Who We Are & What We Do

Sea ice is vital to life in the North as it connects communities and serves as a travel highway and hunting platform. But with sea ice becoming less predictable, ice travel risk has increased for northern communities.

SmartICE is a community-based organization offering climate change adaptation tools and services that integrate Inuit knowledge of sea ice with monitoring technology. Our information contributes to more informed decisions for safer sea ice travel and supports community economic development such as outfitting and fisheries. By augmenting local knowledge and supporting traditional sea-ice use, SmartICE also promotes Inuit culture, intergenerational learning and community wellbeing.

SmartICE technology and services can be found in 24 communities across Inuit Nunangat, with expansion to another 6 coming soon. Contact us if you are interested in SmartICE services in your community.
Community Engagement

SmartICE supports the ice information needs of communities. We understand the importance of community engagement and we develop and maintain strong relationships with each community we operate in.

To build trust and foster community support, Community Management Committees are established in each SmartICE community and they are made up of Elder, youth, and representatives from community organizations.

Social Enterprise

Our social enterprise business model is consistent with Inuit societal values, and commits to maximizing social impact and creating positive community change, while delivering ice information services with communities, for communities.

Our training programs use an approach grounded in Indigenous ways of knowing and learning. Youth are equipped with transferrable skills that prepare them for future employment and educational opportunities.

Inuit youth are hired to build SmartBUOY technology through the Employment Readiness and Technology Development Program at the Northern Production Centre in Nain, Nunatsiavut.

Members of the Qikiqtarjuaq Community Management Committee who call themselves Ikirmiut ("people of the coast"). Together, with some invited Elders and youth, they hosted a workshop to document local sea-ice terminology (posted on wall behind them). The ice terms describe the seasonal ice cycle and communicate safe and unsafe ice conditions.

The Community Management Committees decide how SmartICE should operate, where the technology will be deployed, and make recommendations on other ways that SmartICE can support safer travel. Here, members of the Mittimatalik Community Management Committee, who call themselves Sikumiut ("people of the ice"), discuss past ice conditions.
**Inuit Knowledge**

SmartICE supports its Community Management Committees in documenting their Inuit Quajimajatuqangit that has been passed down through generations and teaches young hunters and ice users how to plan, prepare, identify, and test the sea ice for safety while traveling. By sharing their accumulated sea-ice knowledge, the communities are enabling young generations. It teaches them to adapt to unpredictable sea ice conditions caused by changing climate.

**Our Technology**

SmartICE’s environmental monitoring systems provide communities with invaluable information on local travel conditions in near real time. The data are made available to the community through the Internet platform and mobile app SIKU (siku.org), as well as through social media and local radio.

The shared information helps to reduce the travel risk of unpredictable ice conditions.

Local community operators complete a comprehensive training course in which they learn how to assemble, operate, and maintain the SmartQAMUTIK and SmartBUOY sensors. They also upload the data and make posts on SIKU to share ice and ocean information with community members.

Ikirmiut Elder and youth work together to map the locations of hazardous ice conditions that occur in the same places around the community year after year. These travel hazards will be recorded with other important travel information on maps to be shared with the community.

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Data from the SmartQAMUTIK is instantly converted into a colour-coded track for the community to view on SIKU.

SmartICE in your Community?

SmartICE is actively engaging communities across the North about their ice information needs and our services.

Contact Dave Noseworthy at dave@smartice.org for more information.

View our data on SIKU.org

Download the SIKU app

or scan QR code: