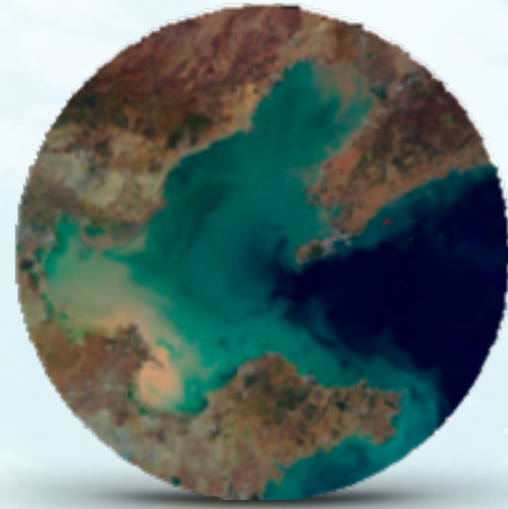


Atmo

(Atmo'Sphere)

Algae Factories



### **Ocean acidification**

reduces the natural ocean capacity of CO<sub>2</sub> capturing



### **GHG emission**

oil-based plastic counts 8% of total emissions



### **Hight costs of land crop-based bioplastics**

2,000- 5,000 \$ / ton compared to oil-based one of 300-500 \$ / ton



### **Eutrophic/hypoxic marine zones**

about 500 sites around the world due to anthropogenic activities



### **Plastic pollution**

8,000,000 tons/year of plastic waste are released in the oceans

**The PROBLEM?!**

# The Solution!

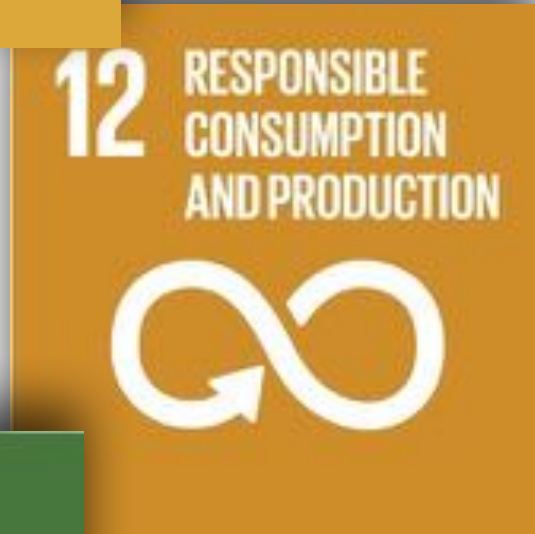
## Blue Plastic - Algae-based Plastic

CO<sub>2</sub> absorption, N and P assimilation, O<sub>2</sub> liberation, pH regulation, improvement of inorganic C in ocean base, valuable biomass, biodegradable plastic

Estimate price of 500-600 \$/ton close to environmentally unfriendly oil-based plastic.

*charismatic blue carbon*





Algae farmed on Sea **absorb CO<sub>2</sub>** resulting from GHG in atmosphere, produce **O<sub>2</sub>** **without Ocean acidification** nor **exhausting land** nor **water resources!**

