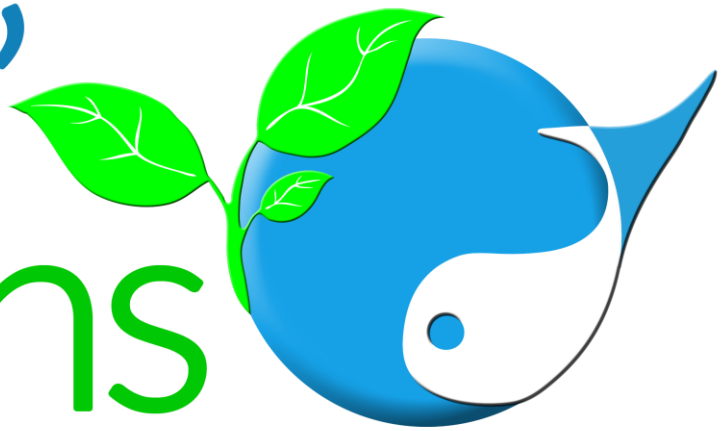
fish n' greens



Fresh and pure food from sustainable
highly efficient aquaponics technologies

by

aquaponics Iberia

Recognized as an **R&D** entity by **ANI**, in the technical-scientific domains:

AGÊNCIA NACIONAL DE INOVAÇÃO

Agri-food – Healthy and sustainable food

Water and Environment – Waste reduction, management, treatment and recovery

Agri-food – Waste treatment and reuse

KNOW HOW

RAS, Aquaponics and
Water treatment

OUR CORE TEAM

Participants in Climate-KIC 2017,
EIT Food FAN Bilbao 2019,
BlueInvest Readiness Assistance 2020,
EIT Innowise Scale Water Scarcity 2022,
Blue Bio Value Edition 2022

