

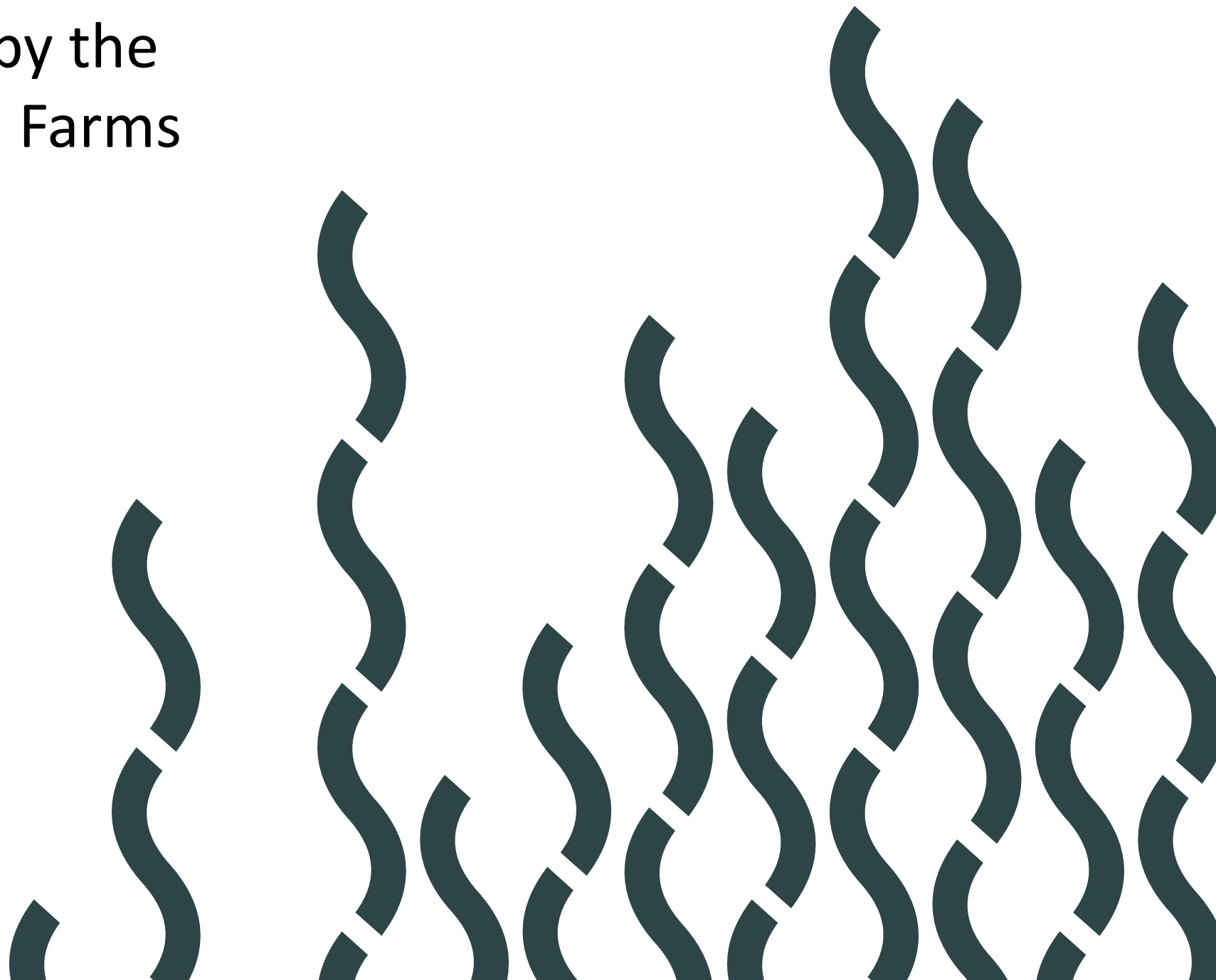
Industry Guidelines by the Norwegian Seaweed Farms

