



Dagskrá

09:30 opnun viðburðar

09:35 Rannsóknir og þróun – um verkefnið Örverur til auðgunar fiskeldisseyru.

Anna Berg og Alexandra Leeper

09:50 Accelwater – hliðarafurðir fiskeldis.

Hildur Inga Sveinsdóttir og Ólafur H. Friðjónsson

10:05 *Kaffipása og spjall*

10:15 Kynning á framkvæmd og ástæðu vinnustofunnar

10:20- Spurningarvinna 1 – Styrkur hliðarafurða

10:35 samantekt hópa

10: 40- Spurningarvinna 2 – Veikleikar hliðarafurða

10:55 samantekt hópa

11:00- Spurningarvinna 3 – Tækifæri hliðarafurða

11:15 samantekt hópa

11:20- Spurningarvinna 4 – Ógnir hliðarafurða

11:35 loka samantekt og vinnustofu lýkur

11:40- Hádegisverður og spjall

SJÁVAR
KLASINN

matís



Dagskrá

09:30 Welcome and opening of workshop -Alexandra

09:35 Research and development in sludge:

Örverur til auðgunar fiskeldisseyru- Anna Berg & Alexandra Leeper

09:50 Accelwater - Hildur, Stefan, Ólafur

10:05 *Coffee and networking*

10:15 Introduction to co-creation and the purpose the of day

10:20- Question 1 - Strengths

10:35 Summary

10: 40- Question 2 - Weaknesses

10:55 Summary

11:00- Question 3 - Opportunities

11:15 Summary

11:20- Question 4 - Threats

11:35 Final summary and closing of event

11:40- Networking Lunch

SJÁVAR
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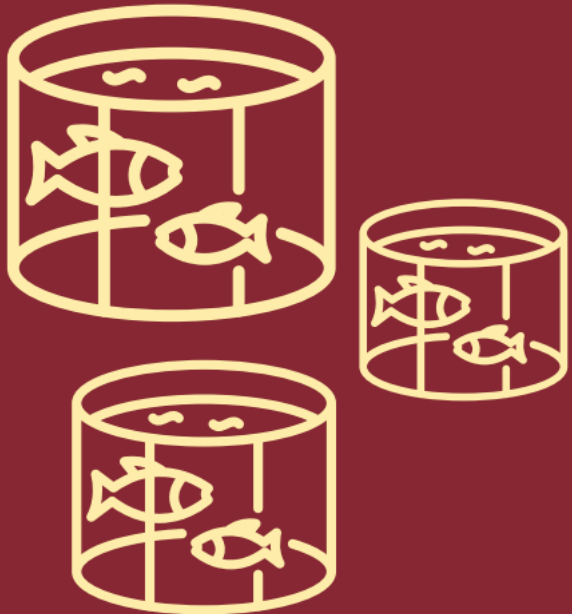
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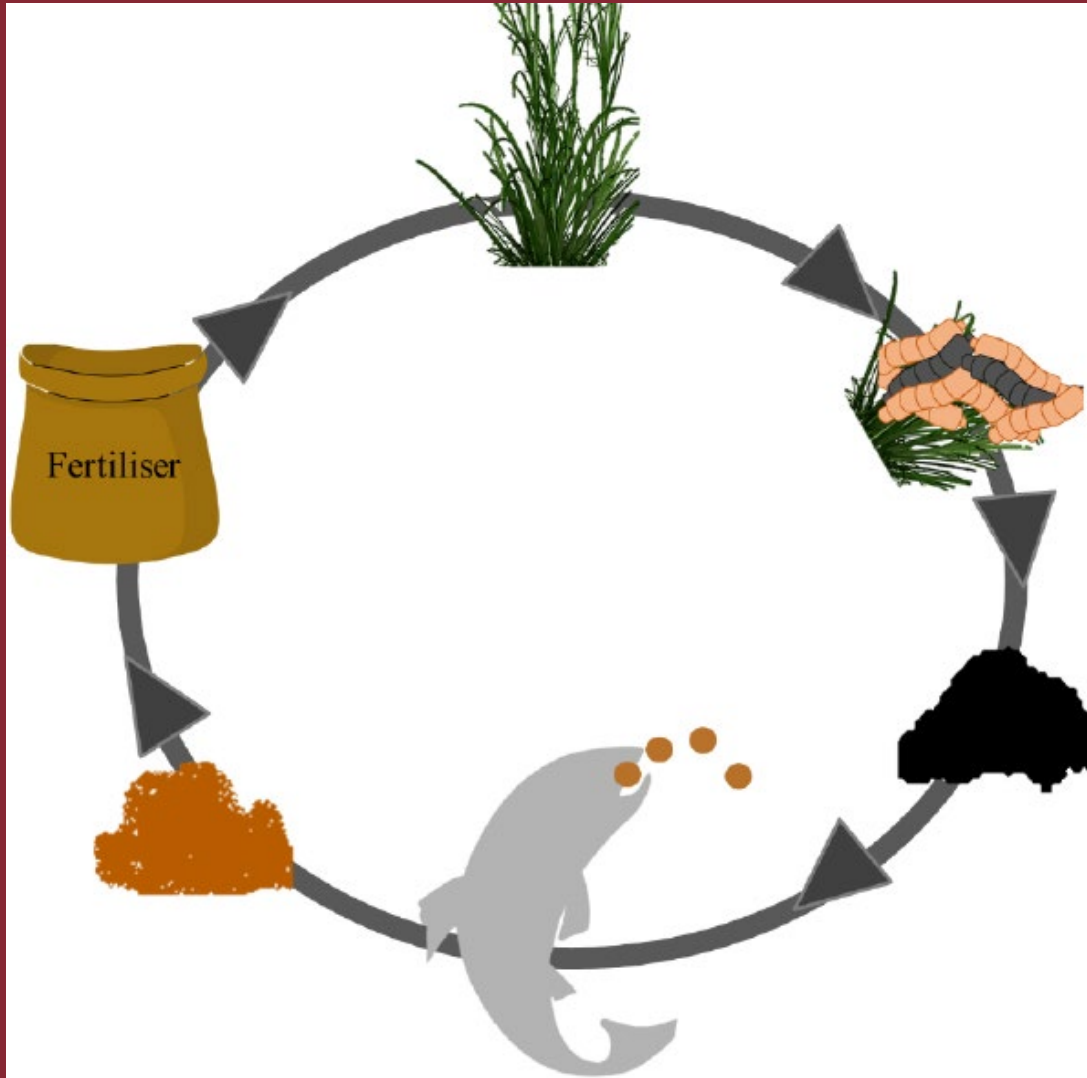
Technology and opportunities in fish farm sludge