JOÃO COTTER

CEO

+20 years of experience in aquaculture & aquaponics

ORLANDO RODRIGUEZ

COO

+40 years of experience in aquaculture & aquaponics

PATRÍCIA COTTER

CCO

+10 years of experience in sales, food safety & processing

PAULO TORRES

CSO

+17 years of experience in marine biology & aquatic R&D

SWIMS™

TECHNOLOGY IN

fish n' greens

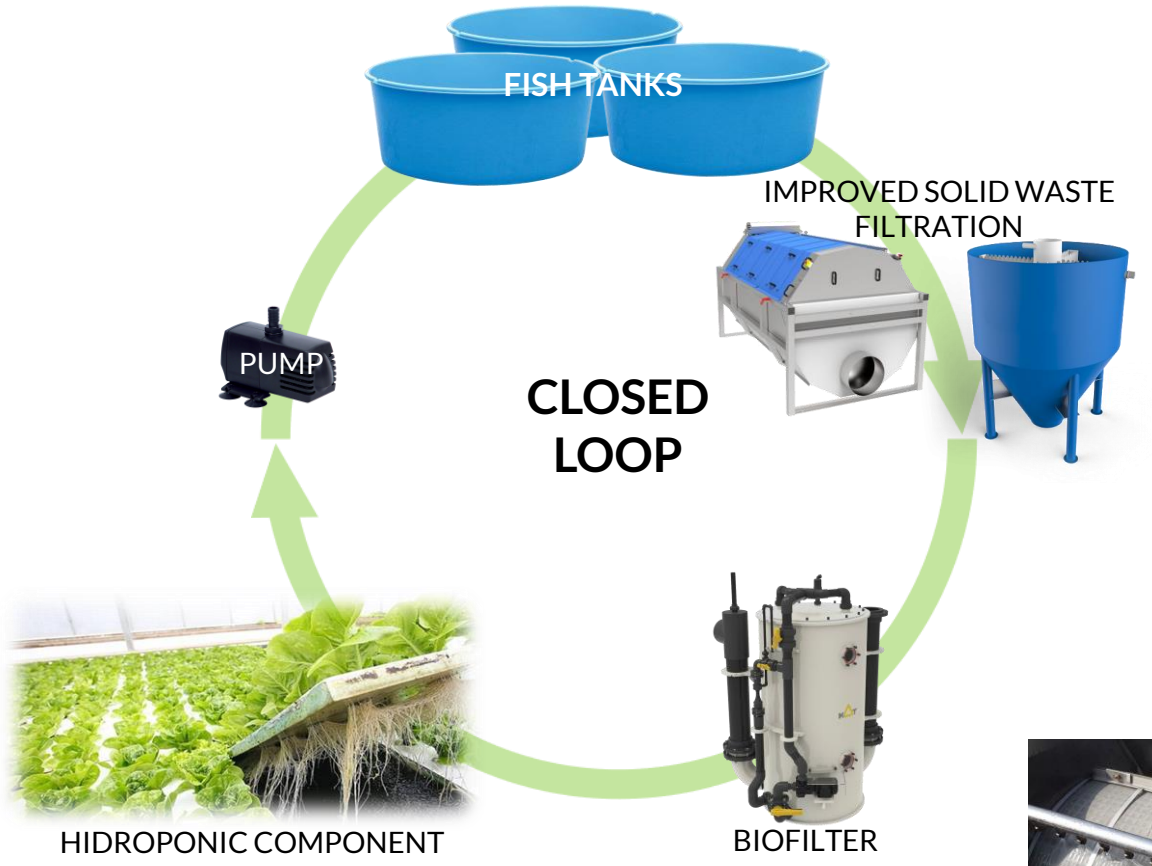
by aquaponics Iberia

SOLID WASTE INTEGRATED MANAGEMENT SYSTEM

BALANCED CLOSED-LOOP AQUAPONICS

1. Improved retention of fine sediments.
2. **However**, removing all solid waste leads to less nutrient availability for plants.

WHAT NOW?