ALGET 2 Quality Algae

November 19th 2020

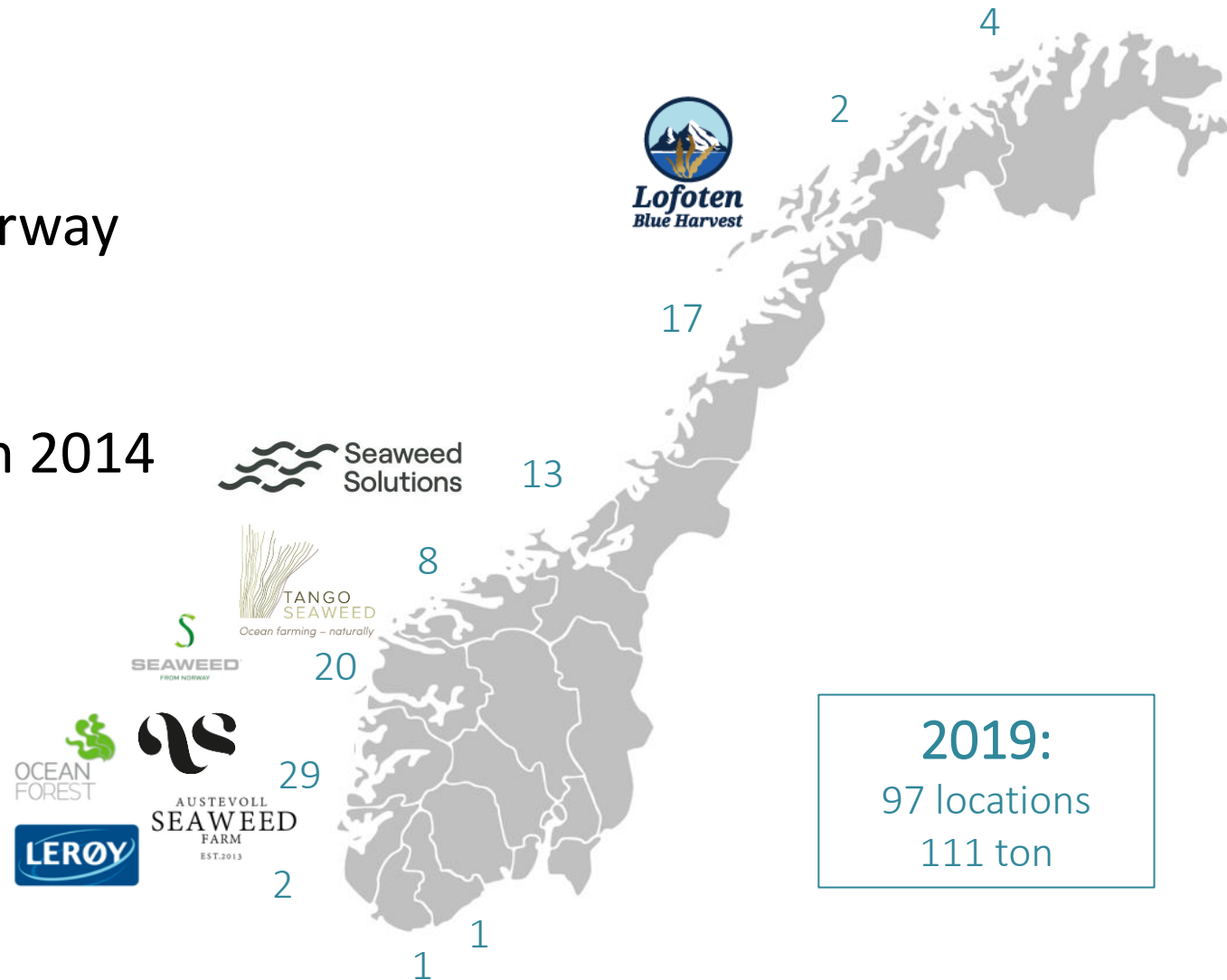
Maren Sæther

**Seaweed
Solutions**



Seaweed farming in Norway

- Seaweed Solutions AS (SES) was established in 2009, as the first seaweed farming company in Norway
- The first cultivation licenses for seaweed farming were granted in 2014
- Growing interest!



Norwegian Seaweed Farms

- The association was established in June 2017, as a formal continuation of the network that was started in 2015
- Currently 10 companies in the association Norges Vel by Marit Gjerstad, is the secretariat
- An arena for collaboration and exchange of experience between seaweed farmers
- Cultivation license and farming experience



Industry guidelines for farmed *S.latissima* and *A. esculenta*

- Focus on quality assurance was an early topic
- Ensure that only farmed seaweed of high quality was entering the food market
- Work on establishing industry guidelines was started in 2016, coordinated by Lill-Ann Gundersen from Norges Vel
- First version of the guidelines was ready in 2017
- The guidelines have been an important tool for communication with authorities

Versjon 1
Bransjeretningslinjer

Dyrking, høsting og håndtering av sukker- og butare som bruk til næringsmiddel



September 2017
på vegne av Norsk Tareyrkerforening
v/Lill-Ann Gundersen Norges Vel

Revision of the guidelines

- Development of the industry in various directions: several ways of processing, new markets etc.
- New knowledge and data on nutritional values etc.
- The association is now working on a revised version of the guidelines, finalized early 2021
- More general descriptions of the production
- More focused on food safety



Challenges and risk components

- Iodine
 - Processing to reduce
 - Blanching is reducing >90%
 - Regulate intake
 - Labelling:
 - Iodine content
 - «Seaweed species» naturally contains high level of iodine. Recommended daily intake of iodine is 0,15 mg. A too high intake of iodine over time can have a negative effect on the thyroid gland.



