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DEVELOPING A BUSINESS PLAN FOR SUSTAINABLE OYSTER PRODUCTION: STRATEGIC APPROACHES TO MARKET ENTRY, EXPANSION, AND LONG-TERM GROWTH IN PORTUGAL AND CENTRAL EUROPE

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Abstract

This report dives into the European oyster market and assesses the expansion of Oceano Fresco into the premium European flat oyster markets in Portugal and Central Europe, starting from 2025. This entailed evaluating macroeconomic and industry-level factors through PESTLE and Porter's 5 Forces, as well as profiling the end consumer via a survey, to understand each region's attractiveness and attainability. These findings would then shape their respective go-to-market strategies. In Portugal, consumers are highly uneducated about oysters, while Central Europe is the fastest growing location. The recommendations aim to establish sustainable European flat oyster trading within the species' revival movement.

Keywords: Sustainable Aquaculture, Blue Economy, Oceano Fresco, Oyster Production, Ostrea Edulis, Business Plan

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Table of Contents

List of Abbreviations

B2B	Business to Business
B2C	Business to Consumer
CCO	Chief Commercial Officer
G2M	Go to Market
HORECA	Hotels, Restaurants, and Catering
LWE	Live Weight Equivalent
OF	Oceano Fresco
R&D	Research and Development

1. Introduction

Aquaculture plays a crucial role in addressing the rising demand for alternative protein sources (AquaVitae 2022). Among its various methods, shellfish farming emerges as a highly environmentally sustainable approach (Shumway et al. 2003), with its numerous environmental benefits within maritime ecosystems aligning with blue economy principles.

However, this industry is highly complex, encompassing diverse standard practices and dynamics across the value chain, as well as environmental or economic risks, and subsequent uncertainties. During the first three years of the bivalves' lifecycle, they grow from selectively bred seeds in a hatchery to semi-adults in the aquaculture farm, employing either off-bottom (commonly found in estuaries) or on-bottom techniques (on the sea floor), with varying degrees of technology advancement.

At this stage, it is commonplace for producers to trade among themselves semi-adults (roughly 80% of adult size) in a process called *affinage*, whereby these bivalves complete the rest of this process in a new farm. Once fully grown, they are considered to have been entirely produced by the receiving farm, thus effectively eliminating the previous farmer' input.

As shellfish reach maturity, whether at the original or a new farmer, they undergo depuration to remove any impurities and ensure safety for human consumption. Producers may do this process in-house or sell specimen in bulk to specialised depuration facilities, where bivalves from multiple producers are pooled. As a result, farmers lose their brand and the product is sold under the depurator's label. The following intermediary are distributors, supplying HORECA, markets, retailers, independent shops, and other vendors. Only then do end consumers establish contact, buy and consume molluscs (Oceano Fresco 2022).

This chain is intricate and may become even more complex due to international trade dynamics. Coupled with the private nature of these agents, it is no wonder, therefore, that

there is hardly any consistent data for quantities or prices, as they execute multiple transactions of various natures, depending on the strategy followed.

Additionally, as seafood, these animals are subject to environmental hazards. There may be predatorial attacks (Armellini 2023) or illness (Elzas 2024), which not only may destroy the year's harvest but also raise concerns from consumers and inadvertently question the safety of unaffected bivalves produced in other regions. As a result, overall supply and demand reduces, driving prices down. Due to the unpredictability of these events, this entire industry is highly volatile, and it is difficult to make solid forecasts. Consequently, planning tends not to be market-led, rather production-led, hoping no adverse conditions affect the harvest.

It is against this backdrop that Oceano Fresco, an innovative blue economy Portuguese start-up, is facing the challenge of assessing the feasibility of expanding its business to the oyster segment in Portugal and Central Europe, among other geographies across Europe.

Firstly, this report will present the Oceano Fresco's story, strategy, and their expansion rationale. This section is followed by the methodology used to assess Portugal and Central Europe, in terms of their respective market opportunities, key industry factors, and trends, all of which to lay the foundations of Go-To-Market strategies for each. Finally, the major obstacles encountered and subsequent implications on the project will be discussed, concluding with high-level recommendations and a forward-looking perspective on OF's success in the oyster business.

2. Oceano Fresco's Expansion

This section delves into Oceano Fresco's strategy and business model, explaining their expansion into the oyster business. Information is sourced from OF's website, internal documents, and meetings with directors.

2.1.Company History

Oceano Fresco is a Portuguese food technology start-up founded in 2015, producing native European bivalve species through sustainable aquaculture methods.

The founders identified the growing demand for protein (OECD/FAO 2017) and the limitations of traditional aquaculture (FAIRR 2023), and believed bivalves could be a solution. This marked the onset of pioneering scientific research into innovative processes for breeding and cultivating clams (Oceano Fresco 2024).

After conclusive evidence that new farming techniques, namely regenerative farming, could be implemented, the company raised capital from venture capital funds and public grants. In 2020, they completed the construction of a world-class biomarine centre in Nazaré, featuring a hatchery and laboratories. They also built the world's first clam open-sea farm in Lagos, Algarve.

Since then, OF has commenced a two-year period of farming and harvesting clams in the Atlantic Ocean, built its depuration and packaging facility in Nazaré, and strengthened R&D investments to embark on blue economy projects. In 2024, the European Investment Bank and the European Commission recognised OF as a "Blue Economy Champion" for its ocean restoration efforts.

2.2.Strategy

Oceano Fresco's mission is to "deep dive to elevate the potential of bivalves" (Oceano Fresco n.d.). This entails changing the paradigm by promoting the transition into a blue economy and protecting native European species. Two major reasons explain this choice.

First, protein demand is expected to double until 2050 (OECD/FAO 2017), but current major protein sources are unsustainable (FAIRR 2023). On the contrary, bivalves are low-trophic species (James and Slater 2023), more nutritious, and have a excellent protein content than meat and plant alternatives (Aldridge and Willer 2020). Moreover, native European species'

populations have nearly been driven to extinction due to the introduction and rapid proliferation of exotic counterparts, such as the Manila Clam, in European water bodies (Chiesa et al. 2017). Therefore, OF is committed to restoring European species to their habitat while promoting the shift of consumers' preferences to eco-friendly options.

Second, the outdated traditional supply of bivalves is failing to meet the growing global demand for protein, unless it transitions to regenerative farming (Cage, Mosnier, and Wang 2023). Given this gap in the industry, OF farms their bivalves in the open Atlantic Ocean, using non-extractive techniques with little to no artificial inputs (Oceano Fresco 2022).

OF's five differentiated value creation areas were developed on these two pillars. Management highlights, on the one hand, the vertical integration of their value chain, from hatchery to storage and packaging. This ensures greater control over the bivalves' lifecycle and biological certification compliance. On the other hand, science-based innovation is equally pivotal in driving product development and quality due to intensive R&D for selective breeding in Nazaré and the novel production process in Lagos.

Paired with a growth mindset across the OF partners' ecosystem, all stakeholders work towards accelerating innovation, which reflects the company's business model.

2.3.Business Model

This section will be structured according to the Business Model Canvas (Lafley and Martin 2014), but it will focus only on key OF characteristics for each framework element.

2.3.1. Propositions

OF has two value propositions: one for customers and another for end consumers. Thanks to reliable operations and methodical production planning and harvesting, OF promises its buyers a year-round supply of premium bivalves. For consumers, OF offers sustainable, healthy, and flavourful clams sourced from the Algarve's pristine waters.

2.3.2. Customer Segments

This start-up sells commercial-sized clams in bulk to depurators and packaged clams to premium distributors serving HORECA, seafood markets, and retail. Its target market is consumers seeking high-quality, sustainably farmed native European bivalves. On a smaller scale, it also sells seeds or semi-adults to producers.

2.3.3. Sales Channels

Oceano Fresco considers B2B sales to be made to producers and B2C sales to be made to depurators and premium distributors. These definitions differ from the standard ones, but they were an internal choice to facilitate differentiation, and the report follows them.

2.3.4. Customer Relationships

The company often contacts other European producers, seafood depurators, and distributors in fairs and conventions to exchange knowledge and discuss commercial matters. To build relationships with end consumers, OF uses social media to tell stories about their bivalves and the people working at the company.

2.3.5. Revenues

As a commodity trader, they are primarily price-takers. In the seafood markets, the price (€/kg) differs according to the intermediary to which the molluscs are sold. Juvenile oysters sold to B2B are at the bottom of the price range, while they increase progressively for B2C sales to depurators, distributors, HORECA, retailers, and, finally, end consumers. Exceptions to charging a premium arise in scenarios where markets are expanding, established competitors are absent, or the business can utilise key assets that align closely with prevailing consumer trends.

2.3.6. Key Resources

OF's innovation lab and expert scientists drive continuous improvement and disruptive thinking, leading to the delivery of groundbreaking bivalves to consumers. Secondly, the open-sea farm and the blue waters of the Algarve provide an ideal environment for the growth

of European species (Pacheco and Gómez 2021). Still, the competitive advantage lies in its vertically integrated value chain, controlling all high-value-adding to differentiate OF from domestic and international rivals.

2.3.7. Key Activities

R&D is critical to fulfil the enterprise's purpose, as discussed in the "Key resources" section. However, the importance of daily farm tasks cannot be understated. Daily check-ups and constant lantern (structures where clams are placed under water) cleaning are pivotal to ensure optimal growth conditions and rapidly adjust to unforeseen events (e.g., predators).

2.3.8. Key Partnerships

From a technological standpoint, Oceano Fresco has built an ecosystem of universities and other start-ups to accelerate innovation and continuously deliver high-quality bivalves. On that note, OF's distribution partners are pivotal to ensuring their goods reach their intended sales channels across Europe.

2.3.9. Costs

The major costs of the clam aquaculture sector are livestock costs, which are the cost of purchasing clam seeds and anticipated costs related to mortality during the grow-out stage, representing around 60% of the total costs. The second largest cost category concerns general labour costs (30%). Moreover, it is essential to note that this type of production does not incur any feeding costs. (STECF 2013)

2.4.Oyster Business Expansion Rationale

2.4.1. Problem Statement

This project's central question is: "How can Oceano Fresco effectively enter the European oyster market in 2025 with *O. edulis*, given the industry's maturity, intense international competition, and evolving consumer preferences for sustainable food options?". The following section will present the context for the expansion, key resources to leverage, constraints, success criteria, risks, and project scope.

2.4.2. Context

Oceano Fresco seeks to diversify its revenue streams by capitalising on the growing importance of bivalve aquaculture as a sustainable protein source (FAIRR 2023).

The European oyster market was a 91.5 thousand tonne of live weight equivalent (LWE) market in 2020 (EUMOFA 2022), making it an attractive prospect from OF's perspective.

Moreover, the last years have seen the restoration of native species increasingly in the spotlight due to rising awareness of biodiversity loss, climate change, and the ecological and economic value of native ecosystems. Regarding oysters, there are two main native species from Europe: *O. edulis* and the Portuguese oyster (*Crassostrea Angulata*). However, the latter is very similar to an invasive species (Pacific cupped oyster – *Crassostrea Gigas*), thus not receiving the same concern as the former.

O. edulis was once the dominant oyster in Europe. Still, it has nearly been driven to extinction due to illness and the rapid proliferation of an invasive species: the Pacific cupped oyster. The latter was first introduced in France in the 1970s to fight a disease that was decimating the *O. edulis* at the time. (Pouvreau et al. 2023). This has been recognised at the European level (European Commission 2021), and OF is keen to apply its efforts to contribute to the revival of this mollusc population.

Prized for its delicate flavour and historical significance, *O. edulis* farming is experiencing a revival (Aquatic Network 2024) and, although this species is likely to retain its position in small, undersupplied niche markets, it has good potential for expansion (Bonham and Roberts 2018).

2.4.3. Key Resources to Leverage

With the introduction of *O. edulis*, the company aims to leverage its existing farming expertise and resources. This strategic move will generate additional revenue, enhance the company's resilience to potential adversities in clam production, and reinforce its commitment to

biodiversity. Furthermore, by diversifying its product portfolio, OF can optimise the utilisation of its 100-hectare farm, currently operating at one-third of its capacity, thus mitigating risks associated with single-species cultivation (Oceano Fresco 2022).

2.4.4. Constraints

Still, some challenges persist. Contrary to popular belief, comprehensive market information remains limited despite France's significant role in the European oyster industry (Deslous-Paoli and Heral 1991). This pertains to the consistency of international trade data, distribution channels, their relationships with clients, end consumer profiles, and pricing, among other factors. As such, the complex dynamics of this commodity market, which will be thoroughly demonstrated later, hindered OF's initial research efforts. At the operational level, this business unit will not use Nazaré Nursery to grow *O. edulis* spat. Instead, they will be sourced from hatcheries across the continent to be directly introduced in the Lagos farm. Afterwards, they are sent to Nazaré for depuration (only for specific cases, discussed later in the paper) and packaging, to be shipped to the intended destination.

2.4.5. Success Criteria

OF set two financial targets: (1) the oyster business unit must break even in the second year of operations, and (2) it must deliver an ongoing EBIT margin above 20%.

2.4.6. Risks

There are three primary risks associated with this business. First and foremost, disease in major Europe-wide supplying countries, such as France (Elzas 2024), affects domestic production and shrinks the overall market demand for oysters sourced elsewhere. OF reported from a trip to Brittany, France, that any anomaly with French oysters impacts the food safety perceptions of other European counterparts, thereby negatively affecting continent-wide demand and, consequently, Oceano Fresco’s sales.

Then, oysters take two years to grow, which is a double-edged sword. On the one hand, predicting future adversities, such as predation or illness (which could devastate the harvest),

is impossible. On the other hand, production planning must be based on best estimates for sales two years in advance, which are highly susceptible to market fluctuations, consumer preferences, and unforeseen events.

2.4.7. Scope

This project begins with an external analysis that will be restricted to "Western" European countries (where oysters are expected to be more consumed and for operational reasons), although this report will only cover Portugal, as well as Belgium, the Netherlands, and Germany. Nonetheless, all others were analysed and presented to OF.

This process will entail identifying relevant macroeconomic and industry-level trends and sizing the market regarding the quantities consumed, their respective values, and the growth rates observed in each region. Furthermore, this paper will examine the different prices in each market for the various supply chain stages.

An internal analysis will be restricted to identifying key strengths that can be leveraged in this venture. Oceano Fresco will not be exhaustively assessed, significantly limiting the overall project. This was negotiated and agreed upon with the company, which is fully aware of these shortcomings.

Both analyses will provide the basis for the Go-To-Market (G2M) strategy for each geography. They start with the assessment of the product-market fit by examining whether OF's oysters' characteristics match consumer needs. Pricing recommendations follow this according to the proposed sales channels for each region. Finally, the G2M plans conclude with essential details for an impactful marketing plan. The G2M is accompanied by an internally developed framework to objectively assess the attractiveness and attainability of each market, a subsequent entry timeline, and expansion criteria within the countries where Oceano Fresco will operate.

3. Methodology

3.1.Market Research

3.1.1. Indirect analysis

The methodology adopted for the market research provided a comprehensive analysis of the European oyster market, focusing on the sustainable production and sales of *O. edulis*. Established analytical tools have been combined with some innovative solutions to address the gaps in the available data to achieve reliable results. Among the methodologies used, the PESTLE analysis enabled the assessment of macro-environmental factors influencing the market in each country considered, providing essential data on political, economic, social, technological, legal, and environmental elements.

Subsequently, Porter's 5 Forces was used to analyse the dynamics of the sector, examining competition, the bargaining power of suppliers and buyers, and the threats of new entrants and substitutes. This way, it was possible to highlight high barriers to entry due to stringent regulations, high initial investment, and competitive pressure from other fish products.

To optimise the analysis and subsequent strategies, EU countries were initially considered individually to gather data and trends and then grouped into clusters based on similarities in consumption patterns, regulatory frameworks, and market dynamics. The final clusters include Portugal, Central Europe (Belgium, the Netherlands, and Germany); and those which this report does not discuss: the Mediterranean (Spain and Italy), the Islands (UK and Ireland), France, and the Nordic countries (Denmark, Norway, and Sweden). This approach allows for logistical efficiency, particularly in cross-border movements, and creates operational synergies by using one country as a hub instead of exporting to each one individually. Furthermore, it simplifies the marketing strategy process due to consumer profile similarities, facilitating communication, product acceptance, and B2B/B2C negotiation. These shared insights also lead to faster market insights, as trends and data from one country can be extrapolated to others within the cluster.

On the positive side, this clustering enables cost optimisations in logistics, production, and marketing through shared resources, while also supporting better risk management by addressing challenges at the cluster level. However, there are notable disadvantages to consider. Country-specific details within clusters, such as variations in regulatory requirements, may require adjustments to the G2M strategy. Additionally, resource misallocations, particularly for premium products, could hinder profitability if mismanaged.

To estimate market size, data from archives such as European Market Observatory for Fisheries and Aquaculture Products[1] (EUMOFA 2020) and other secondary sources were used (Appendixes 25 to 46), and for regions with limited data, extrapolations were made based on the production, imports, and exports of *O. edulis* and *G. gigas*. An innovative method was developed to determine *O. edulis* price points by deconstructing prices from final consumer prices collected from restaurants in different countries. Thereafter, the margins of intermediaries, such as distribution and purification costs, were subtracted to calculate ex-farm prices, thus ensuring greater accuracy and reliability of the data. A table containing the price breakdown in the Netherlands (EUMOFA 2020), validated by OF's CCO, was used as a reference for intermediary margins during this process.

Although data availability and consistency posed a challenge, combining established frameworks with innovative approaches proved a reliable basis for the study.

3.1.2. Direct analysis

An online survey was conducted from October 5th to October 21st to gather qualitative insights into European oyster consumers for the G2M plan.

The survey, built on the Qualtrics platform, was disseminated through a non-probability sampling method, relying on social media platforms and word-of-mouth to reach potential

[1] For reference in the Appendix tables, data for "Edulis Semi-Adult" pertains to the Harmonised System (HS) Code for customs 03071110, and "Oysters Adult" pertains to the HS Code 03071190

European respondents. Thus, it is impossible to determine how many individuals encountered the survey. Regardless, 173 responses were collected, with 152 considered valid. Invalid answers included 12 blank submissions and nine duplicates. Among valid responses, completion rates varied – not all reached 100%. These submissions were not eliminated because the blocks of questions were unrelated, and any feedback about any detail asked in the survey would be valuable amidst the lack of consistent data in the industry.

The survey had 25 questions grouped into six blocks: demographics, seafood consumption habits, pricing, Algarve factor, marketing, and final response & open-ended feedback. The "seafood consumption habits" section intended to identify and exclude non-seafood consumers while segregating consumers into oyster and non-oyster consumers[2] to examine the latter's habits. The "willingness to pay" block briefly introduced OF's oysters to all respondents and compared it to *C. gigas*, to determine a price range and premium over the invader for the former. The "Algarve factor" group aimed to check if this region positively impacted willingness to pay and whether it delivered on critical oyster characteristics that oyster consumers listed. Finally, the marketing block examined demand creation aspects, while the last section gathered feedback on consumer interest in OF's *O. edulis* and solicited additional suggestions for the G2M plan. All survey results may be found in appendices 1-23.