Dr. Alexandra Leeper – Managing Director
of International Affairs



Sludge and circular economy

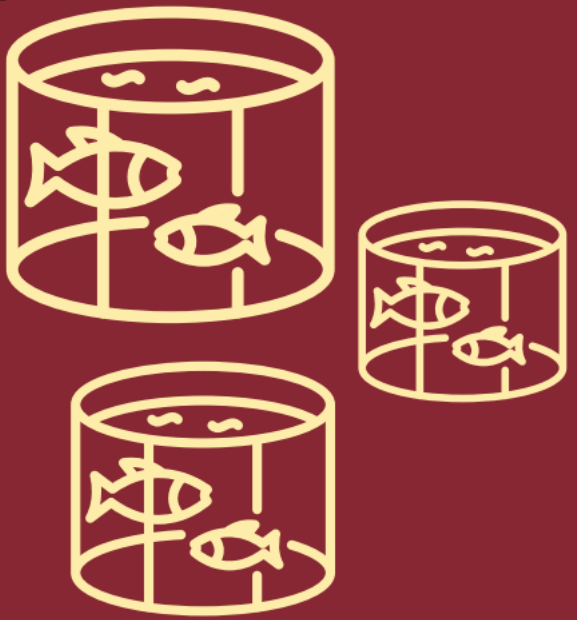


Sludge and circular economy



Tipping point for political and funding incentive





Outline



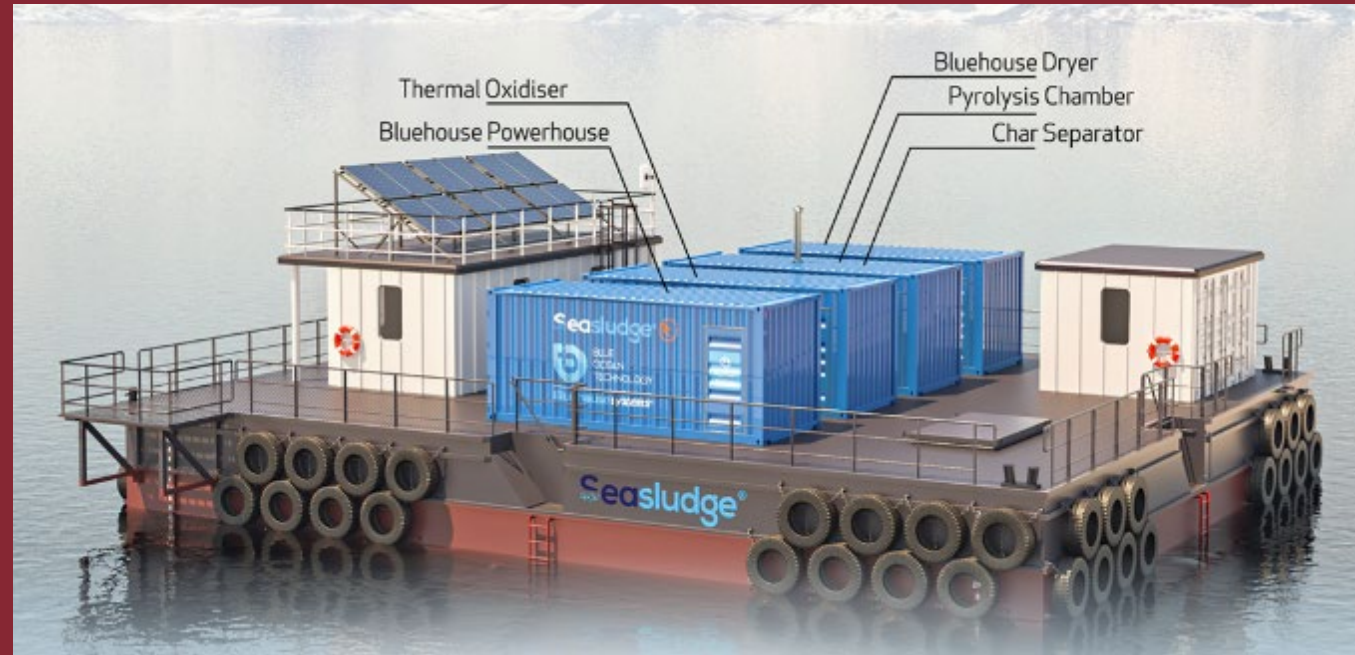


**We have
more ability
to collect
