



# PROTON™ - A Sustainable Protein Solution

RECYCLING INDUSTRIAL CO<sub>2</sub> INTO PROTEIN FOR SUSTAINABLE ANIMAL FEED

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of the European Union



UNREASONABLE IMPACT  
2020



SOLAR IMPULSE FOUNDATION  
2020



FORBES MAGAZINE  
2019

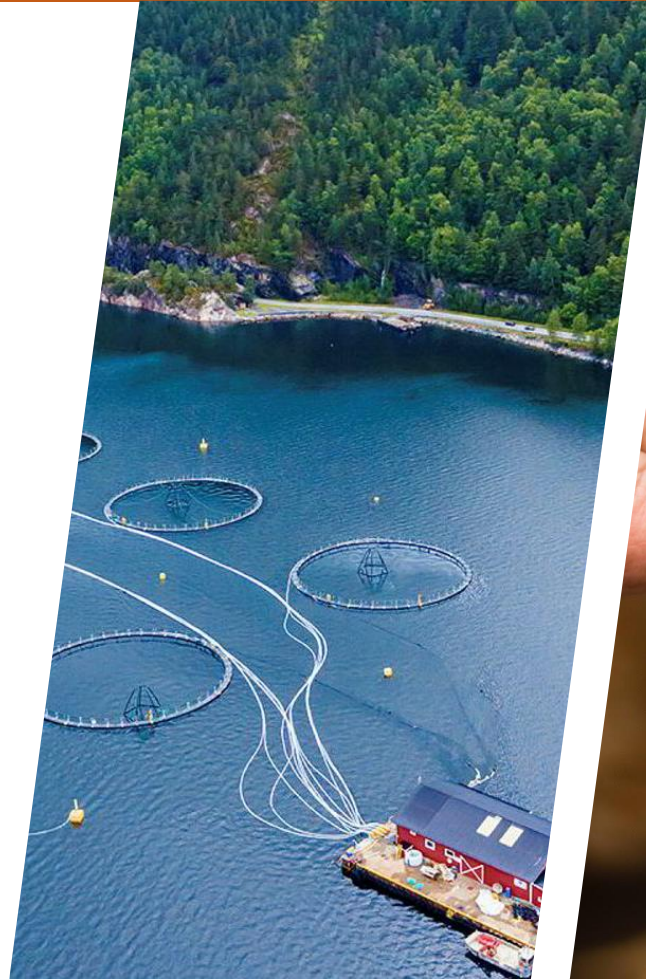
>€4M FUNDING FROM UK & EU BODIES 2019 & 2020

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## Problem:

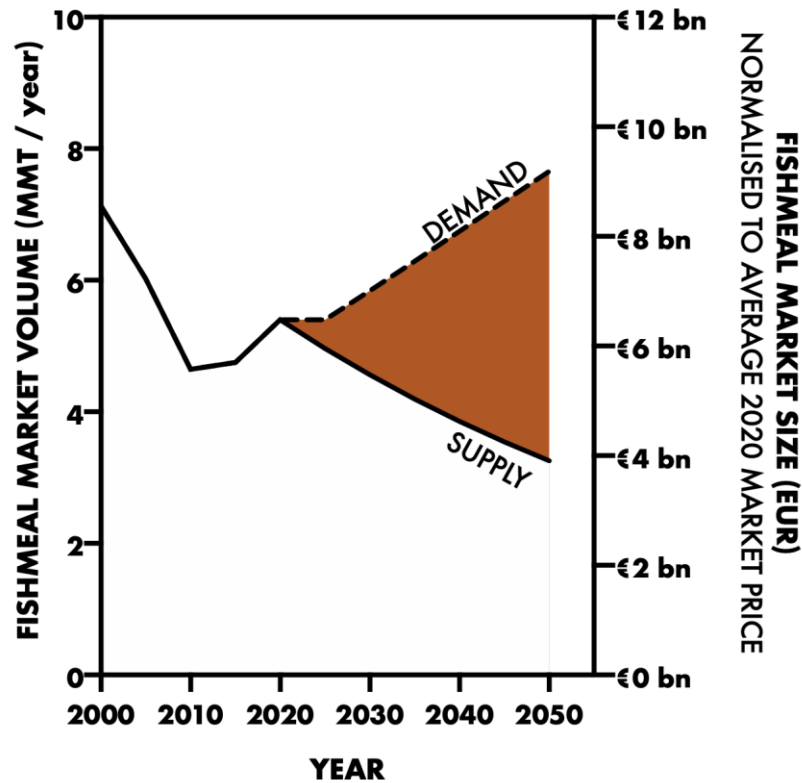
We cannot sustainably feed the animals we eat...