3.2.Go-to-Market Strategy

The Go-to-Market methodology assesses market attractiveness and accessibility. This method considers factors such as market size, consumer preferences, logistical feasibility, and competition to determine the best strategy. In addition, entry timing, pricing, and sales channels are considered to adapt to each market's unique characteristics. Key elements such as market size (large or small) and growth (high or low) are analysed to

[2] This segregation affected the questions each segment answered in the rest of the survey

assess market attractiveness. The conclusions of Porter's Five Forces model are also used to understand the intensity of competition, the bargaining power of buyers, and entry barriers. Also, industry trends help identify opportunities that align with OF's strengths, such as sustainability, premium positioning, and consumer behaviour and habits. On the other side, for market accessibility, it is assessed whether the characteristics of *O. edulis* meet consumer preferences. In this sense, the market is considered further if the product meets key demands, such as quality and sustainability. Other factors, such as the appreciation for Algarve products, the importance of sustainability, national certifications, and the ability to guarantee food safety during transportation to final markets, have also been analysed. Depending on the answers to these questions, the strategy is adapted: for example, if certifications are crucial, a B2C strategy is favoured. If, on the other hand, competition is intense or distance makes it difficult to reach end consumers, options such as B2B collaborations with local partners are explored. The details of G2M are based on the results of attractiveness and accessibility assessments. Timing is essential and depends on production availability and market readiness for entry. Channel strategies vary: B2B is preferred when regulatory or logistical requirements make direct sales difficult, while B2C may be used when Oceano Fresco's key resources can be leveraged in the market (e.g., sustainable brand). In some cases, joint ventures with branded packages are considered to simplify entry. Pricing is another key element. *O. edulis* is a premium product, but the method considers whether the market allows higher prices than competitors such as *G. gigas*. About quantities, they have been estimated based on market demand and logistical capacity, with realistic forecasts. In the future, communication strategies may include social media and advertising for final consumers, while trade fairs and direct contacts are targeted at distributors. Potential partners are assessed according to their values, sales channels, and distribution coverage. Finally, financial forecasts are developed for each market, allowing the most promising ones to be prioritised.

4. Market Research

This section represents a key step in understanding the oyster market for Portugal and Central European countries. The analysis focused on examining macroeconomic factors and the competitive landscape, market sizing, prices, and studying consumer preferences, to identify opportunities and threats.

4.1.Central Europe

4.1.1. Central Europe Macroeconomic Snapshot

The governments of the Netherlands and Belgium have collectively received short of €140 million in EU aid from the European Maritime, Fisheries and Aquaculture Fund to promote sustainable fisheries and aquaculture models. Even if most of the capital is directed towards the former, these nations are committed to promoting sustainability in the latter through processing improvements, energy efficiency, and decarbonisation. This is to support the resilience of these economic activities (The Brussels Times 2022; Directorate-General for Maritime Affairs and Fisheries 2022), especially for Dutch coastal communities and a business ecosystem worth €6.6 billion currently suffering from multi-faceted challenges in the North Sea (Hoesktra 2023).

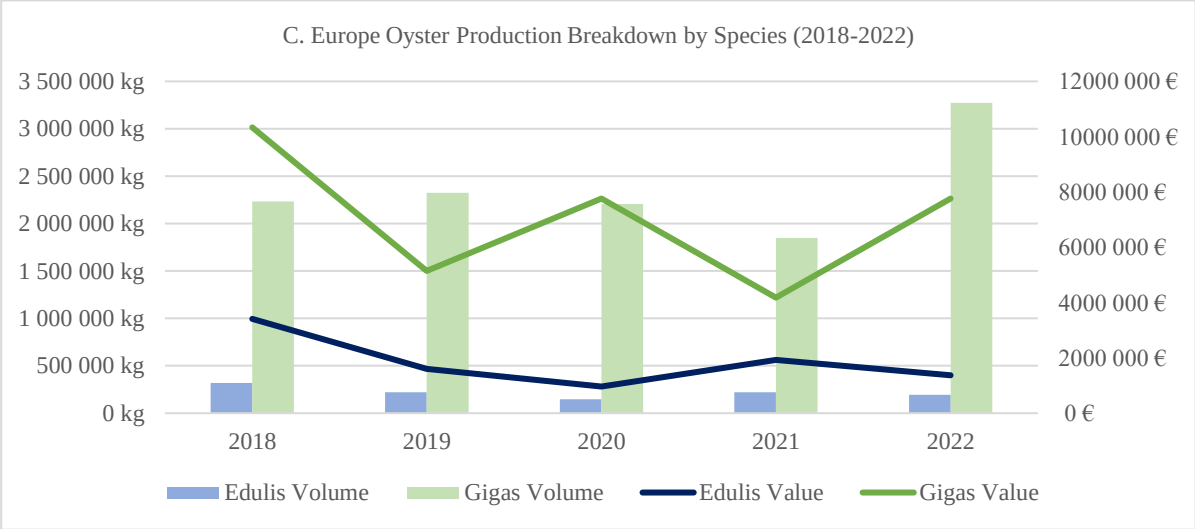
One significant commonality between these countries, observed throughout Europe, is the cost-of-living crisis. High inflation rates have curtailed consumer spending, having many Germans reduced their expenditures on luxury and other non-essential goods, instead opting for lower-cost brands (Boger, Distler, and Funck 2024). Belgium and the Netherlands, where inflation reached 4% in November, followed this trend (Centraal Bureau voor de Statistiek 2024; Moller-Nielsen 2023). In fact, there are numerous instances where Dutch families queue up in food banks, as costs have become unsustainable for many (Corder 2023).

Fortunately, several positive factors offset these adversities. On the one hand, consumption is tipped to be the primary driver of economic growth in the Netherlands (Klok 2024), while sustainability makes significant inroads regarding consumer choices (Boger, Distler, and

Funck 2024) and commands a premium of 9.7% (PwC 2024), particularly among Generation Z and Millennials (Wunsch 2023).

4.1.2. Central Europe Market Overview

From a production perspective, the Netherlands is the single producer of this cluster because Belgium appears to be separate from oyster aquaculture. Germany's production figures have remained at the same level since 2019, raising concerns about the validity of these data points. Graph 5 presents the output of Central Europe in 2022, when the Dutch farmed a total of roughly 3.5 thousand metric tonnes of LWE worth over €9.1 million.



Graph 5 – Source: EUMOFA

Two pertinent observations can be made about this cluster. On the one hand, *O. edulis* production has dropped since 2018, both in volume and value. This contradicts expectations that Dutch farmers would be more inclined to prioritise this species over its invasive counterpart. On the other hand, total production value has declined by 9.7% annually since 2018, despite the increase of almost 1 thousand metric tonnes of LWE in the same period. This is explained by a competitiveness loss by Dutch oysters in the domestic market compared to foreign goods, given that adult oyster import value to this country has grown by 4% more than volume (Appendix 36). On the contrary, overall exports dropped with the pandemic, as seen in Appendix 37, but have since grown by 20.8% in volume and 22.4% in value, in annual

terms. This is consistent with the Dutch government's latest EU-backed sustainability efforts to create high value exports, recognised by Belgium and Germany (Appendix 37).

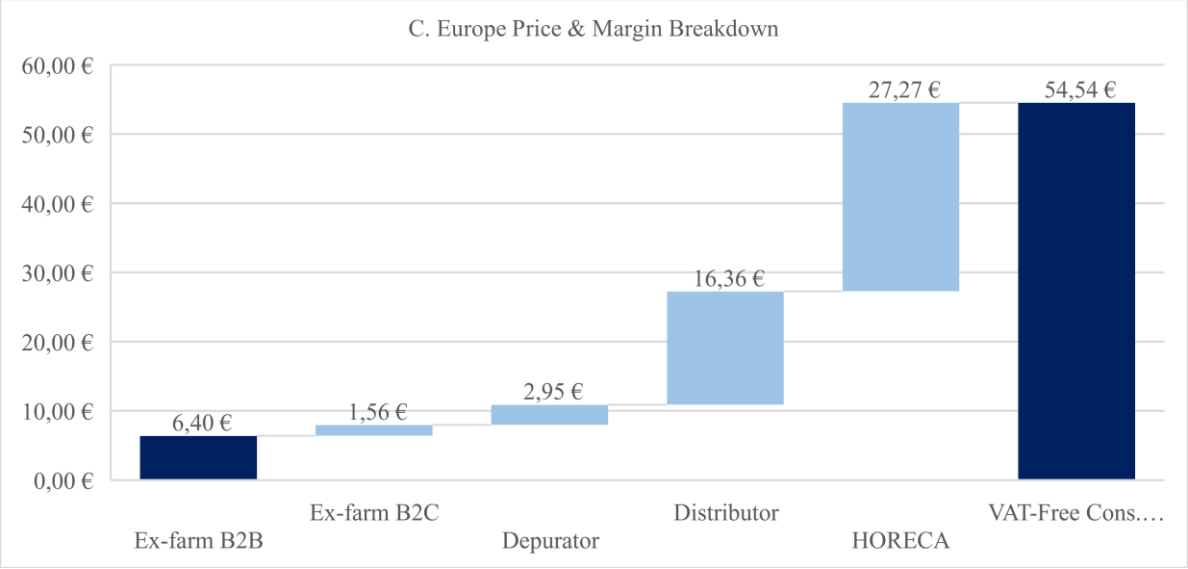
As far as semi-adults are concerned, the Netherlands are a net exporter, ranking second in exports across Europe at €10.8 million (2.33x bigger than 2018), only behind Ireland.

Diving deeper into consumption, the Central European cluster accounted for 6.1 thousand metric tonnes of LWE in 2022, growing by 37.5% annually since 2018 (Table 3). Of these three nations, the Netherlands is responsible for 65% of consumption, while Germany is the smallest market, at an apparent level shy of 600 metric tonnes LWE.

Apparent Consumption - C. Europe (kg)					
Species	2018	2019	2020	2021	2022
Oysters Adult	1 715 677	2 377 626	5 122 128	4 702 915	6 130 807

Table 3 – Source: EUMOFA

Lastly, the price breakdown by supply chain intermediary can be found in Graph 6. Central Europe exhibits the most expensive VAT-free consumer prices, which translates into the costliest ex-farm prices. These data points confirm that Central European consumers highly value premium seafood. Subsequently, *O. edulis* oysters, which match the call for sustainability, can command this price premium.



Graph 6 – Sources: Dutch, Belgian, and German HORECA; EUMOFA

4.1.3. Central Europe Industry Forces

The Netherlands has century-old companies with rooted traditions in oyster farming, mainly located on the Southwestern coast in Zeeland province (Zeeland Visit, n.d.). They have since expanded into other seafood species, such as lobster, crabs, and other shellfish, as well as depuration and distribution. Decades of experience have enabled the establishment of strong distribution networks, ensuring delivery of fresh oysters to major European metropoles within 24 hours, capitalising on the boom of oyster bars. (Pinckaers 2022). Moreover, given the popularity of Dutch oysters outside of the Netherlands, farmers are open to partnering with counterparts from other countries (e.g., "World of Oysters" group) to satisfy demand.

However, this may also pose a significant entry barrier if these ties between producers are difficult to break, considering that the Netherlands appears to be a significant oyster trading hub in Central Europe, and France emerges as the leading oyster exporter to the region (Appendices 36, 38, 40).

Regarding substitutes, oysters compete with cheaper protein sources, such as fish and meat, which may be preferable during the cost-of-living crisis.

4.1.4. Central Europe Final Consumer Profile

Typical consumers' age in Central Europe ranges from 18 to 45 and are increasingly open to experimenting oysters (pairing them with different vinaigrettes and sauces), as a result of social media influence, international travel, and an appetite for novelty (Pinckaers 2022). This means that individuals are keen to introduce *O. edulis* in their habits, even if it is imported from other countries.

Crucially, the growing concern for sustainability has pressured on farmers to transform their practices and balance marine biodiversity conservation, high quality oysters, and sustainable economic development. One important aspect to consider is the need for proof – certifications.

Labels from institutions such as MSC and ASC are crucial for building consumer trust in sustainable seafood practices (Directorate-General for Maritime Affairs and Fisheries 2022). Building on that, they are curious about the provenance of their food and would like to learn more about their oysters' origin, mission and the producer behind their food (Pinckaers 2022).

4.1.5. Central Europe Summary

This cluster may not be one of the largest but is the most promising. This market has been growing rapidly, driven by consumers growingly aware of their carbon footprint and willing to pay a premium for options which mitigate it.

Further, the increasing popularity of oyster bars has democratised market access, which requires strong distribution networks. Dutch oyster farmers are well-positioned to capitalise on this opportunity due to consolidated routes, facilitating entry into surrounding markets.

Nevertheless, intense competition from France, particularly in the Dutch market, has pressured these oyster prices, and the formation of international farmer groups may limit opportunities for collaboration and market access, thereby hindering overall profitability.

4.2.Portugal

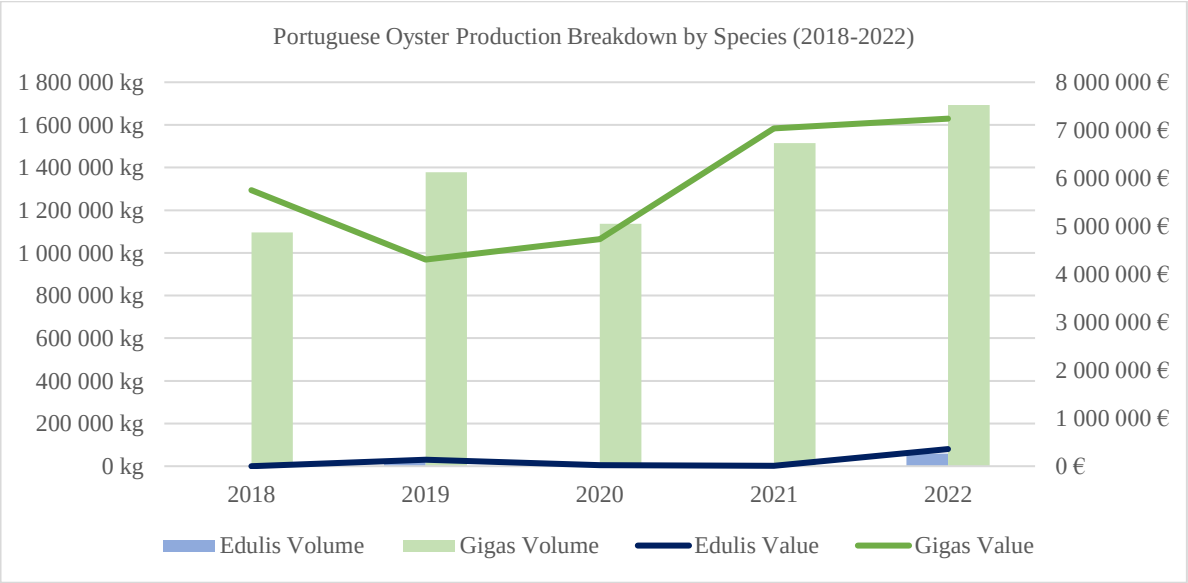
4.2.1. Portugal Macroeconomic Snapshot

The Portuguese government is well invested in boosting the sea economy through its *Estratégia Nacional para o Mar 2030* to protect the ocean and recognise its role as "vectors of sustainable development" for coastal communities (Ministério do Mar and Direção-Geral de Política do Mar 2020). This reinforces the European Union's position on economically sustainable oceans (Council of the European Union and European Parliament 2013). Moreover, most Portuguese are concerned about healthy and sustainable eating habits (Edenred 2024), and environmentally friendly farmed seafood may play a role in these shifting preferences. From an environmental perspective, Portuguese waters possess superior qualities compared to other regions, which accelerate the oyster growth (Pacheco and Gómez 2021). As a result, the country has become a hotspot for farming and exportation.

However, the cost-of-living crisis has led to reduced spending on non-essential goods amongst Europeans (including the Portuguese), affecting premium food (J.P. Morgan 2022). Moreover, oysters are not as embedded in culture, as clams or cockles, thereby being less consumed than their bivalve counterparts (Amasscook 2019).

4.2.2. Portugal Market Overview

Contrary to popular belief, Portugal is one of Europe's greatest oyster producers, having production totalling 1.7 metric tonnes LWE in 2022. However, this nation is no different to previous examples, as far as *O. edulis* is concerned: it is farmed considerably less than *C. gigas* (less than 5% of domestic production). Nevertheless, it is increasingly becoming more popular across Europe, and, as an exporting country, farmers have ramped up production since 2019, going from 20 to 58.2 metric tonnes LWE (roughly 3x) in three years (Graph 7).



Graph 7 – Source: EUMOFA

Regarding trade dynamics, Portugal is a net exporting country for semi-adult *O. edulis* and commercial-size oysters. The main destination is France, which accounts for 97.6% and 91.7% of exports for these oysters, respectively (Appendix 45).

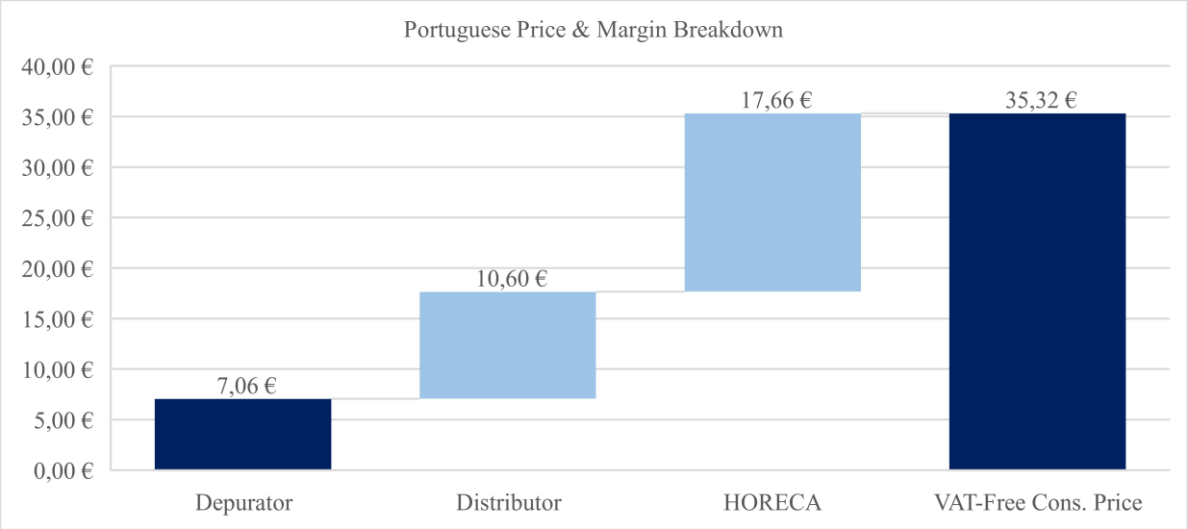
Apparent consumption estimates for 2022 point to a market totalling over 600 metric tonnes LWE (Table 4). EUMOFA data corroborates current trends pointing towards expansion,

driven by foreigners bringing oyster consumption habits and inducing natives to introduce these bivalves in their diet (Pacheco and Gómez 2021). Still, it must be stressed that data for this country is highly imprecise and inconsistent across sources, hindering precise sizing.

Apparent Consumption - Portugal (kg)					
Species	2018	2019	2020	2021	2022
Oysters Adult	440 381	329 927	150 476	479 233	611 510

Table 4 – Source: EUMOFA

Finally, oyster prices for their various sizes and supply chain intermediaries were broken down in Graph 8. Portugal offers relatively low, VAT-free consumer prices for premium oysters in high-end restaurants. Based on this, depurating farmers may expect to sell adult *O. edulis* at €7.06/kg, comparable to the French market (Graph 2).



Graph 8 – Sources: High-end Portuguese restaurants; EUMOFA

4.2.3. Portugal Industry Forces

Many small farmers mark Portugal's competitive landscape focused *C. gigas* and on traditional production method. Still, one major player is operating in this industry, which is Aquanostra. They are based in Setúbal, own a farm spanning over 400 hectares, and have integrated their value chain activities, mirroring OF's strategic choice. This competitor is known for innovation and high-quality bivalves – they also farm clams, cockles, mussels, among others (Aquanostra, n.d.). Main oyster production sites in the country are Ria de Aveiro

in Aveiro, the Sado estuary in Setúbal, Alvor and Ria Formosa in the Algarve. As a net exporting country, international competition is negligible.

Typical buyers include depurators and distributors, having the latter tight bonds with their clients which normally feature high-end HORECA and seafood markets and rely on their suppliers for quality seafood recommendations. Not only does this facilitate access to HORECA partners of potential OF distributors but unfortunately also raises significant barriers to expanding to other outlets.

In this industry, suppliers primarily include hatcheries where to buy spat, but the scarcity of *O. edulis* across Europe gives them some bargaining power. These agents have very limited leverage as producers may build hatcheries and grow oyster seeds until maturity.

Barriers to entry are moderate. Despite the market's likely expansion in the coming years and governmental policies that encourage innovation for blue economy projects, there are high capital requirements in terms of high-tech facilities and machinery and advanced human expertise with oysters.