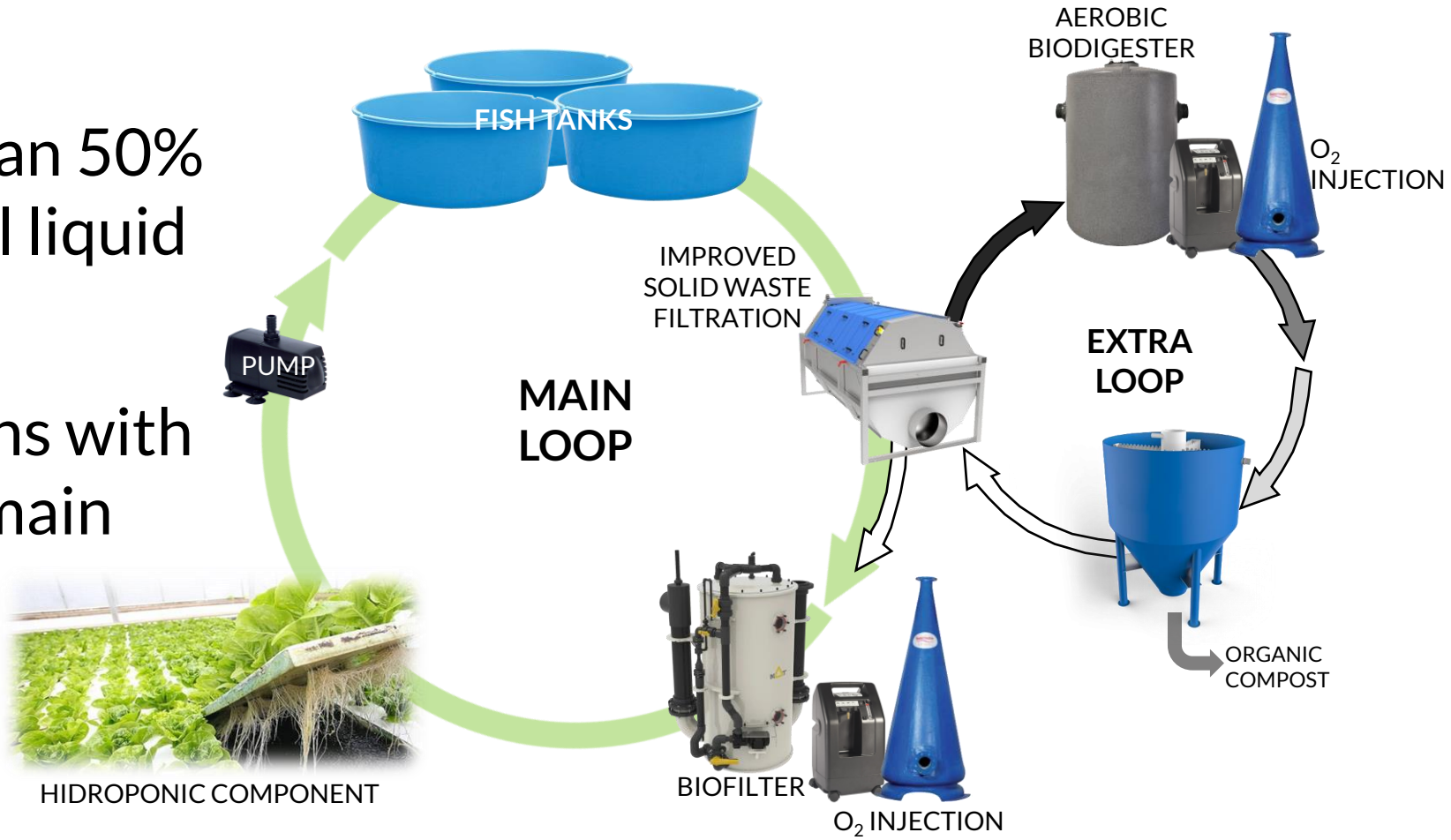


HIGHER MESH
FINER SCREEN
(lower microns)

OUR SOLUTION

BALANCED CLOSED-LOOP AQUAPONICS

3. Converting more than 50% of solids into natural liquid fertilizer.
4. This fertilizer returns with automation to the main loop according to plants' needs.



OUR SOLUTION

BALANCED CLOSED-LOOP AQUAPONICS

5. **Digital monitoring** and controlling of parameters of the main loop and extra loop making **nutrient delivery an automated** process.

OUR SOLUTION

QUALITATIVE COMPARISON BETWEEN AQUAPONICS TECHNOLOGIES

Features	Standard balanced closed-loop aquaponics system	Decoupled aquaponics system	SWIMS™
Consumer trust in organicity (symbiotic ecosystem)	✓	✗	✓
Free of synthetic fertilizers (< input costs)	✓	✗	✓
Flexibility to increase/reduce plant production capacity	✗	✓	✓
Stability and control of nutrient concentration levels	✗	✓	✓
Long term plant high productivity and stability	✗	✓	✓
Long term dissolved oxygen availability and food safety	✗	*	✓
Low maintenance (cleaning) requirements	✗	✓	✓✓
Low water waste/consumption	✓	✗	✓✓

* Depending on the option to use controlled oxygen input

SWIMS™

✓ fish n' greens

OUR PRODUCTS

fish n' greens

Fresh, local, tasty, healthy and sustainable fish and vegetables!

No GMOs, no pesticides, no herbicides, no synthetic fertilizers.

Fish free of heavy metals, and microplastics, without medicines, antibiotics and hormones!