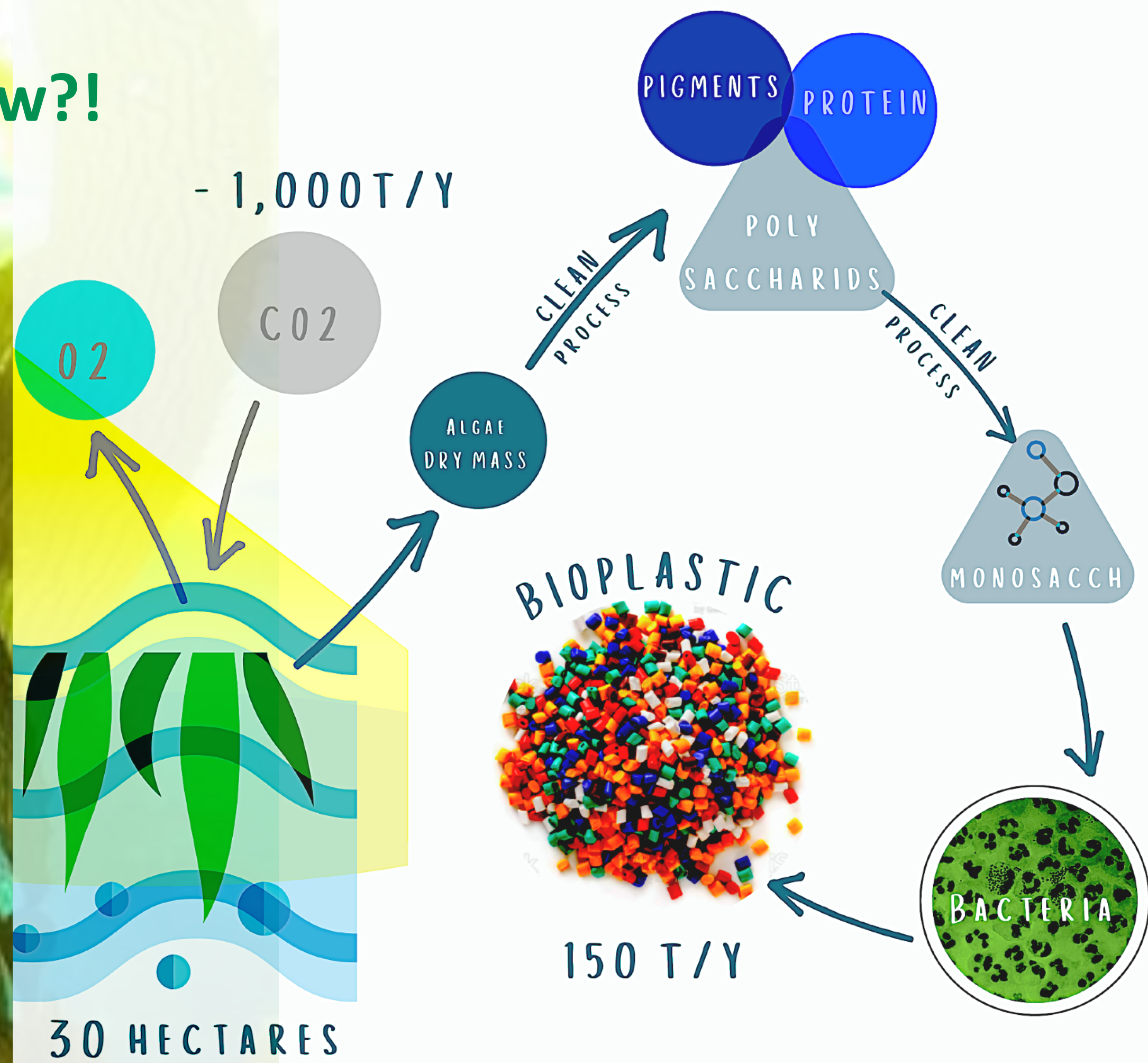
**Without using fertilisers**, up taking **Nitrogen** in Sea Water, **avoiding Eutrophication!**

Extracting **Protein &** producing **Bio-degradable Plastics!**

**SDGs IMPACT!**



# How?!





Growing Algae Faster!  
Safer @ Lower Cost!  
With near Zero Waste!  
Wide Range of Product  
Lines & Applications!



**First sale**



**B2B**



**End-user**



**Food products**

*(directly consumable)*

**Food products**

*(plant protein)*

**Food additives**

**Animal feed**

**Pharmaceuticals**

**Cosmetics**

**Bio-packaging**

**Biofuels**

**Biostimulants**

**Nutraceuticals**

€ million



EU Opportunity 2030



Animal Feed



Food



Biostimulants



Bio-packaging



Pharma & nutraceuticals



Additives



Cosmetics



Biofuels



Ecosystem services

Total market in Europe 2030



# Our Goals 2030?!

**114'000 t/year  
Dry Ulva  
Produced**

**433'000 t/year  
Protein Produced**

**270'000 t/year  
Blue Plastic  
Produced**

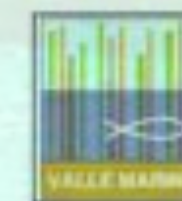
**330'000 t/year  
CO2 Captured**

# 1<sup>st</sup> Farm - Marano Lagunare



45°45'20.9"N 13°09'41.1"E

45.755809, 13.161415



Soc. Agr. Venezia Due sas  
di Cicuttin G & C.  
Acquacoltura - Via San Vito, 68  
Marano Lagunare (UD)

SUPERFICI	MQ.
VASCA ①	5.890
VASCA ②	1.520
VASCA ③	1.750
VASCA ④	5.040
VASCA ⑤	4.080
VASCA ⑥	3.900
VASCA ⑦	4.440
VASCA ⑧	1.210
VASCA ⑨	3.250
VASCA ⑩	2.640
VASCA ⑪	3.360
VASCA ⑫	1.040
VASCA ⑬	4.700
VASCA ⑭	3.980
VASCA ⑮	4.520
VASCA ⑯	4.260
VASCA ⑰	4.430
VASCA ⑱	3.950
VASCA ⑲	5.990
VASCA ⑳	2.420
VASCA ㉑	3.200
VASCA ㉒	3.640
VASCA ㉓	5.080
VASCA ㉔	17.000
VASCA ㉕	2.680
VASCA ㉖	5.780
VASCA ㉗	1.800
VASCA ㉘	33.700
VASCA ㉙	750
VASCHE	146.000

SUPERFICI	MQ.
WIGNUA (A)	1.320
WIGNUA (B)	880
WIGNUA (C)	1.100
WIGNUA (D)	2.420
WIGNUA	5.720
CAN. CIRC. (A)	1.338
CAN. CIRC. (B)	720
CAN. CIRC. (C)	1.740
CAN. CIRC. (D)	1.386
CAN. CIRC. (E)	1.824
CAN. CIRC. (F)	6.130
CAN. CIRC. (G)	6.628
CAN. CIRCON.	19.760
TOT. LAGUNA	171.480
CENTRO AZ.	8.700
VIABILITA'	17.600
SEMINATIVO	93.800
ARGINI	12.600
TOT. VERDE SERV.	132.700
TOTALE	304.180

