.
- U.S. appliance prices have declined over time and are expected to continue to do so.
- Room air conditioners, refrigerators, and central air conditioners have all seen real price declines through two technology transitions under the Montreal Protocol.

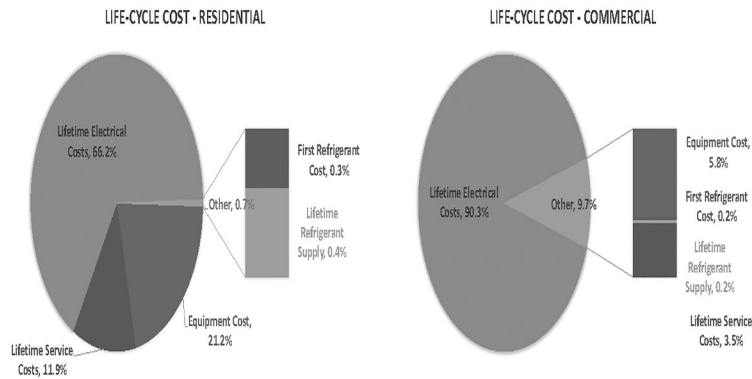
### Historical & Projected Real Price Indices for U.S. Major Appliance Categories



See Desroches, et al. (2018). Historical trends based on the PPI published by the U.S. Bureau of Labor Statistics. Projected trends are experience curve fits to the historical data.

**Innovation and planning minimized costs of conversion under the Montreal Protocol.**

## Life-Cycle Costs of Air Conditioning



- Electricity dominates lifetime costs for both residential and commercial air conditioning.
- Refrigerant Supply is less than 1% of lifetime costs.
- Cost projections of each element were made for a new equipment purchase in 2029, with and without U.S. HFC phasedown.

**Energy cost dominates even equipment cost, and refrigerant is a minor contributor.**

## U.S. Consumers Benefit from HFC Phasedown

- Total costs were estimated over 15-year lifetime for average 2.5 ton residential and 15 ton commercial U.S. air conditioning units.
- Equipment with HFC phasedown ("Consistent with HFC Global Phasedown") is conservatively assumed to be 10% more costly, but on average slightly more efficient, with lower leak rates and smaller charge sizes.
- The average price among all refrigerants is expected to equilibrate and continue to average ~\$7/lb.
- Driven by energy, total costs decline slightly with HFC phasedown. There are no significant consumer cost impacts even if refrigerant prices were 5x higher.

### Total Cost of Ownership for 2029 Purchase

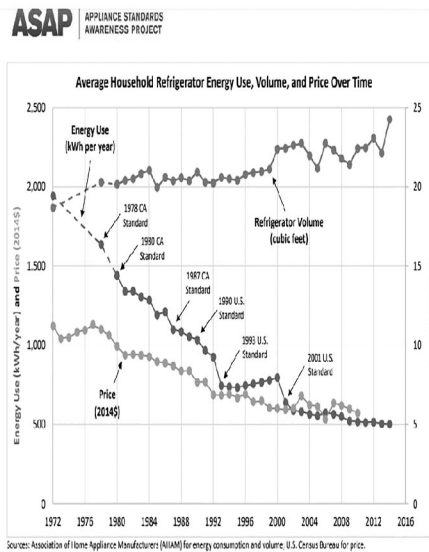
RESIDENTIAL AIR CONDITIONING	Business as Usual	Consistent with Global HFC Phasedown
Equipment Cost	\$4,000	\$4,400
First Refrigerant Cost	\$53	\$49
Lifetime Refrigerant Supply	\$79	\$37
Lifetime Service Costs	\$2,250	\$1,950
Lifetime Electrical Costs	\$11,585	\$11,434
<b>TOTAL OWNERSHIP COSTS</b>	<b>\$17,966</b>	<b>\$17,869</b>
<b>ANNUAL AVERAGE COSTS</b>	<b>\$1,197.74</b>	<b>\$1,191.29</b>

COMMERCIAL AIR CONDITIONING	Business as Usual	Consistent with Global HFC Phasedown
Equipment Cost	\$25,000	\$27,500
First Refrigerant Cost	\$700	\$653
Lifetime Refrigerant Supply	\$1,050	\$490
Lifetime Service Costs	\$15,000	\$13,000
Lifetime Electrical Costs	\$351,285	\$346,697
<b>TOTAL OWNERSHIP COSTS</b>	<b>\$389,035</b>	<b>\$388,340</b>
<b>ANNUAL AVERAGE COSTS</b>	<b>\$26,202.34</b>	<b>\$25,889.34</b>

**HFC phasedown will not increase consumers' cost of air conditioning.**

## Refrigerators Add Value at Lower Cost

- Refrigerators today are larger, lower-priced, and more energy-efficient than ever.
- The trend has been persistent despite 30 years of transitions under the Montreal Protocol.
- Similarly, other applications have already begun to transition to new compounds and can benefit further from the clarity of the HFC phasedown schedule.



