In Alaska: Tuesday, January 14, 2025
and Wednesday, January 15, 2025

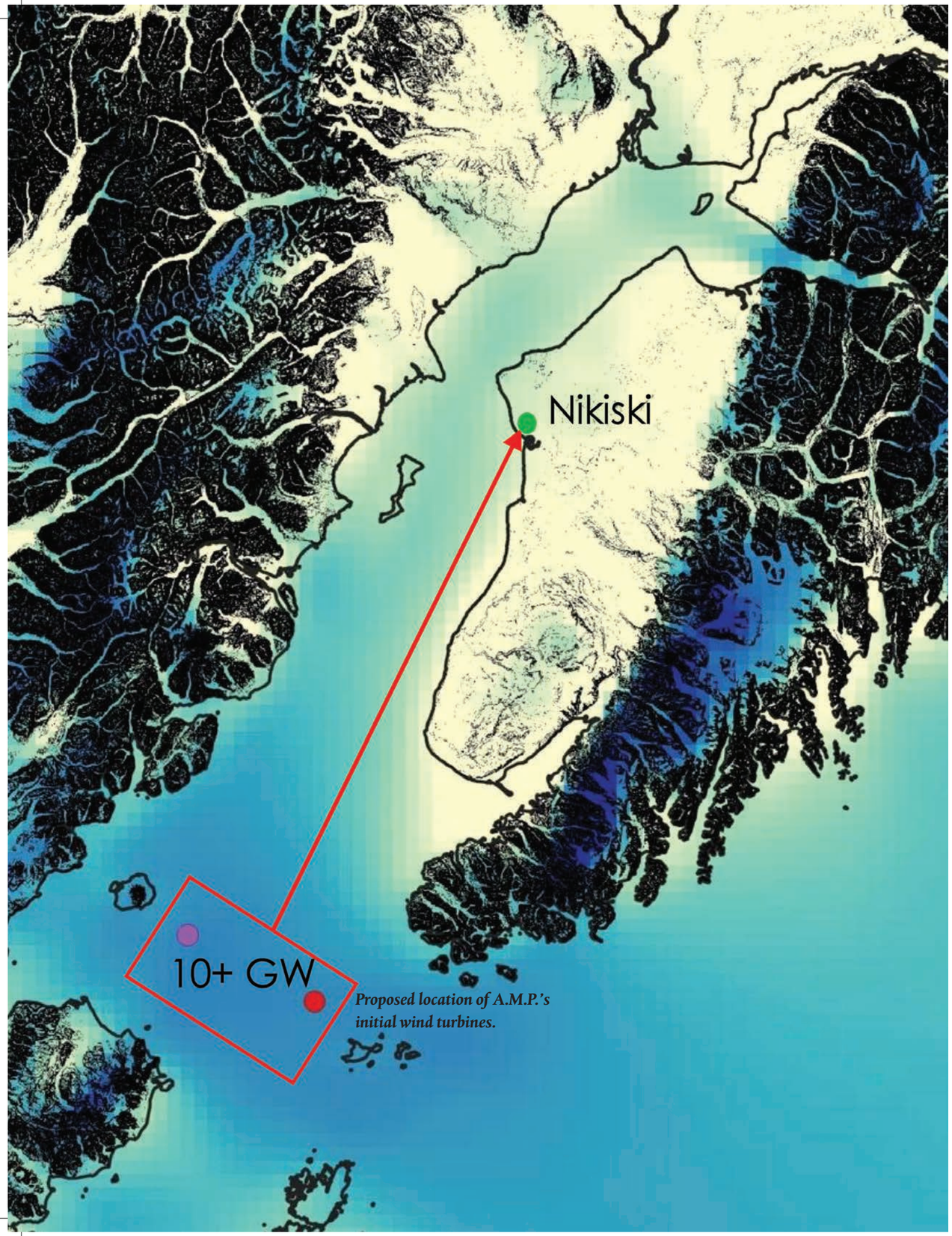
In Japan: Wednesday, January 15, 2025
and Thursday, January 16, 2025

Online Arctic Symposium:

Status and prospects of Japan-U.S. cooperation in the Arctic

COJ-ANC

Hosted by the
Consular Office of Japan in Anchorage



Proposed location of A.M.P.'s initial wind turbines.