120
tons/year

FARMED RESPONSIBLY asc CERTIFIED ASC-AQUA.ORG TM

FRIEND OF THE SEA

400
tons/year

FRIEND OF THE EARTH

OUR CONTRIBUTION TO THE SDGs

END CONSUMER TRENDS

1. Healthy
2. Sustainable
3. Local

BUSINESS MODEL

Revenue sources

and by-products (fish waste, organic compost, organic liquid fertilizer, carbon credits)

Customers (Target Market)

SECURED

B2B

- **Municipality schools**
  (*Biocanteens* project in local schools, supplying close to 11,000 students)
- **Food Retailers**
  (supermarkets, grocery stores, organic food stores and gourmet stores)
- **Restaurants and hotels**
- **Local worplace offices**
  (delivery of fresh food baskets)
- **Other industries**
  (organic agriculture, animal feed, ...)

B2C

- **Online consumers**
  (through webstore)
- Weekly **Farmers markets**
- ***Fish n' Greens* urban fresh food stores**
  (with demonstrative aquaponics system keeping greens alive; coming soon project)

ROADMAP

SWIMS™ R&D (TRL 8)
aquaponics Iberia

Lab scale R&D.
Designing and building commercial units for customers

Automation and digitalization of processes.
Securing market and regulation.
Fish species exclusivity.

fish n' greens
TODAY

2023

Implementing 1st FnG full-scale unit

Financing 1st full-scale unit

2024

Raise funding for 2nd FnG unit (2nd city)

FnG full-scale unit fully operational (TRL 9)

120 tons

400 tons

2025

Replicate units (5 units/cities before 2030)