Oyster substitutes include clams, cockles, and mussels, all of which have been previously said to be more embedded in Portuguese culinary traditions. As such, consumers may opt to buy these goods, in detriment of *O. edulis* (Amasscook 2019).

4.2.4. Portugal Final Consumer Profile

Given the reduced oyster consumption in Portugal, the characterisation of the final consumer is based on survey findings, as most observations were recorded from nationals (Appendix 2). Slightly less than half of seafood consumers have eaten oysters, at least, once in their lives, and nearly all expressed interest in experimenting sustainably produced oysters. As for non-oyster consumers, 20% state never had the opportunity to eat, perhaps explained by the fact that 51% of respondents eat seafood occasionally and would rather opt for more traditional options (Amasscook 2019). Still, 64% demonstrated openness to experimentation.

Portuguese consumers predominantly favour consumption in restaurants, followed special events, and at home. Seafood markets and docks sit at the top for home-consumption purchase locations. The most important characteristics that are associated with oysters are freshness, flavour, and meat content, considering these molluscs are normally eaten raw.

In this day and age, when sustainability is one of the most pressing issues for consumers (Edenred 2024), the Portuguese value tremendously the origin of their oysters (the Algarve has been found to boost willingness to pay), as well as certifications and labels with product information. They are interested in learning more about their oysters' story through QR codes on packages, social media posts, producer websites, or ads.

4.2.5. Portugal Summary

Although a smaller player in European oyster consumption, Portugal exhibits great potential to reinforce its position as the fourth largest producer in Europe, thanks to strong governmental backing for sustainable aquaculture, thriving start-up ecosystems, and superior water quality. Moreover, as foreigners introduce oyster consumption habits to nationals, who are more concerned about sustainability and would be willing to learn more about and pay more for such food options, this country may become an expanding market for premium seafood which shall capture the attention of international competition. For the time being though, the main rival is Aquanostra, a company that has created a business model akin to Oceano Fresco and functions according to the same innovation and quality principles.

5. Go-to-Market Strategy

The Go-to-Market (G2M) is crucial in Oceano Fresco's expansion into the Portuguese and Central European oyster markets. The objective outlined is to enter target markets effectively, responding to consumer needs and adapting strategies to the specificities of each cluster. Having assessed market attractiveness and attainability in the previous section, G2M plans

will focuses on four main aspects: product-market fit analyses, sales channels and quantities, prices for the chosen channels, and demand creation for OF's clients and end consumers.

5.1. Central Europe Go-To-Market

5.1.1. C. Europe Product-Market Fit

Central European consumers are open to experimenting with oysters, be it species or country of origin. Given the rate at which this cluster's market is expanding since 2018, this diversity of options becomes an imperative for sustainable growth. What is more, the democratised access to these molluscs will generate an influx of new customers without established preferences. Therefore, even if regular consumers have defined their desired set of characteristics, it is impossible to detail the preferred oyster traits so that they can be generalised for all consumer segments.

Nevertheless, the results from the survey may shed light on universal criteria that this bivalve must meet: salty flavour, to be paired with different vinaigrettes and sauces, as well as freshness (Appendix 12). Additionally, multiple sources point to sustainable production as being a key driver of consumer choices and premium prices in these markets, and individuals desire to learn more about their food, so they know they are making correct choices and promoting good.

In light of the previous paragraph, OF's *O. edulis* meets these criteria, given the underlying mission of reviving this species' population, its ground-breaking processes, and the freshness and salty flavour provided by the Atlantic.

5.1.2. C. Europe Sales Channels & Quantities

The main opportunity in this market is the possibility to reach far-flung nations where the Netherlands are a preferred producer, in essence acting as a trading hub not only for domestic consumption and facilitate entry into Belgium and Germany, but also to easily study the Nordic countries should Oceano Fresco decide to target them later. Given the dimension and complexity of this opportunity, OF should launch operations via B2B sales to selected Dutch

producers. This is because less than a handful import from Portugal (DutchFish.nl, n.d.) and they must be positioned as premium farmers, to ensure Oceano Fresco's products are carried and marketed. In 2027, the company will sell 2.9 metric tons LWE, to initiate relationships with potential partners and ascertain whether the decline in *O. edulis* production, as reported by EUMOFA (Graph 5), is correct. Entering groups, such as "World of Oysters", may be complicated, so buyers should not yet be affiliated to any association. However, this strategy will not play to OF's favour initially. Selling B2B implies losing brand name, and the impossibility to include the company's sustainable aquaculture certifications or any reference to the Algarve farm, due to the implications of *affinage*.

Still, this will provide a vital beachhead in a promising cluster and, considering the current trends relating to consumers and Dutch farmers' openness, the next step in the expansion plan in Central Europe is selling B2C to previous partners, with which joint-ventures may be established. Predicted B2C implementation is in 2029 with 22.3 metric tons LWE. In this situation, Oceano Fresco will first sell non-depurated, adult oysters to test partners' capacity and, one year later, ship depurated *O. edulis* to streamline processes. Having established strong ties with Dutch farmers, OF's bivalves will be sold with the company's labels, brand, and certifications – all of which align with consumer demands. On balance, combining these sales channels would help diversify the risks associated with these markets and would empower both Oceano Fresco and Dutch partners to bolster their position in Central Europe and beyond. Nevertheless, given the rapid growth of oyster consumption, there may be unmet demand which could be satisfied if the Portuguese start-up could do *ad hoc* sales with other vendors. However, if contractual obligations with partners forbid this practice, revenues from Central Europe will not be maximised.

5.1.3. C. Europe Pricing

Central Europe is the cluster where VAT-free consumer prices for premium *G. gigas* are the greatest – 36% more than the second highest region's price. This is indicative of two important factors: the first is that premium farmers can pass these higher costs downstream and, second, end consumers are willing to pay for it. Accordingly, semi-adult *O. edulis* will be sold on par with the market upon entry as B2B (€6.67/kg in 2027), having the potential to reach higher levels, considering the market is one of the fastest growing, and producers are able to pass costs down the supply chain. Likewise, B2C sales will begin at €8.64/kg for non-depurated oysters and €12.08/kg for depurated individuals. These prices are equally expected to rise in the coming years for the same reasons as B2B prices.

In any case, deviations to this standard may occur for multiple reasons, such as: (1) OF offers discounts for repeated purchases to tighten bonds with buyers in the region, (2) OF and Dutch partners gain market share through joint efforts and may set a premium on their prices *versus* the competition, (3) OF is allowed to do spot sales, which naturally are priced higher than the market, so non-partner agents may meet their demand.

5.1.4. C. Europe Demand Creation

This strategy will be centered around the same message: Oceano Fresco's *O. edulis* are farmed with ground-breaking, sustainable methods to revive this European native species. It shall resonate with the end consumer and would, thus, encourage them to pull it from upstream in the supply chain. In theory, farmers should attend to these demands. However, *C. gigas* is still the dominant species in Europe, making this a herculean effort. Oceano Fresco should follow a dual approach, one tailored to farmers and another to the end consumer to materialise it.

Before entering the market in 2027, the company should initiate contacts with producers in the region as soon as there are grown oysters, to demonstrate how the Algarve creates different oysters compared to the invader and Dutch-farmed *O. edulis*. If successful, vendors should be

invited to Portugal to learn more about OF's facilities and discuss terms. Thereafter, the discounted prices may play a crucial role in retaining buyers, while the start-up's goods make inroads in these markets. The last stage of this process should involve routine trips to the Netherlands to preserve contacts and better streamline operations.

Meanwhile, OF and their Dutch partners must communicate directly with the end consumer. They are interested in learning more about their oysters' provenance, so the main message should be stressed with each campaign. This may be done by accompanying daily activities in the Portuguese and Dutch farms, talking to staff and their story with oysters, or showing the impact of the businesses in local communities. Preferred communication channels may include social media posts, ads, or links to the website for more detailed information.

Regarding packaging, QR codes for traceability and MSC or ASC certifications shall assure consumers they are making a purchase that contributes positively to society and the planet.

5.2.Portugal Go-To-Market

5.2.1. Portugal Product-Market Fit

Portuguese oyster consumers named freshness as the most important characteristics, followed by taste. Meat content and shell condition are also relevant, but to a lesser extent (Appendix 12). Moreover, reports have shown there is a growing concern over the environmental footprint of the food people consume, though this sentiment is not as strong for oysters for the majority of the population. On a more positive note, the native origin and local production in the Algarve encourages locals to experiment OF's *O. edulis*. Given all these characteristics, Oceano Fresco has a product that would fit the market, highlighting its origin, freshness, and taste delivered by the South of Portugal.

5.2.2. Portugal Sales Channels & Quantities

The Portuguese overwhelmingly purchase / consume oysters in restaurants and seafood markets, where distributors are key for market penetration. Therefore, Oceano Fresco will sell

exclusively to these agents upon entry in the Portuguese market in 2027, starting with 3.8 metric tonnes LWE. While this amount is projected to increase tenfold in the coming years, it will still account for less than 10% of oyster allocation across all clusters when OF expands to all proposed regions. This is due to greater opportunities elsewhere and significant uncertainty surrounding this particular country.

The company will use the depurator to prepare all oysters destined for domestic consumption, thereby leapfrogging depurators, and selling their goods under the company's brand, enabling a greater capture of value in Portugal.

Oceano Fresco's CCO stated that distributors have strong relationships with their clients, especially high-end restaurants and seafood markets. On the one hand, this facilitates contacts with existing distributor clients and streamlines the sales process; on the other, expansion to new outlets is significantly more difficult. So, OF can guarantee, at least, that *O. edulis* will be demonstrated to partner distributors' buyers. Furthermore, Portugal is no different from the rest of Europe regarding the emergence of oyster bars and trucks, especially in the Lisbon Metropolitan Area. These venues often utilise social media to target younger consumers with more affordable options. Given their role in expanding access to oysters, OF ought to work with distributors which have connections with these vendors, so both may profit from the early success shown by these emerging businesses.

However, one may argue whether it would not be more beneficial for Oceano Fresco to do business directly with HORECA, mirroring Aquanostra's strategic decision. Granted, this would further help OF capture more profits by skipping distributors and establish closer bonds with their outlets. Yet, these vendors yield equally high margins and tend to squeeze their input costs from suppliers. Though a valid option, the size of the opportunity in Portugal is not worth this additional effort, as the other clusters promise more value.

5.2.3. Portugal Pricing

Oceano Fresco will sell their depurated *O. edulis* solely to distributors at €7.20/kg. Compared to the ex-farm B2C price of €4.58 (EUMOFA 2024), not only does this show the power depurators have to capture a large share of profits, but also reflects the small size of the opportunity provided by this market, the second lowest in this group of clusters.

One positive aspect to consider in pricing is the effect the Algarve has on nationals, as survey results demonstrate this farming site strongly resonates with the Portuguese. They state the Algarve has a "positive" to "very positive" impact on their choice; along with the positive associations made with the region in terms of critical oyster characteristics (Appendix 15), domestic consumers would, be willing to pay more for OF's *O. edulis* (Appendix 16).

Both factors would ensure the company's premium oysters are positioned and priced to reflect their unique value proposition.

5.2.4. Portugal Demand Creation

Concerning demand creation, there are two avenues through which OF can promote their oysters. On the one hand, the company's distribution partners may present the product to their customers and conduct A/B test to show how superior *O. edulis* is compared to the invasive *C. gigas*. Conversely and more difficult, OF may visit restaurants and fishmongers to showcase and sell their oysters. If successful, these vendors would refer to their distributors and place orders through them. Ultimately, this start-up' sales team may opt for a combination of both, to ensure they first secure distributors' clients, and later expand to new venues. To incentivise purchases, OF can bundle *O. edulis* with clams, creating a seafood package offered at a discounted price. Increased sales volume would reduce customer acquisition costs.

As far as the end consumer is concerned, Oceano Fresco has a broader set of tools to educate and promote its oysters to individuals curious to learn more about *O. edulis*. Regarding brand elements, the Portuguese stress sustainable aquaculture certifications, labels with product

information, and the national flag to easily identify OF's products (more applicable in seafood markets). Furthermore, QR codes for traceability would provide access to more details at the point of sale. From a communications perspective, the challenge is greater in Portugal than the other clusters. Not only do people need to learn about this bivalve, but most importantly also see *O. edulis* is different in their fellow consumers' eyes, so they are enticed to try.

An effective plan must emphasise the product's Portuguese roots and sustainability, to attract younger consumers. Educational campaigns should highlight the history of this native species, OF's role in its restoration, the company's sustainable aquaculture methods, and oyster consumption tutorials. Other campaigns should depict oyster consumers comparing *O. edulis* with *C. gigas*, so the audience has unbiased opinions confirming OF's offering is superior and show sales outlets where locals may purchase them. Preferred channels include social media ads and posts, and the website.

6. Limitations

Throughout the duration of this project, there were many seemingly insurmountable obstacles, of which three will be highlighted in this section: market data inconsistencies, the absence of an in-depth internal analysis, and the multiple simplifications made in the analyses.

Regarding the first one, the lack of consistent and comprehensive market data for *O. edulis* is explained by the industry's privatised nature, limiting access to reliable information – be it for trade dynamics, pricing, or other aspects. Thus, several assumptions are based on premium *C. gigas* data, to get a better approximation to *O. edulis*' intended differentiated positioning.

As far as the second is concerned, Oceano Fresco declined the offer to make an internal analysis to identify their main strengths and weaknesses, both of which would have been pivotal for more actionable recommendations which would have capitalised on OF's key resources but also tackled the company's shortcomings prior to entry in these oyster markets.

Lastly, scope and time constraints led to several simplifications, impacting the robustness of some outcomes. Notably, the lack of quantified commercial synergies from the branded seafood bundle in Portugal stems from the inability to estimate the additional oyster sales *versus* a "no-bundle" scenario, without consulting distributors/vendors on their preferences. Therefore, while the results offer valuable directional insights, they should lay a solid foundation for further exploration and refinement as more data becomes available.

7. Recommendations and Conclusion

Europe's oyster market offers diverse opportunities and threats, with sustainability-driven consumers and technological advances as positives, and *C. gigas*' dominance as a key hurdle. Central Europe emerged as the most promising cluster for its astonishing consumption growth and consumer trends that align with Oceano Fresco. However, the opportunity's magnitude is evident, with the diverse origins of oyster imports reflecting continental players' interest. Thus, it is crucial to act swiftly and accelerate the transition to B2C, as the immense consumer value in the region suggests that delaying its entry until 2029 would be a missed opportunity. In Portugal, there clearly is a combination of potential and risk. Although demand is growing, this process has been sluggish, which has been confided to the company by an industry insider. As such, this market ought to be relegated to a secondary role, though not overlooked as OF has the potential to become a trailblazer in transforming the country's seafood landscape.

Looking into the future, *O. edulis* is most likely to occupy a niche positioning in the broader oyster spectrum and will invariably compete with *C. gigas*, wherever it may be sold. Consequently, its commercial success will probably depend on incentive for intermediaries and outlets to promote the European flat oyster over the invasive Pacific cupped oyster.

Despite the challenges faced, the recommended strategies for Central Europe and Portugal will enable Oceano Fresco to secure sustainable growth and profitability, thereby contributing the successful completion of its overall mission in the European premium *O. edulis* market.

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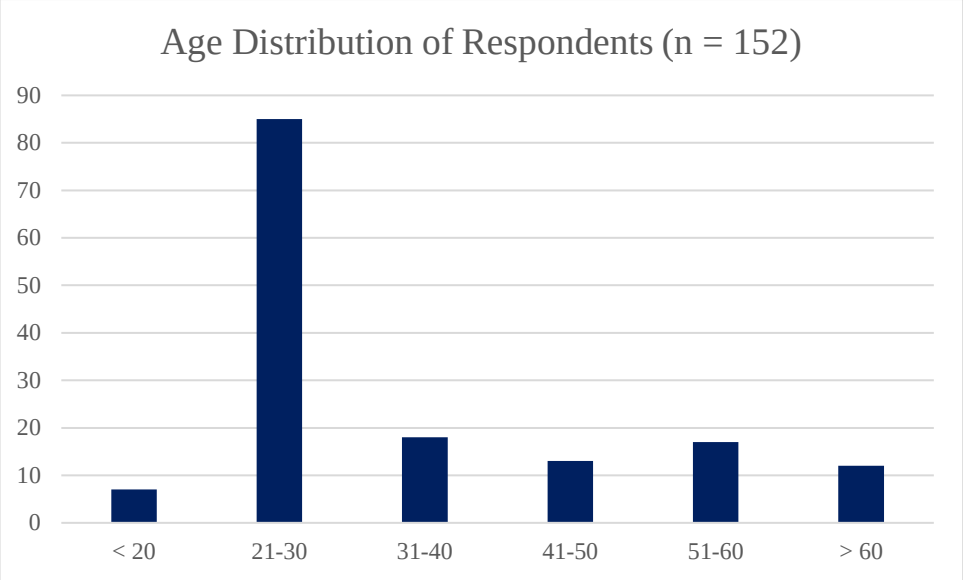
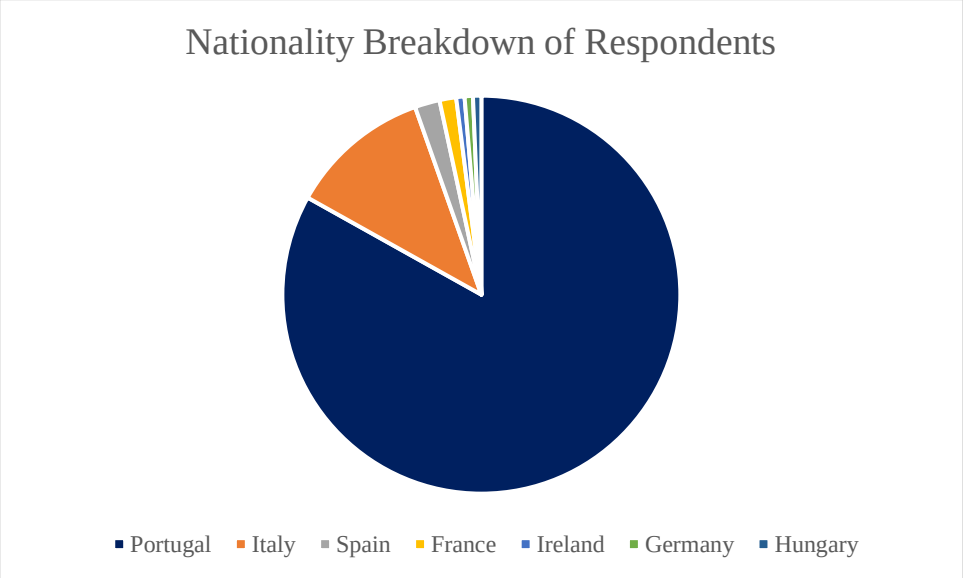
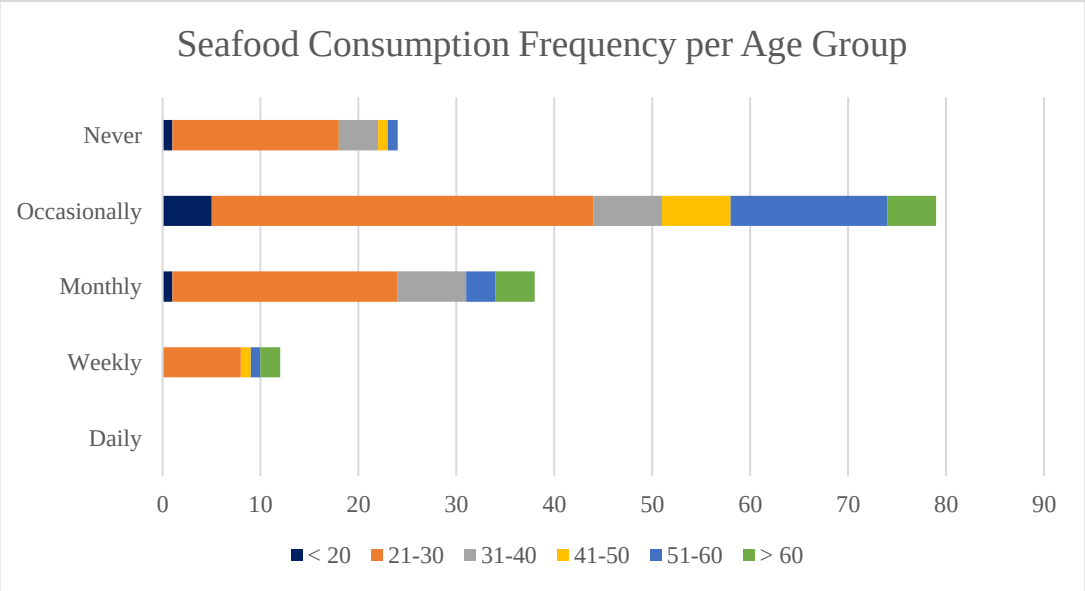
9. Appendix