sludge than
ever before**





Collection from barges



BLUE OCEAN TECHNOLOGY
Bluehousesystems®

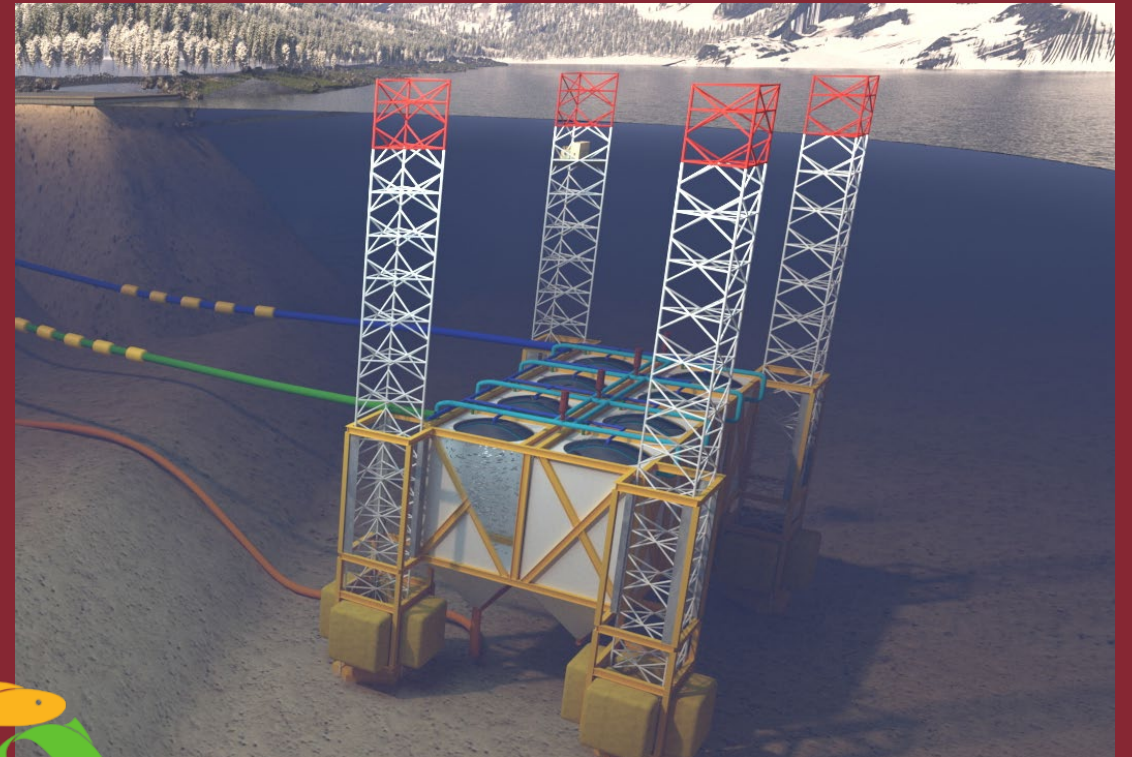


**Technologies
that allow in sea
farming but
closed-system**





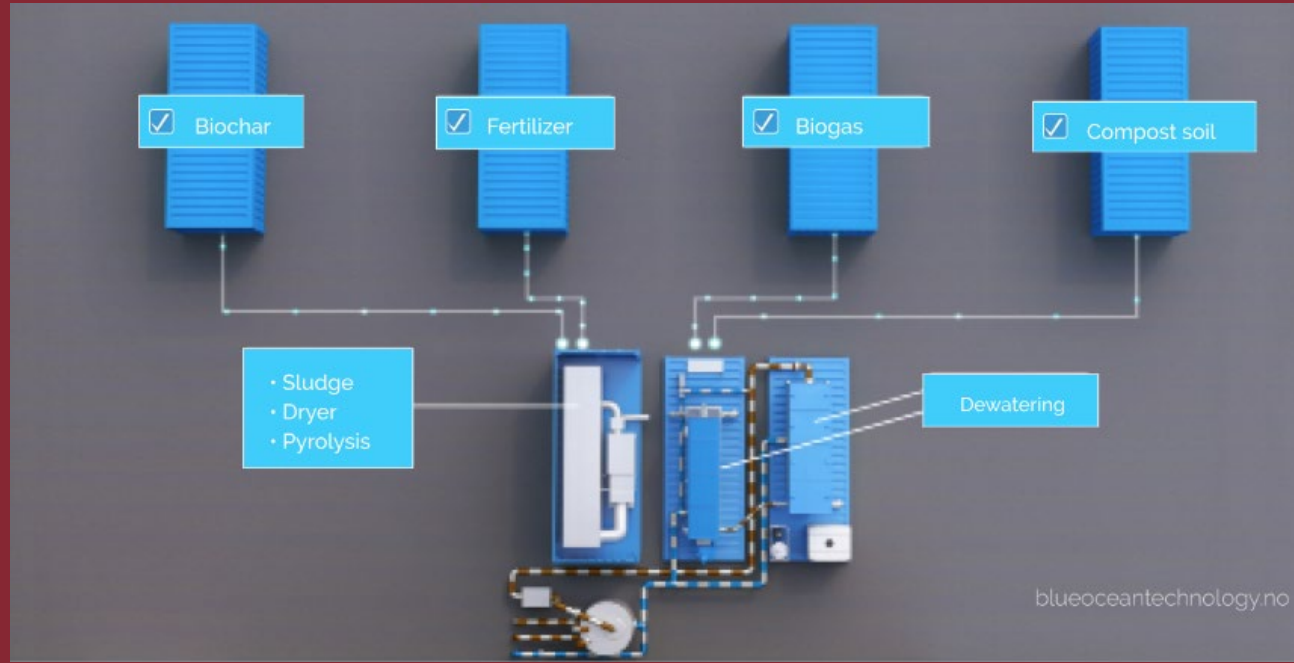
**Technologies
that allow in sea
farming but
closed-system**



