

Reflection on the Arctic Innovation Lab at the Arctic Circle Assembly

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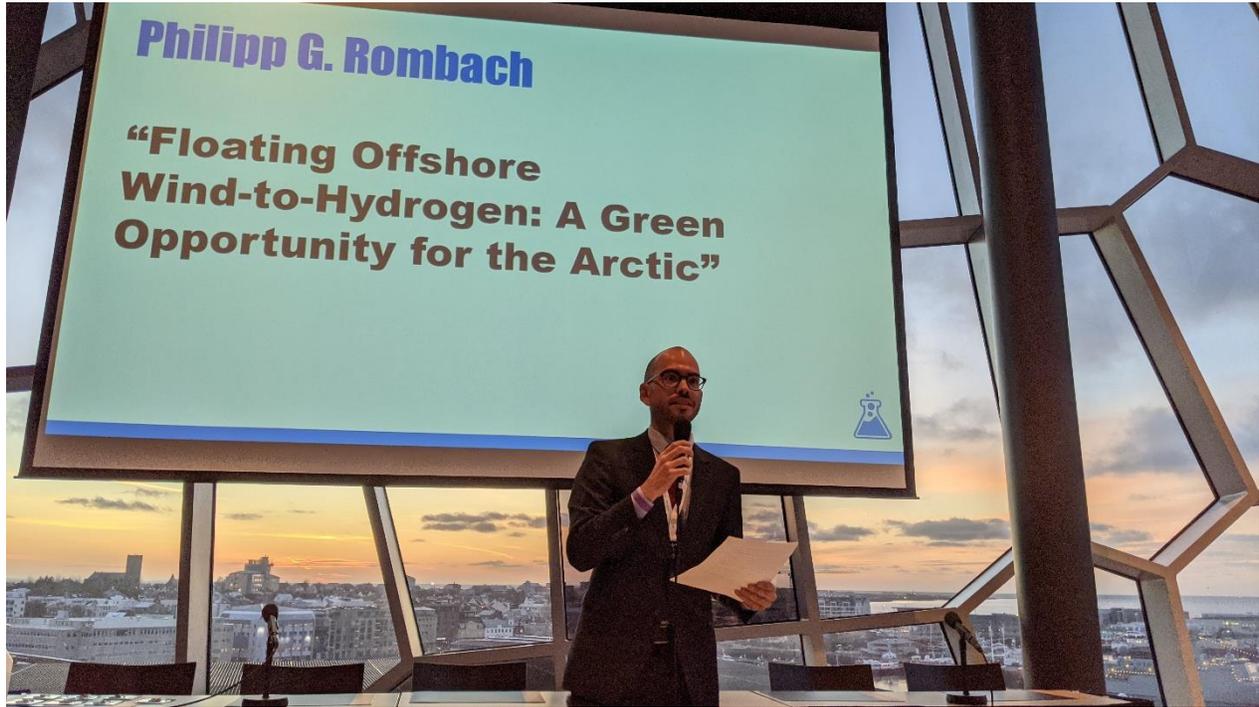
The Fletcher School of Law and Diplomacy has a long-standing tradition of sending its students to the annual Arctic Circle Assembly in Reykjavik, Iceland. What makes the Assembly so unique is its ability to bring together high-level experts, distinguished ambassadors, political leaders, as well as students and young professionals from the High North and beyond. Thus, attending the in-person 2021 Arctic Circle Assembly on behalf of The Fletcher School was a deeply inspiring and enriching experience. The purpose of my travels to Iceland was my participation as speaker in the Arctic Innovation Lab – one of many exciting events at the assembly. The Arctic Innovation Lab was founded five years ago at the Harvard Kennedy School Belfer Center by Halla Hrund Logadóttir, Fletcher alumna and current Director-General of Iceland’s National Energy Authority. The lab brings together enthusiastic, Arctic-minded students from Alaska to Reykjavik and Boston to Tromsø. At the assembly, each student presents a meticulously researched and prepared policy pitch to advance sustainability and foster innovation in the High North. Excitingly, the audience included not just fellow students but practitioners, decision makers, and leaders as well.

