



# Innovative blockchain traceability technology and Stakeholders' Engagement strategy for boosting Sustainable sEafood visibility, social acceptance and consumption in Europe

## Overall project presentation

**WEBINAR 1: Securing our food supply chains: EU's innovative initiatives to combat food fraud, improve food traceability and sustainability, and increase consumers' trust**

11 September, 2024

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# SINGLE POWER IDEA

**Sea2See project contributes to significantly improve Trust, Transparency and Traceability of the European Seafood sector throughout the value chain.**

# Challenges

- i) **INSUFFICIENT INFORMATION ABOUT SEAFOOD PRODUCTS:** species, origin, fishing gear, feed, welfare issues, production methods and parameters such as water quality, processing and transport methods.
- ii) **UNSUSTAINABLE PRACTICES** such as the use of unselective gear with high by-catch and discards, capture of undersized fish and invertebrates, illegal and unregulated fishing, and labelling frauds.
- iii) **LACK OF DIGITALIZATION AND TAILORED SOFTWARE TOOLS FOR seafood products TRACEABILITY.** The main challenge to ensure a clear link between sustainability and traceability of EU seafood lies in the ability to assess, in real-time, sustainability indicators across actors in the value chain.

**CREDIBLE AND PRACTICAL TRANSPARENCY IS ONLY POSSIBLE WITH DIGITIZATION**

# Consortium

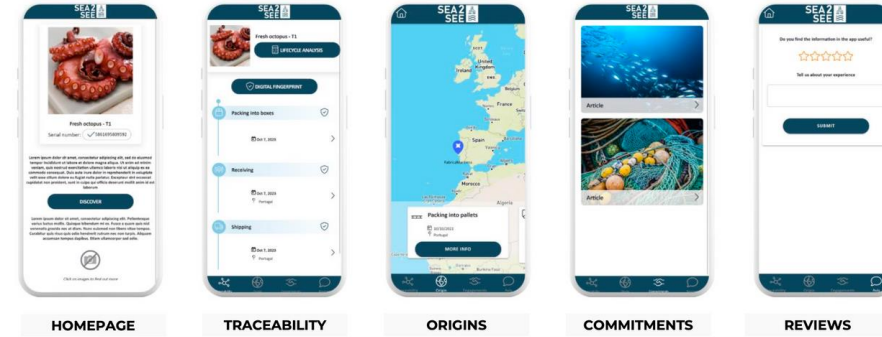


# Project Goal

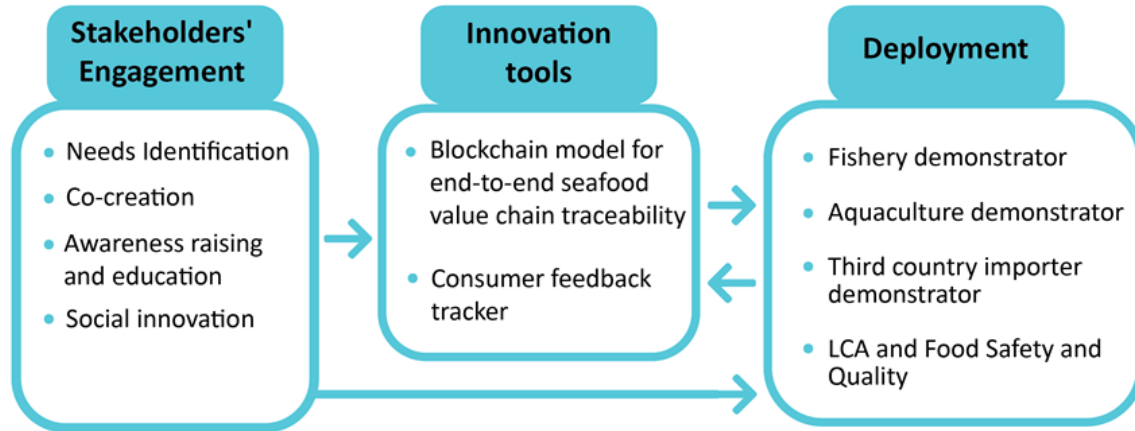
Sea2See' main goal is to significantly **increase consumer trust and acceptance of sustainably fished or farmed seafood** in Europe through

- 1) development and demonstration of an **innovative end-to-end blockchain traceability model throughout the seafood value chain** and
- 2) implementation of **societal and sectoral strategies for co-creation, communication and awareness raising** of the benefits of sustainably fished or farmed nutritious seafood.

