

Raphaël Ollivier-Mrejen, Pierre Michel, and Minh-Hà Pham, “Chronicles of a Science Diplomacy Initiative on Climate Change,” *Science & Diplomacy*, Vol. 7, No. 2 (June 2018). <http://www.sciencediplomacy.org/perspective/2018/chronicles-science-diplomacy-initiative-climate-change>

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Chronicles of a Science Diplomacy Initiative on Climate Change

Raphaël Ollivier-Mrejen, Pierre Michel, and Minh-Hà Pham

“I now invite the COP [conference of parties] to adopt the draft decision entitled ‘Paris Agreement’ which features in the document. I’m looking around the room, I see that the reaction is positive, I don’t hear any objection. The Paris Agreement for the climate is accepted.”

—Laurent Fabius, foreign minister of France

On December 12, 2015, after making this statement and banging his gavel, the French foreign minister, presiding over the United Nations Climate Change Conference, received a lengthy standing ovation from those representing the 196 parties gathered at the Paris Le Bourget conference center. And thus the Paris Agreement on the climate was announced. The landmark achievement, praised by all parties as a diplomatic success for France, came after thirteen days of intense negotiations and months of preparation.

The Difficult Journey to COP21

In 2011, two years after the “Copenhagen failure,” during which participating nations failed to deliver a climate deal, the parties to the UN Framework

Convention on Climate Change (UNFCCC) agreed in Durban, South Africa, to successfully reach a deal by 2015. In September 2012, at the UN General Assembly, French president François Hollande announced his country's candidacy to host the 21st Conference of the Parties to the UNFCCC (COP21) and the 11th Conference of the Parties to the Kyoto Protocol (CMP11), to be held in 2015.

During preparations for COP21, Foreign Minister Fabius stressed how challenging it would be to achieve global consensus. Afterward, Laurence Tubiana, who served as France's climate change ambassador and special representative to the COP21, indicated that an unexpected alignment of factors had allowed for the accord's success, including on these levels:

- **Political**—the U.S.-China Joint Announcement on Climate Change (November 2014)
- **Economic**—breakthrough innovations in sustainable technologies
- **Social**—mobilization of civil society
- **Diplomatic**—fresh start for international negotiations after Copenhagen
- **Scientific**—release by the Intergovernmental Panel on Climate Change (IPCC) of the Fifth Assessment Report (2013, 2014)¹

On the diplomatic front, a key condition for success was the mobilization of French partners. Indeed, the role played by science diplomacy—among a wider set of diplomatic actions undertaken to prepare for COP21—is not well known. In June 2013, the Directorate-General of Global Affairs, which falls within the Foreign Affairs Ministry, asked French embassies in key countries to identify the main actors and influencers for international negotiations on climate change. In its reply, the French embassy in the United States stressed the role researchers could play in delivering messages to the U.S. president and informing public opinion, as well as the importance of think tanks and NGOs for testing and disseminating new ideas for taking on climate change. This article sheds particular light on the lessons learned from the French Ameri-Can Climate Talks (FACTS), a successful science diplomacy initiative launched by the French diplomatic network in North America in the lead-up to COP21.

French-American Climate Talks

In 2014, the Office for Science and Technology of the French embassy in the United States— together with the French embassy in Canada—launched FACTS.² These conferences brought together a wide range of French, Canadian and U.S. stakeholders from academia, NGOs, think tanks, governments, and the private sector. The principal idea was to help frame climate change not only in terms of carbon-emissions reduction but also as an opportunity for creating jobs, enhancing

economic growth, and fostering innovative modes of production and consumption. The goal was twofold: raising public awareness in France, the United States, and Canada, as well as reinforcing exchanges between scientists and experts on climate change issues.

By November 2015, nineteen FACTS conferences had been organized in major cities in the Canada and the United States, including Montreal, Ottawa, Chicago, Boston, New Orleans, Vancouver, Los Angeles, Denver, Raleigh, San Francisco, Dallas, Washington, D.C., Miami, Quebec, Toronto, Houston, Edmonton, and Austin. More than 140 high-level French, U.S. and Canadian speakers took part in those conferences. In total, FACTS events brought together 5,000 people, and the resulting online videos received more than 2,300 views.³ This series of events was also widely relayed on social media: about 1,300 messages were posted on Twitter by 300 different accounts, reaching more than 400,000 people, in 2014 alone.

Among the speakers were numerous climate and environmental scientists and experts, many of them world renowned. At MIT in Cambridge, for instance, Jean Jouzel, a French climatologist and glaciologist and former vice chair of IPCC Working Group I, and Susan Solomon, an MIT professor of atmospheric chemistry and member of the Royal Society, discussed the various impacts of climate change. In Vancouver, David Suzuki,⁴ Mark Jaccard,⁵ and Valérie Masson-Delmotte⁶ gave talks on innovative solutions to climate change.

