



# NASEKOMO

WWW.NASEKOMO.LIFE

**INSPIRED BY NATURE,  
WE GROW INSECTS  
TO FEED ANIMALS**



CHIVAS VENTURE

eit Climate-KIC

Future  
Agro  
Challenge

eit Food  
eit Food is supported by EIT  
a part of the European Union

# THE PROBLEM

**FOOD PRODUCTION  
capacity is SATURATED**

Globally, the demand for protein-rich food is increasing rapidly.

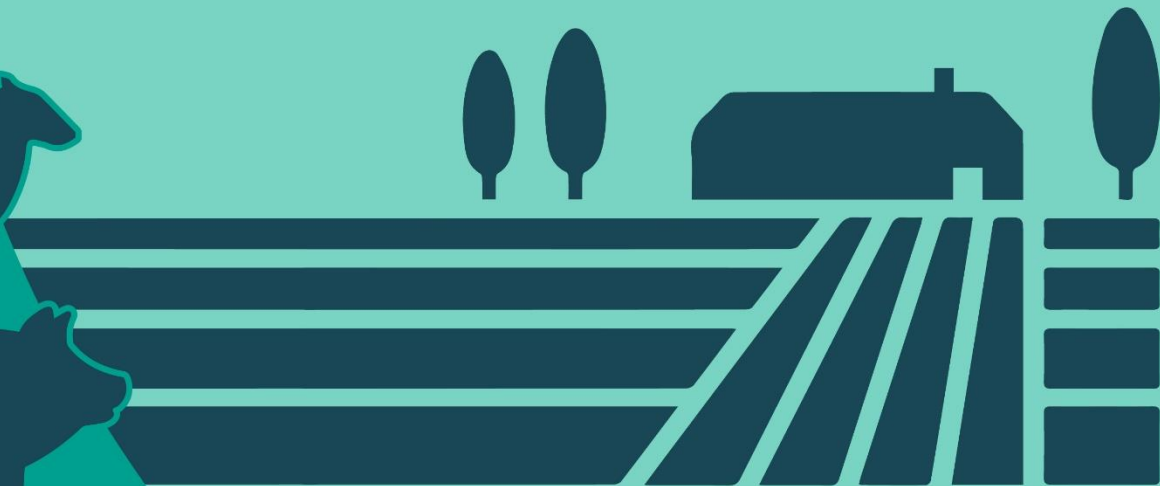
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**EXTRA 100 M  
TONS OF PROTEIN**  
will be required annually  
by 2050.

\* "The future of food and agriculture." FAO, 2017



**80% OF ALL**  
agricultural land is already  
**USED**  
to feed animals.



Fish stocks are  
quickly being  
**DEPLETED**



# THE SOLUTION

Black soldier flies (BSF) efficiently convert organic waste matter into protein for animal feed.



**12 X 10 000**

Increase body mass  
10,000 times in 12 days.

**60 / 40**

Convert 60% of total  
matter into body mass,  
40% remain as fertilizer.



**1 x 900**

1 female lays up  
to 900 eggs.

# IMPACT

OUR SOLUTION IS HIGHLY SCALABLE AND CONTRIBUTES TO THE FOLLOWING SUSTAINABLE DEVELOPMENT GOALS (SDGS)



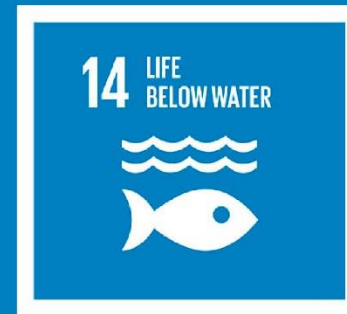
**End hunger, achieve food security and improved nutrition and promote sustainable agriculture**