FOREWORD

On January 14 and 15, 2025, the Consular Office of Japan in Anchorage held the fourth annual Online Arctic Symposium: Status and Prospects of Japan-U.S. cooperation in the Arctic. This year's Symposium featured speakers from Japan and US federal, state, and local governments, national research institutes, the University of Alaska-Fairbanks, Alaskan energy companies, and an autonomous intergovernmental organization. Day 1 featured topics on Japan-US bilateral cooperation in the Arctic, energy innovation in rural Alaska communities, the future of small modular reactors in Alaska, solutions to climate change, and carbon dioxide reduction systems. Day 2 featured topics on Alaska's role in future global energy markets, the potential of methane hydrate projects, and Alaska's potential as a supplier of natural gas and low carbon hydrogen to Japan. Each topic was followed by a question-and-answer session that allowed for discussion. This year's Symposium brought in the highest attendance so far, 91 people from across the globe. What follows is a summary of each presentation. ■

KEYNOTE SPEAKERS

Katsuhiko Takahashi
Ambassador of Japan for International Economic and Arctic Affairs, Women, Peace, and Security

Ambassador Katsuhiko Takahashi welcomed participants and spoke about the Mirai II, an ice breaking vessel set to be Commissioned in 2026 for joint research. The Ambassador then expressed his commitment to the Arctic via continued scientific collaboration.

Kiyohiko Hamada
Head Consul, Consular Office of Japan in Anchorage

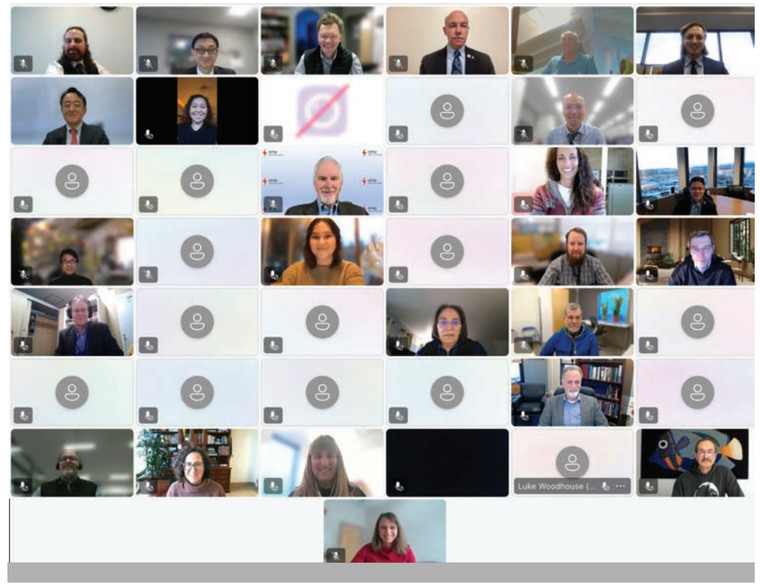
Head Consul Kiyohiko Hamada emphasized the importance of the Japan-Alaska relationship, thanking key collaborators such as Dr. Hajo Eicken and the Hon. Mead Treadwell for their efforts. Head Consul Hamada expressed optimism about future Japan-US joint research and energy projects in the Arctic.

Dan Sullivan
U.S. Senator for Alaska (Pre-Recorded Video Message)

Senator Dan Sullivan highlighted the state of the world's liquified natural gas market and Alaska's potential role. While showing pictures of the future implementation of the Alaska LNG project, Senator Sullivan praised US President Donald Trump's desire to advance the pipeline under the America First Agenda.

