

ARCTIC FOOD ARENA

Climate-Smart Food Kick-off
15 February 2024
Laura Redmond, Project Manager

Co-creating a diversified circular food production in an Arctic climate

Location: Northern Sweden / Starting point: Gällivare
Project owner: Gällivare Näringsliv / Duration: 2023-2026



The Dawn of a New Industrial Age

Fossil-free Production & Electrification



The mining & steel industries are going fossil-free
Large battery factories & data centers are being built
New minerals are being extracted

**All with one thing
in common:**

HUGE WASTE STREAMS

Residual Heat Phosphorus Hydrogen Oxygen ?

**The volumes are not just
significant**

THEY ARE GIGA-SIZED

**Which equals monumental
new opportunities**

**Opportunities to produce a
massive amount of food**

In our Arctic climate

Why the Arctic?

Resource rich:

Fresh water, renewable energy, rail and road infrastructure, energy intensive industries creating powerful waste streams, and a cold climate creating a certain kind of terroir

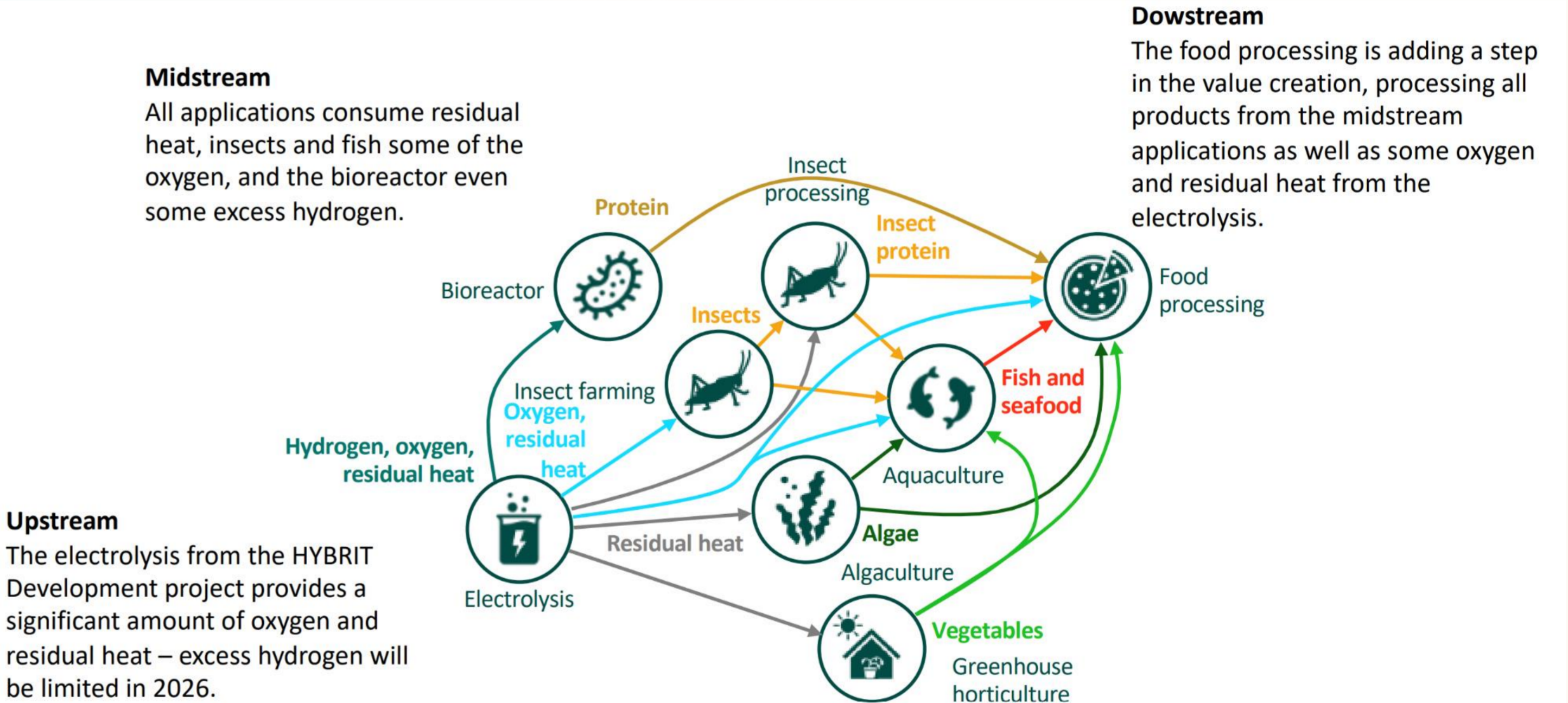
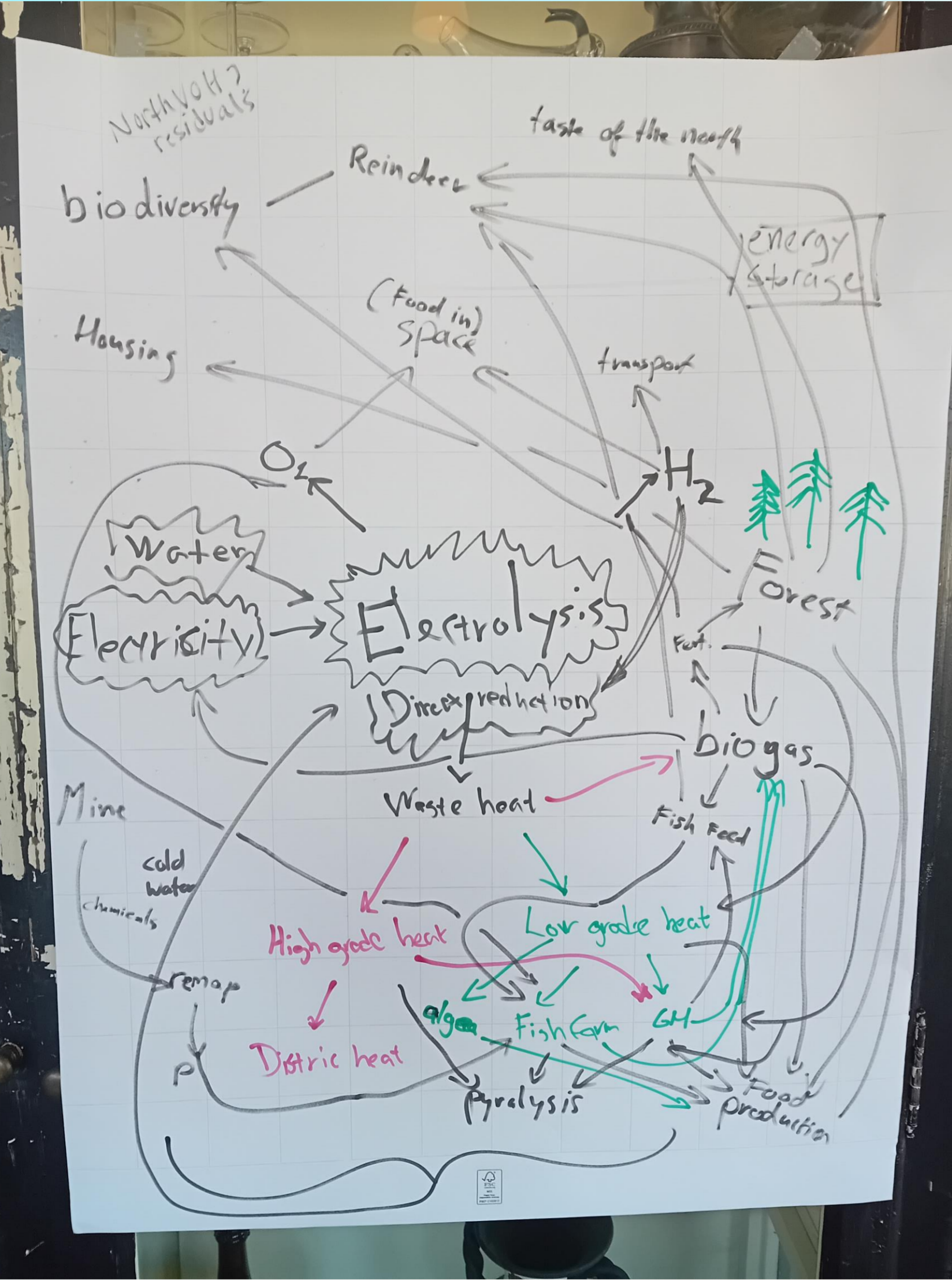
Socially and ecologically rich:

Abundance of nature, work-life-balance, a leisurable way of life, the 15-minute city, low levels of crime, the midnight sun and Kaamos



ARCTIC FOOD ARENA

Where are we heading?



Food Security & Sovereignty

We live in a volatile era

We need to safeguard our access to food

Not just any food, but nutritious food that brings us health

We must emphasize self-determination, power structures and community empowerment in shaping food systems

Food security, and food sovereignty need to be on the agenda. Everything else is too big of a risk.

The Swedish Food Strategy

Increased and diversified national food production

Enhanced national self-sufficiency

Reduced vulnerability

Mitigation of climate change

Smaller ecological footprint

A profitable food industry

Export



The Project

Challenges & Needs

Increased self-sufficiency through food production

A non-diverse business structure in Gällivare. And in Northern Sweden.

Large amounts of waste heat and other residuals from industries

A lack of the whole picture and capacity to prioritise, plan, execute and coordinate different initiatives

A model for circular and sustainable food production in an Arctic environment is missing

A lack of competence, experience and people within the food sector



Planned activities

Form and establish the test bed organization

- Form and establish the web of people that will be engaged in building the project, creating the knowledge hub and future test bed, including the industrial symbiosis

Make Arctic Food Arena visible for research and innovation

Model development for industrial symbiosis for repurposing waste streams

Short-term results

An organisation for test bed in place

Long-term relationship with companies as well as research & innovation partners

Building a knowledge hub around diversified circular food production and logistics

Establish long-term cooperation for open value chains



Long-term results

Increased food security

Industrial symbiosis as a foundation for the new industrial era

Long term effect

A long-term sustainable and attractive business life in Northern Sweden

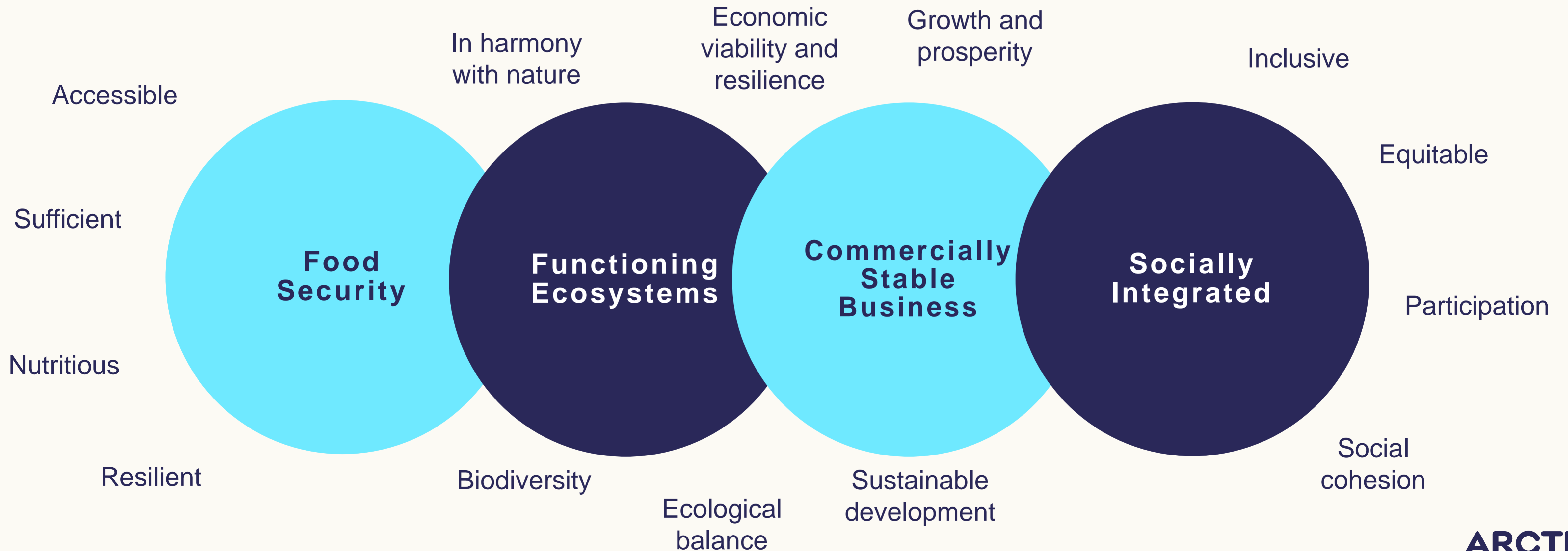
A role modelling example for other places

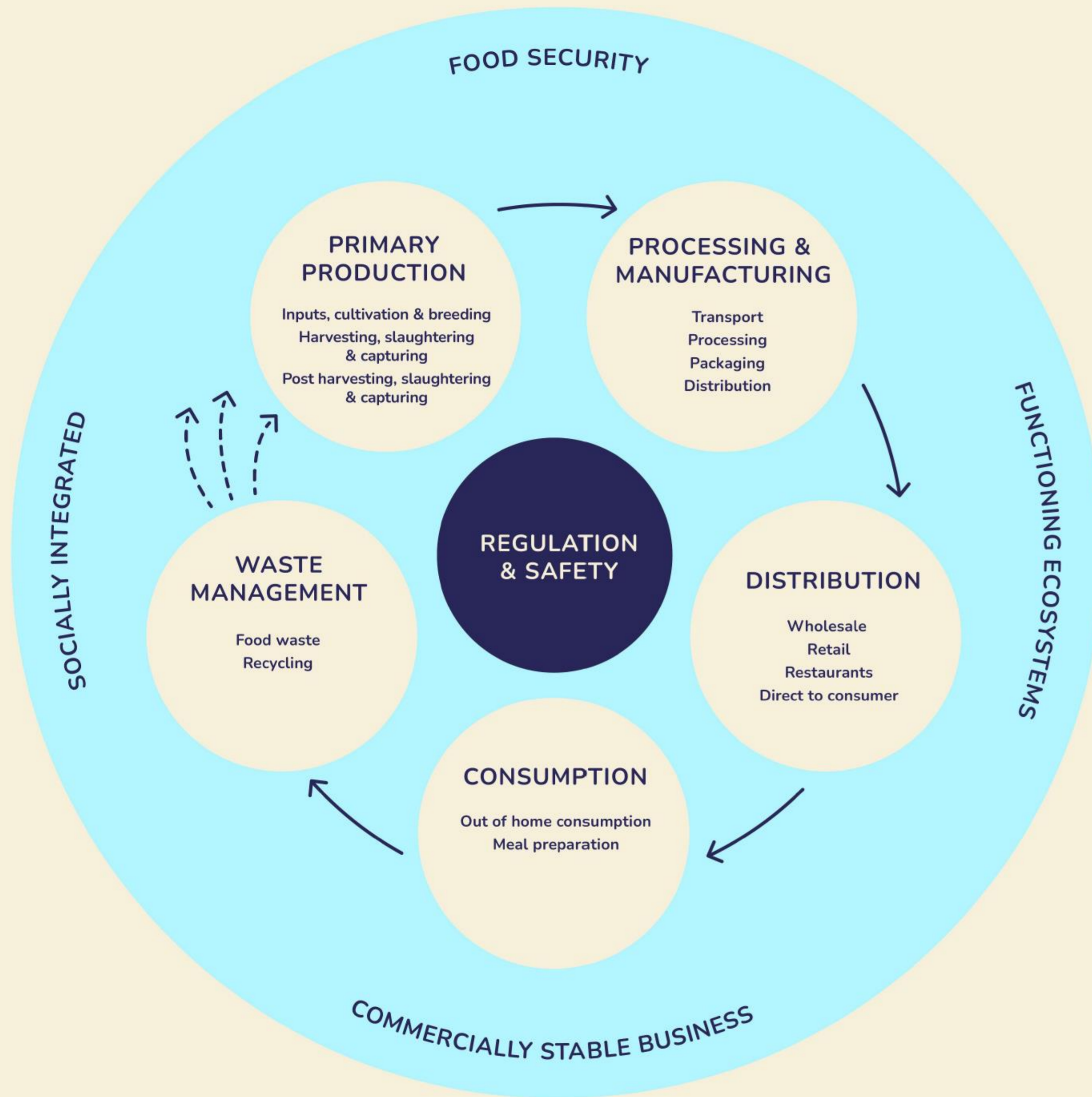
A sustainable large-scale production of food that satisfies large parts of the Swedish population's annual need



Our Compass

We navigate by always keeping 4 goals in our heads.





To achieve sustainability, all sectors and parts of the food value chain need to navigate towards the outcomes of food security, functioning ecosystems, commercially stable businesses and social integration.

Our Strategy

Collaborative

We chose collaboration - not competition

We co-create to gather the collective wisdom from Northern Sweden and the world

Driving innovation & ensuring the success in establishing a circular food production in our Arctic climate

Innovative by Bridging

The holistic & the details

Giga-scale & diversified

Nature & tech

Local & global

Mining & food companies

Practiced & scientific knowledge

Existing & to be-created businesses

People-centric

People are the ones who co-create

Perspective density comes with people from diverse backgrounds

We cross-fertilize mindsets and ways of doing by inviting a broad spectra of people with different backgrounds and belongings

We believe in building on the local perspective and creating mutual benefits for the surrounding communities, including the Sami people

Trust focused

Our truth:

We can only walk at the speed of trust

Trust is earned

Trust needs to be mutual

Trust is based on listening, being transparent, sharing

Trust is about managing expectations

Trust is built by doing. Together

It's all up to us – NOW!

Here we are!

**Northern Sweden, a location in an
Arctic climate,
can become an epicenter of
innovation and create a patchwork of
diversified large-scale circular food
production**

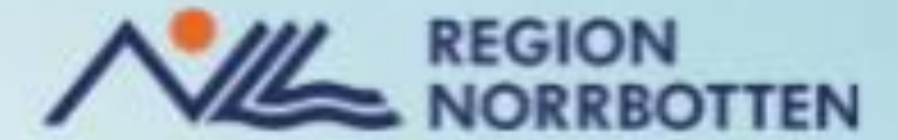
We are building it. NOW!

14-15 March in Gällivare

ARCTIC
FOOD
ARENA

LULEÅ
UNIVERSITY
OF TECHNOLOGY

Co-creation Workshop



Co-Creation Workshop

14-15 March, 2024

You are warmly welcome to join us!

- Exploring the challenges of diversified circular food production in an Arctic climate
- Organized by Arctic Food Arena in Gällivare in partnership with Northern Food Lab at LTU as part of Creaternity Impact Days 2024.
- This gathering aspires to cultivate a collaborative environment, uniting stakeholders from diverse sectors such as the community, business, public authorities, and academia.

Arctic Food Arena needs visionaries, thinkers, doers and funders

New and old insights

Active participation

Investors **Farmers**
Researchers **Aqua-culturists**
Entrepreneurs **Scientists** **Retailers**
Engineers **Fishermen** **Foragers**
Hunters **Food producers**
Logisticians **Manufacturers** **Herders** **Wholesalers**
Experts **Waste Managers**

**Anyone who
is curious
and engaged**

**WELCOME TO JOIN US
ON AN EPIC RIDE
FOR FOOD IN AN
ARCTIC CLIMATE!**



**ARCTIC
FOOD
ARENA**