Science was at the heart of the FACTS conferences. Events took place at the universities with which the Office for Science and Technology partnered, including the Coeur des Sciences de l'Université du Québec à Montréal, MIT, UCLA, North Carolina State University, and Simon Fraser University (British Columbia). Some talks were also hosted by the Canadian Museum of Nature in Ottawa and the Exploratorium in San Francisco. The partners helped define conference themes, based on local-level realities and challenges: e.g., sea-level rise in Miami, management of water resources in Denver, and carbon finance in Chicago.

The entire network of the Office for Science and Technology in North America was involved in organizing the FACTS events. Scientific attachés based in the consulates general of France in Atlanta, Boston, Chicago, Houston, Los Angeles, and San Francisco, together with the scientific service of the French embassy in Canada, helped to coordinate logistics and identify potential participants. Cooperation with other branches of the consulates general, including cultural and press services, as well as consuls general themselves, also figured centrally in promoting the events to a broad public. Coordination between different units was managed by the counselor for science and technology and the attaché for science

and technology in charge of environmental issues in Washington, D.C., ensuring this program fit the wider French strategy for COP21.

France's Strategy for COP21

Laurence Tubiana defined the French strategy for COP21 as being based on three conceptual approaches: Robert D. Putnam's "two-level game" theory, Robert O. Keohane and David G. Victor's concept of "the regime complex," and the economic theory of self-fulfilling prophecies.⁷ These approaches helped set the road map to COP21. As shown below, FACTS conferences took into account the three dimensions and were therefore fully integrated into the French diplomatic strategy.

First, in his famous academic article published in 1988, Putnam argued that domestic and international politics are entangled in a "two-level game":

At the national level, domestic groups pursue their interests by pressuring the government to adopt favorable policies, and politicians seek power by constructing coalitions among those groups. At the international level, national governments seek to maximize their own ability to satisfy domestic pressures, while minimizing the adverse consequences of foreign developments.⁸

The connections between the national and international levels are significant. On the one hand, international agreements enable important shifts in domestic policies, such as those needed to fight climate change. On the other hand, the balance of power among various domestic constituents has a direct impact on the possibility of reaching such international accords. Therefore, a detailed analysis of the different stakeholders' views on climate change—in every country—was deemed necessary to better understand the constraints national negotiators faced and how much leeway they had to negotiate. Such an enterprise proved especially insightful in large, diverse countries such as the United States and Canada, where a wide range of stakeholders with very different positions takes part in the (somewhat controversial) climate change debates.

Against this backdrop, the FACTS initiative helped France better understand those domestic debates and even contributed to shaping them by giving the floor to numerous actors, from the chairman of Royal Dutch Shell, Charles O. Holliday, to the environmental activist and cofounder of the Canadian NGO Équiterre, Steven Guilbeault.

Second, "the regime complex" concept, developed in 2011 by the U.S. academics Keohane and Victor, holds that instead of an integrated regime of governance,

international efforts to deal with climate change fall within a “complex” encompassing a “loosely coupled set of specific regimes.”⁹ Consequently, the UNFCCC, under which the intergovernmental agreement was negotiated, was not the only arena that mattered. Just as decisive was the alignment of positive signals in the different institutions and forums making up the regime complex for climate change.

For example, financial institutions proved critical given that climate finance was one of the four pillars of the Paris accord.¹⁰ France was particularly active in this field, especially in preparing the International Monetary Fund (IMF) and World Bank Group annual meetings. This is why Christine Lagarde, managing director of the IMF, and Bertrand Badré, managing director and chief financial officer of the World Bank Group, were invited to Washington, D.C., to give the opening keynote and concluding remarks, respectively, of the FACTS conference on innovation and the role of the private sector, just a few weeks before the opening of COP21.

Third was a grounding in the economic theory of self-fulfilling prophecies. Coined by U.S. sociologist Robert Merton in 1948, it is based on the idea that individuals’ expectations of the future will directly impact this future.¹¹ This theory is often used to explain how the shared belief that a bank will go bankrupt may lead to this very outcome. In the case of COP21, the idea was that success would be facilitated if all the stakeholders expected it to happen. To this end, great efforts were made to convince opinion leaders, journalists, entrepreneurs, activists, and CEOs that a strong agreement would be reached in Paris, the results of which would have significant effects on society in general and the economy in particular. The FACTS conferences are a good example, among others, of how political and economic momentum was built on the ground by spreading the idea that the Paris accord will change everything. In this respect, the large social media coverage of the initiative played a key role, as did the involvement of a wide range of actors, including major U.S. and French companies such as Mars Inc., L’Oréal, and Total.

Lessons Learned for Science Diplomacy

Through the FACTS conferences, science was fully integrated into the French diplomatic strategy. Consequently, the analysis of this initiative can contribute to current debates in the science diplomacy literature in at least two respects: by providing useful clarifications on (1) what science diplomacy is; and (2) what can be expected from it.

As for the first, an inaugural definition of science diplomacy was proposed in 2010 by the Royal Society and the American Association for the Advancement of Science (AAAS), publisher of *Science & Diplomacy*, in their report *New Frontiers in*

Science Diplomacy: Navigating the Changing Balance of Power.¹² This seminal work detailed the three dimensions of the field: science in diplomacy, diplomacy for science, and science for diplomacy.