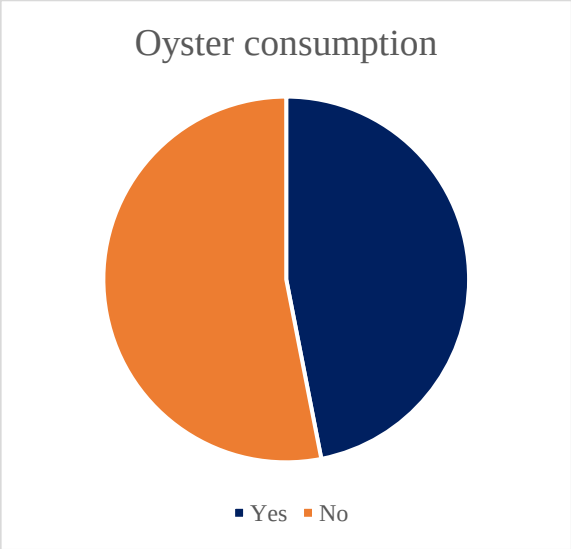
Appendix 1: Survey Respondents Age Distribution



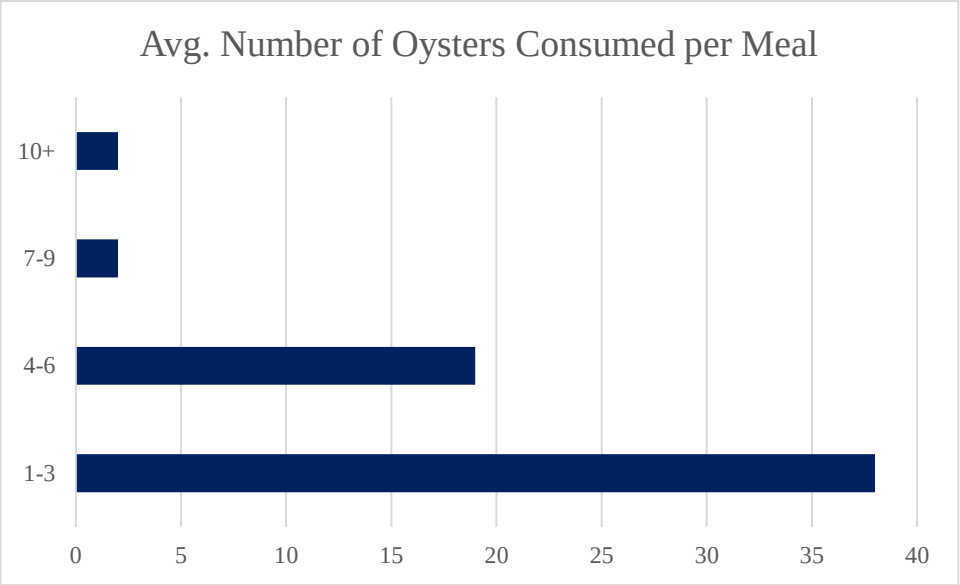
Appendix 2: Survey Respondents Nationality Distribution



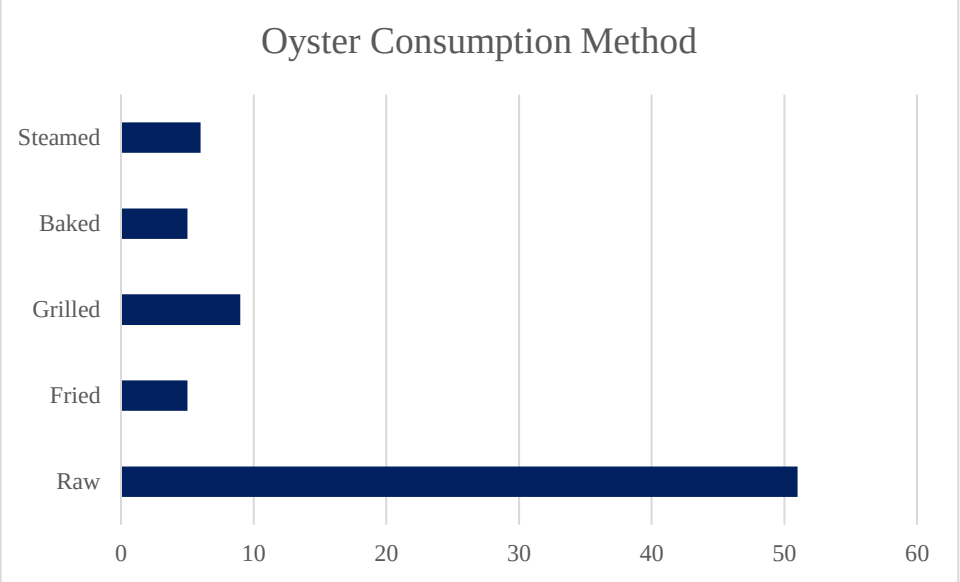
Appendix 3: Survey Seafood Consumption Frequency per Age Group



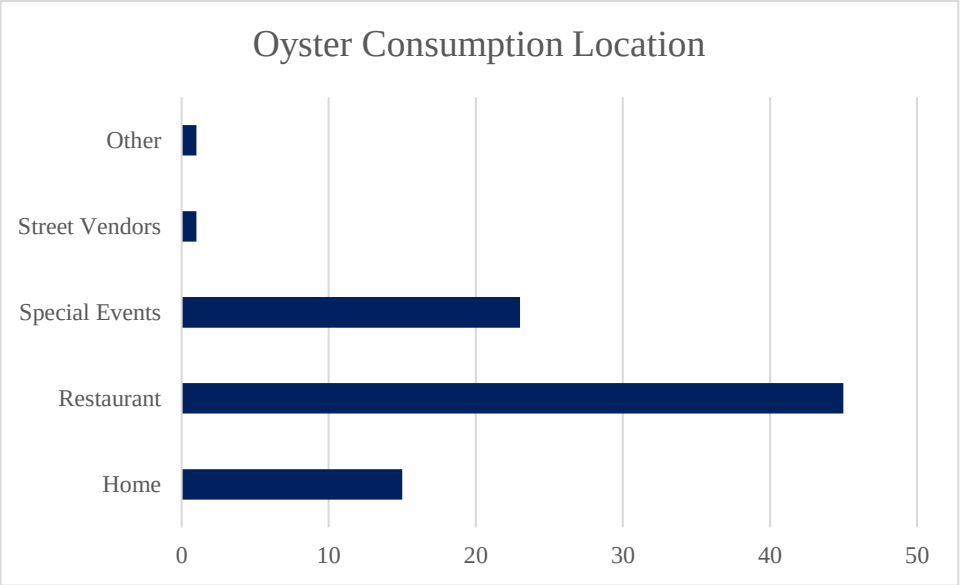
Appendix 4: Survey Seafood Consumers Split into Oyster Consumers and Non-consumers



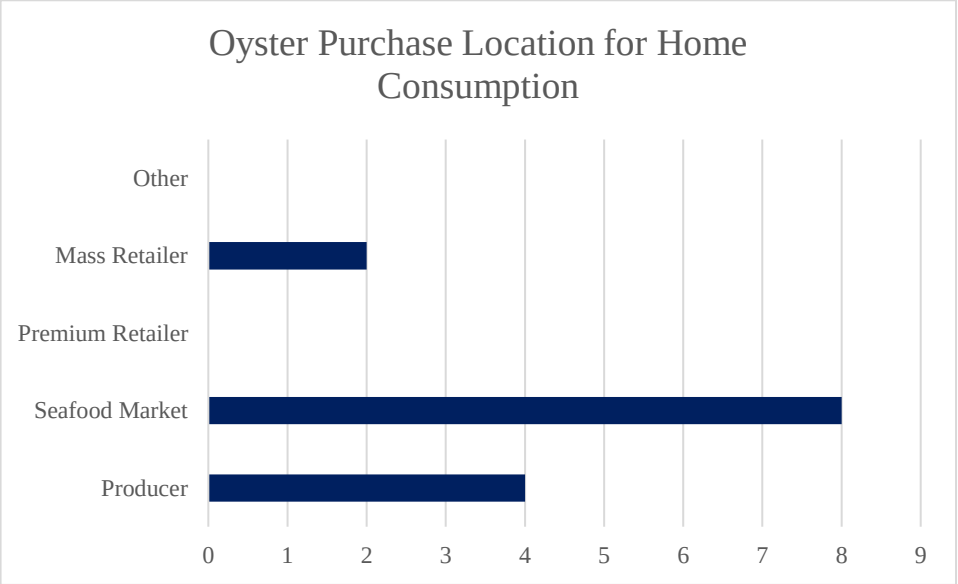
Appendix 5: Survey Oyster Consumers Average Number of Units Eaten per Meal



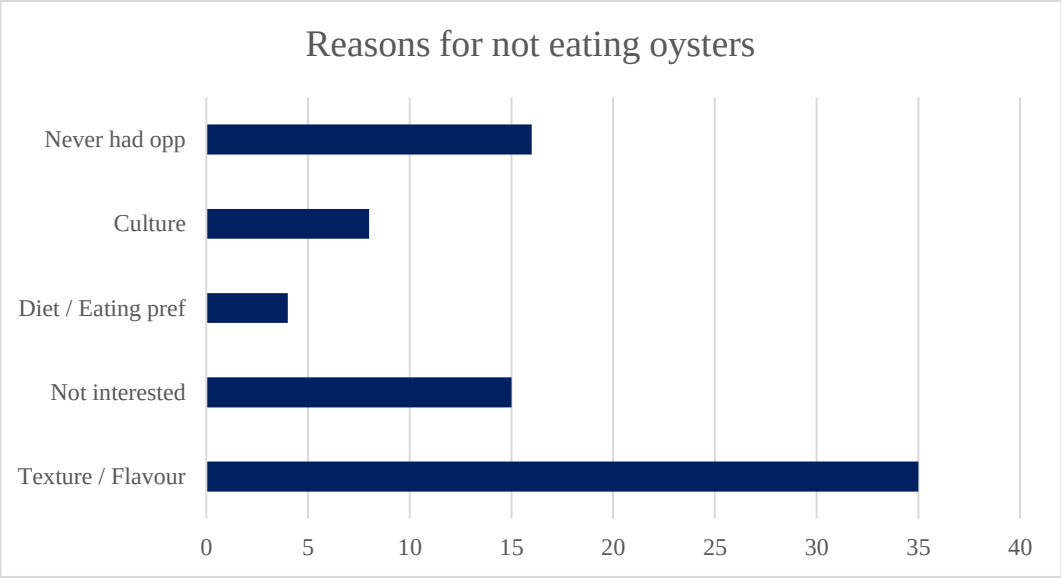
Appendix 6: Survey Oyster Consumers Preferred Oyster Consumption Method



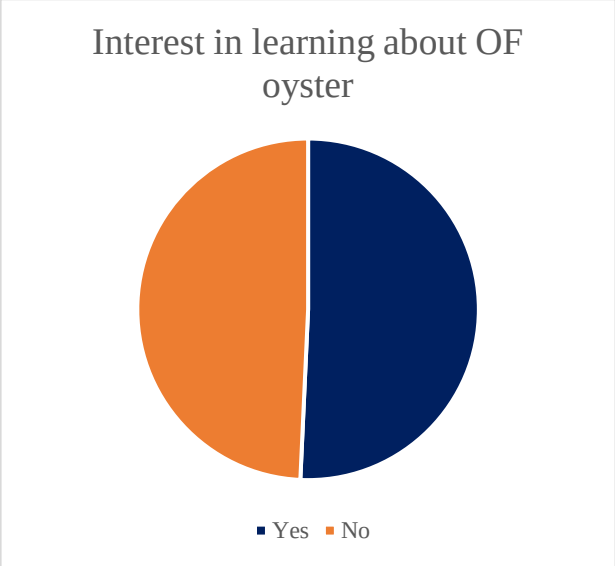
Appendix 7: Survey Oyster Consumers Consumption Location



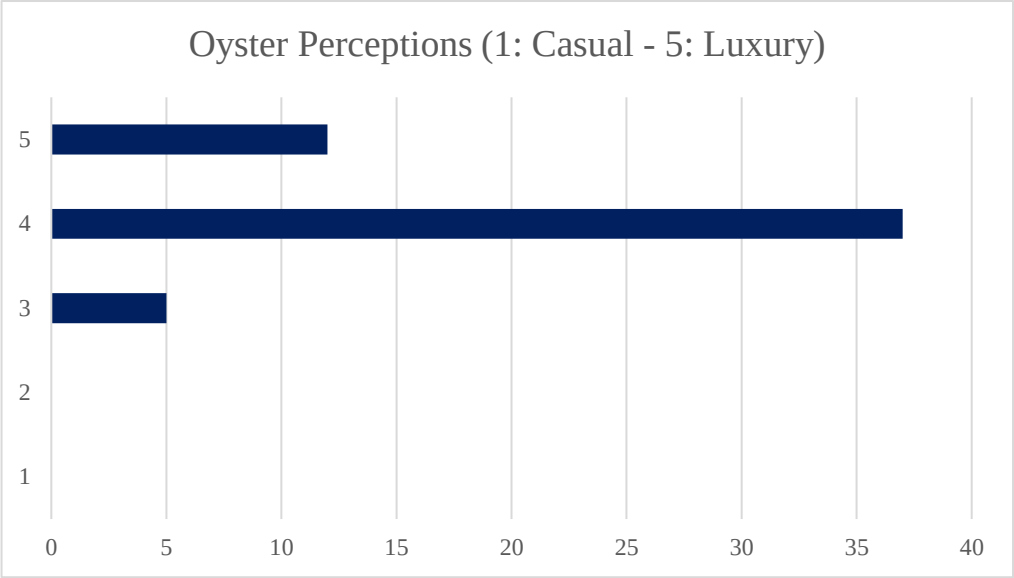
Appendix 8: Survey In-home Oyster Consumers Purchase Location



Appendix 9: Survey Non-oyster Consumers Reasons for Non-consumption



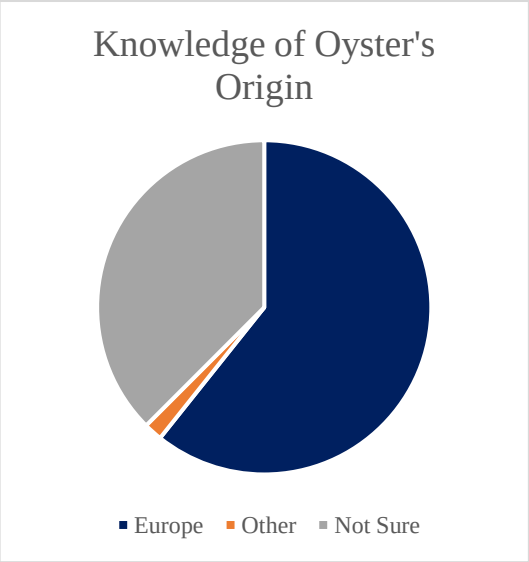
Appendix 10: Survey Non-oyster Consumers Interest in Learning about OF-like Oysters (at this point, non-oyster consumers who respond negatively to the question will end the survey)



Appendix 11: Survey Oyster Consumers Perceptions about Oysters

Importance of Oyster Characteristics for Consumers						
Characteristic	1	2	3	4	5	Rank
Freshness	0	2	3	2	39	4,695652174
Flavour	0	1	3	13	28	4,511111111
Meat Content	0	1	11	18	13	3,954545455
Shell	0	7	12	8	18	3,822222222
Price	0	5	13	13	14	3,8
Origin	6	10	6	6	17	3,4
Sustainability	8	10	10	7	9	2,977272727

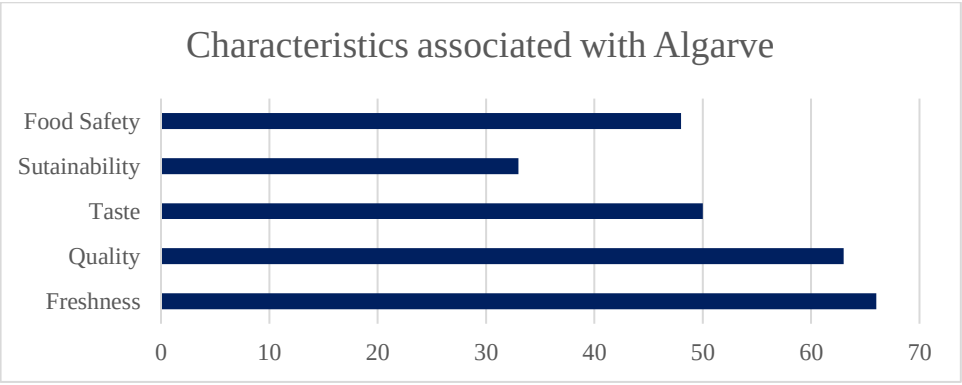
Appendix 12: Survey Oyster Consumers Critical Oyster Characteristics



Appendix 13: Survey Oyster Consumers' Knowledge of Oyster Origin

WTP Premium	
Yes	76
No	10

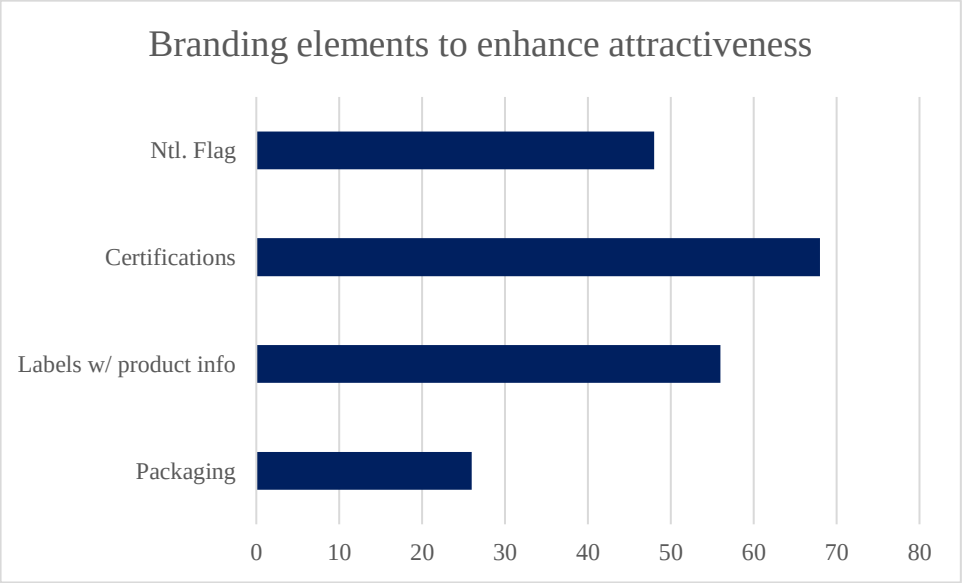
Appendix 14: Survey Seafood Consumers' Willingness to Pay a Premium Price for OF-like Oysters (at this point of the survey, respondents have been introduced to the mission behind *O. edulis* farming and methods)



Appendix 15: Survey Seafood Consumers' Associations of Important Oyster Characteristics with the Algarve

Algarve Impact on WTP		
1	0	
2	2	
3	27	Foreigners only
4	40	3 foreigners + 37 Portuguese
5	24	Portuguese only

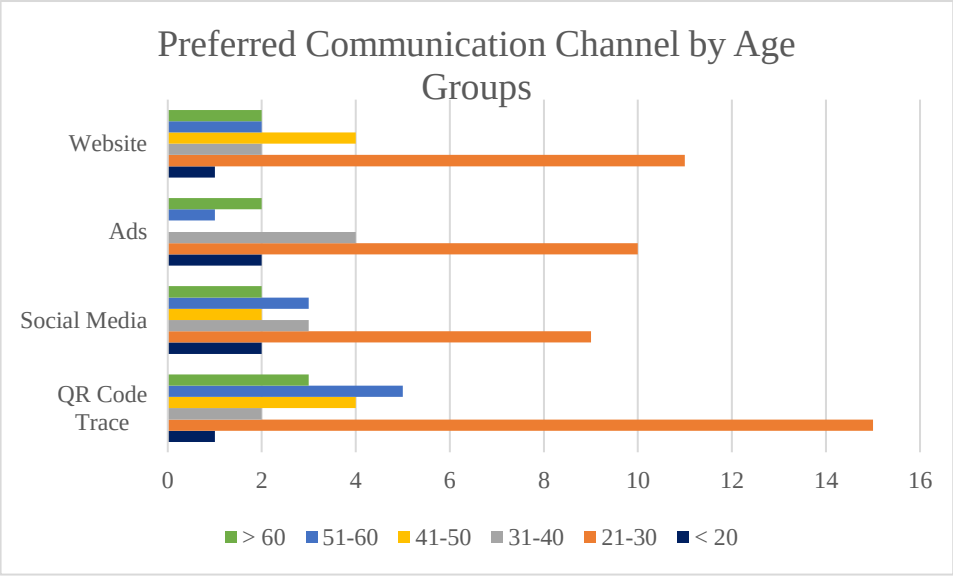
Appendix 16: Survey Algarve Effect on Seafood Consumers' Willingness to Pay for OF-like Oysters (1: Very Negative – 5: Very Positive)



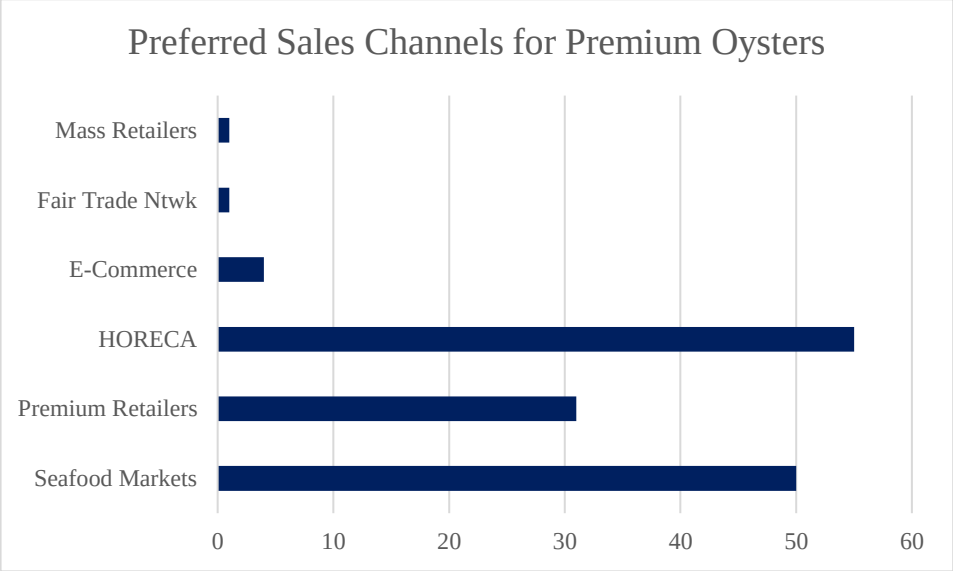
Appendix 17: Survey Seafood Consumers' Important Branding Elements for Oysters

Interest in learning more about the oysters' story							
Response	< 20	21-30	31-40	41-50	51-60	> 60	Total
Yes	2	26	6	6	7	8	47
No	1	17	3	0	3	2	26

Appendix 18: Survey Seafood Consumers' Interest in Stories about OF-like Oysters (Breakdown by Age Group)



Appendix 19: Survey Seafood Consumers' Preferred Communication Channels for Stories



Appendix 20: Survey Seafood Consumers' Preferred Sales Channels to Buy OF-like Oysters

Try? – Oyst. Cons.	
Yes	55
No	6

Appendix 21: Survey Oyster Consumers' Interest in Experimenting OF-like Oysters

Try OF?	
Yes	17
Maybe	18

Appendix 22: Survey Non-oyster Consumers' Interest in Experimenting OF-like Oysters

Comments from respondants about how to further encourage to try OF
Being a native species would make me try
To have a regular consumer try those new oysters and say if it has any differences than the ones that he normally eats - taste tests from people
The arising of the occasion
Quality & sustainability
Would try if on holidays in Algarve. Not a seafood fan
The Portuguese flag would greatly incentivise me to try. Only concerned about conservation during delivery
Guarantees of quality & safety
Education about how to distinguish oysters, and food safety assurances
Curiosity, I trust the product
Company values
Better marketing
Possible great flavour would incentivise
No concerns. Good marketing campaign & promotion as a national, sustainable product would encourage me to try. Granted, price must be competitive to reflect its premium nature
Never tried oysters because its texture is not appealing, but it is an interesting product I would be interested in trying & knowing more about in an expereince by the sea or in a seafood market
Food certificate

Appendix 23: Survey Seafood Consumers' Open-ended Feedback

$$Apparent\ Consumption = T.Production + T.Imports - T.Exports$$

Appendix 24: Apparent Consumption Formula

Henceforth, S-A means semi-adults to represent B2B trade.

Production - France (kg)

Species	2018	2019	2020	2021	2022
Edulis B2C	721 000	1 187 555	1 280 261	1 177 401	670 800
Gigas B2C	92 225 000	84 759 542	79 503 123	79 733 368	80 094 270
Total	**92 946 000**	**85 947 097**	**80 783 384**	**80 910 769**	**80 765 070**

Production - France (€)

Species	2018	2019	2020	2021	2022
Edulis B2C	5 765 000 €	7 171 537 €	6 748 212 €	7 432 660 €	5 269 601 €
Gigas B2C	374 265 000 €	391 126 947 €	350 236 782 €	396 376 098 €	410 159 181 €
Total	**380 030 000 €**	**398 298 484 €**	**356 984 994 €**	**403 808 758 €**	**415 428 782 €**

Appendix 25: France Production. Source: EUMOFA database

Imports - France (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Ireland	Edulis S-A	116 340	329 882	434 711	390 341	307 154
	Oysters Adult	5 718 035	5 133 181	4 135 372	6 364 997	6 687 458
Netherlands	Edulis S-A	44 299	6 471	1 252	51 810	77 570
	Oysters Adult	84 104	77 691	80 804	65 591	32 086
Portugal	Edulis S-A	85 751	226 002	125 606	137 923	130 540
	Oysters Adult	36 565	350 695	358 702	302 545	484 319
UK	Edulis S-A	2 670	577	8 794	3 330	2 005
	Oysters Adult	1 185 842	1 052 745	1 318 018	2 127 848	1 239 839
Others	Edulis S-A	1 570	315	434	10 121	53 813
	Oysters Adult	44 928	80 726	39 694	56 987	47 326
Total		**7 320 104**	**7 258 285**	**6 503 387**	**9 511 493**	**9 062 110**
Subtotal Edulis Semi-Adult		250 630	563 247	570 797	593 525	571 082
Subtotal Oysters Adult		7 069 474	6 695 038	5 932 590	8 917 968	8 491 028

Imports - France (€)

Top Markets	Species	2018	2019	2020	2021	2022
Ireland	Edulis S-A	667 620 €	857 243 €	1 014 283 €	1 944 448 €	1 602 308 €
	Oysters Adult	27 850 184 €	26 655 682 €	20 042 314 €	31 228 149 €	37 264 649 €
Netherlands	Edulis S-A	80 358 €	28 982 €	5 561 €	18 581 €	44 383 €
	Oysters Adult	255 077 €	265 564 €	334 823 €	248 607 €	145 696 €
Portugal	Edulis S-A	420 853 €	682 548 €	558 841 €	620 468 €	577 897 €
	Oysters Adult	284 766 €	1 545 060 €	1 536 312 €	1 366 220 €	2 295 861 €
UK	Edulis S-A	13 530 €	2 907 €	15 510 €	16 779 €	20 600 €
	Oysters Adult	3 525 665 €	3 266 712 €	3 343 779 €	6 294 643 €	4 323 822 €
Others	Edulis S-A	14 742 €	138 €	1 053 €	35 968 €	12 965 €
	Oysters Adult	368 131 €	364 658 €	221 066 €	420 117 €	442 453 €
Total		**33 480 926 €**	**33 669 494 €**	**27 073 542 €**	**42 193 980 €**	**46 730 634 €**
Subtotal Edulis Semi-Adult		1 197 103 €	1 571 818 €	1 595 248 €	2 636 244 €	2 258 153 €
Subtotal Oysters Adult		32 283 823 €	32 097 676 €	25 478 294 €	39 557 736 €	44 472 481 €

Appendix 26: France Imports. Source: EUMOFA database

Exports - France (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Belgium	Edulis S-A	19 763	37 037	12 872	16 158	83 952
	Oysters Adult	515 410	548 030	396 495	447 017	565 463
Denmark	Edulis S-A	2 395	8 384	5 048	10 244	852
	Oysters Adult	133 818	145 205	100 262	229 475	337 418
Ireland	Edulis S-A	n.d.	16	8	n.d.	32
	Oysters Adult	311 202	394 889	132 412	294 856	195 300
Italy	Edulis S-A	89 200	150 439	356 404	863 569	812 227
	Oysters Adult	3 737 146	4 716 597	3 670 877	4 564 475	5 371 233
Netherlands	Edulis S-A	1 171	78 533	56 929	124 824	122 391
	Oysters Adult	1 084 961	1 473 375	997 250	1 643 873	2 022 733
Others	Edulis S-A	434 637	557 091	371 190	489 654	655 179
	Oysters Adult	6 289 858	6 761 266	4 798 918	6 957 132	6 716 614
Total		**12 619 561**	**14 870 862**	**10 898 665**	**15 641 277**	**16 883 394**
Subtotal Edulis Semi-Adult		547 166	831 500	802 451	1 504 449	1 674 633
Subtotal Oysters Adult		12 072 395	14 039 362	10 096 214	14 136 828	15 208 761

Exports - France (€)

Top Markets	Species	2018	2019	2020	2021	2022
Belgium	Edulis S-A	206 414 €	293 541 €	102 406 €	137 083 €	658 377 €
	Oysters Adult	3 926 508 €	3 572 992 €	2 915 433 €	3 424 282 €	4 334 493 €
Denmark	Edulis S-A	24 188 €	77 757 €	44 684 €	102 977 €	9 770 €
	Oysters Adult	1 027 743 €	1 148 091 €	867 663 €	1 891 989 €	2 913 126 €
Ireland	Edulis S-A	n.d.	162 €	82 €	n.d.	375 €
	Oysters Adult	3 985 608	4 816 670 €	3 684 815 €	4 929 135 €	4 146 711 €
Italy	Edulis S-A	576 396 €	965 789 €	1 865 645 €	3 826 409 €	4 028 030 €
	Oysters Adult	19 497 325 €	24 209 686 €	17 582 741 €	26 247 792 €	35 781 415 €
Netherlands	Edulis S-A	14 641 €	613 989 €	509 722 €	998 457 €	1 077 642 €
	Oysters Adult	6 095 813 €	7 191 300 €	5 316 103 €	8 600 949 €	11 811 343 €
Others	Edulis S-A	12 728 €	100 999 €	183 116 €	70 410 €	169 315 €
	Oysters Adult	58 608 393 €	63 245 014 €	44 092 066 €	63 635 542 €	69 836 013 €
Total		**93 975 757 €**	**106 235 990 €**	**77 164 476 €**	**113 865 025 €**	**134 766 610 €**
Subtotal Edulis Semi-Adult		834 367 €	2 052 237 €	2 705 655 €	5 135 336 €	5 943 509 €
Subtotal Oysters Adult		93 141 390 €	104 183 753 €	74 458 821 €	108 729 689 €	128 823 101 €

Appendix 27: France Exports. Source: EUMOFA database

Apparent Consumption - France (kg)

Species	2018	2019	2020	2021	2022
Oysters Adult	87 943 079	78 602 773	76 619 760	75 691 909	74 047 337

Apparent Consumption - France (€)

Species	2018	2019	2020	2021	2022
Oysters Adult	319 172 433 €	326 212 407 €	308 004 467 €	334 636 805 €	331 078 162 €

Appendix 28: France Apparent Consumption. Source: EUMOFA database

Production - UK & Ireland (kg)

Species	2018	2019	2020	2021	2022
Edulis B2C	291 000	288 000	266 000	452 000	413 000
Gigas B2C	10 605 000	10 268 000	8 474 000	10 585 000	10 869 000
Total	**10 896 000**	**10 556 000**	**8 740 000**	**11 037 000**	**11 282 000**

Appendix 29: UK & Ireland Production. Sources: FAO Fishstat, EUMOFA database. There is no table containing the euro value of production because FAO Fishstat only presents data in metric tonnes LWE and EUMOFA stopped recording data for the UK after Brexit

Imports - UK (kg)

Top Markets	Species	2018	2019	mar/20	2021	2022
France	Edulis S-A	7 127	1 795	6	No data due to Brexit	
	Oysters Adult	12 281	1 272	9		
Ireland	Edulis S-A	118	256	11		
	Oysters Adult	3 618	390	n.d.		
Italy	Edulis S-A	n.d.	n.d.	n.d.		
	Oysters Adult	68	339	n.d.		
Netherlands	Edulis S-A	n.d.	n.d.	n.d.		
	Oysters Adult	2 044	974	48		
Others	Edulis S-A	0	0	0		
	Oysters Adult	206	381	0		
Total		**25 462**	**5 407**	**74**		
Subtotal Edulis Semi-Adult		7 245	2 051	17		
Subtotal Oysters Adult		18 217	3 356	57		

Imports - UK (€)

Top Markets	Species	2018	2019	mar/20	2021	2022
France	Edulis S-A	9 457 €	2 797 €	32 €	No data due to Brexit	
	Oysters Adult	100 935 €	5 273 €	111 €		
Ireland	Edulis S-A	905 €	2 046 €	89 €		
	Oysters Adult	25 522 €	19 656 €	n.d.		
Italy	Edulis S-A	n.d.	n.d.	n.d.		
	Oysters Adult	1 144 €	2 796 €	n.d.		
Netherlands	Edulis S-A	n.d.	n.d.	n.d.		
	Oysters Adult	28 332 €	22 372 €	1 180 €		
Others	Edulis S-A	0 €	0 €	0 €		
	Oysters Adult	4 150 €	486 €	0 €		
Total		**170 445 €**	**55 426 €**	**1 412 €**		
Subtotal Edulis Semi-Adult		10 362 €	4 843 €	121 €		
Subtotal Oysters Adult		160 083 €	50 583 €	1 291 €		

Appendix 30: UK Imports. Source: EUMOFA database

Exports - UK (kg)

Top Markets	Species	2018	2019	mar/20	2021	2022
France	Edulis S-A	90 785	177 279	45 322	No data due to Brexit	
	Oysters Adult	645 864	487 675	111 496		
Ireland	Edulis S-A	292 190	337 028	10 127		
	Oysters Adult	113 551	18 849	254		
Taiwan	Edulis S-A	8 125	9 818	605		
	Oysters Adult	2 110	4 317	n.d.		
UAE	Edulis S-A	3 793	7 156	407		
	Oysters Adult	2 716	1 626	n.d.		
Others	Edulis S-A	4 039	2 457	67		
	Oysters Adult	-357 257	-517 975	-51 176		
Total		**1 267 177**	**1 063 216**	**168 815**		
Subtotal Edulis Semi-Adult		398 932	533 738	56 528		
Subtotal Oysters Adult		868 245	529 478	112 287		

Exports - UK (€)

Top Markets	Species	2018	2019	mar/20	2021	2022
France	Edulis S-A	504 642 €	881 863 €	203 693 €	No data due to Brexit	
	Oysters Adult	2 211 129 €	843 006 €	301 621 €		
Ireland	Edulis S-A	842 787 €	1 087 392 €	31 004 €		
	Oysters Adult	485 125 €	39 983 €	119 €		
Taiwan	Edulis S-A	54 790 €	67 791 €	3 855 €		
	Oysters Adult	12 680	27 214 €	n.d.		
UAE	Edulis S-A	n.d.	n.d.	n.d.		
	Oysters Adult	848 060 €	784 369 €	824 810 €		
Others	Edulis S-A	-357 257 €	-517 975 €	-51 176 €		
	Oysters Adult	-357 257 €	-517 975 €	-51 176 €		
Total		**4 711 499 €**	**3 223 162 €**	**563 691 €**		
Subtotal Edulis Semi-Adult		1 485 404 €	2 194 538 €	258 978 €		
Subtotal Oysters Adult		3 226 095 €	1 028 624 €	304 713 €		

Appendix 31: UK Exports. Source: EUMOFA database

Imports - Ireland (kg)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	224 019	72 105	n.d.	1 057	15 579
	Oysters Adult	52 236	40 366	8 931	468	177 520
UK	Edulis S-A	302 508	241 355	n.d.	15 654	14
	Oysters Adult	15 974	16 427	2 154	406	16 879
Others	Edulis S-A	183 196	38 933	2 214	144	806
	Oysters Adult	654	842	250	2	8 410
Total		**778 587**	**410 028**	**13 549**	**17 731**	**219 208**
Subtotal Edulis Semi-Adult		709 723	352 393	2 214	16 855	16 399
Subtotal Oysters Adult		68 864	57 635	11 335	876	202 809

Imports - Ireland (€)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	927 708 €	414 664 €	n.d.	27 527 €	401 492 €
	Oysters Adult	1 235 623 €	593 582 €	227 323 €	418 910 €	2 423 437 €
UK	Edulis S-A	967 924 €	860 726 €	n.d.	55 699 €	374 €
	Oysters Adult	123 673 €	119 747 €	17 821 €	47 831 €	99 290 €
Others	Edulis S-A	706 076 €	129 809 €	8 821 €	617 €	22 004 €
	Oysters Adult	1 993 €	3 563 €	682 €	6 €	84 116 €
Total		**3 962 997 €**	**2 122 091 €**	**254 647 €**	**550 590 €**	**3 030 713 €**
Subtotal Edulis Semi-Adult		2 601 708 €	1 405 199 €	8 821 €	83 843 €	423 870 €
Subtotal Oysters Adult		1 361 289 €	716 892 €	245 826 €	466 747 €	2 606 843 €

Appendix 32: Ireland Imports. Source: EUMOFA database

Exports - Ireland (kg)

Top Markets	Species	2018	2019	2020	2021	2022
China	Edulis S-A	130 389	97 958	143 046	223 627	156 590
	Oysters Adult	495 882	380 224	148 193	163 149	11 042
France	Edulis S-A	4 704 916	3 403 446	2 148 717	834 359	836 394
	Oysters Adult	975 627	1 248 750	1 004 339	4 322 399	4 903 826
Hong Kong	Edulis S-A	126 446	119 070	185 903	223 089	214 392
	Oysters Adult	310 412	230 362	88 021	161 242	100 908
Japan	Edulis S-A	6 071	8 187	7 120	4 005	2 198
	Oysters Adult	9 831	7 754	n.d.	n.d.	n.d.
South Korea	Edulis S-A	300	2 697	10 957	8 014	10 309
	Oysters Adult	n.d.	1 814	n.d.	n.d.	n.d.
Netherlands	Edulis S-A	236 671	112 905	85 120	68 958	40 851
	Oysters Adult	76 333	262 133	60 973	93 269	279 724
Singapore	Edulis S-A	154	11 320	44 940	80 644	97 760
	Oysters Adult	80 985	56 446	4 124	53	11 044
Spain	Edulis S-A	27 178	10 835	12 450	67 572	76 785
	Oysters Adult	149 485	101 315	46 662	n.d.	24 557
UK	Edulis S-A	106 735	95 743	71 455	14 330	3 159
	Oysters Adult	60 883	198 812	145 097	243 859	402 617
Others	Edulis S-A	44 848	63 549	39 532	97 079	220 443
	Oysters Adult	120 231	78 853	19 331	31 914	88 690
Total		**7 663 377**	**6 492 173**	**4 265 980**	**6 637 562**	**7 481 289**
Subtotal Edulis Semi-Adult		5 383 708	3 925 710	2 749 240	1 621 677	1 658 881
Subtotal Oysters Adult		2 279 669	2 566 463	1 516 740	5 015 885	5 822 408