SUBSEA HARVEST



**Collection more
accessible in
landbased
facilities**



BLUE OCEAN TECHNOLOGY
Bluehouse systems®



**Collection more
accessible in
landbased
facilities**





**If we can collect
it, we can
transform or
directly utilise it**

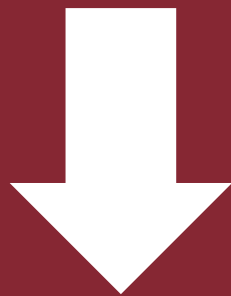
Concentration

De-watering

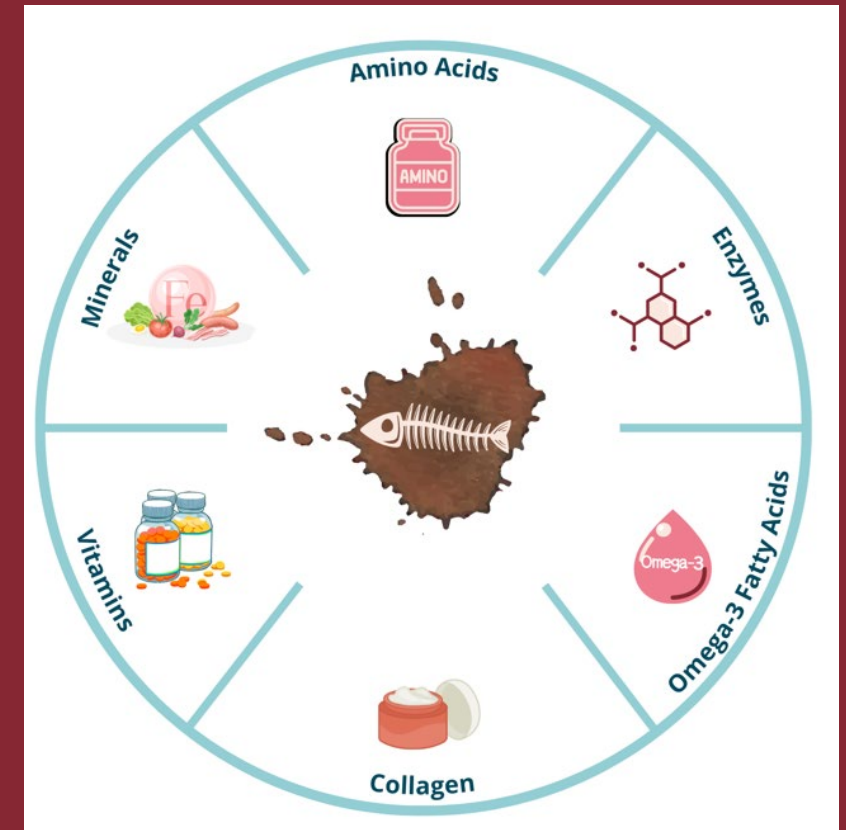
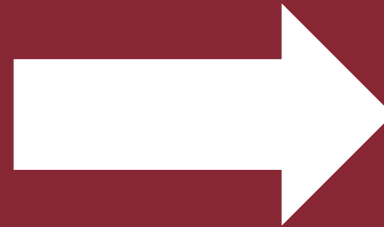
Drying

