

"If we can do this project here, near the North Pole, then it can be done anywhere!"
-Benjamin L. Vidmar, Polar Permaculture Founder

The Future of Arctic Farming

Greenhouses and hydroponic systems are becoming ripe with possibility

Vegetable production is on the rise in the Arctic, especially in places like Alaska, Canada, and Norway. Families across the Arctic have hope for a better, more affordable, and more sustainable supply of fresh vegetables.

Traditional Farming & Food Challenges



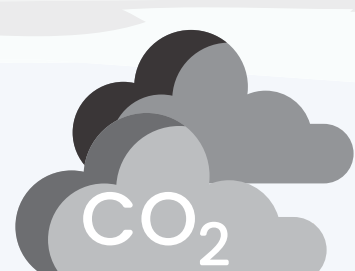
LOGISTICS
CHALLENGES
IN WINTER



SHORT
GROWING
SEASON



HIGH IMPORT
COSTS



GREENHOUSE
GAS EMISSIONS



FINANCIAL
BURDEN TO
FAMILIES



INCREASED
HEALTH RELATED
ISSUES & OBESITY



DEPENDENCY
ON OIL

The Solution

GREENHOUSES



HYDROPONICS



Benefits of Greenhouse & Hydroponic Farming



FOOD SECURITY
AND SUPPLY



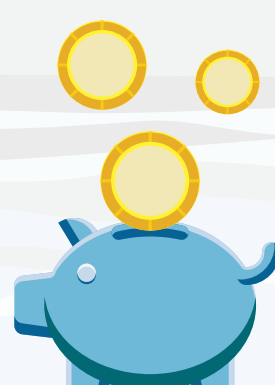
SHORTER
HARVEST-TO-SHELF
CYCLES



BETTER QUALITY
OF PRODUCE



REDUCTION IN
GREENHOUSE GAS
EMISSIONS



EXPECTED
LOWER COSTS



IMPROVED
DIET & HEALTH



SUSTAINABLE
ORGANIC FARMING
METHODS

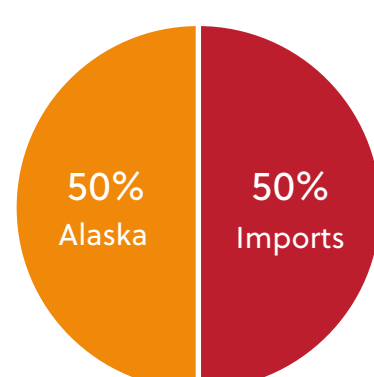
Greenhouse & Hydroponic Farming Projects

(66°53'N, 162°35'W)

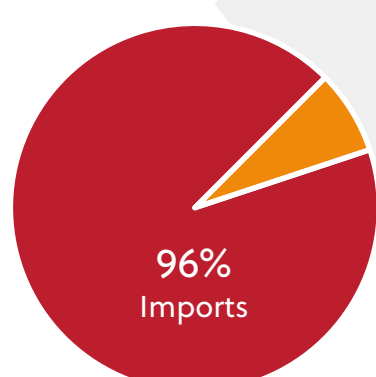
ALASKA Kotzebue

Kikiktagruk Inupiat Corporation delivered their first greens to the supermarkets in 2016. The production is based on a system of portable high-tech hydroponic containers.

Food imports to Alaska



1959



2019

CANADA Inuvik

The community developed an old hockey arena into a multi-level greenhouse that has been growing vegetables since 1998.

70%

Inuit preschoolers live in food-insecure homes

7%

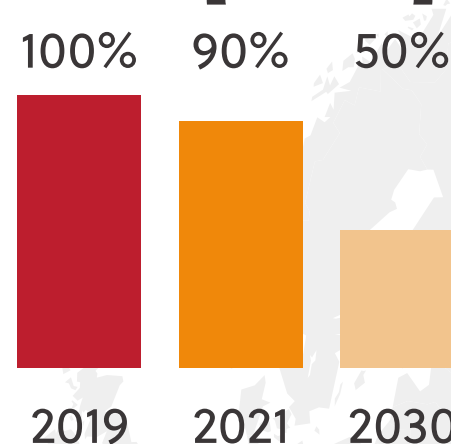
Canada's land area suitable for farming

NORWAY Longyearbyen

The Polar Permaculture organization, founded in 2015, uses a mini-geodesic dome which combines permaculture with ecological design to create a resource efficient circular economy.

(78°13'N, 15°38'E)

Goal



Produce shipped from mainland Norway to Svalbard

References & Further Information

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Sharp, Gregory (2018): Inaugural High North Young Entrepreneur Prize Awarded. High North News.
Stephen, Kathrin (2018): Food Insecurity Prevails in Canadian North. High North News.
Polar Permaculture organization - www.polarpermaculture.com

Credits

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