**No reason to expect consumer impacts of HFC phasedown to differ from earlier transitions.**

## Summary of HFC Phasedown Impacts

- U.S. Industry needs certainty about transition timing to win globally
  - The global HVACR market will double in ten years
  - U.S. industry must be cost competitive to expand global market share
  - Phasedown timing certainty reduces transition costs
- U.S. Economic Benefits
  - Increase American manufacturing jobs
  - Grow U.S. share of the global market
  - Improve the U.S. balance of trade
  - Phasedown timing certainty delivers economic benefits
- American Consumer Impact
  - AC continues to be more efficient
  - AC continues to be more affordable for American consumers
  - Phasedown timing certainty reduces the cost to consumers

**U.S. HFC phasedown benefits industry, the economy, and consumers**



Shaping Tomorrow's  
Built Environment Today

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Michael CA Schwedler, PE  
2021-2022 ASHRAE President

Trane  
3600 Pammel Creek Rd  
La Crosse, WI 54601-7599  
Phone: 608-787-4339  
Email: [mschwedler@trane.com](mailto:mschwedler@trane.com)

March 14, 2022

The Honorable Robert Menendez  
Chairman  
U.S. Senate Committee on Foreign Relations  
423 Dirksen Senate Office Building  
Washington, DC 20510

The Honorable James E. Risch  
Ranking Member  
U.S. Senate Committee on Foreign Relations  
423 Dirksen Senate Office Building  
Washington, DC 20510

**Re: Ratification of the Kigali Amendment to the Montreal Protocol**

Dear Chairman Menendez and Ranking Member Risch:

The Kigali Amendment to the Montreal Protocol is an agreement to phase down the production and consumption of high global warming potential (GWP) hydrofluorocarbons (HFCs) globally before 2050. The phase down began in 2019 and 130 countries around the world have already ratified the amendment, including the EU, UK, China, and India. We urge the Senate Foreign Relations Committee to give prompt consideration and a favorable vote to ratify the Kigali Amendment to the Montreal Protocol at its earliest opportunity, so that it may be considered by the full U.S. Senate.

ASHRAE, founded in 1894, is a technical society advancing human well-being through sustainable technology for the built environment. The Society and its more than 50,000 individual members worldwide focus on building systems, energy efficiency, indoor environmental quality, refrigeration and sustainability. ASHRAE has been involved in research projects and the development of standards to help industry safely transition from the current HFC refrigerants to a next generation of refrigerants without disruption to the end-users that rely on refrigeration and air conditioning technologies.

The Biden Administration committed to ratify the Kigali Amendment in April 2021 and it was transmitted to the Senate for ratification consideration on November 16, 2021. To date, the Senate has not taken substantive action toward ratification. Although the U.S. enacted the American Innovation and Manufacturing Act in 2020, which authorizes the U.S.



Environmental Protection Agency to phase down high GWP refrigerants in line with the Kigali Amendment, ratification is necessary to ensure American technology leadership, to provide more accountability to meet phasedown goals, to expand commerce opportunities, and to enable trade favorability with other ratifying countries. Ratification of the Kigali Amendment has bipartisan support, will reduce potent greenhouse gas emissions, prevent a half degree Celsius of warming by the end of the century, boost domestic manufacturing by over 30,000 jobs, and reestablish the U.S. as a leader in the global effort to combat global warming.

High GWP HFCs are commonly used in refrigeration, air conditioning, heating, building insulation and fire extinguishing systems today. The use of these HFCs is attributed to the phaseout of ozone depleting chloroflourocarbons (CFCs) and hydrochloroflourocarbons (HCFCs) under the Montreal Protocol. While HFCs are not ozone depleting, their GWP can be as much as 14,000 times greater than carbon dioxide. For this reason, alternative refrigerants have been developed with low or no GWP, some of which are mildly flammable.

To safely transition to these next generation refrigerants, ASHRAE Standards 15 and 34 have been updated and are available for immediate adoption. These standards are designed to protect people and property, and provide a uniform system for assigning reference numbers, safety classifications and refrigerant concentration limits to refrigerants:

- Standard 15-2019 *Safety Standard for Refrigeration Systems* establishes procedures for operating equipment and systems associated with refrigerants
- Standard 34-2019 *Safety Classification of Refrigerants* provides shorthand nomenclature and assigned safety classes based on toxicity and flammability

We are ready to offer our support, knowledge, and resources to answer technical questions concerning the phase down of HFCs, particularly those used as refrigerants in buildings. Please contact me with any questions or have your staff contact ASHRAE's government affairs staff at [GovAffairs@ASHRAE.org](mailto:GovAffairs@ASHRAE.org). Thank you again for your consideration of our comments.

Sincerely,



Michael CA (Mick) Schwedler, P.E., Fellow ASHRAE, LEED AP  
2021-2022 ASHRAE President



April 5, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
United States Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
United States Senate  
Washington, DC 20510

Dear Chairman Menendez and Ranking Member Risch:

Carrier respectfully urges the expeditious consideration of the Kigali Amendment to the Montreal Protocol in the Foreign Relations Committee. By ratifying this amendment, we will secure America's place as the global leader in several manufacturing industries and give American workers an advantage against competitors in global markets.

We are the leading global provider of healthy, safe, sustainable, and intelligent building and cold chain solutions, with a diverse and world-class workforce. With more than a century of expertise, we drive innovation while putting our customers first, helping protect our planet, and inspiring and empowering our people.

American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.

Last Congress, the American Innovation and Manufacturing (AIM) Act was enacted, a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment. But to reap its full economic benefits, ratification also is necessary.

Carrier therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's HVACR technology leadership.

We greatly appreciate your attention to this matter and look forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Gilley".

Kyle Gilley  
Vice President, Government Relations  
Carrier Global Corporation

May 18, 2018

The Honorable Donald J. Trump  
The White House  
1600 Pennsylvania Avenue, NW  
Washington, D.C. 20500

Dear Mr. President:

The undersigned member manufacturers of the Alliance for Responsible Atmospheric Policy (the Alliance) and Air-Conditioning, Heating, and Refrigeration Institute (AHRI) are writing to urge you to submit the Kigali Amendment to the Montreal Protocol to the United States Senate for ratification. We believe this action will help secure a position of strength for American companies in a highly competitive global market for next generation air conditioning, refrigeration, thermal insulation, aerosols, medical uses, fire suppression, semiconductors and other technologies that utilize fluorocarbons. With Senate ratification comes American technological leadership, and a head-start for American industry in the global race to provide the world with state-of-the-art products. As such, we believe that the Kigali Amendment represents a chance to put America first, and to keep American workers at the forefront of these important global industries.

For more than 30 years, the Montreal Protocol has provided the framework for the rapid development of new technologies in the air conditioning and refrigeration industry. Through American participation and leadership, American companies and the workers they employ have been able to stay ahead of foreign competition. By sending the Kigali Amendment to the Senate, you can help solidify this advantage and take the next step in improving a framework that has enjoyed bipartisan support for decades. In fact, the Montreal Protocol was first ratified – unanimously- during the Reagan Administration.

This is a critical issue for American jobs and the economy. Studies show that ratification of the Kigali amendment will increase U.S. manufacturing jobs by 33,000, increase exports by \$5 billion, and improve the overall balance of trade for these products. On the other hand, failure to ratify the Kigali Amendment could transfer the current competitive advantage from America to other countries, like China. As an example, a 2016 U.S. International Trade Commission anti-dumping decision regarding fluorocarbons was decided against Chinese companies.

On behalf of the 589,000 Americans currently employed in our industries, we urge you to send the Kigali Amendment to the United States Senate for ratification. It is our goal to protect and create American jobs, a goal that we know you share. We look forward to working together to achieve this goal.

Sincerely,



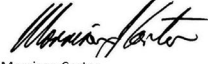
Andy Armstrong  
Vice President, Sales & Marketing  
Fujitsu General America



Todd Bluedorn  
Chairman of the Board & Chief Executive Officer  
Lennox International Inc.



Thomas Burke  
President and CEO  
Modine Manufacturing



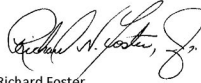
Morrison Carter  
President & CEO  
Beckett Gas Inc.



Keith Coursin  
President  
Desert Aire LLC



Takeshi Ebisu  
President and CEO  
Goodman Global Group



Richard Foster  
President  
Trolex Corporation



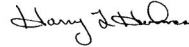
John Galyen  
President  
Danfoss North America



Chuck Gates  
President  
RenewAire



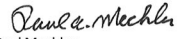
David Geerts  
President  
Structural Concepts Corporation




Harry Holmes  
President  
Morrison Products



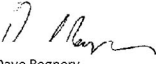
Bill Jackson  
President, Global Products, Head of Corporate  
Strategy  
Johnson Controls



Paul Mechler  
President  
Marvair and ICE Divisions of Airxcel, Inc.



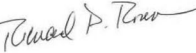
Chris Peel  
President and COO  
Rheem Manufacturing



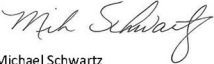
Dave Regnery  
Executive Vice President  
Ingersoll Rand



J. Monte Roach  
CEO  
A-Gas



Richard Rowe  
Arkema



Michael Schwartz  
Chief Executive Officer  
Daikin Applied Americas



Paul Sindoni  
President  
Hillphoenix



Roger Richmond Smith  
Chairman, CEO  
SMART Chillers, Inc.



Yashuhiro Utsumi  
President and CEO  
Daikin America, Inc.



Mark Vergnano  
President and Chief Executive Officer  
The Chemours Company



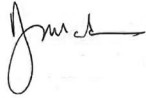
Phillip Windham  
President - Residential  
Nortek Global HVAC



Frank Xu  
Marketing Director  
Sanhua



Brad Kivlan  
CEO  
Dynatempt International



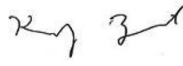
Robert J. McDonough  
President  
UTC Climate, Controls & Security



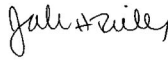
Darius Adamczyk  
Chairman and Chief Executive Officer  
Honeywell



Phillip M. Lapin  
President and CEO  
Falcon Safety Products



Kevin J. Zugibe  
Chief Executive Officer  
Hudson Technologies



John H. Reilly  
President and CEO  
National Refrigerants, Inc.



Brent Schroeder  
Group President, Heating & Air Conditioning  
Emerson



Jim Fitterling  
President and Chief Operating Officer  
Chief Executive Officer-Elect  
The Dow Chemical Company

CC: The Honorable Mike Pompeo  
United States Secretary of State

February 16, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
Washington, DC 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
Washington, DC 20510

*Re: Ratification of the Kigali Amendment to the Montreal Protocol*

Dear Chairman Menendez and Ranking Member Risch:

The undersigned organizations urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol, which would enable the full Senate to provide its advice and consent.

We represent the American business community, which strongly supports the Kigali Amendment for the economic and environmental benefits associated with phasing down the production and use of hydrofluorocarbons (HFCs).

We believe the case for ratification is both essential and urgent. Ratification would safeguard the competitiveness of American manufacturers and showcase American climate leadership. The Kigali Amendment would enhance the significant economic opportunities created by *The American Innovation and Manufacturing Act*, passed by Congress in 2020. For instance, there are estimates that some sectors could directly add 33,000 U.S. manufacturing jobs over the next decade. A global HFC phasedown would also avoid up to 0.5° C of warming by 2100.

Accessing global markets for the HFC phasedown is among our highest priorities. We believe even a slight delay in ratification emboldens foreign competitors, undermines U.S. climate action, and delays reduction of HFC emissions.

We greatly appreciate your attention to this matter and look forward to working with you in the coming weeks in support of Senate approval of the Kigali Amendment.

Sincerely,

Alliance for Automotive Innovation  
Alliance for Responsible Atmospheric Policy  
American Chemistry Council  
Air-Conditioning, Heating & Refrigeration Institute  
Association of Home Appliance Manufacturers  
Heating, Air-conditioning & Refrigeration Distributors International  
National Association of Manufacturers  
Plumbing-Heating-Cooling Contractors—National Association  
Semiconductor Industry Association  
U.S. Chamber of Commerce

cc: Members of the Senate Committee on Foreign Relations





April 5, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

*Re: Ratification of the Kigali Amendment to the Montreal Protocol*

Dear Chairman Menendez and Ranking Member Risch:

The American Chemistry Council's (ACC) Center for the Polyurethanes Industry (CPI) is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. By ratifying this amendment, we will secure America's place as the global leader in several manufacturing industries and give American workers an advantage against competitors in global markets.

CPI represents the value chain for the polyurethanes industry, including suppliers, manufacturers, and users of polyurethanes. CPI members manufacture foam blowing agents — chemical compounds that help foam materials harden — formulate polyurethane foam systems and products containing blowing agents and produce products that contain polyurethane foam. The polyurethanes industry has been a leader in producing products that balance performance and environmental impacts

Over the last several years, CPI members have made significant investments to develop products, like spray foam, that are based on low global warming potential foam blowing agents. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000 and stimulate \$12.5 billion in new investment in the U.S. economy.

Spray foam is an innovative, multifunctional material for home insulation and air sealing that can increase energy efficiency and comfort while helping combat climate change and greenhouse gas emissions. Transitioning from high global warming potential (GWP) blowing agents like hydrofluorocarbons to low-GWP blowing agents will make environmentally friendly products like spray foam even more sustainable.

During the last session, Congress passed the American Innovation and Manufacturing Act (AIM Act) — a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment. However, to optimize the full economic benefits of the Amendment, ratification is also necessary.

ACC therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's insulation technology leadership.

CPI greatly appreciates your attention to this matter and look forward to working with you in support of Senate ratification of the Kigali Amendment.

Sincerely,

Ian Choiniere  
Director, Product Advocacy  
American Chemistry Council, Center for the Polyurethanes Industry



**DAIKIN U.S. CORPORATION**  
801 13<sup>TH</sup> STREET NW, SUITE 200 SOUTH  
WASHINGTON, DC 20005  
PHONE: (202) 383-8740

April 5, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

***Re: Senate Committee on Foreign Relations Hearing to Consider the Kigali Amendment to the Montreal Protocol (Treaty Doc. 117-1)***

Dear Chairman Menendez and Ranking Member Risch:

Daikin U.S. Corporation strongly supports the expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. The ratification of this amendment will give American workers an advantage in today's global market and secure America's place as the global leader.