Mike Dunleavy
Governor of Alaska (Pre-Recorded Video Message)

Governor Mike Dunleavy highlighted Alaska's trade and historical cooperation with Japan. He then spoke about carbon offsets, the unique opportunity Alaska's Cook Inlet offers for carbon storage, Alaska's logistical advantages for global markets, and AKLNG's potential to provide Japan gas for years to come. Governor Dunleavy looks forward to continuing cooperation with Japan. ■



OVERVIEW OF THE ARCTIC

Michael Sfraga
US Ambassador-at-Large for Arctic Affairs

Ambassador Mike Sfraga addressed Arctic collaboration between the US and Japan as a pathway to ensuring a peaceful, stable, and prosperous region. He also urged participants to commit to actionable goals in advancing Arctic partnerships. While answering questions from the audience, Ambassador Sfraga made clear the US will continue to pay great attention to the geopolitical climate and military activity in the Arctic and will continue to make the region secure and safe for collaborative efforts.

Hajo Eicken
Director of the International Arctic Research Center

Director Hajo Eicken focused on measures to counteract the degradation of permafrost, loss of sea ice, and ecosystem restructuring in the Arctic. He stressed the importance of integrating scientific research into infrastructure planning. Sea ice loss is most prevalent north of Hokkaido, the Bering Sea, and the Kara Sea. He knows more work will be done by the US and Japan to understand the effects of climate change in the Arctic. ■

NEW FORMS OF ENERGY AND TECHNOLOGY IN THE ARCTIC

Pat Pitney
University of Alaska President

President Pat Pitney highlighted the Arctic Science publications at the University of Alaska-Fairbanks, and the importance of understanding local realities in remote regions such as Utqiagvik. She closed her remarks emphasizing the importance of Alaskan representation in D.C. due to actual experience and expertise.

Jeremy Kasper
Director of the Alaska Center for Energy and Power

Director Jeremy Kasper drew focus to rural energy projects and Alaska's expertise in microgrid technology. He shared successful case studies of wind and battery storage systems in St. Mary's and Mountain Village. He also displayed a map of the 250 microgrids throughout Alaska, 70 of which are incorporated through renewable energy projects. He hopes that Japan will continue to see Alaska as an opportunity for renewable energy project advancement.

Gwen Holdmann
University of Alaska-Fairbanks, Vice Chancellor for Research, Innovation, & Industry Partnerships

Dr. Gwen Holdmann provided details on advancements in small modular nuclear reactors technology and their potential in Alaska. After providing a brief primer on nuclear classifications and modern TRISO fuels she highlighted a partnership Galena, Alaska had with Toshiba in developing a 10MW sodium reactor due to similar environmental hazards in Japan and Alaska. Ongoing projects, such as Eielson AFB's micro reactor were mentioned as she brought attention to Alaska's interest in nuclear. ■

THE EFFECTS OF CLIMATE CHANGE ON THE ARCTIC

Claudine Hauri
Deputy Director of the International Arctic Research Center

Deputy Director Claudine Hauri presented on Indigenous perspectives on ocean acidification and cultural equity in scientific management. She also shared a video that highlighted the experiences of Native Alaskans activities in the Arctic.

Dr. Hiroshi Yoshida
Japan Agency for Marine-Earth Science Technology

Dr. Hiroshi Yoshida introduced information on COMAI, a robotic undersea drone used for under ice research. He detailed Japan's efforts in carbon capture technology and storage, with a focus on electric hydrolysis. He is optimistic that direct capture will exceed Japan's emissions by 2055. During the Q and A session, he discussed Alaska as Japan's best option for carbon capture and storage. ■

