

## **Focusing on Arctic Opportunities**

- **Arctic Energy:** Senator Murkowski successfully included report language that supports the promotion of research, development, and deployment of electric power technologies that are cost-effective and suited to meet the needs of rural and remote regions, especially where permafrost is present. The bill also encourages the Department of Energy to support a renewed focus on the Arctic region and use the Arctic Energy Office as a centralized area to support the use of energy resources and innovative activities, including microgrids, alternative energy development, and integrated energy systems.
- **Methane Hydrates:** The bill includes \$20 million to further research the production of natural gas from methane hydrates, as well as report language secured by Senator Murkowski encouraging the Secretary of Energy to perform a long-term methane hydrate production test in the Arctic. Alaska's Arctic contains an estimated 32,600 trillion cubic feet of natural gas locked in ice crystals – enough to meet domestic demand for more than for 1,000 years.

## **Improving Alaska's Infrastructure**

- **Denali Commission:** Includes \$15 million for the Commission tasked with coordination of construction and infrastructure efforts in rural Alaska.
- **Small, Remote, Subsistence Harbors:** Senator Murkowski secured language to create one new start investigation for a remote subsistence harbor.

## **Spurring Energy Development and Affordability**

- **Weatherization Assistance Program:** Increases funding to \$251 million to improve the energy efficiency of low-income families' homes.
- **State Energy Program:** Provides \$55 million to invest in energy efficiency, renewable energy, and emergency preparedness.
- **Office of Indian Energy:** Includes \$18 million for a key program that assists tribes with energy needs and projects on their lands, and formally establishes the Office of Indian Energy as its own entity within the Department with clear and separate budget authority.
- **Grid Modernization:** Authorizes the Grid Modernization Laboratory Consortium crosscut, which supports microgrid research grants, including a previous award for the project led by the City of Cordova and the University of Alaska Fairbanks.
- **Coal to Carbon Fiber:** Provides \$30 million in the Fossil Energy Rural and Development Advanced Energy Systems account to support research into novel ways

to utilize our vast coal resources, including coal-to-liquids and potentially coal-to-carbon-fiber.

- **Advanced Research Projects Agency-Energy (ARPA-E):** While the President's budget proposed to eliminate this program, the FY 2019 bill increases funding to \$375 million for emerging, pre-commercial technologies to make energy more affordable, reliable, clean, diverse, and secure.
- **Island and Remote Community Energy Transition:** Recommends in report language \$12.5 million for the Office of Strategic Programs, and within that funding recommends \$2.5 million for the Energy Transition Initiative to support efforts to build cost-effective, resilient energy infrastructure in island and remote communities, including in Alaska, that are grappling with high energy costs, reliability challenges, and inadequate infrastructure.
- **Hydropower Energy:** Strengthens the development of hydropower projects by authorizing the expansion of Terror Lake in Kodiak to provide nearly 100 percent renewable power to Kodiak and the nation's largest U.S. Coast Guard base; authorizes a stay of the Mahoney Lake Hydroelectric Project in Ketchikan to be considered for future power needs; and conveys 25.8 additional acres of land to the Southeast Alaska Power Association to expand the Swan Lake project.