The practice of science diplomacy was later reframed by Luk Van Langenhove as “a problem-solving approach in the international realm, where it can be used as a tool to achieve better global governance.”¹³ He suggested that “global science diplomacy” has three strands: “science in global diplomacy,” “diplomacy for global science,” and “global science for global diplomacy.” Interestingly, he places the focus on “the mechanisms for disseminating science advice at the global level” (science in global diplomacy) as well as on “advocacy networks...at the nexus of global science-policy interactions” (global science for global diplomacy). Those mechanisms for disseminating science cannot be conceived as elements of a linear process. The development of epistemic communities, such as the IPCC, and transnational advocacy networks, such as the Ocean and Climate Platform, has led to the multiplication of two-way interactions and blurring of boundaries between science and policy. Simply asserting scientific facts is no longer enough if political momentum is to be built at the international level to combat something as complex as climate change. To the contrary, sustained two-way interactions should be maintained between scientists and policy makers so that these sectors can share ideas and better appreciate each other’s practices. Enhanced connection was precisely the goal of the FACTS initiative: creating shared public spaces to foster exchanges among scientists, experts, and decision makers coming from the public and private sectors. In short, the FACTS experience showed that if actions to limit climate change are to be fostered, science must be brought back to the heart of intellectual and policy debates, through dialogue rather than one-way-interaction processes.

Second, the impacts of science diplomacy are still poorly understood.¹⁴ In a recent paper published in *Science & Diplomacy*, Peter Gluckman and his coauthors proposed a more “pragmatic perspective” on the discipline, one comprising “actions designed to directly advance a country’s national needs,” “address cross-border interests,” and “meet global needs and challenges.”¹⁵ The FACTS initiative directly embraces this vision of science diplomacy as a way of tackling global issues, such as climate change, by building diplomatic consensus, while advancing the national needs of the parties. Indeed, the FACTS experience shows how the protection of a common good, like the environment, can go hand in hand with the promotion of national interests.

In this regard, the FACTS initiative was a major success for French diplomatic leadership. Feedback from the different stakeholders involved in the FACTS events, as well as from the public, was largely positive. Participants often expressed

their gratitude to France for organizing these conferences and hosting the Paris climate summit. Thus, this science diplomacy initiative reinforced the idea that France was a strong climate advocate committed to facilitating exchanges among all stakeholders. It consolidated France's leadership and strengthened its ability to coordinate international negotiations by building trust-based relationships with all parties.

The Path Forward

To maintain political momentum after COP21, the Office for Science and Technology decided to build on the dynamics created by the FACTS program within a wide network of universities, NGOs, think tanks, and U.S. and Canadian public institutions. A new series called the French-American Climate Talks on Ocean (FACT-O) was thus launched in cooperation with the Ocean and Climate Platform.¹⁶ This platform is an alliance of NGOs and research institutions, created in 2014 with support from the UNESCO Intergovernmental Oceanographic Commission, that helped emphasize the importance of oceans in climate in the lead-up to COP21. For the first time in the history of climate change negotiations, oceans were mentioned in the preamble to the Paris Agreement, acknowledging the "importance of ensuring the integrity of [its] ecosystems."¹⁷ As of June 2018, seven FACT-O conferences have been organized at six different sites, including in Miami, Washington, D.C., New York City, Mount Vernon (Virginia), Galveston (Texas), and Vancouver, and have covered key issues ranging from marine protected areas and underwater heritage to the impact of climate change on ocean biodiversity and coral reefs.

French science diplomacy took on a new dimension with the "Make Our Planet Great Again" initiative.¹⁸ After U.S. president Donald Trump announced that the United States would withdraw from the Paris climate accord on June 1, 2018, French president Emmanuel Macron launched a call to researchers, entrepreneurs, students, associations, and NGOs from all over the world to come to France to work on climate change. Within the next several months, a website was created, 1,800 formal applications were received, including 1,100 (61%) from the United States, and the first eighteen researchers were selected for long-term stays, with each set to receive 1–1.5 million euros for a three-to-five-year project in cooperation with a French laboratory.¹⁹ Short stays for U.S. PhD students in France or cooperative research projects are also being supported by the French embassy in the United States based on existing schemes of cooperation. Although it is far too soon to determine the success of this initiative, it has already helped position France as a leader in the field of environmental science at large.

In conclusion, through leveraging science in the climate debate, and through the opportunity offered by the FACTS program in particular to favor the U.S.-French bilateral conversation on this topic, France has shown how science diplomacy has become a recognized and effective tool for promoting international coordination to deal with global issues such as the fight against climate change. These mechanisms are sure to outlast the challenges now being posed to the climate science agenda.

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The authors wish to address a special thanks to the representatives of the Embassy of France in Canada who partnered in the FACTS program, especially Jean-Christophe Auffray, then counselor for science and technology, as well as Mathieu Leporini and Fabien Agenès, the former and current scientific attachés in Vancouver.

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