# Project Aims



The main question Sea2See targets is how to make actors with sustainable seafood practices more visible to consumers, to give them a competitive advantage.





# Project Objectives

SO1: Develop a **co-creation approach** to sustainable seafood transparency and traceability

SO2: Leverage a set of **awareness raising and educational practices** to increase sustainable seafood consumption

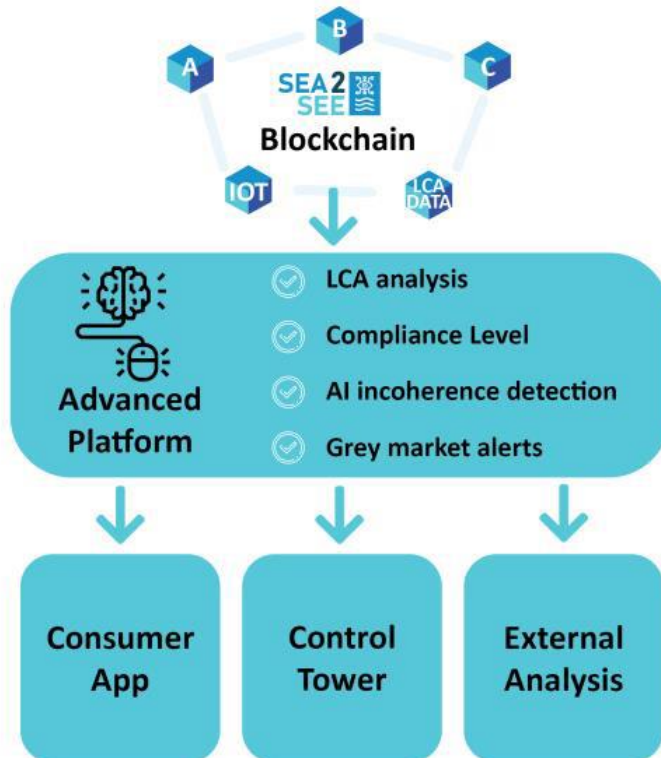
SO3: Develop a **blockchain deployment model** for seafood industry-specific traceability data collection

SO4: Demonstrate the **feasibility and advantages** of the Sea2See blockchain model

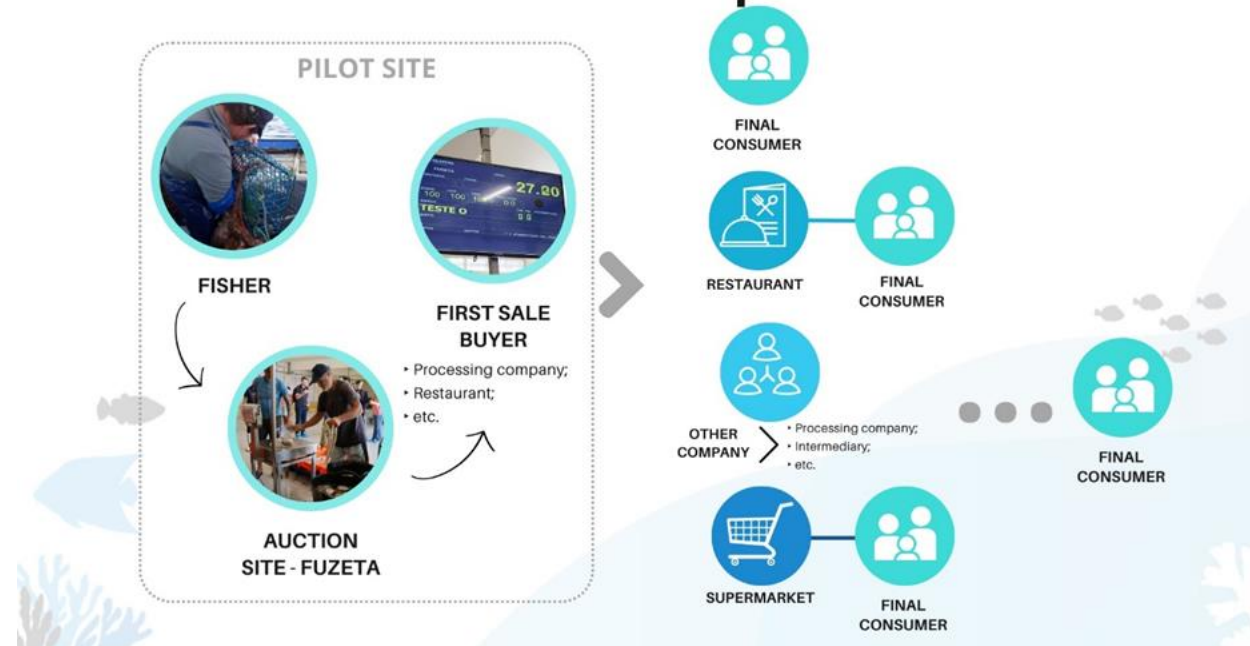
SO5: Develop a standardized **Life Cycle Assessment** framework for identifying and quantifying the major sources of environmental impact