Right now, American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. According to a study by the University of Maryland and JMS, the Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.

In addition, ratification is needed in order to enjoy the full economic benefits of last year's enacted American Innovation and Manufacturing Act (AIM Act), a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment.

Daikin U.S. Corporation therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and encourage further innovation to strengthen America's HVACR technology leadership.

Thank you for your attention to this matter and we look forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,

David Calabrese  
Senior Vice President, Government Affairs  
Deputy General Manager, Washington, D.C. Office  
Daikin U.S. Corporation  
E-Mail: [david.calabrese@daikinus.com](mailto:david.calabrese@daikinus.com)

## Honeywell

Advanced Materials  
115 Tabor Road, Morris Plains 07950  
www.honeywell.com

April 5, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

*Re: Ratification of the Kigali Amendment to the Montreal Protocol*

Dear Chairman Menendez and Ranking Member Risch:

Honeywell International Inc. is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. By ratifying this amendment, we will secure America's place as the global leader in several manufacturing industries and give American workers an advantage against competitors in global markets.


Right now, American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.

Last Congress, you passed the American Innovation and Manufacturing Act (AIM Act), a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment.

But to reap its full economic benefits, ratification also is necessary.

Honeywell International Inc. therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's HVACR technology leadership.

Honeywell International Inc. greatly appreciates your attention to this matter and look forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,  
Digitally signed by  
  
938346922884CS  
Jeffrey Dormo  
VPGM Fluorine Products

**HUSSMANN®**Hussmann Corporation  
12999 St. Charles Rock Road  
Bridgeton, MO 63044 USA

April 5, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510***Re: Ratification of the Kigali Amendment to the Montreal Protocol***

Dear Chairman Menendez and Ranking Member Risch:

Hussmann Corporation is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. By ratifying this amendment, we will secure America's place as the global leader in several manufacturing industries and give American workers an advantage against competitors in global markets.

Hussmann is a leading manufacturer of commercial refrigeration equipment in North America and a primary provider of installation, maintenance, and service for the food retailing industry. Since its founding in 1906, the company has supported our food retailer partners, from the largest retail chains and regional supermarkets to dollar and drug stores and family-owned specialty markets. Committed to pursuing new value through innovation, the company uses its technologies to help our customers improve the energy efficiency of their operations and reduce refrigerant emissions to the environment. Hussmann has manufacturing facilities in California, Florida, Georgia, Missouri and Tennessee. Service and install branches are located throughout the country.

Including Hussmann, American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.

Last Congress, you passed the American Innovation and Manufacturing Act (AIM Act), a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment.

But to reap its full economic benefits, ratification also is necessary.

Hussmann therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's HVACR technology leadership.

Hussmann greatly appreciates your attention to this matter and look forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,



Jim Figge  
CEO Hussmann Corporation



Climate Solutions  
1946 W Cook Rd  
Ft. Wayne, IN 46818

www.regalrexnord.com

*Not indicative of legal entity*

April 4, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

**Re: Ratification of the Kigali Amendment to the Montreal Protocol**

Dear Chairman Menendez and Ranking Member Risch:

Regal Rexnord is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. By ratifying this amendment, we will secure America's place as the global leader in several manufacturing industries and give American workers an advantage against competitors in global markets.

Regal Rexnord is a leading American manufacturer of electric motors, electrical-motion controls, power generation and transmission products serving markets throughout the world. Regal provides efficient and innovative solutions to customers in commercial, industrial, and residential markets. Our product brands meet customer requirements in demanding applications used around the globe.

Right now, American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.

Last Congress, you passed the American Innovation and Manufacturing Act (AIM Act), a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment.

But to reap its full economic benefits, ratification also is necessary.

Regal Rexnord therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's HVACR technology leadership.

Regal Rexnord greatly appreciates your attention to this matter and looks forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,

John Kunze  
Segment President  
Climate Solutions  
Regal Beloit America inc.



8000 Phoenix Parkway  
O'Fallon, MO 63368  
636.561.7300 main  
www.nortekhvac.com

April 4, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

Sent via email:  
[josh\\_klein@foreign.senate.gov](mailto:josh_klein@foreign.senate.gov)  
[julia\\_greenfelder@foreign.senate.gov](mailto:julia_greenfelder@foreign.senate.gov)  
[andy\\_olson@foreign.senate.gov](mailto:andy_olson@foreign.senate.gov)

***Re: Ratification of the Kigali Amendment to the Montreal Protocol***

Dear Chairman Menendez and Ranking Member Risch:

Nortek Global HVAC (Nortek) is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. By ratifying this amendment, we will secure America's place as the global leader in several manufacturing industries and give American workers an advantage against competitors in global markets.

Founded in 1919 and headquartered in O'Fallon, Missouri, Nortek is a manufacturing leader in heating and air-conditioning appliances with nearly \$600M in annual sales across the residential, light commercial, and manufactured housing markets. On behalf of Nortek's approximately 2000 employees, we urge the U.S. Senate to ratify the Kigali Amendment to the Montreal Protocol.