**Take urgent action to combat climate change and its impacts**



**Ensure sustainable consumption and production patterns**



**Conserve and sustainably use the oceans, seas and marine resources for sustainable development**

# MARKETS



AQUACULTURE FEED  
€ 119 BN



PET FEED  
€ 61 BN



PIG FEED  
€ 65 BN



POULTRY FEED  
€ 108 BN

GLOBAL INSECT PROTEIN DEMAND IS EXPECTED TO INCREASE OVER **300 X IN VOLUME AND VALUE** OVER THE NEXT **10 YEARS.**

2018

€50 M

20 000 tons

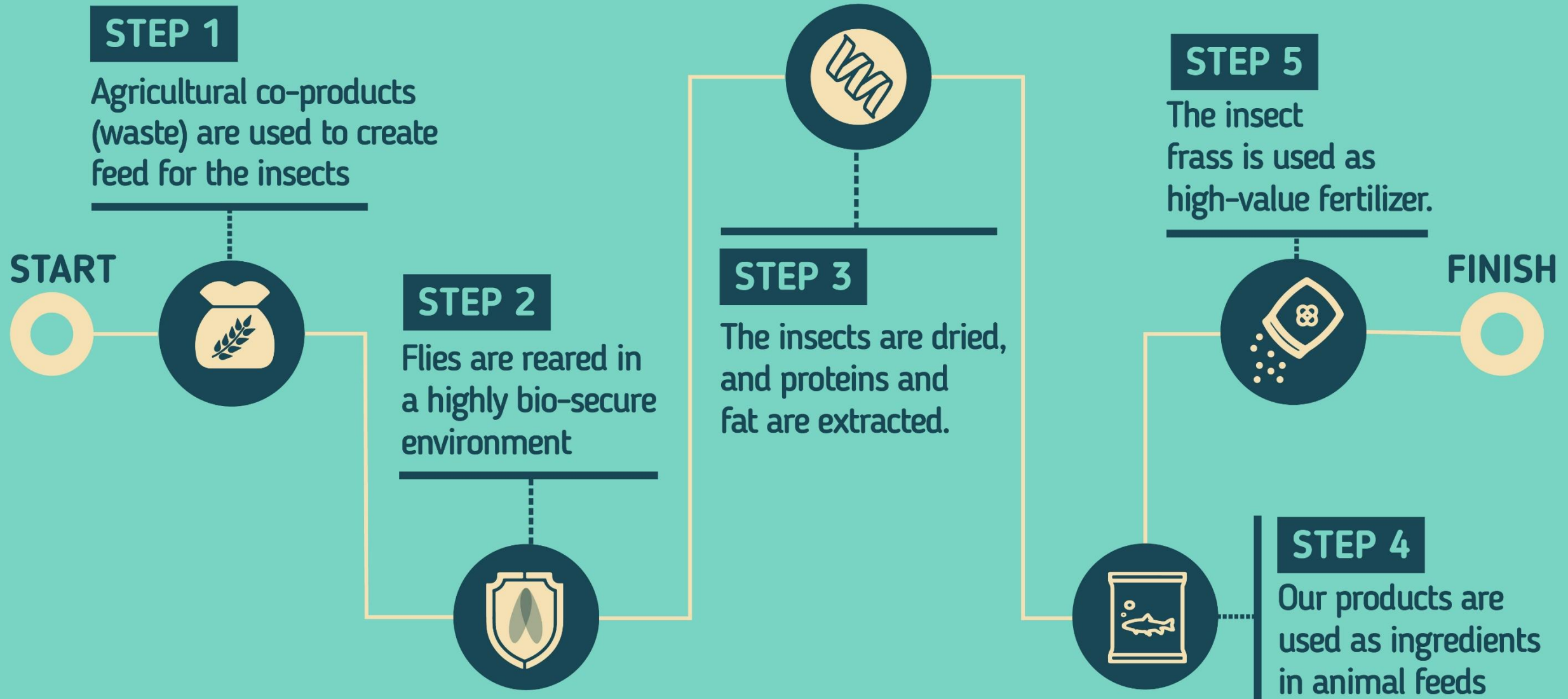
VS

€15 BN

6 000 000 tons

2030

# HOW IT WORKS: from WASTE to PROTEIN in 12 DAYS



# INDUSTRY VALUE CHAIN

NASEKOMO intends to be a key-player in the nascent insect industry and specialize in the genetics, multiplication and transformation stages in the future. Our value chain will replicate those of other animal industries, and integrate all stages of the process.

## GENETICS



Hold genetic capital and manage strains

## MULTIPLICATIONS



Generate billions of juvenile larvae (5 day-old-larvae, DOLs)

## REARING



Grow the larvae on the organic waste matter

## TRANSFORMATION



Extract ingredients from the insects

**ZERO WASTE**

THE INSECT FRASS IS USED AS HIGH-VALUE FERTILIZER

**ZERO WASTE**

# BUSINESS MODEL

Evolving from an integrated model to supplying high value-added products and services to the insect industry