Exports - Ireland (€)

Top Markets	Species	2018	2019	2020	2021	2022
China	Edulis S-A	1 244 260 €	927 403 €	1 425 017 €	2 474 264 €	2 064 276 €
	Oysters Adult	4 278 013 €	3 202 793 €	1 272 664 €	1 213 392 €	100 024 €
France	Edulis S-A	23 831 817 €	18 035 794 €	11 541 936 €	3 990 165 €	3 886 447 €
	Oysters Adult	3 790 968 €	5 587 854 €	5 245 359 €	23 571 950 €	28 148 779 €
Hong Kong	Edulis S-A	1 165 042 €	1 174 424 €	1 717 096 €	2 111 967 €	2 656 338 €
	Oysters Adult	2 667 047	1 856 870 €	671 712 €	1 200 294 €	809 637 €
Japan	Edulis S-A	21 140 €	38 800 €	34 075 €	92 188 €	83 422 €
	Oysters Adult	91 485 €	65 380 €	n.d.	n.d.	n.d.
South Korea	Edulis S-A	2 670 €	14 913 €	92 954 €	86 700 €	192 586 €
	Oysters Adult	n.d.	15 389 €	n.d.	n.d.	n.d.
Netherlands	Edulis S-A	642 050 €	461 205 €	317 064 €	273 459 €	203 578 €
	Oysters Adult	263 923 €	765 799 €	192 424 €	731 519 €	1 316 200 €
Singapore	Edulis S-A	1 381 €	96 789 €	434 080 €	752 647 €	881 151 €
	Oysters Adult	682 249 €	461 770 €	36 172 €	413 €	88 315 €
Spain	Edulis S-A	141 761 €	47 256 €	54 923 €	368 825 €	593 667 €
	Oysters Adult	871 896 €	441 148 €	195 587 €	n.d.	175 729 €
UK	Edulis S-A	443 678 €	428 836 €	251 420 €	55 049 €	31 353 €
	Oysters Adult	248 777 €	1 030 509 €	803 138 €	1 042 932 €	1 929 692 €
Others	Edulis S-A	242 734 €	330 775 €	358 477 €	836 030 €	1 793 396 €
	Oysters Adult	739 979 €	605 293 €	104 462 €	181 710 €	565 211 €
Total		**41 370 870 €**	**35 589 000 €**	**24 748 560 €**	**38 983 504 €**	**45 519 801 €**
Subtotal Edulis Semi-Adult		27 736 533 €	21 556 195 €	16 227 042 €	11 041 294 €	12 386 214 €
Subtotal Oysters Adult		13 634 337 €	14 032 805 €	8 521 518 €	27 942 210 €	33 133 587 €

Appendix 33: Ireland Exports. Source: EUMOFA database

Apparent Consumption - UK & Ireland (kg)

Species	2018	2019	2020	2021	2022
Oysters Adult	7 835 167	7 521 050	5 399 595	3 004 991	2 626 401

Apparent Consumption – UK & Ireland (€)

Species	2018	2019	2020	2021	2022
Oysters Adult	30 736 940 €	27 859 536 €	20 020 189 €	11 307 817 €	11 822 717 €

Appendix 34: UK & Ireland Apparent Consumption. Source: FAO Fishstat, EUMOFA database. From 2020 onwards, Ireland-only data, since it was impossible to estimate UK consumption after Brexit

Production – Central Europe (kg)

Species	2018	2019	2020	2021	2022
Edulis B2C	319 000	221 140	145 000	221 615	193 000
Gigas B2C	2 232 000	2 323 360	2 206 000	1 847 700	3 274 000
Total	**2 551 000**	**2 544 500**	**2 351 000**	**2 069 315**	**3 467 000**

Production – Central Europe (€)

Species	2018	2019	2020	2021	2022
Edulis B2C	3 410 748 €	1 602 602 €	963 714 €	1 922 472 €	1 370 686 €
Gigas B2C	10 336 000 €	5 141 596 €	7 761 121 €	4 179 234 €	7 765 928 €
Total	**13 746 748 €**	**6 744 198 €**	**8 724 835 €**	**6 101 706 €**	**9 136 614 €**

Appendix 35: Central Europe Production. Source: EUMOFA database. This only contains Dutch production because there is no data available for Belgium and German production figures present little variation over the last years

Imports - Netherlands (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Belgium	Edulis S-A	5 872	3 125	1 720	2 905	66 536
	Oysters Adult	3 443	26 845	13 372	6 878	13 861
Denmark	Edulis S-A	8 301	1 409	5 585	566	24
	Oysters Adult	3 271	3 816	377	325	3 862
France	Edulis S-A	5 870	5 937	7 307	6 743	20 915
	Oysters Adult	845 047	998 740	913 400	1 255 964	1 768 730
Ireland	Edulis S-A	53 558	11 265	21 553	80 478	63 934
	Oysters Adult	158 669	79 072	150 600	67 345	67 996
Italy	Edulis S-A	2 573	n.d.	n.d.	n.d.	74
	Oysters Adult	19 156	20 674	20 488	20 807	4 438
Portugal	Edulis S-A	n.d.	n.d.	n.d.	n.d.	11
	Oysters Adult	8 402	11 522	12 506	58 923	25 544
UK	Edulis S-A	398	2	n.d.	5	95
	Oysters Adult	161 683	111 985	130 910	92	3 924
Others	Edulis S-A	167	258	80	241	1 462
	Oysters Adult	6 467	8 746	15 980	39 203	83 678
Total		**1 282 877**	**1 283 396**	**1 293 878**	**1 540 475**	**2 125 084**
Subtotal Edulis Semi-Adult		76 739	21 996	36 245	90 938	153 051
Subtotal Oysters Adult		1 206 138	1 261 400	1 257 633	1 449 537	1 972 033

Imports - Netherlands (€)

Top Markets	Species	2018	2019	2020	2021	2022
Belgium	Edulis S-A	64 141 €	50 665 €	56 005 €	39 343 €	867 122 €
	Oysters Adult	35 477 €	127 590 €	97 765 €	79 618 €	92 266 €
Denmark	Edulis S-A	272 492 €	58 454 €	99 436 €	34 183 €	306 €
	Oysters Adult	31 041 €	13 856 €	3 242 €	3 044 €	25 726 €
France	Edulis S-A	83 589 €	158 732 €	281 713 €	355 086 €	242 935 €
	Oysters Adult	5 658 168 €	7 411 185 €	6 915 702 €	9 754 973 €	13 517 546 €
Ireland	Edulis S-A	1 521 792 €	2 060 206 €	2 481 247 €	2 357 666 €	186 521 €
	Oysters Adult	889 625 €	408 412 €	756 005 €	432 350 €	418 525 €
Italy	Edulis S-A	28 904 €	n.d.	n.d.	n.d.	971 €
	Oysters Adult	172 966 €	204 631 €	171 235 €	197 348 €	29 549 €
Portugal	Edulis S-A	n.d.	n.d.	n.d.	n.d.	161 €
	Oysters Adult	46 448 €	75 962 €	61 776 €	246 439 €	158 775 €
UK	Edulis S-A	18 852 €	317 €	n.d.	4 087 €	1 284 €
	Oysters Adult	858 406 €	661 408 €	629 472 €	818 €	26 113 €
Others	Edulis S-A	23 157 €	20 082 €	795 €	2 456 €	19 335 €
	Oysters Adult	52 588 €	68 122 €	126 425 €	305 646 €	559 485 €
Total		**9 757 646 €**	**11 319 622 €**	**11 680 818 €**	**13 813 057 €**	**16 146 620 €**
Subtotal Edulis Semi-Adult		2 012 927 €	2 348 456 €	2 919 196 €	2 792 821 €	1 318 635 €
Subtotal Oysters Adult		7 744 719 €	8 971 166 €	8 761 622 €	11 020 236 €	14 827 985 €

Appendix 36: Netherlands Imports. Source: EUMOFA database

Exports - Netherlands (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Belgium	Edulis S-A	152 678	277 388	285 007	272 612	363 812
	Oysters Adult	2 766 129	2 416 553	556 573	711 676	845 489
Denmark	Edulis S-A	39 686	38 462	38 574	32 615	57 055
	Oysters Adult	29 820	7 763	10 339	11 306	14 205
France	Edulis S-A	38 373	32 070	75 278	75 770	539 989
	Oysters Adult	175 487	66 577	19 642	31 332	4 880
Germany	Edulis S-A	95 070	144 683	153 768	202 252	378 302
	Oysters Adult	154 722	187 874	132 010	192 661	197 074
Italy	Edulis S-A	293 363	329 928	196 016	443 658	234 501
	Oysters Adult	246 639	271 605	59 816	95 071	105 892
Spain	Edulis S-A	40 365	61 002	20 529	41 360	96 572
	Oysters Adult	120 625	58 176	22 056	34 349	25 514
Sweden	Edulis S-A	10 321	n.d.	582	4 593	11 017
	Oysters Adult	78 605	92 645	69 817	74 818	69 845
Others	Edulis S-A	105 780	217 135	210 314	272 799	218 227
	Oysters Adult	200 467	229 154	126 033	173 069	192 371
Total		**4 548 130**	**4 431 015**	**1 976 354**	**2 669 941**	**3 354 745**
Subtotal Edulis Semi-Adult		775 636	1 100 668	980 068	1 345 659	1 899 475
Subtotal Oysters Adult		3 772 494	3 330 347	996 286	1 324 282	1 455 270

Exports - Netherlands (€)

Top Markets	Species	2018	2019	2020	2021	2022
Belgium	Edulis S-A	1 083 374 €	1 748 543 €	1 716 984 €	1 687 583 €	2 393 366 €
	Oysters Adult	8 952 524 €	9 123 141 €	4 404 650 €	6 276 254 €	6 219 061 €
Denmark	Edulis S-A	202 810 €	207 502 €	237 781 €	200 365 €	481 727 €
	Oysters Adult	244 230 €	55 320 €	82 366 €	123 416 €	162 076 €
France	Edulis S-A	229 684 €	160 994 €	312 262 €	301 011 €	1 235 596 €
	Oysters Adult	606 932 €	249 695 €	169 891 €	209 013 €	51 368 €
Germany	Edulis S-A	636 413 €	932 724 €	983 383 €	1 448 493 €	2 826 982 €
	Oysters Adult	1 030 379 €	1 177 379 €	1 147 629 €	1 815 279 €	2 232 078 €
Italy	Edulis S-A	1 140 770 €	1 123 194 €	651 832 €	1 583 264 €	995 867 €
	Oysters Adult	896 152 €	1 051 396 €	387 193 €	645 967 €	710 242 €
Spain	Edulis S-A	521 015 €	646 438 €	258 061 €	482 254 €	762 621 €
	Oysters Adult	581 178 €	421 713 €	173 909 €	219 162 €	92 673 €
Sweden	Edulis S-A	104 531 €	n.d.	2 837 €	36 008 €	106 374 €
	Oysters Adult	804 836 €	930 298 €	691 107 €	774 575 €	786 738 €
Others	Edulis S-A	722 712 €	1 319 913 €	1 241 320 €	1 980 206 €	2 021 185 €
	Oysters Adult	1 686 362 €	1 539 827 €	1 098 983 €	1 710 554 €	1 960 849 €
Total		**19 443 902 €**	**20 688 077 €**	**13 560 188 €**	**19 493 404 €**	**23 038 803 €**
Subtotal Edulis Semi-Adult		4 641 309 €	6 139 308 €	5 404 460 €	7 719 184 €	10 823 718 €
Subtotal Oysters Adult		14 802 593 €	14 548 769 €	8 155 728 €	11 774 220 €	12 215 085 €

Appendix 37: Netherlands Exports. Source: EUMOFA database

Imports - Belgium (kg)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	18 124	31 105	18 218	22 809	28 849
	Oysters Adult	389 688	391 041	279 776	315 191	363 927
Netherlands	Edulis S-A	102 804	104 217	107 981	125 159	179 772
	Oysters Adult	809 405	1 319 219	1 735 890	1 643 823	1 227 550
Others	Edulis S-A	1 659	0	380	510	0
	Oysters Adult	2 476	2 313	1 508	603	1 244
Total		**1 324 156**	**1 847 895**	**2 143 753**	**2 108 095**	**1 801 342**
Subtotal Edulis Semi-Adult		122 587	135 322	126 579	148 478	208 621
Subtotal Oysters Adult		1 201 569	1 712 573	2 017 174	1 959 617	1 592 721

Imports - Belgium (€)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	123 602 €	229 973 €	259 502 €	306 308 €	307 303 €
	Oysters Adult	3 616 451 €	3 593 648 €	1 962 945 €	2 431 391 €	3 224 426 €
Netherlands	Edulis S-A	647 664 €	644 218 €	649 182 €	779 517 €	1 046 289 €
	Oysters Adult	3 797 071 €	5 998 569 €	8 742 956 €	8 666 044 €	8 282 758 €
Others	Edulis S-A	20 182 €	0 €	10 221 €	7 348 €	0 €
	Oysters Adult	34 889	33 555	20 752	17 327	42 362
Total		**8 239 859 €**	**10 499 963 €**	**11 645 558 €**	**12 207 935 €**	**12 903 138 €**
Subtotal Edulis Semi-Adult		791 448 €	874 191 €	918 905 €	1 093 173 €	1 353 592 €
Subtotal Oysters Adult		7 448 411 €	9 625 772 €	10 726 653 €	11 114 762 €	11 549 546 €

Appendix 38: Belgium Imports. Source: EUMOFA database

Exports - Belgium (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Luxembourg	Edulis S-A	4 225	221	146	34	15
	Oysters Adult	20 981	14 012	12 263	12 854	11 823
Netherlands	Edulis S-A	184	2 354	521	562	147
	Oysters Adult	13 610	17 179	11 253	9 448	15 299
Others	Edulis S-A	4 468	3 870	2	149	913
	Oysters Adult	6 253	418 296	2 472	11 015	1 966
Total		**49 721**	**455 932**	**26 657**	**34 062**	**30 163**
Subtotal Edulis Semi-Adult		8 877	6 445	669	745	1 075
Subtotal Oysters Adult		40 844	449 487	25 988	33 317	29 088

Exports - Belgium (€)

Top Markets	Species	2018	2019	2020	2021	2022
Luxembourg	Edulis S-A	41 540 €	1 376 €	795 €	164 €	204 €
	Oysters Adult	143 138 €	119 955 €	80 906 €	78 093 €	82 107 €
Netherlands	Edulis S-A	1 242 €	15 432 €	6 993 €	8 260 €	874 €
	Oysters Adult	98 403 €	135 403 €	104 288 €	84 600 €	143 249 €
Others	Edulis S-A	21 313 €	23 017 €	26 €	1 893 €	8 391 €
	Oysters Adult	38 325 €	52 561 €	21 317 €	42 951 €	18 331 €
Total		**343 961 €**	**347 744 €**	**214 325 €**	**215 961 €**	**253 156 €**
Subtotal Edulis Semi-Adult		64 095 €	39 825 €	7 814 €	10 317 €	9 469 €
Subtotal Oysters Adult		279 866 €	307 919 €	206 511 €	205 644 €	243 687 €

Appendix 39: Belgium Exports. Source: EUMOFA database

Imports - Germany (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Denmark	Edulis S-A	691	979	1 058	583	540
	Oysters Adult	3 628	6 752	12 557	3 452	2 772
France	Edulis S-A	63 432	58 443	55 118	52 881	85 889
	Oysters Adult	293 700	381 830	255 283	265 674	272 542
Ireland	Edulis S-A	7 990	13 717	11 288	11 000	13 075
	Oysters Adult	68 980	45 741	20 600	20 300	930
Italy	Edulis S-A	n.d.	58	1 934	447	213
	Oysters Adult	2 962	3 607	3 132	4 404	3 134
Netherlands	Edulis S-A	93 372	93 083	92 225	135 559	185 158
	Oysters Adult	155 737	160 381	183 022	244 038	284 965
Spain	Edulis S-A	7	n.d.	n.d.	12	n.d.
	Oysters Adult	n.d.	2	15 935	18 040	43 889
UK	Edulis S-A	60	307	n.d.	n.d.	20
	Oysters Adult	11 554	13 305	1 407	n.d.	170
Others	Edulis S-A	0	188	55	987	804
	Oysters Adult	3 540	294	472	639	212
Total		**705 653**	**778 687**	**654 086**	**758 016**	**894 313**
Subtotal Edulis Semi-Adult		165 552	166 775	161 678	201 469	285 699
Subtotal Oysters Adult		540 101	611 912	492 408	556 547	608 614

Imports - Germany (€)

Top Markets	Species	2018	2019	2020	2021	2022
Denmark	Edulis S-A	5 438 €	5 604 €	4 361 €	2 695 €	7 528 €
	Oysters Adult	52 694 €	78 802 €	293 828 €	54 362 €	24 603 €
France	Edulis S-A	675 021 €	661 663 €	599 935 €	529 531 €	948 174 €
	Oysters Adult	2 346 005 €	3 058 124 €	2 243 092 €	2 328 147 €	2 906 410 €
Ireland	Edulis S-A	70 377 €	115 633 €	87 960 €	87 051 €	111 930 €
	Oysters Adult	283 020 €	197 059 €	67 055 €	64 858 €	7 599 €
Italy	Edulis S-A	n.d.	954 €	10 430 €	2 749 €	1 512 €
	Oysters Adult	20 093 €	24 597 €	19 283 €	24 423 €	23 670 €
Netherlands	Edulis S-A	458 202 €	472 675 €	575 100 €	806 367 €	1 236 553 €
	Oysters Adult	964 227 €	1 136 510 €	1 214 501 €	1 960 256 €	2 419 168 €
Spain	Edulis S-A	330 €	n.d.	n.d.	51 €	n.d.
	Oysters Adult	n.d.	43 €	73 359 €	95 772 €	226 206 €
UK	Edulis S-A	975 €	2 399 €	n.d.	n.d.	2 155 €
	Oysters Adult	74 691 €	84 620 €	9 044 €	n.d.	6 343 €
Others	Edulis S-A	0 €	2 739 €	382 €	2 208 €	4 743 €
	Oysters Adult	43 340 €	2 820 €	4 887 €	6 628 €	3 357 €
Total		**4 994 413 €**	**5 844 242 €**	**5 203 217 €**	**5 965 098 €**	**7 929 951 €**
Subtotal Edulis Semi-Adult		1 210 343 €	1 261 667 €	1 278 168 €	1 430 652 €	2 312 595 €
Subtotal Oysters Adult		3 784 070 €	4 582 575 €	3 925 049 €	4 534 446 €	5 617 356 €

Appendix 40: Germany Imports. Source: EUMOFA database

Exports - Germany (kg)

Top Markets	Species	2018	2019	2020	2021	2022
German exports constitute sales to Eastern Europe, leading us to conclude they are an intermediary between producers in the West and few consumers in the East. Top markets: Czech Republic, Poland, Austria (in this order)						
Total		**65 156**	**63 990**	**31 438**	**30 070**	**89 627**
Subtotal Edulis Semi-Adult		15 363	11 065	7 625	5 568	14 424
Subtotal Oysters Adult		49 793	52 925	23 813	24 502	75 203

Exports - Germany (€)

Top Markets	Species	2018	2019	2020	2021	2022
German exports constitute sales to Eastern Europe, leading us to conclude they are an intermediary between producers in the West and few consumers in the East. Top markets: Czech Republic, Poland, Austria (in this order)						
Total		**824 463 €**	**839 189 €**	**482 808 €**	**498 692 €**	**1 073 115 €**
	Subtotal Edulis Semi-Adult	220 907 €	222 167 €	159 198 €	126 772 €	230 610 €
	Subtotal Oysters Adult	603 556 €	617 022 €	323 610 €	371 920 €	842 505 €