...Demand for animal products will double by 2050

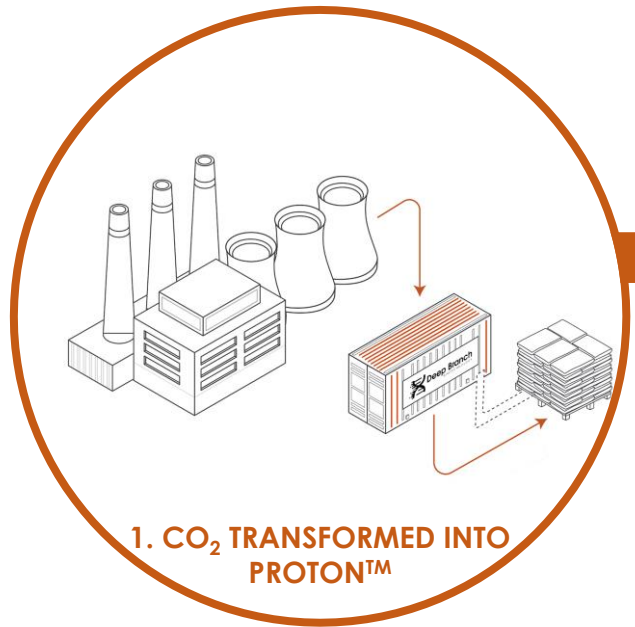




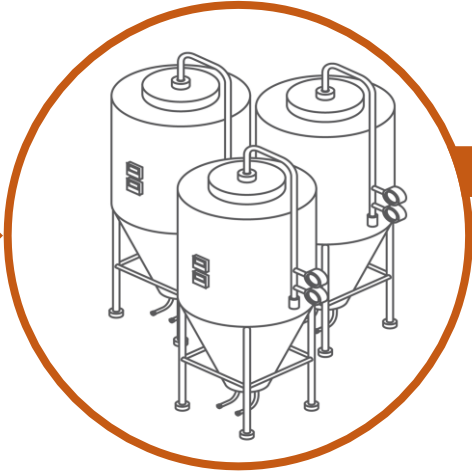
**Problem:**  
Protein for animal diets is too resource intensive to meet growing demand



# Our solution: Transform CO<sub>2</sub> into protein



1. CO<sub>2</sub> TRANSFORMED INTO PROTON™

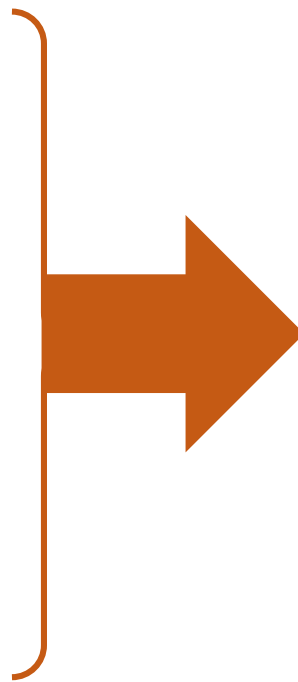


2. PROTON™ USED INSTEAD OF SOY OR FISHMEAL IN ANIMAL FEED

3. MORE SUSTAINABLE ANIMAL PRODUCTS



## Proton™ features



## Customer benefits

COMPARABLE NUTRITIONAL  
PROFILE TO FISHMEAL  
(INDUSTRY GOLD STANDARD)

+

QUALITY WITH YEAR ROUND  
CONTINUOUS PRODUCTION

+

NO OVERFISHING  
NO DEFORESTATION

+

75% SMALLER CARBON  
FOOTPRINT



# Impact

For every  
100 kT of  
Proton™  
produced:

1. Preserving &  
restoring  
ecosystems

Deforestation  
avoided for an area  
3X that of Paris

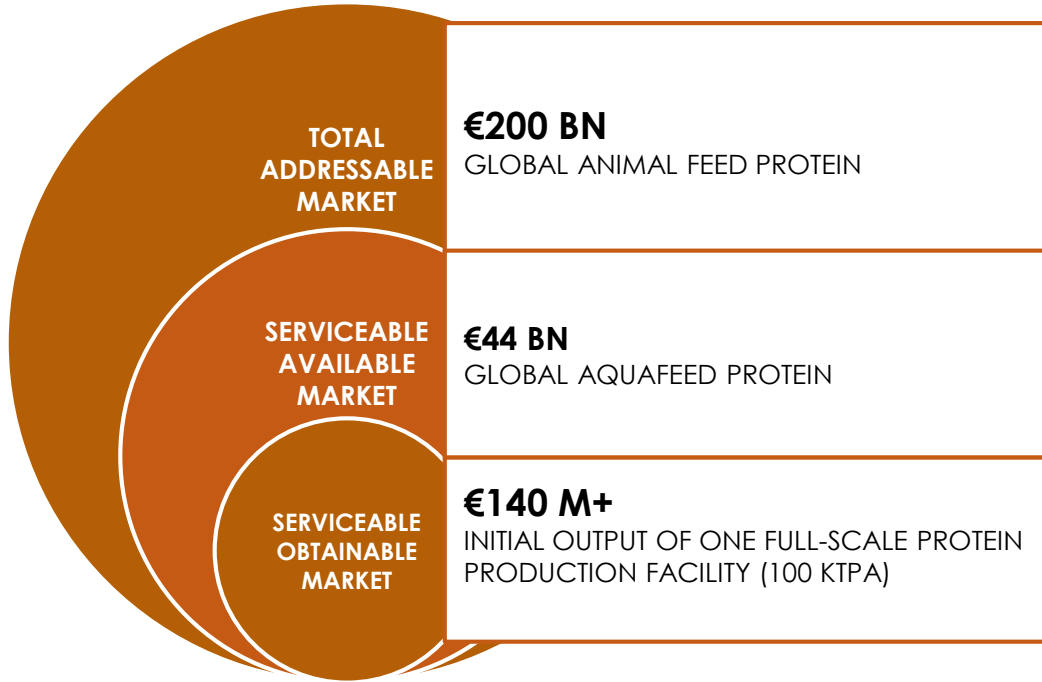
2. Environmentally  
friendly food  
production

90% less CO<sub>2</sub> per  
tonne of feed protein  
↓  
27% less CO<sub>2</sub> per  
salmon fillet

3. Climate  
mitigation &  
circular economy

>60,000 barrels of oil  
saved through  
avoidance of  
transcontinental  
shipping