Pyrolysis

Downstream
processing



Sludge value creation

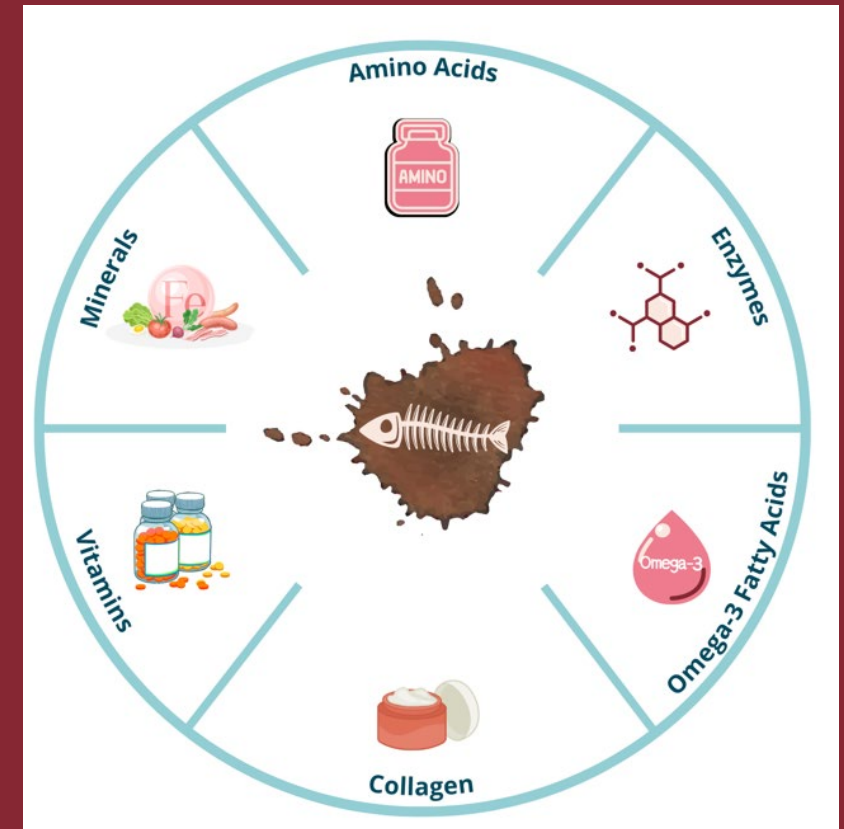


Extending 100% fish

A wide range of functional or bioactive compound

Challenge

- Availability of processing infrastructure.
- Process efficiency.
- Cost and scale up & legislation