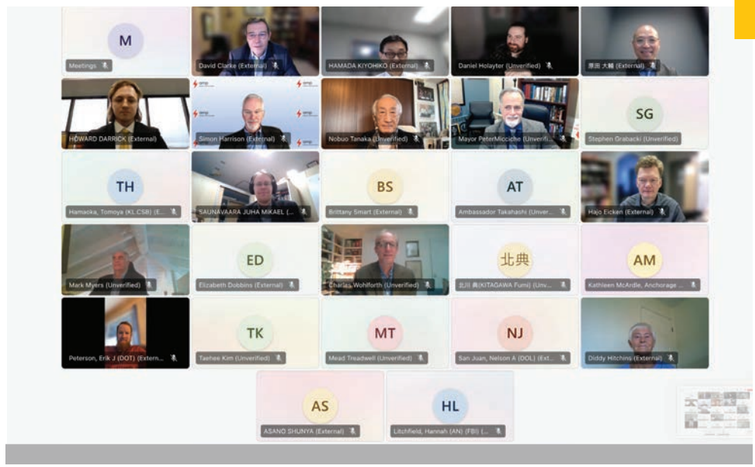
OPENING REMARKS AND PRESENTATIONS, LNG MARKETS

Honorable Mead Treadwell
Former Lieutenant Governor of Alaska

The Hon. Mead Treadwell discussed Alaska-Japan collaboration on energy, shipping, science, and sustainability. He highlighted the geopolitical situation in the Arctic noting Alaska and Japan's: unity in facing the challenges posed by Russia and China, collaboration in methane hydrate research, importance in larger committees such as the Arctic Shipping Committee, and role in Asia's LNG market. During Q&A he also provided a brief update on Qilak LNG's status.

Daisuke Harada
Director/Economist Business Strategy Department, Energy Business Unit, JOGMEC

Director Daisuke Harada's presentation focused on current and historical market trends shedding light on L.N.G. pricing in the J.K.M. or Asian markets. Then Harada forecasted global supply, demand, and development juxtaposed against Japan's energy policies to illustrate Japan's demand in the future. He expects L.N.G. supply to increase sharply (lowering prices) for 5 years then decline towards 2031 as demand outpaces new developments, making 2031 a critical year for L.N.G. until Japan's aim of net zero is reached in 2050. He also examined the impacts of the Russia-Ukraine war, China developing its own supply, nuclear advancement, and general climate policy goals. Director Harada believes there will be significant liquified natural gas demand around 2030, notes that AKLNG is "very promising," and sees Alaska as a strategic location supplier to meet Japan's needs. ■



UPDATE FROM KENAI PENINSULA BOROUGH MAYOR

Peter Micciche
Kenai Peninsula Borough Mayor

Kenai Peninsula Borough Mayor Peter Micciche provided details concerning Cook Inlet's forecasted natural gas supply shortfall in 2028 and beyond and explained the role the Kenai Peninsula Mayor's Energy Committee is playing in mitigating the impacts of that shortfall. He discussed further Cook Inlet drilling, upcoming projects, the limitations of renewables, storage expansion, and LNG imports to bridge supply gaps until a larger solution is available like Qilak and/or AKLNG. He stressed the strong reliance the Cook Inlet region, Alaska's largest population area, has on North Slope energy. He then closed noting Cook Inlet is a relatively minor offtake and as a result we need Japanese and Korean cooperation to bring any large project to market. ■

HYDROCARBON FUELS

David Clarke
Engineering Director, Alaska Marine Power

Director David Clarke made a case for A.M.P.s plans to export hydrogen to Japan via offshore wind production. He also detailed hydrogen classifications, its production strategies, and renewable efforts in Alaska. He outlined Japan's current use of grey hydrogen. He spoke significantly concerning wind potential in Cook Inlet citing NREL studies claiming Alaska has the worlds best wind resources. Further technical details concerning wind technology were also discussed during Q&A.

Mark Myers
Commissioner, United States Arctic Research Commission

Commissioner Mark Myers spoke about methane hydrates, a vast yet untapped energy resource. He then outlined the US and Japan's joint research efforts over the years. He believes methane hydrates have a potential to transform the energy sector. He noted that Alaska has not been examined for the presence of methane hydrates but has similar geological strata to the most well-known methane hydrate resource beds in the world. He strongly advocates for methane hydrate research in Alaska and proposed continued international collaboration on hydrate exploration and hydrogen production. ■