Appendix 41: Germany Exports. Source: EUMOFA database

Apparent Consumption - C. Europe (kg)

Species	2018	2019	2020	2021	2022
Oysters Adult	1 715 677	2 377 626	5 122 128	4 702 915	6 130 807

Apparent Consumption (€)

Species	2018	2019	2020	2021	2022
Oysters Adult	17 647 933 €	15 093 145 €	23 846 287 €	20 869 381 €	28 280 245 €

Appendix 42: Central Europe Apparent Consumption. Source: EUMOFA database

Production - Portugal (kg)

Species	2018	2019	2020	2021	2022
Edulis B2C	n.d.	20 050	5 660	990	58 220
Gigas B2C	1 096 000	1 377 590	1 136 160	1 514 450	1 692 870
Total	**1 096 000**	**1 397 640**	**1 141 820**	**1 515 440**	**1 751 090**

Production - Portugal (€)

Species	2018	2019	2020	2021	2022
Edulis B2C	n.d.	135 338 €	24 859 €	5 603 €	356 840 €
Gigas B2C	5 748 000 €	4 305 632 €	4 730 982 €	7 035 932 €	7 241 196 €
Total	**5 748 000 €**	**4 440 970 €**	**4 755 841 €**	**7 041 535 €**	**7 598 036 €**

Appendix 43: Portugal Production. Source: EUMOFA database

Imports - Portugal (kg)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	n.d.	n.d.	79 231	97 413	86 943
	Oysters Adult	21 716	29 786	18 820	19 678	20 985
Spain	Edulis S-A	3 525	590	13 090	2 220	11 074
	Oysters Adult	12 010	4 281	2 574	10 847	4 205
UK	Edulis S-A	n.d.	n.d.	836	n.d.	n.d.
	Oysters Adult	4 173	2 111	594	n.d.	n.d.
Others	Edulis S-A	0	0	0	0	0
	Oysters Adult	414	273	495	822	691
Total		**41 838**	**37 041**	**115 640**	**130 980**	**123 898**
Subtotal Edulis Semi-Adult		3 525	590	93 157	99 633	98 017
Subtotal Oysters Adult		38 313	36 451	22 483	31 347	25 881

Imports - Portugal (€)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	n.d.	n.d.	573 144	614 638	778 045 €
	Oysters Adult	101 091 €	108 225 €	60 372 €	58 058 €	77 031 €
Spain	Edulis S-A	5 370 €	2 053 €	32 736 €	14 580 €	36 437 €
	Oysters Adult	45 216 €	13 995 €	7 870 €	46 829 €	57 420 €
UK	Edulis S-A	n.d.	n.d.	3 640	n.d.	n.d.
	Oysters Adult	10 531 €	4 773 €	234 €	n.d.	n.d.
Others	Edulis S-A	0 €	0 €	0 €	0 €	0 €
	Oysters Adult	4 389 €	3 973 €	3 932 €	5 541 €	4 304 €
Total		**166 597 €**	**133 019 €**	**681 928 €**	**739 646 €**	**953 237 €**
Subtotal Edulis Semi-Adult		5 370 €	2 053 €	609 520 €	629 218 €	814 482 €
Subtotal Oysters Adult		161 227 €	130 966 €	72 408 €	110 428 €	138 755 €

Appendix 44: Portugal Imports. Source: EUMOFA database

Exports - Portugal (kg)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	246 381	387 067	378 541	586 900	469 488
	Oysters Adult	540 826	865 708	520 654	911 645	1 052 561
Ireland	Edulis S-A	n.d.	n.d.	n.d.	n.d.	n.d.
	Oysters Adult	132 987	113 663	161 750	100 128	56 961
Italy	Edulis S-A	n.d.	31 719	29 377	n.d.	n.d.
	Oysters Adult	n.d.	n.d.	n.d.	3	n.d.
Spain	Edulis S-A	32 557	19 653	678	65	14 289
	Oysters Adult	12 431	117 913	289 199	54 224	48 846
Others	Edulis S-A	4	0	0	657	5
	Oysters Adult	7 688	6 880	42 224	1 554	7 093
Total		**972 874**	**1 542 603**	**1 422 423**	**1 655 176**	**1 649 243**
Subtotal Edulis Semi-Adult		278 942	438 439	408 596	587 622	483 782
Subtotal Oysters Adult		693 932	1 104 164	1 013 827	1 067 554	1 165 461

Exports - Portugal (€)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	874 897 €	1 189 750 €	1 001 630 €	1 911 445 €	1 789 816 €
	Oysters Adult	1 402 842 €	2 412 948 €	1 662 256 €	3 192 530 €	4 068 123 €
Ireland	Edulis S-A	n.d.	n.d.	n.d.	n.d.	n.d.
	Oysters Adult	481 871 €	312 948 €	479 242 €	299 213 €	170 029 €
Italy	Edulis S-A	n.d.	89 934 €	95 258 €	n.d.	n.d.
	Oysters Adult	n.d.	n.d.	n.d.	41 €	n.d.
Spain	Edulis S-A	96 952 €	26 289 €	2 687 €	310 €	44 093 €
	Oysters Adult	27 853 €	284 124 €	899 988 €	170 481 €	173 283 €
Others	Edulis S-A	70 €	0 €	0 €	2 437 €	112 €
	Oysters Adult	23 365 €	20 075 €	163 811 €	3 918 €	22 676 €
Total		**2 907 850 €**	**4 336 068 €**	**4 304 872 €**	**5 580 375 €**	**6 268 132 €**
Subtotal Edulis Semi-Adult		971 919 €	1 305 973 €	1 099 575 €	1 914 192 €	1 834 021 €
Subtotal Oysters Adult		1 935 931 €	3 030 095 €	3 205 297 €	3 666 183 €	4 434 111 €

Appendix 45: Portugal Exports. Source: EUMOFA database

Apparent Consumption - Portugal (kg)

Species	2018	2019	2020	2021	2022
Oysters Adult	440 381	329 927	150 476	479 233	611 510

Apparent Consumption - Portugal (€)

Species	2018	2019	2020	2021	2022
Oysters Adult	3 973 296 €	1 541 841 €	1 622 952 €	3 485 780 €	3 302 680 €

Appendix 46: Portugal Apparent Consumption. Source: EUMOFA database

$$\mathrm{W} = \mathrm{a} * L^{b} \iff W = 0.127 * L^{3.148} \iff L = \sqrt[3.148]{W/0.127}$$

Appendix 47: Shell-Length Relationship

Stage		Seed Introduction							B2B	B2C
Life Time	Months	0	3	6	9	12	15	18	21	24

Oyster Length	mm	10	16	20	25	31	39	49	62	77
Mesh Size	mm	4	6	9	12	15	20	25	25	
Weight	kg	0,0003	0,0006	0,0011	0,0023	0,0046	0,0095	0,0193	0,0393	0,0800
Oysters per kg	#	3 700	1 817	892	438	215	106	52	25	13
Cage Density	kg/ Level	1	1	2	2	3	4	5	5	

Appendix 48: *O. edulis* Production Cycle

Year		**2025**	**2023**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**
Seed Quantity Introduced	**Million Seeds**	**3**	**10**	**30**	**50**	**70**	**94.5**	**94.5**	**94.5**	**94.5**	**94.5**
Open Sea Farm occupied area	%	1%	5%	16%	37%	58%	80%	99%	99%	99%	99%
Seed Quantity	kg	811	2 703	8 108	13 514	18 919	25 541	25 541	25 541	25 541	25 541

Appendix 49: Production Ramp-up

Month	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Seasonality	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%

Appendix 50: Seasonality Table

Year		2026	2027	2028	2029	2030	2031	2032	2033	2034
Availability	Million Oysters	0.180	1.140	3.600	8.400	13.200	18.270	22.680	22.680	22.680
	kg	1 705	10 796	34 092	79 549	125 006	173 019	214 782	214 782	214 782
Proportion Sold	**%**	**95%**	**90%**	**85%**	**80%**	**80%**	**80%**	**80%**	**80%**	**80%**
Total Sold to B2B	Million Oysters	0.171	1.026	3.060	6.720	10.560	14.592	18.144	18.144	18.144
	kg	1 619	9 716	28 979	63 639	100 004	138 415	171 826	171 826	171 826
France	%	100%	70%	70%	75%	75%	75%	75%	75%	75%
	kg	1 619	6 801	20 285	47 729	75 003	103 811	128 869	128 869	128 869
C. Europe	%	0%	30%	20%	15%	15%	15%	15%	15%	15%
	kg	0	2 915	5 796	9 546	15 001	20 762	25 774	25 774	25 774
UK & Ireland	%	0%	0%	10%	10%	10%	10%	10%	10%	10%
	kg	0	0	2 898	6 364	10 000	13 842	17 092	17 183	17 183

Appendix 51: B2B Sales Strategy

Year		2027	2028	2029	2030	2031	2031	2033	2034
Total Sold	Million Oysters	0.095	0.434	1.395	2.400	3.400	4.315	4.536	4.536
	kg	7 560	34 680	111 600	192 000	272 040	345 240	362 880	362 880
Portugal	**%**	**50%**	**35%**	**20%**	**10%**	**6%**	**5%**	**5%**	**5%**
	kg	3 780	12 138	22 320	19 200	16 322	17 262	18 144	18 144
Distributors - Branded	%	100%	100%	100%	100%	100%	100%	100%	100%
Mediterranean	**%**	**50%**	**40%**	**30%**	**25%**	**25%**	**20%**	**20%**	**20%**
	kg	3 780	13 872	33 480	48 000	68 010	69 048	72 576	72 576
Depurators - Unbranded	%	70%	50%	40%	40%	40%	40%	40%	40%
Distributors - Branded	%	30%	50%	60%	60%	60%	60%	60%	60%
Central Europe	**%**	**0%**	**0%**	**20%**	**25%**	**25%**	**25%**	**25%**	**25%**
	kg	0	0	22 320	48 000	68 010	86 310	90 720	90 720
Depurators - Unbranded	%	0%	0%	100%	50%	30%	30%	30%	30%
Distributors - Branded	%	0%	0%	0%	50%	70%	70%	70%	70%
France	**%**	**0%**	**25%**	**30%**	**30%**	**30%**	**35%**	**35%**	**35%**
	kg	0	8 670	33 480	57 600	81 612	120 834	127 008	127 008
Distributors - Branded	%	0%	100%	100%	100%	100%	100%	100%	100%
UK & Ireland	**%**	**0%**	**0%**	**0%**	**10%**	**14%**	**15%**	**15%**	**15%**
	kg	0	0	0	19 200	38 035	51 786	54 432	54 432
HORECA	%	0%	0%	0%	70%	70%	70%	70%	70%
D2C	%	0%	0%	0%	30%	30%	30%	30%	30%

Appendix 52: B2C Sales Strategy

Seed Price	0.015 €/Seed
General Labor Salary	24 634 €/Year
Boat Fuel	1.70 €/Liter
Average Fuel Use	20 Liters/Hour
Total Boat Running Hours	10% of Production Labour Hours
Bulk Packaging	0.10€/Kilogram
Retail Packaging	0.40 €/Kilogram
B2B Transportation	0.50 €/Kilogram
B2C Transportation	1.00 €/Kilogram

Appendix 53: COGS Overview

$$General\ Labor\ Hours = 4631.4 * \ln\ (Number\ of\ Oysters\ on\ Farm) - 55129$$

Appendix 54: Direct Labour Regression

Year		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Labor Hours - Production	h	13 944	19 842	24 965	27 597	29 265	30 660	30 919	30 919	30 919	30 919
Labor hours per employee	h/ year	1 920	1 920	1 920	1 920	1 920	1 920	1 920	1 920	1 920	1 920
Employees - Production	#	8	11	15	15	16	16	17	17	17	17
Employees - Post Harvesting	#	0	1	2	2	2	2	2	2	2	2
TOTAL EMPLOYEES	**#**	**8**	**12**	**16**	**17**	**18**	**18**	**19**	**19**	**19**	**19**

Appendix 55: Number of employees required for Direct Labour

Utilities	7.50% of Production Costs
Marketing and Advertising	10% of Revenues
Marketing and Advertising Ceiling	300 000 €
Management Team Salary	3 000 €/Year
TUPEM Tax	1 220 €/Year
TAQ Tax	200 €
Current Rent	48 000 €/Year
Expansion Rent	72 000 €/Year

Appendix 56: Operating Expenses Overview

$$TUPEM = A + B + C <=> TUPEM = €0.002 * a + €500 * b1 * b2 + €0.0001 * c$$

Appendix 57: TUPEM Tax

$$TAQ = TB * FDE * FRE <=> TAQ = €200 * FDE * FRE$$

Appendix 58: TAQ Tax

Equipment	Unitary Price	Useful Life	Capacity
Cage 4mm mesh	120 €	3	-
Cage 6mm mesh	115 €	3	-
Cage 9mm mesh	110 €	3	-
Cage 12mm mesh	105 €	3	-
Cage 15mm mesh	100 €	3	-
Cage 20mm mesh	95 €	3	-
Cage 25mm mesh	90 €	3	-
Long-Line Structure	2 000 €	10	-
Power Washer	70 000 €	5	20 Cages/Hour
Boat 12 meters	150 000 €	15	-
Boat 22 meters	1 500 000 €	20	-
Sorting Machine	100 000 €	10	1 500 000 Oysters/Hour
Washing Machine	50 000 €	5	1 200 Kilograms/Hour
Depurator	750 000 €	15	10 000 Kilograms/Day
Bulk Bagging Machine	150 000 €	10	748 800 Kilograms/Year
Retail Bagging Machine	150 000 €	10	599 040 Kilograms/Year

Appendix 59: Equipments Overview

Year		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Europe Inflation Rate	%	2,37%	2,14%	2,06%	2,04%	2,04%	2,00%	2,00%	2,00%	2,00%	2,00%
Portugal Inflation Rate	%	2,10%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%
Euribor 12m	%	2,10%	1,96%	2,07%	2,11%	2,14%	2,19%	2,23%	2,27%	2,31%	2,34%

Appendix 60: Economic Factors

		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
OpEx Grants	% General Labor Cost	30%	30%	30%	30%	30%	0%	0%	0%	0%	0%
CapEx Grants	% Capex	50%	50%	50%	50%	50%	0%	0%	0%	0%	0%
Loan Amount Stand-alone BU	**000 €**	**2 000**	**0**	**0**	**0**	**0**	**0**	**1 000**	**0**	**0**	**0**
Loan Amount Incremental BU	**000 €**	**1 000**						**1 000**			
Spread	%	3,0%						2,0%			
Upfront Fee	%	1,5%						1,5%			
Maturity	Years	7						5			
Grace Period	Years	2						0			
Equity Injection	**000 €**	**50 000**									

Appendix 61: Financing Conditions

$$WACC = \frac{E}{V} * Re + \frac{D}{V} * Rd * (1 - t)$$

Appendix 62: WACC Formula

Year		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
General Labor Synergy	€	-121 938	-124 377	-126 865	-97 051	-98 992	-100 972	-102 992	-105 052	-107 153	-109 296
Employees - Production	**#**	**-4**	**-3**	**-2**	**-1**	**-1**	**-1**	**-1**	**-1**	**-1**	**-1**
Incremental Total		4	8	12	14	15	15	16	16	16	16
Employees - Post Harvesting	**#**	**0**	**-1**	**-2**	**-2**	**-2**	**-2**	**-2**	**-2**	**-2**	**-2**
Incremental Total		0	0	0	0	0	0	0	0	0	0
Incremental Total Employees	#	4	8	12	14	15	15	16	16	16	16
Boat Fuel Synergy	€	-6 188	-6 312	-6 406	-6 471	-6 503	-6 535	-6 568	-6 601	-6 634	-6 667
Hour Reduction	**h**	**-182,0**	**-182,00**	**-182,00**	**-182,00**	**-182,00**	**-182,00**	**-182,00**	**-182,00**	**-182,00**	**-182,00**
Management Team Synergy	€	-155 925	-159 044	-162 224	-165 469	-168 778	-172 154	-175 597	-179 109	-182 691	-186 345
Employees Reduction	**#**	**-3**	**-3**	**-3**	**-3**	**-3**	**-3**	**-3**	**-3**	**-3**	**-3**
Incremental Total Employees	#	0	0	0	0	0	0	0	0	0	0
TUPEM Tax Synergy	€	-1 220	-1 220	-1 220	-1 220	-1 220	-1 220	-1 220	-1 220	-1 220	-1 220
TAQ Tax Synergy	€	-200	0	0	0	0	0	0	0	0	0
Rent Synergy	€	-48 000	-48 000	-48 000	-48 000	-48 000	-48 000	-48 000	-48 000	-48 000	-48 000

Appendix 63: Operational Synergies

Year		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Oysters Sorted	Million Oysters	2	15	57	155	313	534	810	1 093	1 377	1 661
Cages Cleaned	#	81	735	2 718	7 341	13 809	20 382	27 042	30 426	30 468	30 468
Cages 4mm	#	12	36	102	171	237	321	321	321	321	321
Surviving Seeds	Million Oysters	1	5	15	27	39	53	57	57	57	57
Cages 6mm	#	15	42	126	207	291	393	393	393	393	393
Cages 9mm	#	15	45	129	213	297	399	399	399	399	399
Cages 12mm	#	27	87	258	429	600	810	810	810	810	810
Cages 15mm	#	0	36	117	351	582	816	1 101	1 101	1 101	1 101
Cages 20mm	#	0	54	180	534	888	1 245	1 680	1 680	1 680	1 680
Cages 25mm	#	0	87	291	870	1 449	2 028	2 721	2 721	2 721	2 721
Surviving Oysters	Million Oysters	0	0.180	1.140	3.600	8.400	13.200	18.270	22.680	22.680	22.680
Oysters Sold to B2B	Million Oysters	0	0.171	1.026	3.060	6.720	10.560	14.616	18.144	18.144	18.144
Growing Oysters	Million Oysters	0	0.009	0.114	0.540	1.680	2.640	3.654	4.536	4.536	4.536
Cages 25mm	#	0	3	6	27	84	129	177	219	219	219
Oysters Sold to B2C	Million Oysters	0	0	0.095	0.434	1.395	2.400	3.396	4.296	4.512	4.512
Total Cages In Use	#	69	390	1 209	2 802	4 428	6 141	7 575	7 617	7 617	7 617
Long-Lines Needed	#	0.29	1.63	5.04	11.68	18.45	25.59	31.74	31.91	31.91	31.91

Appendix 64: Aggregated annual Production Schedule

Year		2026	2026	2026	2026	2026	2026
Month		7	8	9	10	11	12
Seeds Introduced	#	833 333	833 333	833 333	833 333	833 333	833 333
Oysters Sorted	**#**	**8 100 000**	**9 200 000**	**10 300 000**	**11 900 000**	**13 500 000**	**15 100 000**
Cages Cleaned	**#**	**70**	**70**	**70**	**109**	**109**	**109**
Seeds	#	833 333	833 333	833 333	833 333	833 333	833 333
Oyster per Kg	#	3 700	3 700	3 700	3 700	3 700	3 700
Kg per Level	#	1	1	1	1	1	1
Levels per Cage	#	20	20	20	20	20	20
New Cages Needed	#	12	12	12	12	12	12
Cages 4mm	**#**	**36**	**36**	**36**	**36**	**36**	**36**
Surviving Seeds	#	500 000	500 000	500 000	500 000	500 000	500 000
Survival Rate	%	60%	60%	60%	60%	60%	60%