# Project Objectives

SO3: Develop a **blockchain deployment model** for seafood industry-specific traceability data collection



## Value chain of the Octopus from Fuzeta



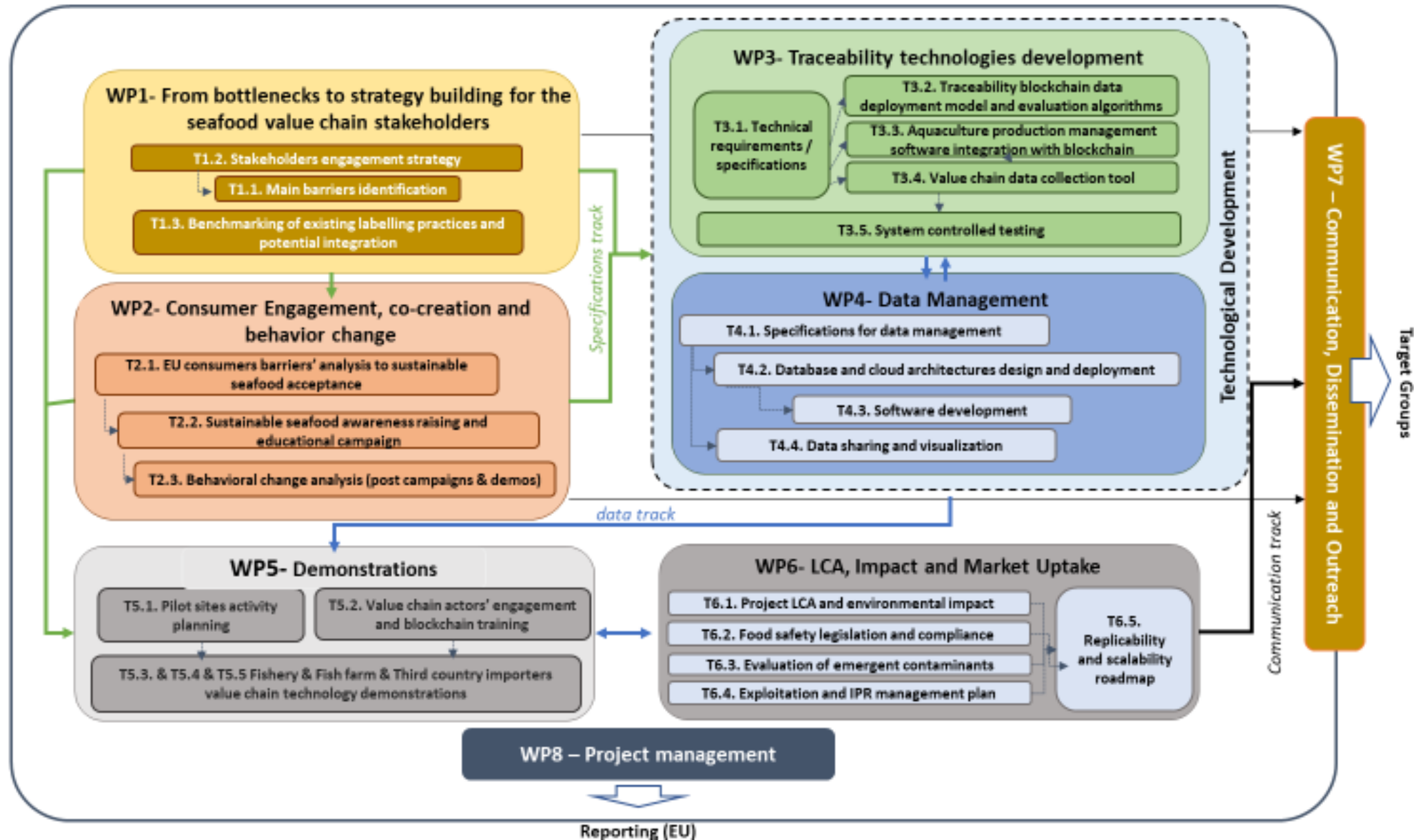


# Project Objectives

## SO4: Demonstrate the **feasibility and advantages** of the Sea2See blockchain model

- FISHERIES
  - Fishery Portugal (Octopus)
- AQUACULTURE
  - Greece (seabream cages)
  - Spain (trout raceways)
  - Portugal (meagre RAS)
- IMPORTER
  - Perú-Spain (canned tuna)

# Project Work Distribution



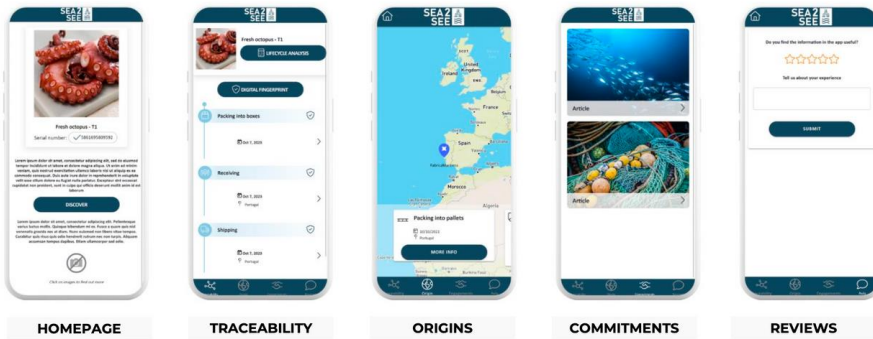
# Main Results to date

- Novel Sea2See methodology & strategy on stakeholders' engagement
- Map stakeholder groups & subgroups and level of engagement
- Benchmarking existing seafood certification practices
- Identified Benefits and Barriers to blockchain in seafood value chains
- Map of consuming habits
- Development of tools and technologies for stakeholder data collection and interaction with the Sea2See Traceability Platform

# Main Results

## WP3 & WP4 → WP5

- Develop tools and technologies for stakeholder data collection and interaction with the Sea2See Traceability Platform [VIDEO](#)



6511691064000

Overview Upstream Events Composition Logistic Transactions Origin

→ 🔍 🔍 ✖ ✖ ✖

**Asset:** FreshOctopus - T3 (6511691064000)  
**Location:** Port 01  
 🇵🇹 Portugal  
**Activity:** -  
**Business Step:** receiving  
**Date:** 8/3/2023,

+2

**Asset:** FreshOctopus - T3 (6511691064000)  
**Location:** Port 01  
 🇵🇹 Portugal  
**Activity:** -  
**Business Step:** shipping  
**Date:** 8/3/2023,

+1

**Asset:** FreshOctopus - T3 (6511691064000)  
**Location:** Hélia Vieira  
 🇵🇹 Portugal  
**Activity:** -  
**Business Step:** commissioning  
**Date:** 8/3/2023,

# Main Results

## WP3 & WP4 → WP5

- Develop tools and technologies for stakeholder data collection and interaction with the Sea2See Traceability Platform [Spotlight sea2see-test.tilkal.net](http://spotlight.sea2see-test.tilkal.net)