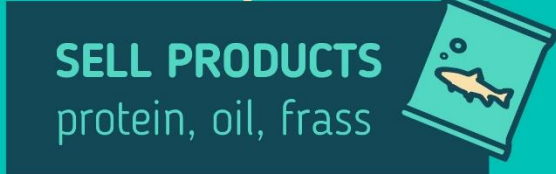
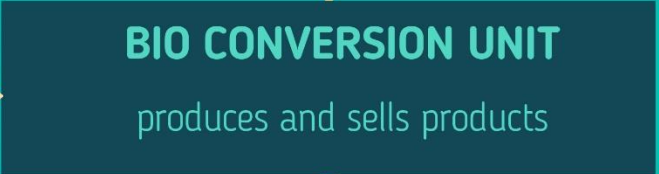
## TODAY



Entity owned by 1/3 party

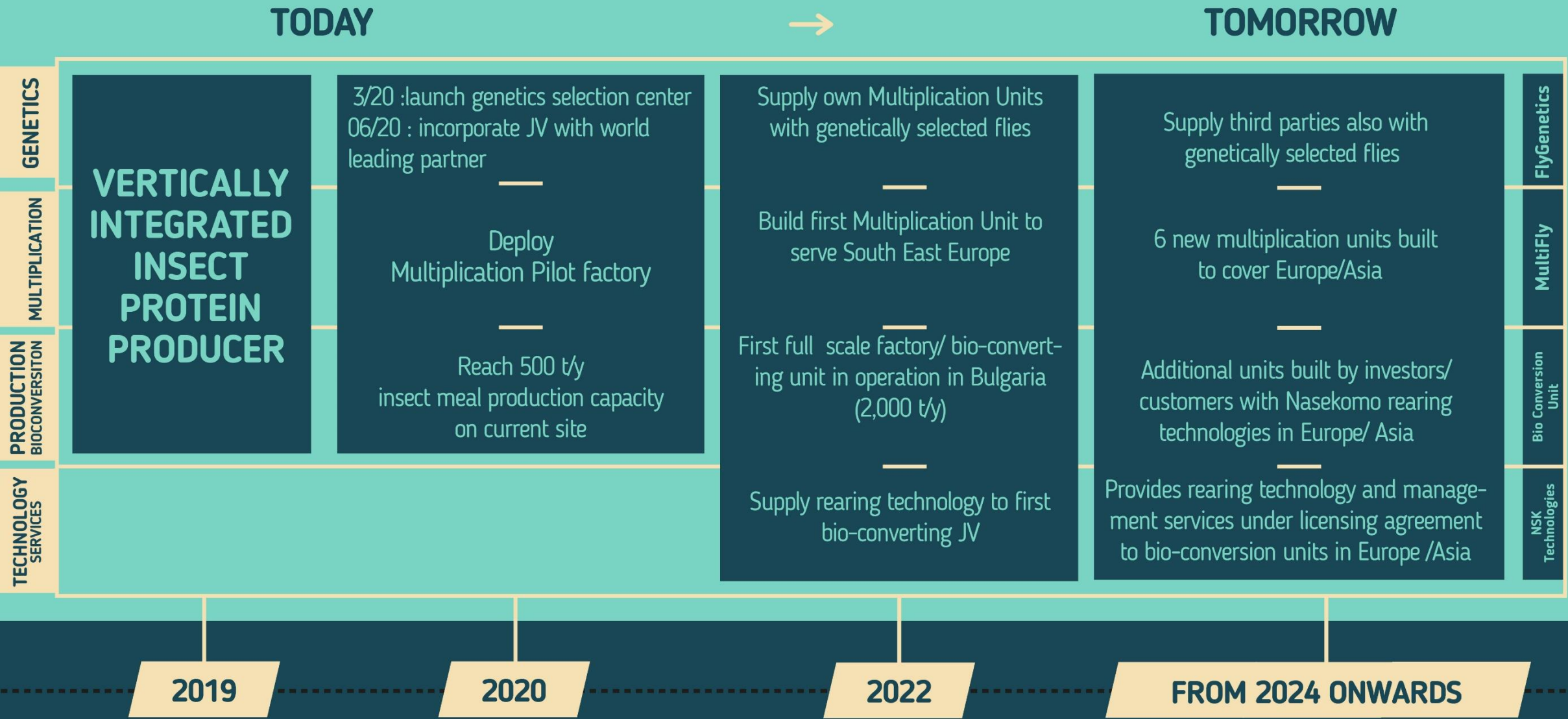
Entity owned by NASEKOMO

## TOMORROW





# ROADMAP: HOW do WE get THERE?

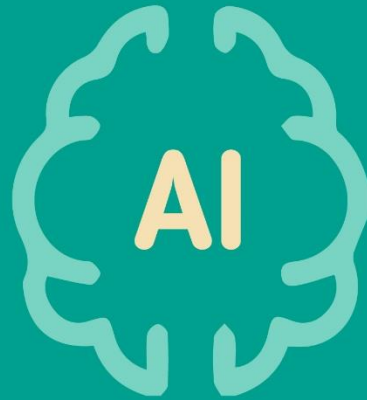


# NASEKOMO USES PROPRIETARY TECHNOLOGIES



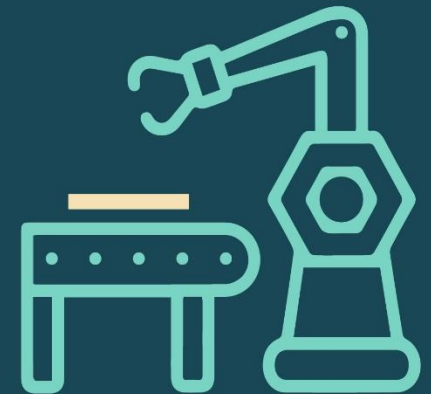