ARCTIC ENERGY AND JAPAN

Nobuo Tanaka
Former Executive Director Emeritus, International Energy Agency

Former Executive Director Tanaka advocated for collaboration between Japan, US, and the Republic of Korea on nuclear and hydrogen power. He strongly pushed for Japan to increase liquified natural gas and energy importation from Alaska. He proposed Alaska as an energy park and discussed the role the International Energy Agency will play in helping increase trade in energy between Japan and the US. He also spoke more on how Japan, US, and the Republic of Korea should work together on creating nuclear reactors. ■

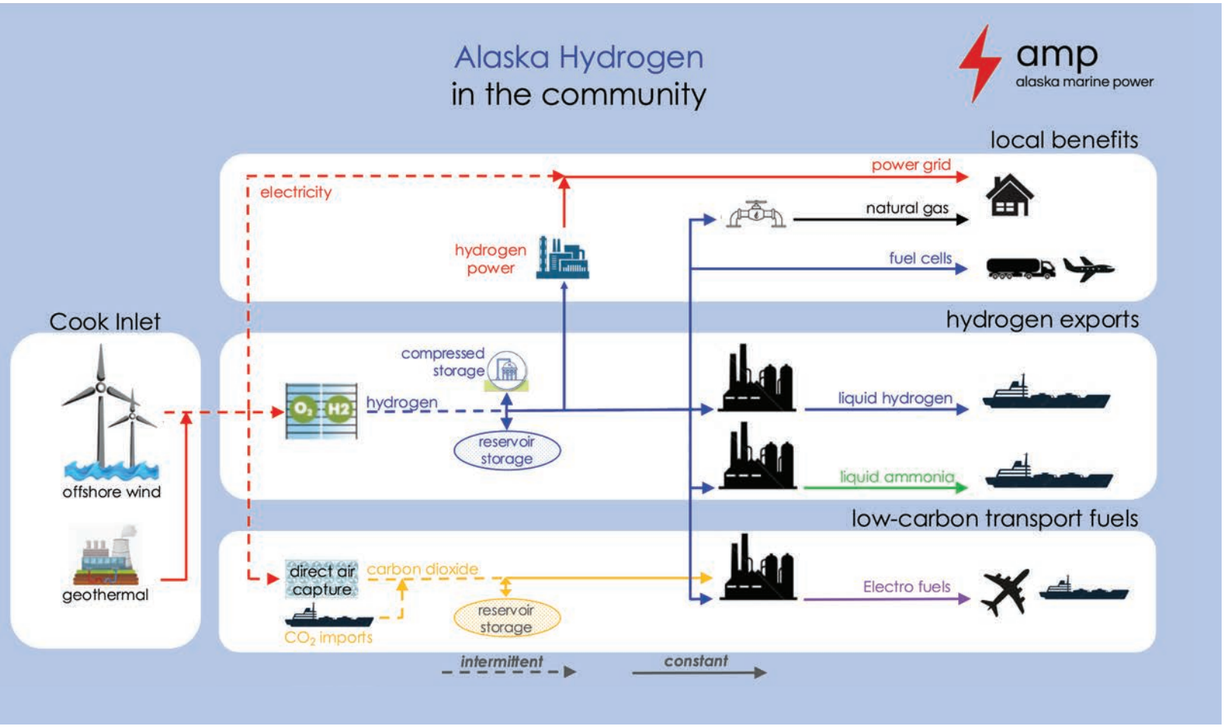
CLOSING WORDS

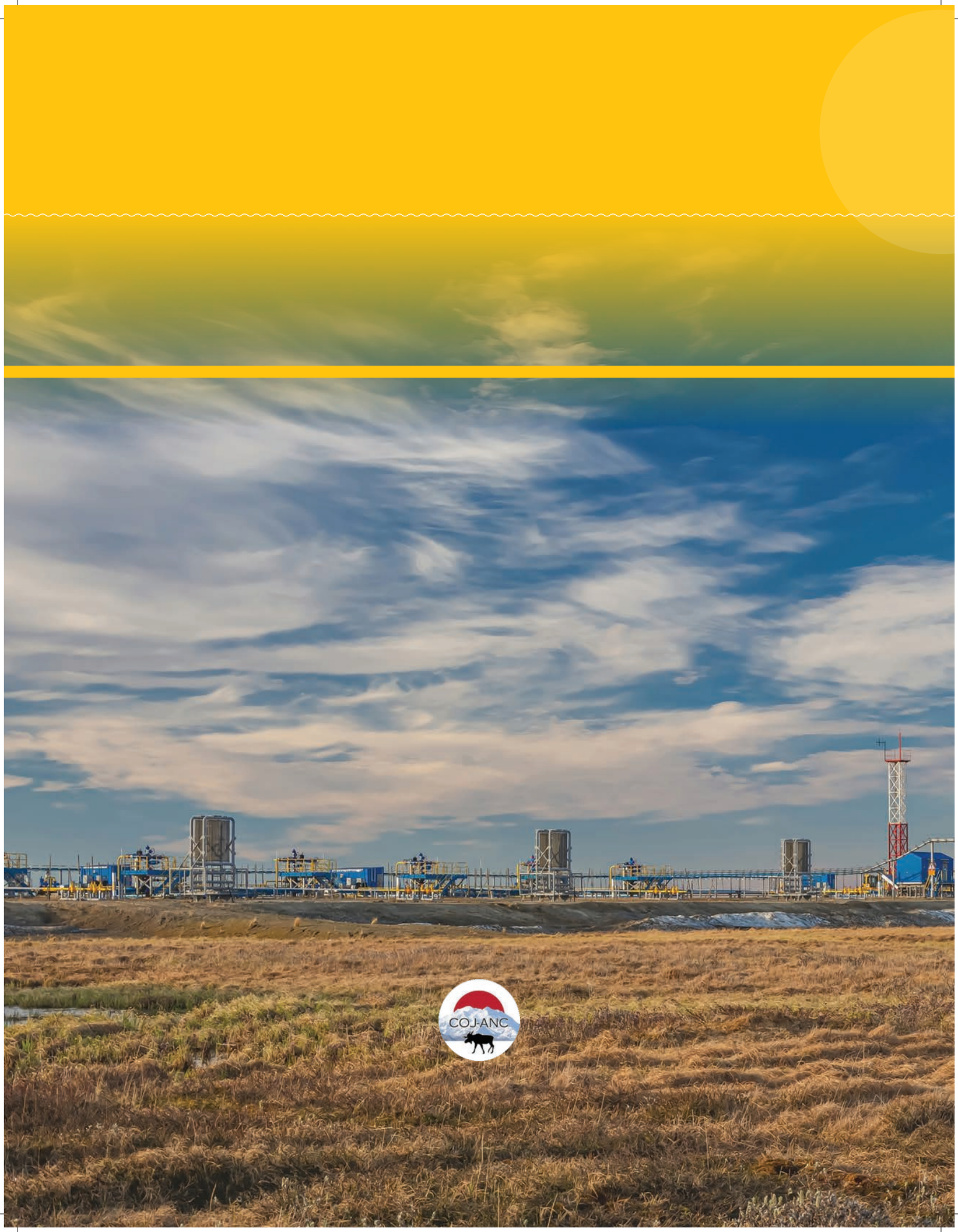
The 2025 Online Arctic Symposium reinforced Alaska's critical role in Arctic energy, sustainability, and international cooperation. The discussions reflected the urgency of addressing geopolitical challenges, leveraging renewable resources, and fostering strong ties between Japan and Alaska to achieve mutual energy goals. The Consular Office of Japan in Anchorage is hopeful the Online Arctic Symposium will continue to play a role in encouraging new joint research projects and business ventures between Japan and Alaska. Thank you to all the presenters and attendees for your kind contributions in making another successful Symposium.

In case you missed any of the days from our Online Arctic Symposium in January, we were fortunate to have some of our speakers share their presentations. Please see the link below to view them.

https://www.anchorage.us.emb-japan.go.jp/itpr_ja/4th_online_arctic_symposium.html

Kawasaki's prototype 160,000 m³ liquid hydrogen carrier

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