



# Arctic Energy Policy Update 2021

Arctic Energy Office

# Guiding Policy Documents

The 2014 National Strategy for the Arctic Region and the Arctic Research and Policy Act remain the foundation stones of United States Arctic Policy

Expect an update in next 4 years



# Arctic Council

- Iceland hands over to Russia in May
- Russian Chairmanship plan unpublished but likely to focus on support for energy infrastructure development, economic support for Arctic communities and indigenous economic/social development
- DOE-financed ARENA (Arctic Remote Energy Network Academy) program through the Sustainable Development Working Group (SDWG) will be held in 2022





# Maritime Domain

- The Arctic Maritime Domain will be a driver of energy investment.
- Marine Energy transition is coming – Heavy Fuel Oil (HFO)/Diesel to cleaner fuels to electric? Norway/Denmark leaders. US is actively engaging.
- Port decarbonization is major issue - \$5B in President's budget for these efforts
- New ports (sorely needed in Arctic) could decarbonize from ground (water) up

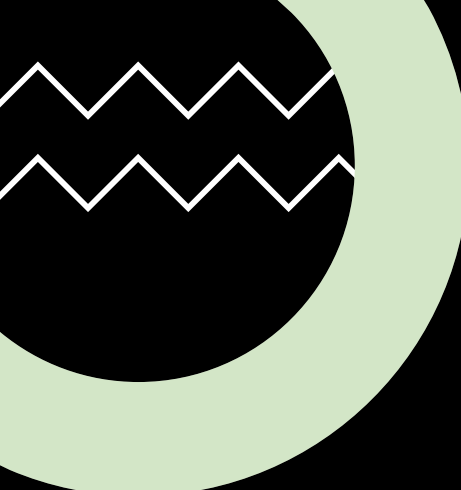




# Terrestrial Clean Energy

- DOE is pushing for Carbon Neutrality (Net-Zero) by 2050
- Primary Arctic contribution will be increased use of micro-grids to allow disparate renewable sources to be integrated, stored, and managed
- Energy Transition initiative → research, technology development, DEPLOYMENT
- Evolving areas at DOE: hydrogen, hydrokinetics, buildings, energy districts, small nuclear reactors





# Climate Change / Infrastructure

- Impacts of Climate Change are already present and significant in the Arctic
- Community relocation, infrastructure replacement, and economic impact will all become more frequent in next few years
- Arctic Infrastructure is often single source and can be impacted by environmental and man-made crises



# ETIPP Grants for Alaska

- “Residents of remote and island communities face energy disruptions, natural disasters, and climate change impacts and pay some of the nation’s highest energy costs,” said Secretary of Energy Jennifer M. Granholm. “These 11 communities—working hand-in-hand with DOE’s network of experts—will implement resilient and secure clean energy solutions. It’s a win-win—environmentally impacted communities will benefit from cheaper, more reliable power in their homes and businesses while our country makes progress toward the Biden Administration’s goal of 100% clean electricity by 2035.”



- Alaska Longline Fisherman's Association (ALFA), Sitka, Alaska – ALFA's fishing fleet is reliant on diesel fuel imports, the cost of which makes up most of the fishers' earned income. With ETIPP, they will investigate the possibility of developing a hybrid fuel or electrified fishing fleet to reduce diesel reliance and increase the earning potential of their members.
- Dillingham, Alaska – Barge shipments containing the fossil fuels needed to power Dillingham's islanded grid are a significant expense to the community. Through ETIPP, Dillingham and neighboring communities will explore the impact and benefits of the Nuyakuk River Hydroelectric Project.
- Ouzinkie, Alaska – Ouzinkie currently relies on diesel generators and an aging hydroelectric system to power their community but is looking to understand how they can optimize their use of renewables and storage.
- Sitka, Alaska – To build up their renewable energy generation to support a growing community with changing needs, Sitka would like to assess the available renewable resources in and around their community while planning for a more modern grid control system.
- Wainwright, Alaska – Located in the Arctic Circle, Wainwright is a fully diesel-fired, islanded power grid looking to employ energy efficiency measures and renewable power where possible to decrease its reliance on diesel and increase its community resilience.







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Nexus for DOE activities &  
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