



Seaweed Energy Solutions AS

SIG Seaweed 04.04.17

Maren Sæther





SEAWEED
ENERGY
SOLUTIONS AS

VISION

To enable large scale ocean farming of seaweed
for food, feed, biochemicals,
energy and other valuable products

Company overview

- Company founded in 2009
- Development of innovative technology for large scale offshore seaweed farming
- Patented cultivation concept (“The Seaweed Carrier”)
- In-house hatchery
- Pilot farm established 2014 – largest seaweed farm in Norway
- Targets the food market (short term goal)



The SES team



Pål Bakken
Founder and Director



Jon Funderud, MSc
CEO



Frank Neumann, Dipl.-Ing.
Cultivation Technology



Kaia Kjølbo Rød, MSc
Cultivation Manager



Luiza Neves, MSc
Cultivation & Environment



Diogo Raposo, MSc
Hatchery & Cultivation



Maren Sæther, MSc
Processing & Biotechnology

Located in Mid-Norway

Frøya

- Sea farm
- 65 ha farming concessions

Hitra

- Processing at Hitramat



Brekstad



Trondheim

- Lab and hatchery



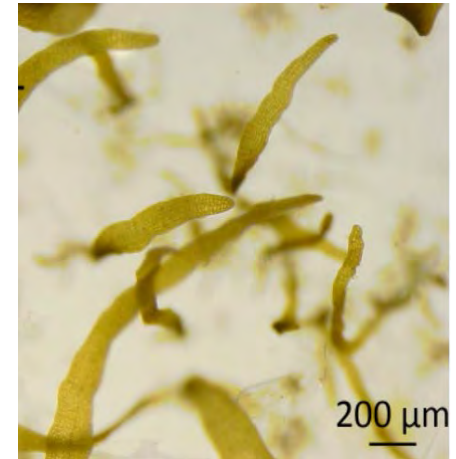
Hitramat



Lab and hatchery



- Lab and pilot scale hatchery in Trondheim
- Development of seeding and hatchery techniques
- Supply of seeded material both for internal use and sales
- Method development for selective breeding





The Pilot farm

2015:

Proof of concept
100 tonnes *Saccharina*
23 200 meter rope

2016:

Processing; freezing and drying
25 tonnes *Saccharina* and *Alaria*
16 000 meter rope

2017:

Upscaling
26 600 meter rope
Saccharina and *Alaria*

Future: Upscaling...

FOODS OF NORWAY

BIOFEED

KELPPRO



MACROSEA

Student theses

Department of Biology, NTNU

MSc. Elin B. Njåstad (Prof. Yngvar Olsen)

MSc. David Cohen (Prof. Yngvar Olsen)

Department of Biotechnology and Food Science, NTNU

MSc. Nicoline Korsvold (Prof. Turid Rustad)

BSc. Greta Moen, Marte Dalsnes, Susann Andersen (Ass. prof Marianne Østerlie)

BSc. Pia L. Rostad, Marit M. Amundsen, Siv Maria Nguyen (Ass. prof Marianne Østerlie)

BSc. Kristin Brustad, Sunniva Ø. Opsahl, Torill Hagen (Ass. prof Marianne Østerlie)



Department of Mechanical and Industrial Engineering, NTNU

BSc. Emil Høgli, Brynjar Hykkerud, Martin Aasvestad, Ulrik T. Vermedal (Ass. prof. Bjørn Austbø)

NTNU, Ålesund

BSc. Maria Elvemo

Thank you!