Phosphorus Recovery & Fertiliser & biochar

Value chain follow through





Phosphorus Recovery & Fertiliser & Biochar

Value chain follow through



1680isk/kg





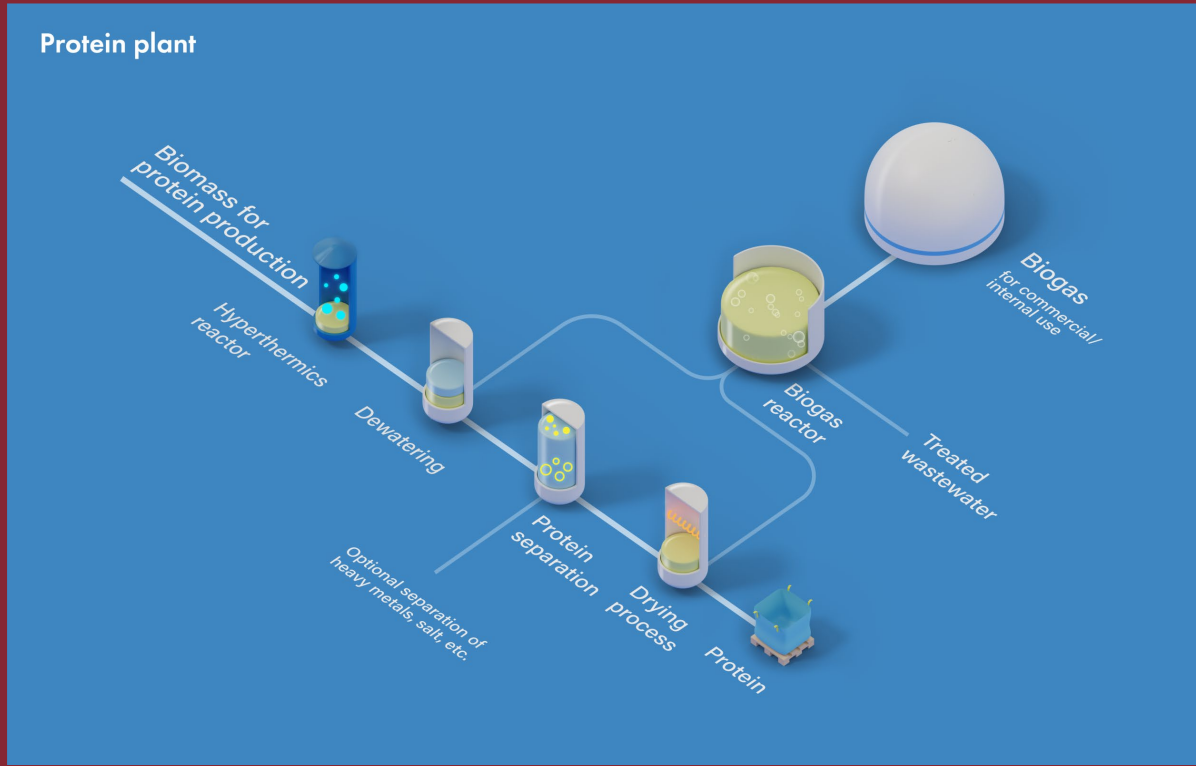
Microalgae production



Value chain follow through

17.85Euro





Biogas & Biogas Substrate



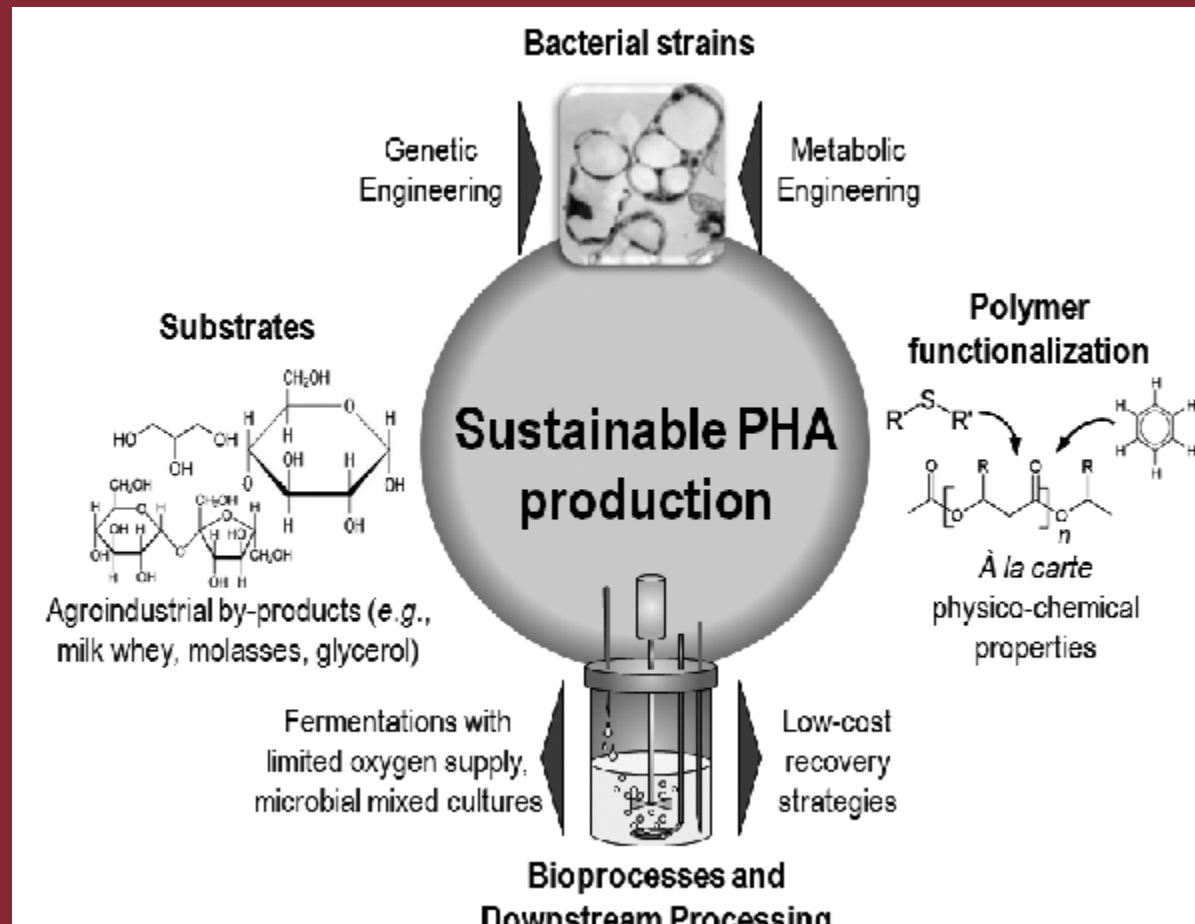
Pyrolysis oil (bio-oil)



Industrial lubricant & biobased surfactant

ECO CLEAN

polyhydroxyalkanoate production





Biotechnological prospecting



Purpose of workshop

To gather the perspective of the Icelandic aquaculture industry on where we should focus research and development resources.



Strengths



- What resources do we have that can support value creation in sludge?
- What practices already exist for sludge management in Iceland today?
- What might be other sources of competitive advantage for sludge utilization and valorization in Iceland?

Weaknesses

- What is lacking in the aquaculture industry in Iceland, that as a result is impacting the utilization of sludge in Iceland?
- What internal factors might be limiting the success of sludge utilization and valorization in Iceland?



Opportunities



- What resources and practices could we easily integrate into sludge utilization in Iceland right now?
- What factors should be prioritized when further developing sludge utilization and valorization in Iceland, in order to maximize growth?

Threats

- What are the external blockers that sludge utilization may face?
- What are non-controllable external factors that may negatively impact sludge utilization and valorization?