LEGENDA	
①	VASCHE
	TOMBITO CON DUEVA
	SPEDA DI SPONDA
	PEZZO GESTERNA
	SERRE
	AREA CONCESSA IN AFFITTO
	TRANSITO PROSPICUO
	RECINTAZIONE

# Ongoing Partnerships



**UNIVERSITÀ  
DEGLI STUDI  
DI UDINE**

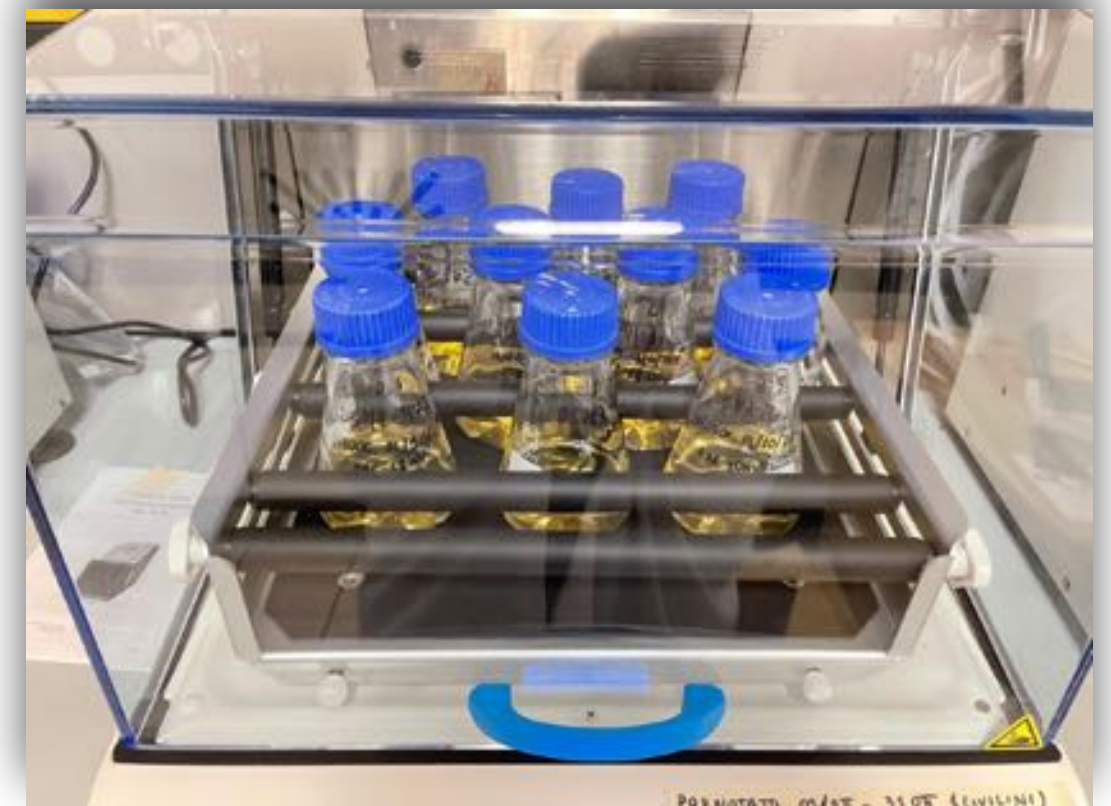
**Laboratory  
& Research Agreement**



**Leibniz Institute  
DSMZ-German Collection  
of Microorganisms  
and Cell Cultures GmbH**

**License for  
Biological Material**

# ATMOO in Action!!



## Seaweed Production

**Beatriz Castelar, PhD.**  
Co-Founder (Italy)



**Claudio Franci**  
Marine Biologist  
Expert in Aquaculture &  
Marine Ecology (Italy)



**Davide Cedioli**  
Engineer & inventor  
(Italy)



## Marketing

**Alberto Scuero**  
Managing Director  
Carpi Tech Group  
(Switzerland)



## Development at Sea

**Yurij Bean**  
Founder (Italy)



**Capitan Nick Sloane**  
Resolve Marine Director &  
President of International  
Salvage Union (South Africa)



## Biochemicals & Bio-Plastic Production

**Giuliano Zambonin**  
Chemistry Process Eng. (Italy)



**Michele Balsamo**  
Environmental Eng. & Micro-  
biotechnologist (Italy)



**The TEAM!**

An aerial photograph of a pond surrounded by green trees and grass. The pond's surface is covered with a semi-transparent blue overlay, suggesting water temperature or carbon sequestration data. The text "Let's Catch that Carbon!" is centered over the pond in a light green, italicized font.

*Let's Catch that Carbon!*