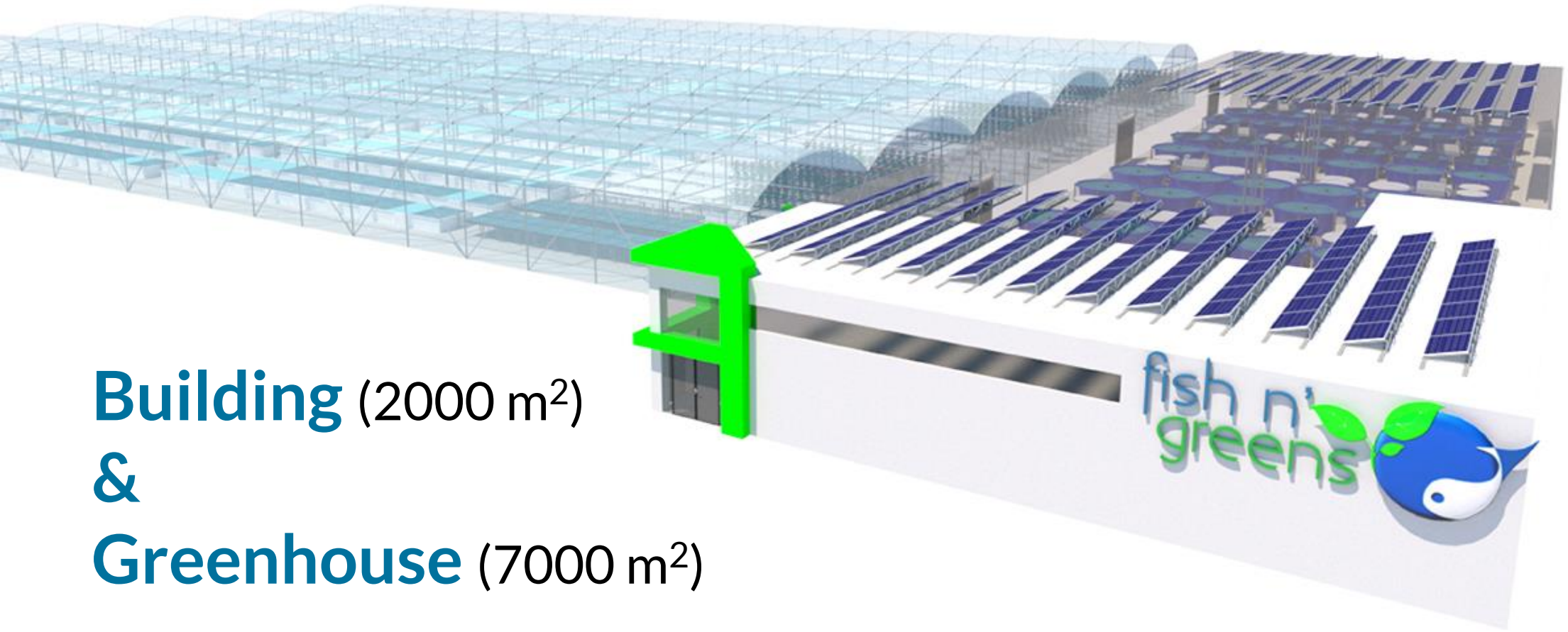
2030

Market technologies

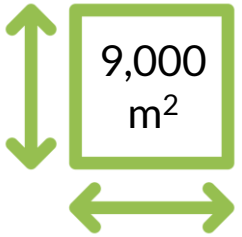
600 tons

2 000 tons

FACILITIES (1st FULL-SCALE UNIT)



Building (2000 m^2)
&
Greenhouse (7000 m^2)



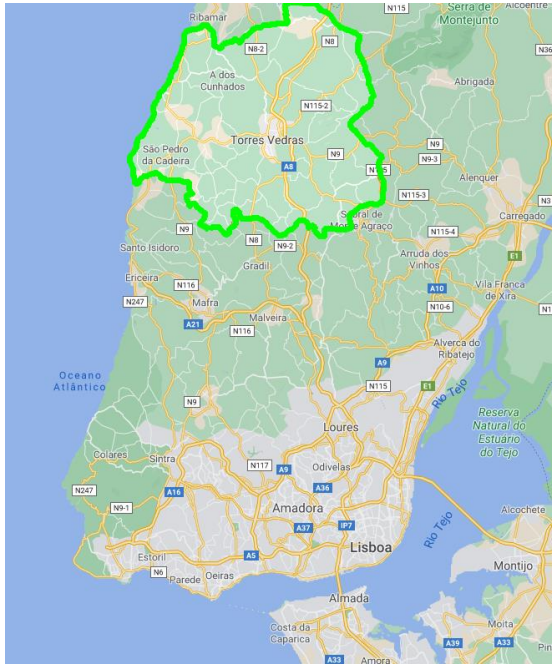
WHERE

Torres Vedras
Câmara Municipal

fish n' greens

Torres Vedras

Location of the first production unit.
A region of more than 2 million consumers (50 km radius). Less than 30 minutes from Lisbon.



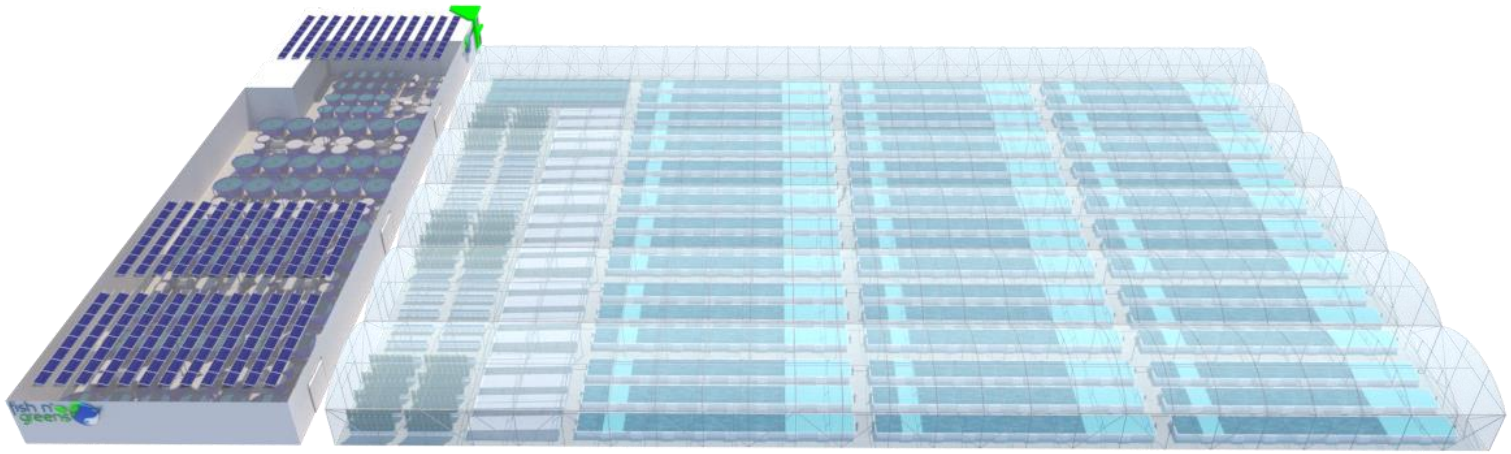
Later, expand to the outskirts of other European cities, through the replication and adaptation of this concept.