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Genetic selection processes to pick the most efficient flies



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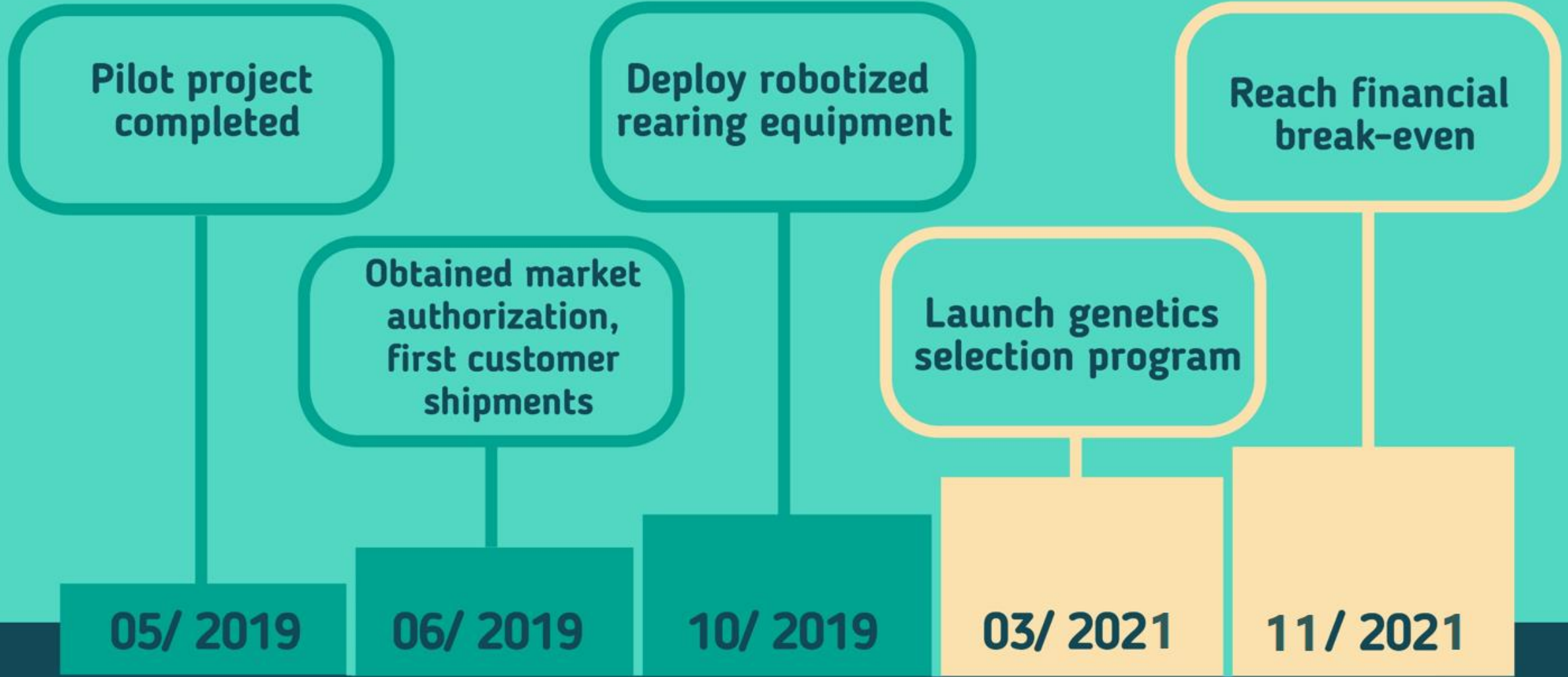
AI-operated and automated breeding cages for larvae



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Robotized rearing beds for mass rearing of BSFs

# TRACTION



We have already completed the initial stages of our strategic growth plan.