My policy pitch covered the topic of *Floating Offshore Wind-to-Hydrogen: A Green Opportunity for the Arctic*. The policy idea is the result of multi-disciplinary research conducted at the Fletcher Maritime Studies Program under the leadership of Prof. Rockford Weitz. My policy pitch on the future of Arctic green hydrogen sparked various inspiring debates following the event. The policy incubation process included eye-opening conversations with directors and representatives of the Arctic Economic Council, the Arctic Council’s Sustainability Development Working Group, the Wilson Center, as well as the International Center for Reindeer Husbandry.

The many experiences empowered me to build meaningful connections with like-minded young professionals and experienced practitioners. The assembly has taught me a deeper understanding of Arctic issues. Most importantly, getting to know Arctic researchers and representatives of indigenous communities enabled me to approach Arctic issues from a more nuanced perspective. Highly complex and interconnected issues are often amplified in the Arctic context. Thus, issues like a heating planet, the opening Arctic sea routes, and a sea change in the geopolitical climate all require balanced problem-solving approaches. Participating in such an inspiring event empowered me to learn new concepts, share a vision for a changing Arctic, and advance my career prospects. The written transcript of the policy pitch is printed below.



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Floating Offshore Wind-to-Hydrogen: A Green Opportunity for the Arctic

“The energy transition is the policy challenge of my generation. And the Arctic could place itself at the heart of the solution by becoming a global green hydrogen exporter in the decades ahead. This would be a major economic opportunity for the Arctic and its indigenous populations. Let me tell you how!”

The Arctic has some of the best wind conditions in the world. With the rapid emergence of electrolyzer and floating offshore wind technologies, the High North could be well positioned to ship green energy around the world. Gigawatt-scale floating wind parks in Arctic exclusive economic zones could harvest reliably strong winds. And in a subsequent step, large electrolyzers can transform the generated electricity into hydrogen and its derivatives ammonia and methanol.

With opening Arctic sea routes, Greenland and Alaska are best positioned to tap into new maritime lanes to ship green hydrogen carriers to global demand centers. There, green fuels will accelerate the decarbonization of hard-to-abate sectors such as aviation, shipping, and cement- and steelmaking.

To make floating wind-to-green hydrogen an economic and job opportunity for the Arctic, three advantages must be leveraged:

First, offshore wind-to-hydrogen circumvents the challenge of nimbyism while promising the creation of thousands of well-paying jobs in the local construction and maintenance economy.

Second, supplying Europe and North America with green hydrogen would integrate Greenland, Iceland, and the Faroe Islands deeper into the transatlantic community and could spur unprecedented foreign direct investment into these regions.

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Third, and maybe most importantly, the United States of America could spin the geopolitical chessboard around by supplying its East Asian allies – as well as its peer competitor – with green hydrogen from the Aleutian Islands. It would thus circumvent some of the risks attached to energy chokepoints such as the Strait of Malacca and the South China Sea. Therefore, Alaska could play a pivotal role in U.S. grand strategy by carrying over American energy independence into the age of renewable energies.

By daring to think big about the Arctic, renewable energies could create thousands of good-paying jobs from the Aleutians to Greenland and from Norway to the Kuril Islands. This circumpolar opportunity could facilitate a just energy transition for the Arctic and its indigenous populations.

The world absolutely can – and, therefore, must – move towards a sustainable future.”

I am grateful for CIERP’s financial support of my in-person participation in the Arctic Innovation Lab at the Arctic Circle Assembly in Reykjavik, Iceland.



Halla Hrund Logadóttir (Arctic Innovation Lab), Philipp G. Rombach (The Fletcher School), & Anders Oskal (International Center for Reindeer Husbandry)