Right now, American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.

Last Congress, you passed the American Innovation and Manufacturing Act (AIM Act), a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment.





8000 Phoenix Parkway  
O'Fallon, MO 63368  
636.561.7300 main  
[www.nortekhvac.com](http://www.nortekhvac.com)

But to reap its full economic benefits, ratification also is necessary.

Nortek therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's HVACR technology leadership.

Nortek greatly appreciates your attention to this matter and look forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,

A handwritten signature in black ink that reads 'Matt Lattanzi'.

Matt Lattanzi  
VP Research & Innovation  
Nortek Global HVAC, LLC  
[matt.lattanzi@nortek.com](mailto:matt.lattanzi@nortek.com)  
314-604-3996

cc: [sslater@ahrinet.org](mailto:sslater@ahrinet.org), [fay@alcalde-fay.com](mailto:fay@alcalde-fay.com)







April 5, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

***Re: Ratification of the Kigali Amendment to the Montreal Protocol***

Dear Chairman Menendez and Ranking Member Risch:

Koura is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. By ratifying this amendment, we will secure America's place as the global leader in several manufacturing industries and give American workers an advantage against competitors in global markets.

Koura is the global leader in the fluoroproducts that play a fundamental role in enhancing everyday lives, in a vast range of applications, including construction, batteries, polymers, refrigerants, medical devices and active pharmaceutical ingredients, among others.

Right now, American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.

Last Congress, you passed the American Innovation and Manufacturing Act (AIM Act), a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment.

But to reap its full economic benefits, ratification also is necessary.

Koura therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's HVACR technology leadership.

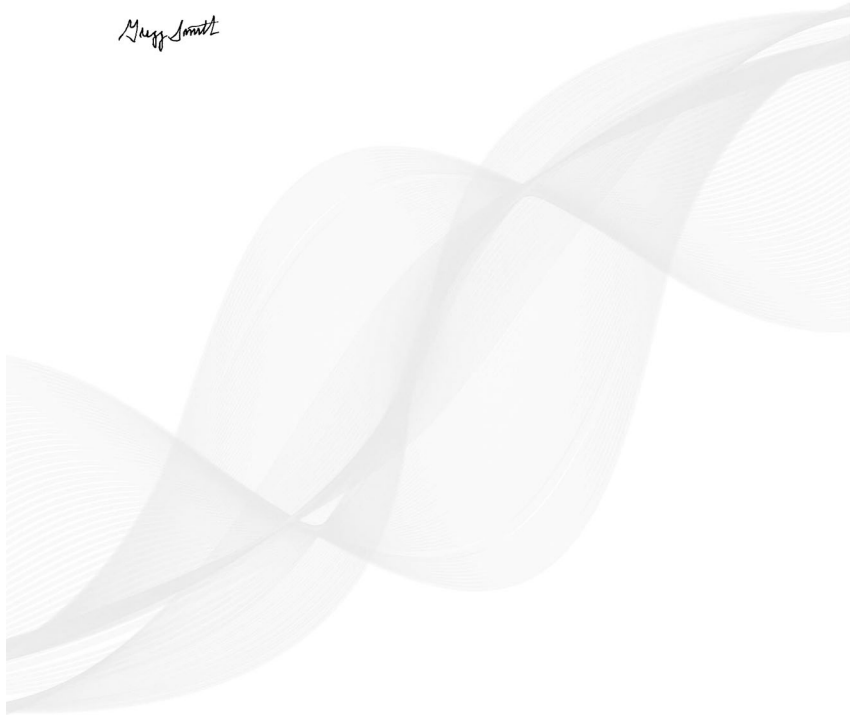
Koura  
49506 ICI Road  
St. Gabriel, LA 70776



Koura greatly appreciates your attention to this matter and look forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,

*Mary Smith*





Chemours Thermal & Specialized Solutions  
1007 Market Street  
Wilmington, DE 19801

April 5, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

*Re: Ratification of the Kigali Amendment to the Montreal Protocol*

Dear Chairman Menendez and Ranking Member Risch:

The Chemours Company, LLC is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. By ratifying this amendment, we will secure America's place as the global leader in several manufacturing industries including sustainable, high performance refrigerants with low global warming potential (GWP); and give American workers an advantage against competitors in global markets.

Chemours is a US producer and global market leader in manufacturing of thermal management and specialized solutions including Opteon™ and Freon™ refrigerants. Chemours brings solutions that are better, safer, more reliable, and more sustainable, through responsible chemistry to meet the needs of a world that demands more.

Right now, American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.

Last Congress, you passed the American Innovation and Manufacturing Act (AIM Act), a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment. But to reap its full economic benefits, ratification is also necessary.

Chemours therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's HVACR technology leadership.