# TEAM

Entrepreneur + Operational leader + Biologist = Solution to meet growing protein demand.



INSEAD

## XAVIER MARCENAC Business Development

25 years experience

Operations & entrepreneurship

Founder/CEO of TELUS Intern. Europe

Successfully exits TELUS PwC



INSEAD

## OLGA MARCENAC Operations & Finance

Operational leader Finance

Building teams Service delivery

GE PwC UBS TELUS



AgroParisTech

## MARC BOLARD Genetics

Genetics Animal farming Research

Xy Evolution Creavia Urceo

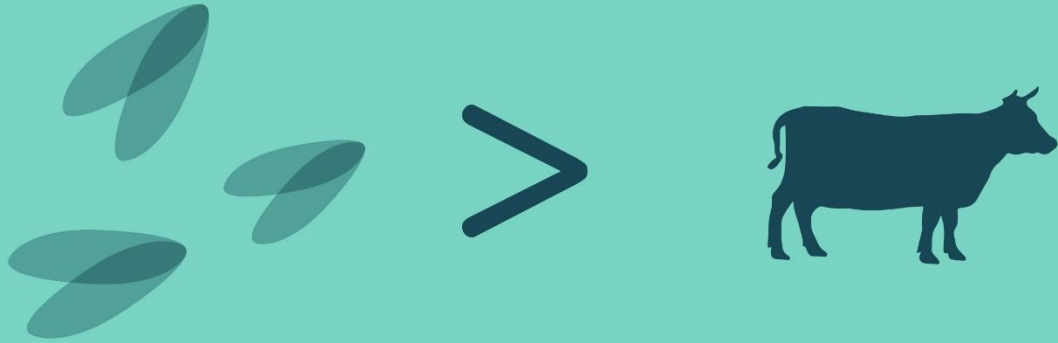


## NASEKOMO TEAM

A team of 25 professionals from business and life sciences.

# ENVIRONMENTAL IMPACT INVEST IN NASEKOMO FOR AN IMPACT

The production of 1 kg of insect body mass compared to the production of 1 kg of beef:

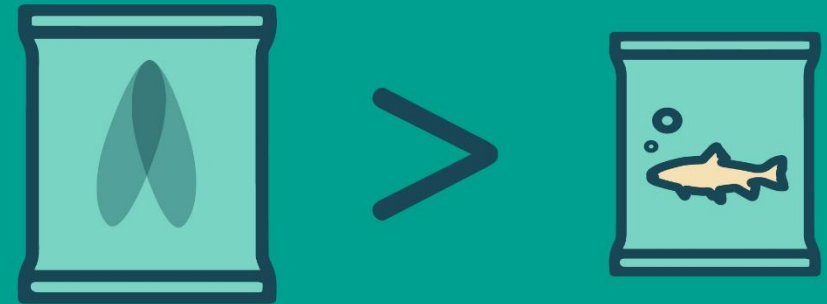


2,000 X **LESS** WATER

200 X **LESS** LAND

5 X **LESS** FEED

The production of 1 ton of BSF insect meal that replaces fish meal:



**SAVES**

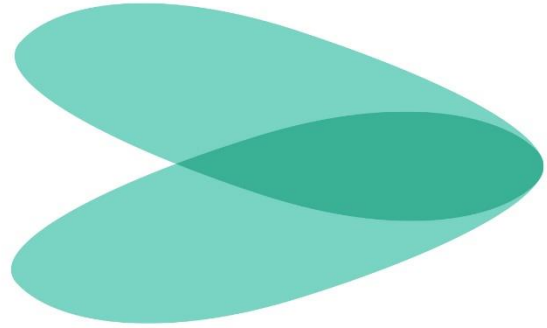
3 TONS OF WILD FISH

**REDUCES CO2**

EMISSIONS BY 0.4 TONS

**REDUCES**

METHANE EMISSIONS



**NASEKOMO**

**THANK YOU!**

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