## Professional Apps



09:09

### Packaging

Temperature during transport

Yes

Box net weight (kg)  Pieces

Arrival date

Departure date

Legal informations

Freshness grade

Material of packaging

LDPE  PP

Certified by

Packaging

09:12

### Distribution

Batch number

General characteristics

Characteristics of packaging

Unique identifier of distributor

Unique identifier of trading partner

Date of reception

Date of transaction

Box net weight (kg)  Keep at 0-2°C  Yes

Certified by

Unique identifier of the vehicle

Distribution

09:19

### Retail

Batch number

General characteristics

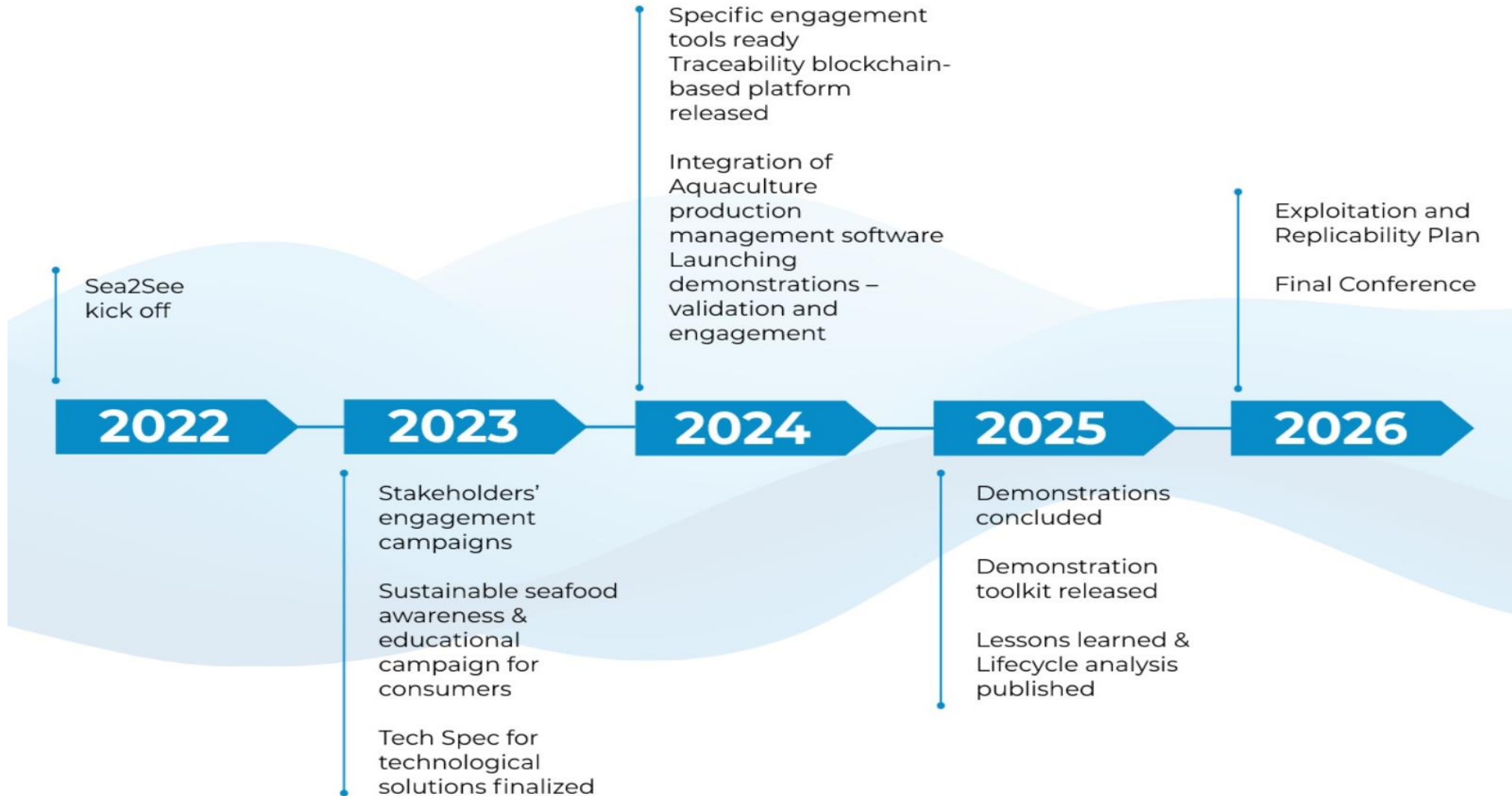
Characteristics of packaging

Certified by

Date of reception

Retail

# Gantt chart





# Proposed synergies

- Awareness campaigns highlighting blockchain solutions for food traceability and fraud prevention
- Sharing best practices and challenges in implementing digital tools, especially for traceability
- Pooling resources for creating educational materials to raise awareness about food safety in supply chains
- Discuss how to build consumers' trust in sustainable food and interventions on consumer behaviour
- Communicating the benefits of the tools to the stakeholders

# Proposed synergies

- Small scale fisheries / Sustainable seafood
- Legal Framework  
REGULATION (EU) 2023/2842 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 November 2023  
Most provisions of the amended regulation will apply in 2 years, from 10 January 2026  
CATCH
- Digitalisation of Data Acquisition

# Thank you!



Co-funded by  
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