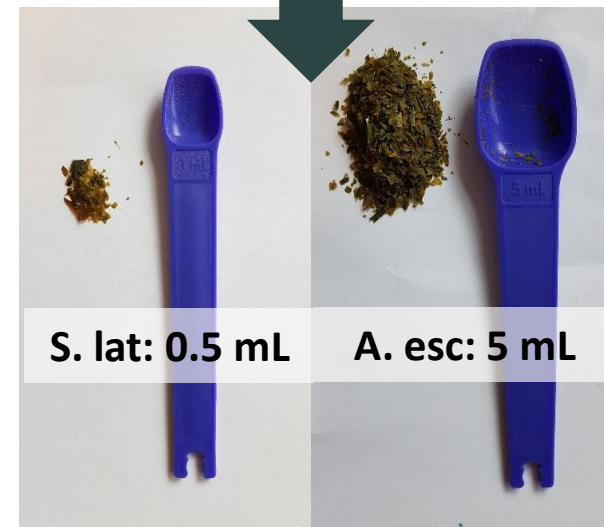
Saccharina latissima:

3000-6000 mg I/kg dw

Alaria esculenta:

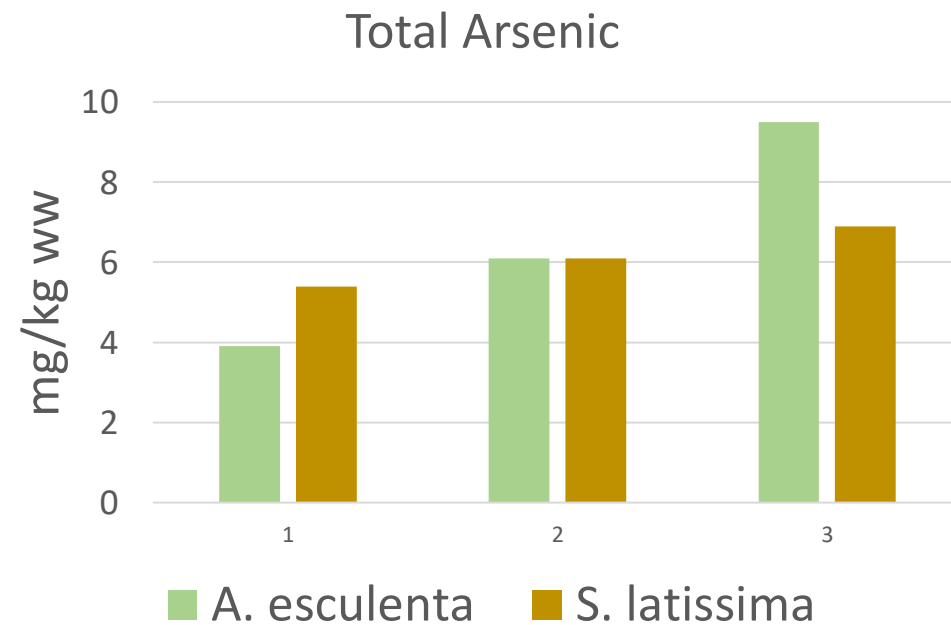
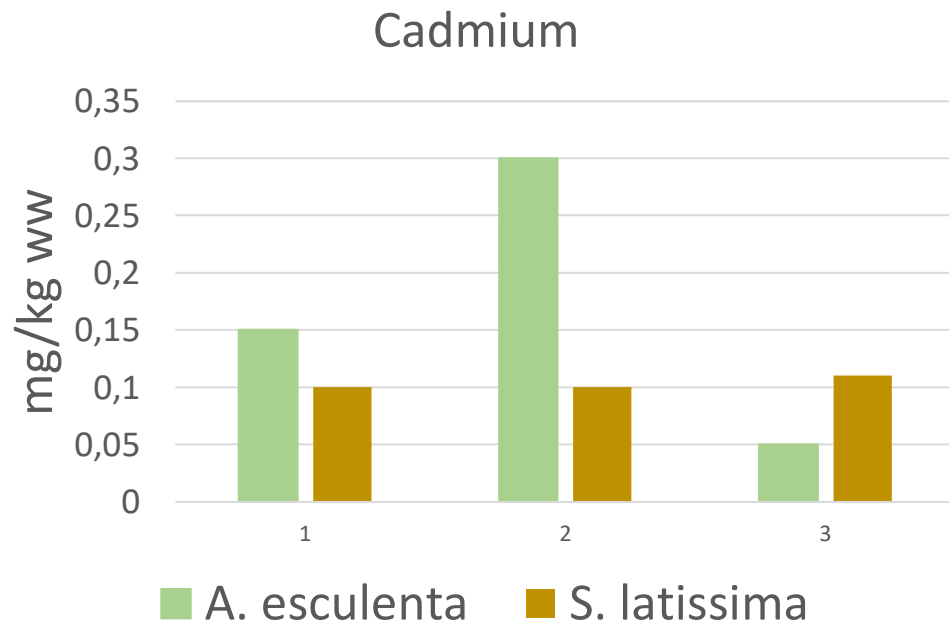
400-900 mg I/kg dw

Amounts needed to obtain the daily recommendation of iodine (0.15 mg)



Challenges and risk components

- Inorganic arsenic, cadmium
- Allergens
- Sampling protocols



Thank you for the attention!



Contact:

sather@seaweedsolutions.com

seaweedsolutions.com

norwegianseaweedfarms.com