INVESTMENT

4.5 million € (9,000 m^2 setup)

Includes:

- 12,000 m^2 land,
- design and engineering,
- construction (building and greenhouse),
- equipment and materials,
- labour and installation,
- project management,
- licensing and certification,
- tests,
- expansion and training of the team,
- working capital and
- beginning of operations.



INVESTMENT IN SUSTAINABLE AQUACULTURE

FISH N' GREENS FARMS – KEY NUMBERS

		1st full scale unit	Scale-up
Size	→	9 000 m^2	5 x 9 000 m^2
Carbon sequestration	→	590 tons/year	2950 tons/year
Fresh finfish	→	120 tons/year	600 tons/year
Organic fresh greens	→	400 tons/year	2 000 tons/year
Financing demand	→	4.5 M€	20 M€
Revenues per year	→	5 M€	25 M€
EBITDA-To-Sales Ratio	→	60%	66%
ROI	→	56%	59%
Payback period	→	3 to 4 years	3 years

INVESTOR PERSPECTIVE

Raising
4.5 M€
for **37.5%** equity
(SAFE)

Incl. 18 months run rate

Post-money valuation:
12 M€

Pre-money valuation:
7.5 M€

Convertible debth

Considering only 1 Fish n' Greens full scale facility.

SUMMARY

fish n' greens

Does it meet all your investment requirements?

- ✓ Highly productive and sustainable technology, tested & validated!
- ✓ Raising funding for the first large-scale commercial unit!
- ✓ 120 tons/year of the tastiest and ω-3 fatty acids-rich fresh certified fish!
- ✓ 400 tons/year of certified organic herbs, leafy greens and fruits!
- ✓ Secured local market (local public schools)!
- ✓ Carbon neutrality!
- ✓ Sustainable «vegetarian» fish (full plant-based fish feed)
- ✓ Zero waste, zero pesticides and zero water waste!
- ✓ Farm to Fork, reaching a market of 2 million consumers!
- ✓ 56% ROI average per year (one unit)! *
- ✓ 60% EBITDA-To-Sales Ratio *
- ✓ 3-to-4-year Payback!
- ✓ Easy replicable for the outskirts of other large cities!
- ✓ The most experienced team in RAS and Aquaponics!

* 4-year average, from 2025 onwards
(from the 1st year of full production capacity)

OUR JOINT VISION

fish n' greens

Partners and supporters

Torres Vedras Câmara Municipal

ECO CAMPUS TORRES VEDRAS

TORRES INØV-E

food for sustainability

aquaponics Iberia

Ciências ULisboa

POLITÉCNICO DE LEIRIA

BLUEBIO ALLIANCE

MARE

eit Community Water Scarcity

Funded by the European Union

eit Food ACCELERATOR NETWORK

eit Climate-KIC

Climate-KIC is supported by the EIT, a body of the European Union

MARE STARTUP

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