Chemours greatly appreciates your attention to this matter and look forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,

Alisha Bellezza  
President, Thermal & Specialized Solution



701 8th Street, NW  
Suite 200  
Washington, DC 20001  
Phone: 202.434.0999  
Fax: 202.737.8069  
www.walmart.com

The Honorable Bob Menendez  
Chairman  
Senate Committee on Foreign Relations  
423 Dirksen Senate Office Building  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Senate Committee on Foreign Relations  
423 Dirksen Senate Office Building  
Washington, D.C. 20510

April 1, 2022

Dear Chairman Menendez and Ranking Member Risch:

Thank you for holding the hearing entitled "Treaties," scheduled to take place on April 6, 2022, which we understand will include a discussion of the Kigali Amendment. Walmart supports ratification of the Kigali Amendment to the Montreal Protocol, and we urge the Committee to advance the amendment to the full Senate for advice and consent as expeditiously as possible.

The Kigali Amendment is the global standard for countries to systematically reduce the consumption and production of climate-polluting hydrofluorocarbons ("HFCs") and has been ratified by 129 nations and regions, including major economies like China and India, as well as the European Union.<sup>1</sup> If all member parties meet their targets, the Kigali framework will prevent up to a half degree of warming by the end of the century.<sup>2</sup>

The American Innovation and Manufacturing Act ("AIM Act") of 2020, which passed Congress with strong bipartisan support, aligns with the phasedown schedule that the Kigali Amendment sets forth, driving innovation and creating jobs while supporting the cost-effective transition to lower emissions technologies that are critical to widespread end-use adoption.<sup>3</sup> Walmart supports science-based and market-based approaches to climate policy, characteristics evident in both the Kigali Amendment and the AIM Act.

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<sup>1</sup> [https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg\\_no=XXVII-2.f&chapter=27&clang=en](https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-2.f&chapter=27&clang=en)

<sup>2</sup> <https://www.epa.gov/ozone-layer-protection/recent-international-developments-under-montreal-protocol>

<sup>3</sup> [https://www.ahrinet.org/App\\_Content/ahri/files/RESOURCES/Kigali\\_JWS\\_04-19-18.pdf](https://www.ahrinet.org/App_Content/ahri/files/RESOURCES/Kigali_JWS_04-19-18.pdf)



Walmart has adopted a science-based strategy to eliminate emissions in our operations by 2040 and to avoid at least one billion metric tons of greenhouse gases in our global value chain by 2030. One of the core areas of our zero-emissions strategy is to phase down the use of high global warming potential (GWP) HFC refrigerants from refrigeration and air-cooling equipment.

As a global company, Walmart values the alignment of climate policies across national borders. U.S. ratification of the Kigali Amendment will provide international consistency and further enable our access to new technologies to move forward on becoming a zero emissions company.

Thank you for your consideration. We appreciate the Committee's work on this important matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Bruce Harris".

Bruce Harris  
Vice President, Federal Government Affairs  
Walmart, Inc.

CC: Members of the Senator Foreign Relations Committee  
The Honorable John Boozman  
The Honorable Tom Cotton



April 7, 2022

The Honorable Bob Menendez  
Chairman  
Committee on Foreign Relations  
U.S. Senate  
Washington, D.C. 20510

The Honorable James Risch  
Ranking Member  
Committee on Foreign Relations  
U.S. Senate  
Washington, DC 20510

**Re: Ratification of the Kigali Amendment to the Montreal Protocol**

Dear Chairman Menendez and Ranking Member Risch:

National Refrigerants, Inc. (NRI) is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. By ratifying this amendment, we will secure America's place as the global leader in several manufacturing industries and give American workers an advantage against competitors in global markets.

NRI is an importer, packager, distributor, and EPA-certified reclaimer of refrigerants located in New Jersey. With over 400 distribution locations in the United States, Canada, and Europe, National is one of the largest refrigerant distributors in the world. It supplies refrigerant products to over 50,000 customers that own, operate, and/or service billions of dollars worth of refrigeration and air conditioning equipment. These customers include businesses of all sizes, including, but not limited to, one and two truck service technician companies, corner grocery stores, supermarket chains, industrial plants, small commercial businesses, hospitals, government facilities, and schools.

Right now, American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.

Last Congress, you passed the American Innovation and Manufacturing Act (AIM Act), a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment. NRI is fully supportive of the AIM Act as well as the Kigali Amendment. But to reap its full economic benefits, ratification also is necessary.

NRI therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's HVACR technology leadership.

NRI greatly appreciates your attention to this matter and looks forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,  
NATIONAL REFRIGERANTS, INC.

A handwritten signature in cursive script that reads "Maureen Beatty".