# Market



# Alternative Proteins

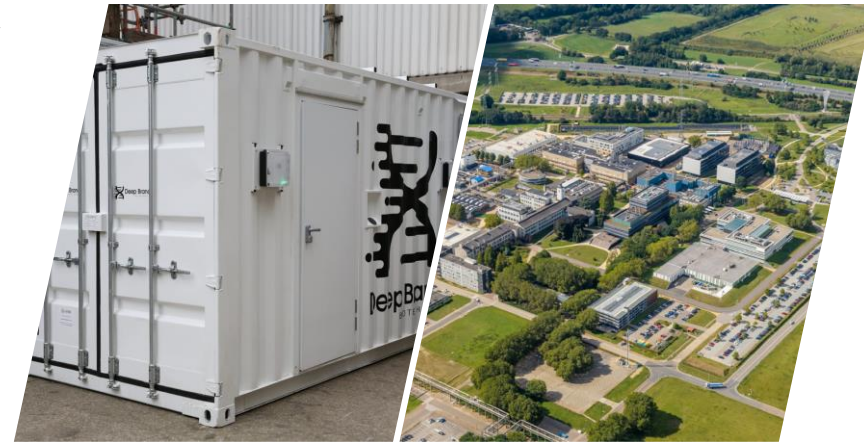
**PLANT**      **INSECT**      **SINGLE-CELL PROTEIN (SCP)**

**NEW PROTEIN SOURCES MUST BE COST-COMPETITIVE, SUSTAINABLE & AVAILABLE IN HIGH VOLUME**

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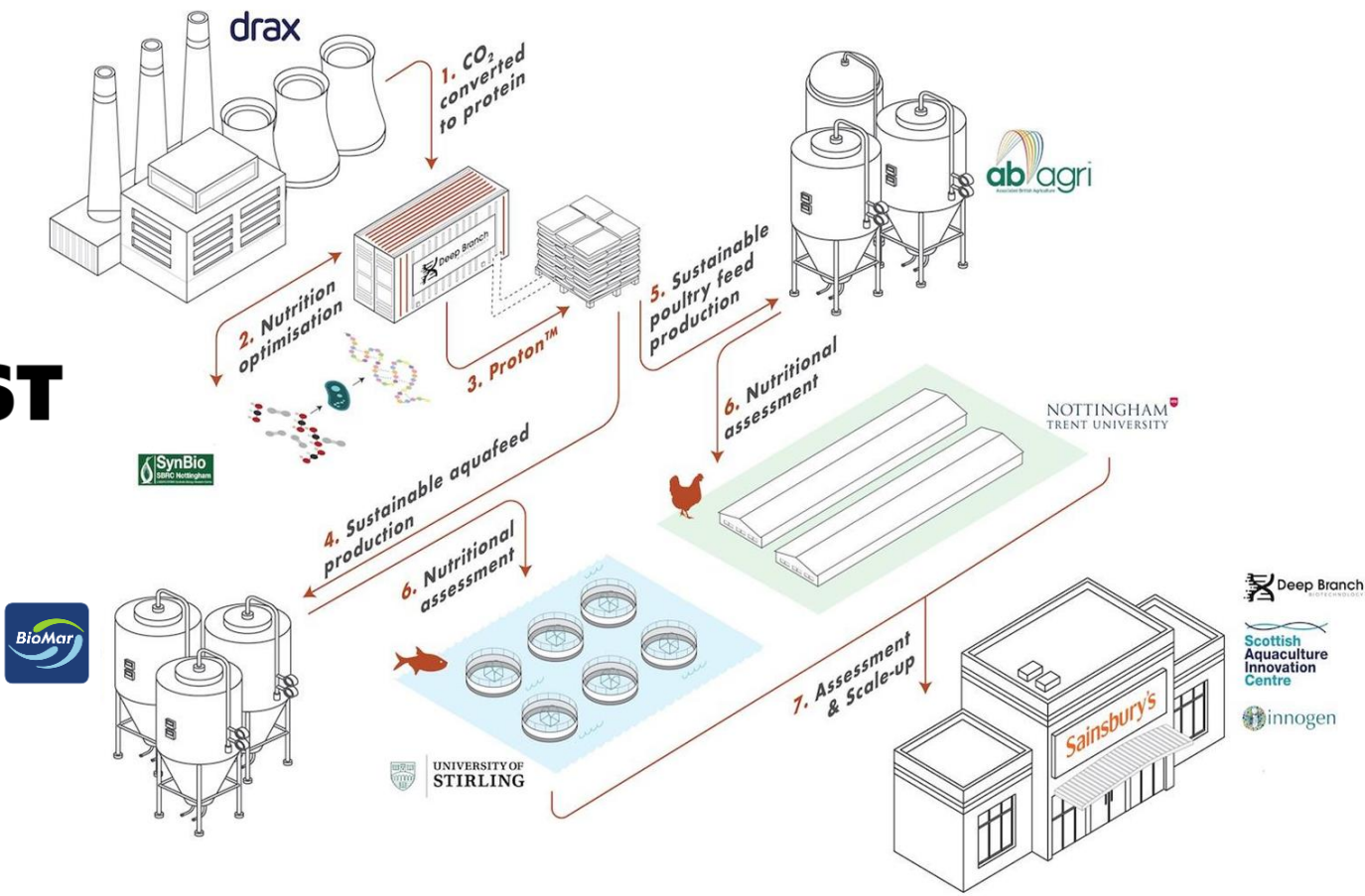
# PRODUCTION OVERVIEW

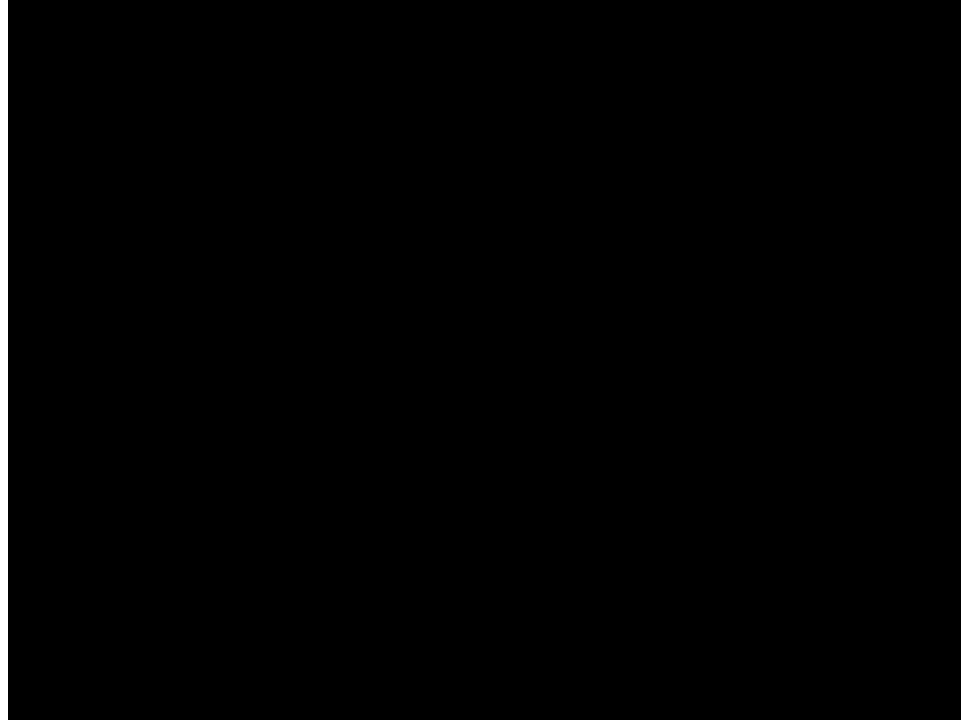
- Scale up from the Mobile Pilot Unit currently at Drax
- European Innovation Council Accelerator Grant
- Build and test a scale up plant- Brightlands, Chemelot Campus, Geleen, Netherlands
- Protein production by mid 2021
- Commercial scale production...2024





# REACT-FIRST





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