



ARENA 2022

Arctic Remote Energy Networks Academy

U.S. Program Agenda

At-A-Glance

About

The Arctic Remote Energy Networks Academy (ARENA) is a unique circumpolar knowledge sharing program about isolated power systems integration designed for individuals living and working in remote Arctic and northern communities. ARENA is held in partnership with Canada, Gwich'in Council International, the U.S. and Iceland and endorsed by the Sustainable Development Working Group (SDWG) of the Arctic Council.

Combining visits to communities and participant knowledge exchanges with presentations and laboratory demonstrations, ARENA connects current and emerging community project managers with hands-on learning experiences, mentors, and project development leaders from throughout the circumpolar north. The 2022-23 program will host on-sites in Alaska (July), Iceland (October), and the Yukon Territory in Canada (January 2023).

This year's program collected nearly 40 applications from throughout the circumpolar north. Fifteen individuals were selected for the final program: eight Canadians, five Americans, and two Greenlanders. Half of the final cohort identifies as indigenous. One application accepted into the program is a Greenland-U.S. partnership that will send two different individuals to each of the three on-sites.

Day 0

Saturday July 16

ARENA participants arrive in Fairbanks. Information meet & greet gathering.

Day 1

Sunday July 17

A welcome from local leaders and program planners, an overview of American Federalism, Tribal governance and the [Alaska Native Claims Settlement Act \(ANCSA\)](#), followed by an outing to Chena Hot Springs Resorts for a tour of geothermal resources, district heating and greenhouses, followed by a swim in the hot springs and dinner.

Day 2

Monday July 18

Presentation on hydrokinetic research in Alaska followed by a deeper dive into the function and value of microgrids in the North. Afternoon will include a tour and demonstration at the [Energy Technology Facility](#) and a discussion about the intersection of water, sanitation and energy with representatives from the U.S. Arctic Research Commission (USARC) and the Environmental Protection Agency (EPA). Optional hike up Ester Dome or Moose Mountain followed by BBQ.

Day 3

Tuesday July 19

Half-day interactive training on project management for energy projects in the North and a brief [HOMER](#) demonstration. Traditional foods luncheon with Alaska Native Elders from Interior Alaska communities at [Denakkanaaga, Inc.](#), followed by tour and discussion of building research and best practices in the North at [Cold Climate Housing Research Center](#).

Day 4

Wednesday July 20

Early morning flight to Kotzebue via Anchorage. Tour of [Alaska Technical Center](#) followed by roundtable discussion about data collection and reducing heating costs in remote Alaska. Optional sea wall walk and discussion of erosion control with Kotzebue City Manager.

Day 5

Thursday July 21

Tour of [Kotzebue Electric Association's](#) solar and wind farms, battery storage and diesel plant, followed by discussion of electric vehicle research in northern and Arctic environments. Afternoon conversation with representatives from the community of [Naknek](#) about commercial fishing loads (Naknek's load quintuples in the summer), the importance of failure, and an upcoming wind proposal.

Day 6

Friday July 22

Cohort will visit smaller communities (< 800 people) with renewable energy projects in the [Northwest Arctic Borough](#) via small chartered aircraft. Discussions currently underway with [Deering](#), [Buckland](#), and [Shungnak](#). Final decisions and arrangements will be made in the coming weeks.

Day 7

Saturday July 23

Site visit to sewage lagoon and brand-new water treatment facility in Kotzebue (commissions this summer), tour of container-based hydroponic garden on the [Chukchi campus](#), program wrap up. Community block party closing event with [Kotzebue IRA](#).

Day 8

Sunday July 24

Participants depart Kotzebue and return home.

PROGRAM CONTACT

Questions? Comments?

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