Maureen Beatty  
EVP





The new degree of comfort.™

April 4, 2022

The Honorable Bob Menendez  
 Chairman  
 Committee on Foreign Relations  
 U.S. Senate  
 Washington, D.C. 20510

The Honorable James Risch  
 Ranking Member  
 Committee on Foreign Relations  
 U.S. Senate  
 Washington, D.C. 20510

***Re: Ratification of the Kigali Amendment to the Montreal Protocol***

Dear Chairman Menendez and Ranking Member Risch:

Rheem Manufacturing Company (Rheem) is writing to urge expeditious Foreign Relations Committee consideration of the Kigali Amendment to the Montreal Protocol. By ratifying this amendment, we will secure America's place as the global leader in several manufacturing industries and give American workers an advantage against competitors in global markets.

Rheem is an industry leader in total heating, cooling, refrigeration and water heating solutions, headquartered in Atlanta, Georgia. Rheem has air conditioning and refrigeration manufacturing operations in Arkansas, Alabama and North Carolina and distribution facilities throughout the United States, Canada and around the world. U.S. leadership, through ratification of the Kigali Amendment, is necessary in order to fully capture the job, trade and environmental benefits from the design, engineering and installation of new HVAC and refrigeration technologies.

Right now, American companies and the 2.5 million people employed in the U.S. heating, ventilation, air conditioning, and refrigeration (HVACR) industry are poised to significantly benefit from the technology transitions contemplated by the Kigali Amendment. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, stimulate \$12.5 billion in new investment in the U.S. economy, and boost HVACR exports by 25 percent.

Last Congress, you passed the American Innovation and Manufacturing Act (AIM Act), a bipartisan measure providing authority under federal law to implement the terms of the Kigali Amendment.

But to reap its full economic benefits, ratification also is necessary.



INTEGRATED HOME COMFORT

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Rheem therefore urges you to ratify the Kigali Amendment without delay to protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's HVACR technology leadership.

Rheem greatly appreciates your attention to this matter and look forward to working with you in support of Senate approval of the Kigali Amendment.

Sincerely,

A handwritten signature in black ink that reads "Mike Branson".

Mike Branson  
President, Global Air  
Rheem Manufacturing Company

United States Senate  
WASHINGTON, DC 20510

June 4, 2018

President Donald J. Trump  
The White House  
1600 Pennsylvania Avenue NW  
Washington, D.C. 20500

Dear Mr. President:

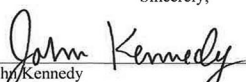
We write to urge you to send the Kigali Amendment to the Montreal Protocol to the Senate for its advice and consent. The Kigali Amendment is intended to foster a smooth transition to commercially available next generation technologies developed by American industry. By sending this amendment to the Senate, you will help secure America's place as the global leader in several manufacturing industries, and in turn give American workers an advantage against their competitors in the international marketplace.

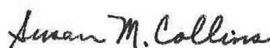
Under the framework of the Montreal Protocol, U.S. industry has for years positioned itself as a leader in the effort to develop beneficial technology transitions relating to the use of fluorocarbon technologies, including air conditioning and refrigeration technologies. In fact, the Montreal Protocol has its roots in the Reagan Administration and has enjoyed bipartisan support since its inception. This leadership is due in part to the active participation of U.S. industry members with the government over the 30-year history of the treaty and can only continue through Senate ratification of the Kigali Amendment.

Right now, American companies and their 589,000 employees are poised to significantly benefit from the transitions contemplated by the Kigali Amendment, transitions that other countries already have in place. The Kigali Amendment is projected to increase U.S. manufacturing jobs by 33,000, increase exports by \$4.8 billion, and improve the heating, ventilation, air-conditioning, and refrigeration industry (HVACR) balance of trade. The failure to ratify this amendment could transfer our American advantage to other countries, including China, which have been dumping outdated products into the global marketplace and our backyard. Thankfully, there is a clear path forward to protect American interests.

We urge you to send this amendment to the Senate for its consideration. The impacted industries in our country played a major role in shaping this amendment and are supportive of its ratification and implementation. The Kigali Amendment will protect American workers, grow our economy, and improve our trade balance all while encouraging further innovation to strengthen America's leadership role. We look forward to working with you on this important effort to support American jobs and technology.

Sincerely,

  
\_\_\_\_\_  
John Kennedy  
United States Senator

  
\_\_\_\_\_  
Susan M. Collins  
United States Senator

*Bill Cassidy, M.D.* *Lindsey O. Graham*

Bill Cassidy, M.D.  
United States Senator

Lindsey O. Graham  
United States Senator

*Lisa Murkowski*

Lisa Murkowski  
United States Senator

*Johnny Isakson*

Johnny Isakson  
United States Senator

*Lamar Alexander*

Lamar Alexander  
United States Senator

*Marco Rubio*

Marco Rubio  
United States Senator

*Jerry Moran*

Jerry Moran  
United States Senator

*Tim Scott*

Tim Scott  
United States Senator

*Roy Blunt*

Roy Blunt  
United States Senator

*John Boozman*

John Boozman  
United States Senator

*Todd Young*

Todd Young  
United States Senator