The sustainable production of Atlantic Bluefin Tuna (ABT)

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Content
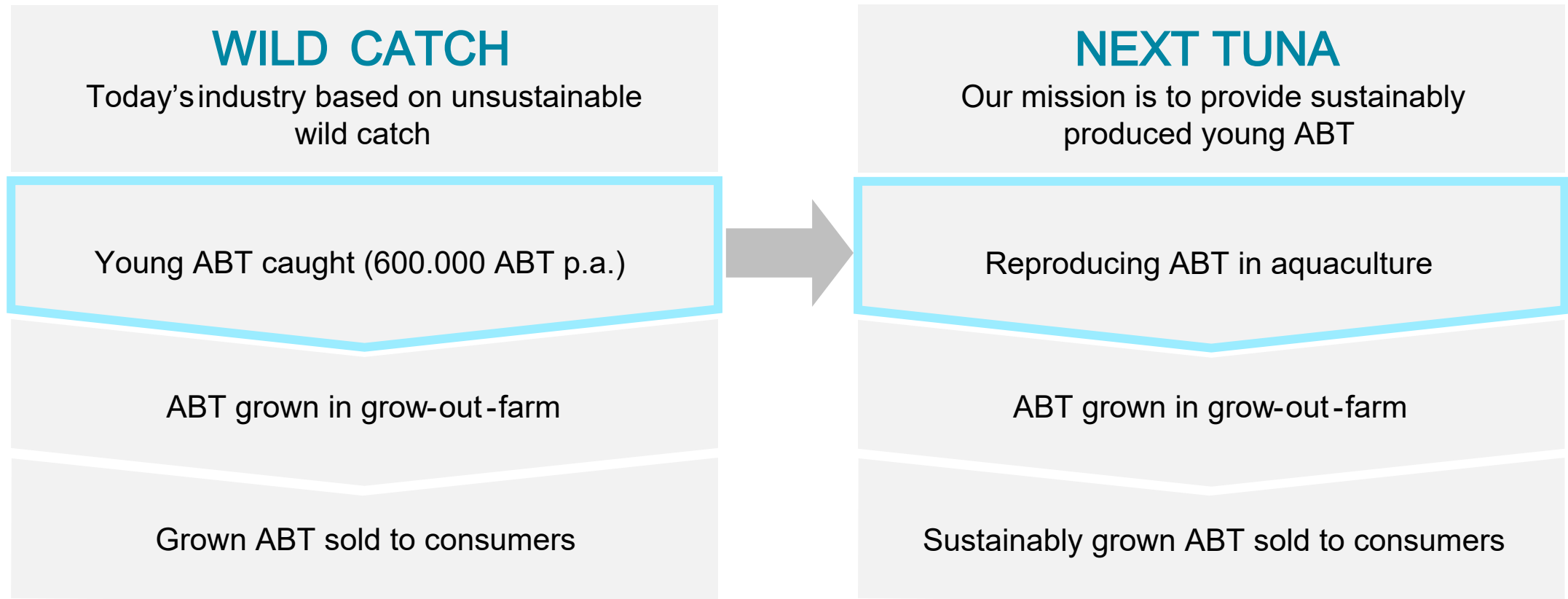
Our mission

Next Tuna will replace wild catch of Atlantic Bluefin Tuna (ABT) as input factor into tuna grow-out farms

WILD CATCH

Today's industry based on unsustainable wild catch

Young ABT caught (600.000 ABT p.a.)

ABT grown in grow-out-farm

Grown ABT sold to consumers

NEXT TUNA

Our mission is to provide sustainably produced young ABT

Reproducing ABT in aquaculture

ABT grown in grow-out-farm

Sustainably grown ABT sold to consumers

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Our solution

Innovation in 5 areas:

Scale science to industry; ABT breeding program; Adapt RAS to ABT; Floating RAS; Infertile ABT production

Solving the challenges around ABT:

- Implement ABT spawning with partner IEO

- Develop feed with partner from the feed industry

- Solve logistics with concept of floating RAS

Closing the Tuna reproductive cycle

- Artificial reproduction in RAS
  - Pacific Bluefin Tuna (*Thunnus orientalis*) successful in Japan
  - Southern Bluefin Tuna (*Thunnus maccoyii*) successful in Australia
  - Yellowfin Tuna (*Thunnus albacares*) successful in Panama and Indonesia
  - Atlantic Bluefin Tuna (*Thunnus thynnus*):
    - Only successful in net-pens, yet
    - Spanish Oceanographic Institute: brood-stock in RAS about to spawn
- Rearing Protocol:
  1. Larval phase (0-30g); complex follow up of live prey organisms:
     1. Copepods or Rotifers together with algae
     2. Artemia
     3. Bream yolk-sack larvae
     4. Weaning to artificial diet
  2. Juvenile phase (30g-75kg):
     - Artificial feed up to 100g.
     - **100g-8kg no artificial feed in Europe**
     - Soft diet from 8kg-75kg
  3. Brood-Stock:
     - No artificial Brood-stock diet available

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Facility layout

- **Port of Castellon (Valencia):**
  - <u>Floating facilities</u>
    - 4 floating RAS for Brood-stock
    - 2 RAS for brood-stock replacement
    - 12 floating RAS for juveniles

  - <u>Land-based facilities</u>
    - Hatchery
    - Storage
    - Service area
    - Effluent treatment (IMTA)
    - Pumping station
    - Oxygen tank
    - …

Three phases of implementation

Next Tuna build-up

July 2021–June 2023: Development Phase (DP)

- Construction ready, ABT specific project,
- Design breeding program, initiate marketing
- Funded under EIT Food's call „Sustainable Aquaculture"

July 2023 – June 2028: Construction and Breeding Program (CBP)

- Build infrastructure in Puerto de Castellón (Spain) in phases
- Raise brood-stock in RAS based on breeding program
- Build up team, ramp-up operations, start sales (ABT floating RAS)

From July 2028: Operating Period (OP)

- Run state-of-the-art, high margin fish farm in Puerto de Castellón
- Scale business via global satellite farms

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Achieved/Open Milestones

Achieved Milestones

- Breeding program in place
- Production concept developed
- Concept approved by external partners
- Site selection finalized
- Local subsidiary established
- Permitting process started

Open Milestones:

- Permits (construction, etc…) granted
- Pre-sales contract secured
- Financing for next phase secured
- Start construction

Visualization by: AFRY

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EAS Rimini

Creating a sustainable tuna farming industry

Sustainability as clear target

- Next Tuna's concept does no harm
- New sustainable value chain to replace wild catch
- ASC certification of ABT production – farm to fork
- Positive effect on all 17 SDGs
  - Main impact on SDG 12, SDG 14 and SDG 6
  - Substantial impact on SDG 8, SDG 13 and SDG 2

12 RESPONSIBLE CONSUMPTION AND PRODUCTION — We will allow the supply of 12'000-18'000 metric tons of farm-raised, sustainable ABT to consumers

14 LIFE BELOW WATER — Reducing the amount of wild-caught ABT for human consumption reduces the pressure on ABT stocks

6 CLEAN WATER AND SANITATION — RAS : circular production system with control of all processes and para meters, no fresh water consumed

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Thank you for your attention

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Special thanks to:

Visit: www.nexttuna.com