Oysters with 3 months	#	500 000	500 000	500 000	500 000	500 000	500 000
New Cages Needed	#	14	14	14	14	14	14
Cages 6mm in Use	**#**	**42**	**42**	**42**	**42**	**42**	**42**
Oysters with 6 months	#	500 000	500 000	500 000	500 000	500 000	500 000
New Cages Needed	#	15	15	15	15	15	15
Cages 9mm in Use	**#**	**25**	**35**	**45**	**45**	**45**	**45**
Oysters with 9 months	#	150 000	150 000	150 000	500 000	500 000	500 000
New Cages Needed	#	9	9	9	29	29	29
Cages 12mm in Use	**#**	**27**	**27**	**27**	**47**	**67**	**87**
Oysters with 12 months	#	150 000	150 000	150 000	150 000	150 000	150 000
New Cages Needed	#	12	12	12	12	12	12
Cages 15mm in Use	**#**	**36**	**36**	**36**	**36**	**36**	**36**
Oysters with 15 months	#	150 000	150 000	150 000	150 000	150 000	150 000
New Cages Needed	#	18	18	18	18	18	18
Cages 20mm in Use	**#**	**54**	**54**	**54**	**54**	**54**	**54**
Oysters with 18 months	#	150 000	150 000	150 000	150 000	150 000	150 000
New Cages Needed	#	29	29	29	29	29	29
Cages 25mm in Use	**#**	**29**	**58**	**87**	**87**	**87**	**87**

Surviving Grown Oysters	#	0	0	0	60 000	60 000	60 000
Survival Rate	%	40%	40%	40%	40%	40%	40%

Oysters Available for B2B	#	0	0	0	60 000	60 000	60 000
Growing Oysters	#				3 000	3 000	3 000

Oysters with 21 months	#	0	0	0	3 000	3 000	3 000
New Cages Needed	#	0	0	0	1	1	1
Cages 25mm in Use	**#**	**0**	**0**	**0**	**1**	**2**	**3**

Oysters sold to B2C	#	0	0	0	0	0	0

Total Cages In Use	**#**	**249**	**288**	**327**	**348**	**369**	**390**
Long-Lines Needed	**#**	**2**	**2**	**2**	**2**	**2**	**2**

Appendix 65: Production Schedule snapshot of the last 6 months of 2026

Year		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Oyster Seed Cost	000 €	45	152	462	774	1 084	1 463	1 463	1 463	1 463	1 463
General Labor Cost	000 €	170	261	355	384	415	605	652	665	678	692
Boat Fuel Cost	000 €	47	68	87	98	104	110	111	112	112	113
Total Production Costs	**000 €**	**263**	**482**	**905**	**1 257**	**1 604**	**2 179**	**2 227**	**2 241**	**2 255**	**2 269**
Oysters sold B2B	Million Oysters		0.171	1.026	3.060	6.720	10.560	14.616	18.144	18.144	18.144
Referring to 1y ago Seeds	Million Oysters		0.171	0.571	1.665	2.580	3.540	4.756	4.536	4.536	4.536
Referring to 2y ago Seeds	Million Oysters			0.454	1.395	4.140	7.020	9.859	13.608	13.608	13.608
Oysters sold B2C	Million Oysters			0.094	0.433	1.395	2.400	3.400	4.315	4.536	4.536
Oyster Seed											
Base of Allocation	Million Oysters	0.720	2.400	7.200	12.000	16.800	22.680	22.680	22.680	22.680	22.680
B2B Allocation	000 €		10	64	195	432	681	943	1 171	1 171	1 171
Referring to 1y ago Seeds	000 €		10	36	106	166	228	307	292	292	292
Referring to 2y ago Seeds	000 €			28	88	265	453	636	878	878	878
B2C Allocation	000 €			5	27	89	154	219	278	292	292
General Labor											
Base of allocation	Million Oysters	0.720	3.120	9.600	19.200	28.800	39.480	45.360	45.360	45.360	45.360
B2B Allocation	000 €		54	327	372	430	455 426	535 235	630 083	619 278	630 319
Referring to 1y ago Seeds	000 €		54	68	94	88	105	141	131	134	137
Referring to 2y ago Seeds	000 €			145	168	236	242	293	404	395	403
B2C Allocation	000 €			30	52	79	82	101	128	131	134
Boat Fuel											
Base of allocation	Million Oysters	0.720	3.120	9.600	19.200	28.800	39.480	45.360	45.360	45.360	45.360
B2B Allocation	000 €		4	48	26	18	16	12	11	11	11
Referring to 1y ago Seeds	000 €		4	6	10	11	12	14	14	14	14
Referring to 2y ago Seeds	000 €			12	15	22	26	28	34	34	34
B2C Allocation	000 €			2	2	3	3	4	4	4	4
Costs Allocated to B2B	€	0	70 023	392 134	568 107	862 411	1 137 038	1 478 638	1 801 199	1 790 393	1 801 435
Costs Allocated to B2C	€	0	0	38 721	82 635	172 936	241 637	324 845	411 436	428 869	431 526
Total Costs Allocated	**€**	**0**	**70 023**	**430 854**	**650 741**	**1 035 348**	**1 378 675**	**1 803 482**	**2 212 635**	**2 219 262**	**2 232 961**

Appendix 66: Production Costs Allocation

	Unit	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Cages Cost	**€**	**10 350**	**25 275**	**69 840**	**96 360**	**114 225**	**172 200**	**127 755**	**118 005**	**172 200**	**127 755**
Cages 4mm Cost	**€**	**1 440**	**2 880**	**7 920**	**9 720**	**10 800**	**18 000**	**9 720**	**10 800**	**18 000**	**9 720**
Cages 4mm	#	12	24	66	81	90	150	81	90	150	81
Unitary Price	€	120	120	120	120	120	120	120	120	120	120
Cages 6mm Cost	**€**	**1 725**	**3 105**	**9 660**	**11 040**	**12 765**	**21 390**	**11 040**	**12 765**	**21 390**	**11 040**
Cages 6mm	#	15	27	84	96	111	186	96	111	186	96
Unitary Price	€	115	115	115	115	115	115	115	115	115	115
Cages 9mm Cost	**€**	**1 650**	**3 300**	**9 240**	**10 890**	**12 540**	**20 460**	**10 890**	**12 540**	**20 460**	**10 890**
Cages 9mm	#	15	30	84	99	114	186	99	114	186	99
Unitary Price	€	110	110	110	110	110	110	110	110	110	110
Cages 12mm Cost	**€**	**2 835**	**6 300**	**17 955**	**20 790**	**24 255**	**40 005**	**20 790**	**24 255**	**40 005**	**20 790**
Cages 12mm	#	27	60	171	198	231	381	198	231	381	198
Unitary Price	€	105	105	105	105	105	105	105	105	105	105
Cages 15mm Cost	**€**	**2 700**	**6 000**	**17 100**	**19 800**	**23 100**	**38 100**	**19 800**	**23 100**	**38 100**	**19 800**
Cages 15mm	#	27	60	171	198	231	381	198	231	381	198
Unitary Price	€	100	100	100	100	100	100	100	100	100	100
Cages 20mm Cost	**€**	**0**	**3 420**	**7 695**	**22 230**	**25 365**	**29 925**	**49 305**	**25 365**	**29 925**	**49 305**
Cages 20mm	#	0	36	81	234	267	315	519	267	315	519
Unitary Price	€	95	95	95	95	95	95	95	95	95	95
Cages 25mm Cost	**€**	**0**	**270**	**270**	**1 890**	**5 400**	**4 320**	**6 210**	**9 180**	**4 320**	**6 210**
Cages 25mm	#	0	3	3	21	60	48	69	102	48	69
Unitary Price	€	90	90	90	90	90	90	90	90	90	90
Long-Lines Structure	**€**	**2 000**	**2 000**	**8 000**	**12 000**	**14 000**	**14 000**	**12 000**	**0**	**0**	**0**
Long-Lines Installed	#	1	1	4	6	7	7	6	0	0	0
Cost per Long-Line	€	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000
Boat 12m Cost	**€**	**150 000**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Boat 12m	#	1	0	0	0	0	0	0	0	0	0
Unitary Price	€	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000
Boat 22m Cost	**€**	**1 500 000**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Boat 22m	#	1	0	0	0	0	0	0	0	0	0
Unitary Price	€	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000
Power Washer Cost	**€**	**70 000**	**0**	**0**	**0**	**0**	**70 000**	**0**	**0**	**0**	**0**
Power Washer	#	1	0	0	0	0	1	0	0	0	0
Unitary Price	€	70 000	70 000	70 000	70 000	70 000	70 000	70 000	70 000	70 000	70 000

Graders Cost	**€**	**100 000**	**0**	**0**	**0**	**100 000**	**100 000**	**100 000**	**100 000**	**100 000**	**100 000**
Graders	#	1	0	0	0	1	1	1	1	1	1
Unitary Price	€	100 000	100 000	100 000	100 000	100 000	100 000	100 000	100 000	100 000	100 000
Washing Machine Cost	**€**	**0**	**0**	**50 000**	**0**	**0**	**0**	**0**	**50 000**	**0**	**0**
Washing Machine	#	0	0	1	0	0	0	0	1	0	0
Unitary Price	€	50 000	50 000	50 000	50 000	50 000	50 000	50 000	50 000	50 000	50 000
Depurator Cost	**€**	**0**	**0**	**750 000**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Depurator	#	0	0	1	0	0	0	0	0	0	0
Unitary Price	€	750 000	750 000	750 000	750 000	750 000	750 000	750 000	750 000	750 000	750 000
Bulk Bagging Machine Cost	**€**	**0**	**150 000**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Bagging Machine	#	0	1	0	0	0	0	0	0	0	0
Unitary Price	€	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000
Retail Bagging Machine Cost	**€**	**0**	**0**	**150 000**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Bagging Machine	#	0	0	1	0	0	0	0	0	0	0
Unitary Price	€	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000
Total Capex		**1 832 350**	**177 275**	**877 840**	**108 360**	**228 225**	**356 200**	**239 755**	**268 005**	**272 200**	**227 755**

Appendix 67: Capital Expenditure from Stand-alone Perspective

	Unit	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Cages Cost	**€**	**10 350**	**25 275**	**69 840**	**96 360**	**114 225**	**172 200**	**127 755**	**118 005**	**172 200**	**127 755**
Cages 4mm Cost	**€**	**1 440**	**2 880**	**7 920**	**9 720**	**10 800**	**18 000**	**9 720**	**10 800**	**18 000**	**9 720**
Cages 4mm	#	12	24	66	81	90	150	81	90	150	81
Unitary Price	€	120	120	120	120	120	120	120	120	120	120
Cages 6mm Cost	**€**	**1 725**	**3 105**	**9 660**	**11 040**	**12 765**	**21 390**	**11 040**	**12 765**	**21 390**	**11 040**
Cages 6mm	#	15	27	84	96	111	186	96	111	186	96
Unitary Price	€	115	115	115	115	115	115	115	115	115	115
Cages 9mm Cost	**€**	**1 650**	**3 300**	**9 240**	**10 890**	**12 540**	**20 460**	**10 890**	**12 540**	**20 460**	**10 890**
Cages 9mm	#	15	30	84	99	114	186	99	114	186	99
Unitary Price	€	110	110	110	110	110	110	110	110	110	110
Cages 12mm Cost	**€**	**2 835**	**6 300**	**17 955**	**20 790**	**24 255**	**40 005**	**20 790**	**24 255**	**40 005**	**20 790**
Cages 12mm	#	27	60	171	198	231	381	198	231	381	198
Unitary Price	€	105	105	105	105	105	105	105	105	105	105
Cages 15mm Cost	**€**	**2 700**	**6 000**	**17 100**	**19 800**	**23 100**	**38 100**	**19 800**	**23 100**	**38 100**	**19 800**
Cages 15mm	#	27	60	171	198	231	381	198	231	381	198
Unitary Price	€	100	100	100	100	100	100	100	100	100	100
Cages 20mm Cost	**€**	**0**	**3 420**	**7 695**	**22 230**	**25 365**	**29 925**	**49 305**	**25 365**	**29 925**	**49 305**
Cages 20mm	#	0	36	81	234	267	315	519	267	315	519
Unitary Price	€	95	95	95	95	95	95	95	95	95	95
Cages 25mm Cost	**€**	**0**	**270**	**270**	**1 890**	**5 400**	**4 320**	**6 210**	**9 180**	**4 320**	**6 210**
Cages 25mm	#	0	3	3	21	60	48	69	102	48	69
Unitary Price	€	90	90	90	90	90	90	90	90	90	90
Long-Lines Structure	**€**	**2 000**	**2 000**	**8 000**	**12 000**	**14 000**	**14 000**	**12 000**	**0**	**0**	**0**
Long-Lines Installed	#	1,0	1,0	4,0	6,0	7,0	7,0	6,0	0,0	0,0	0,0
Cost per Long-Line	€	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000
Boat 12m Cost	**€**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Boat 12m	#	0	0	0	0	0	0	0	0	0	0
Unitary Price	€	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000
Boat 22m Cost	**€**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Boat 22m	#	0	0	0	0	0	0	0	0	0	0
Unitary Price	€	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000	1 500 000
Power Washer Cost	**€**	**0**	**0**	**0**	**0**	**70 000**	**0**	**0**	**0**	**0**	**70 000**
Power Washer	#	0	0	0	0	1	0	0	0	0	1
Unitary Price	€	70 000	70 000	70 000	70 000	70 000	70 000	70 000	70 000	70 000	70 000
Graders Cost	**€**	**0**	**0**	**0**	**0**	**100 000**	**100 000**	**100 000**	**100 000**	**100 000**	**200 000**
Graders	#	0	0	0	0	1	1	1	1	1	2
Unitary Price	€	100 000	100 000	100 000	100 000	100 000	100 000	100 000	100 000	100 000	100 000

Washing Machine Cost	**€**	**0**	**0**	**0**	**0**	**50 000**	**0**	**0**	**0**	**0**	**0**
Washing Machine	#	0	0	0	0	1	0	0	0	0	0
Unitary Price	€	50 000	50 000	50 000	50 000	50 000	50 000	50 000	50 000	50 000	50 000
Depurator Cost	**€**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Depurator	#	0	0	0	0	0	0	0	0	0	0
Unitary Price	€	750 000	750 000	750 000	750 000	750 000	750 000	750 000	750 000	750 000	750 000
Bulk Bagging Machine Cost	**€**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Bagging Machine	#	0	0	0	0	0	0	0	0	0	0
Unitary Price	€	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000
Retail Bagging Machine Cost	**€**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Bagging Machine	#	0	0	0	0	0	0	0	0	0	0
Unitary Price	€	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000
Total Capex		**12 350**	**27 275**	**77 840**	**108 360**	**348 225**	**286 200**	**239 755**	**218 005**	**272 200**	**397 755**

Appendix 68: Capital Expenditure from Incremental Perspective

Figures in 000 €	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Cages 4mm	480	1 440	4 080	6 840	9 480	12 840	12 840	12 840	12 840	12 840
Cages 6mm	575	1 610	4 830	7 935	11 155	15 065	15 065	15 065	15 065	15 065
Cages 9mm	550	1 650	4 730	7 810	10 890	14 630	14 630	14 630	14 630	14 630
Cages 12mm	945	3 045	9 030	15 015	21 000	28 350	28 350	28 350	28 350	28 350
Cages 15mm	900	2 900	8 600	14 300	20 000	27 000	27 000	27 000	27 000	27 000
Cages 20mm	0	1 140	3 705	11 115	18 430	25 840	34 865	34 865	34 865	34 865
Cages 25mm	0	90	180	810	2 520	3 870	5 310	6 570	6 570	6 570
Long-Lines Structure	200	400	1 200	2 400	3 800	5 200	6 400	6 400	6 400	6 400
Boat 12m	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
Boat 22m	75 000	75 000	75 000	75 000	75 000	75 000	75 000	75 000	75 000	75 000
Power Washer	14 000	14 000	14 000	14 000	14 000	14 000	14 000	14 000	14 000	14 000
Grader	0	10 000	10 000	10 000	20 000	30 000	40 000	50 000	60 000	70 000
Washing Machine	0	0	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
Depurator	0	0	50 000	50 000	50 000	50 000	50 000	50 000	50 000	50 000
Bulk Bagging Machine	0	15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000
Retail Bagging Machine	0	0	15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000
Total Depreciation	**102 650**	**136 275**	**235 355**	**265 225**	**306 275**	**351 795**	**373 460**	**384 720**	**394 720**	**404 720**

Appendix 69: Depreciation Schedule from Stand-alone Perspective

Figures in 000 €	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Cages 4mm	480	1 440	4 080	6 840	9 480	12 840	12 840	12 840	12 840	12 840
Cages 6mm	575	1 610	4 830	7 935	11 155	15 065	15 065	15 065	15 065	15 065
Cages 9mm	550	1 650	4 730	7 810	10 890	14 630	14 630	14 630	14 630	14 630
Cages 12mm	945	3 045	9 030	15 015	21 000	28 350	28 350	28 350	28 350	28 350
Cages 15mm	900	2 900	8 600	14 300	20 000	27 000	27 000	27 000	27 000	27 000
Cages 20mm	0	1 140	3 705	11 115	18 430	25 840	34 865	34 865	34 865	34 865
Cages 25mm	0	90	180	810	2 520	3 870	5 310	6 570	6 570	6 570
Long-Lines Structure	200	400	1 200	2 400	3 800	5 200	6 400	6 400	6 400	6 400
Boat 12m	0	0	0	0	0	0	0	0	0	0
Boat 22m	0	0	0	0	0	0	0	0	0	0
Power Washer	0	0	0	0	14 000	14 000	14 000	14 000	14 000	14 000
Grader	0	0	0	0	10 000	20 000	30 000	40 000	50 000	70 000
Washing Machine	0	0	0	0	10 000	10 000	10 000	10 000	10 000	0
Depurator	0	0	0	0	0	0	0	0	0	0
Bulk Bagging Machine	0	0	0	0	0	0	0	0	0	0
Retail Bagging Machine	0	0	0	0	0	0	0	0	0	0
Total Depreciation	**3 650**	**12 275**	**36 355**	**66 225**	**131 275**	**176 795**	**198 460**	**209 720**	**219 720**	**229 720**

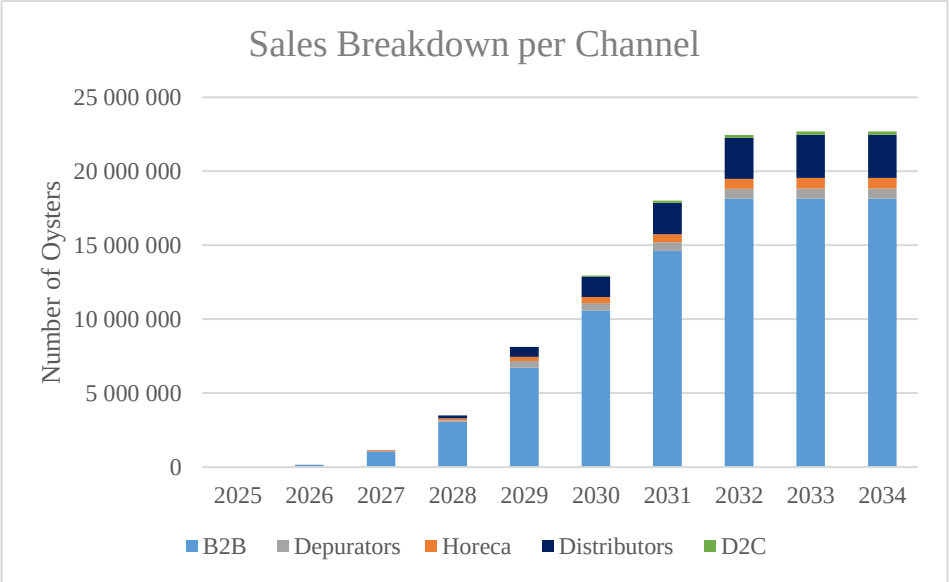
Appendix 70: Depreciation Schedule from Incremental Perspective

Figures in 000 €	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
STAND-ALONE PERSPECTIVE										
Total Grant Value	916 175	88 638	513 920	54 180	114 113	0	0	0	0	0
Total Grant Amortization	56 325	25 638	75 178	90 113	110 638	91 998	75 938	51 900	51 900	51 900
INCREMENTAL PERSPECTIVE										
Total Grant Value	6 175	13 638	38 920	54 180	174 113	0	0	0	0	0
Total Grant Amortization	1 825	6 138	18 178	33 113	65 638	53 998	37 938	18 900	18 900	6 900

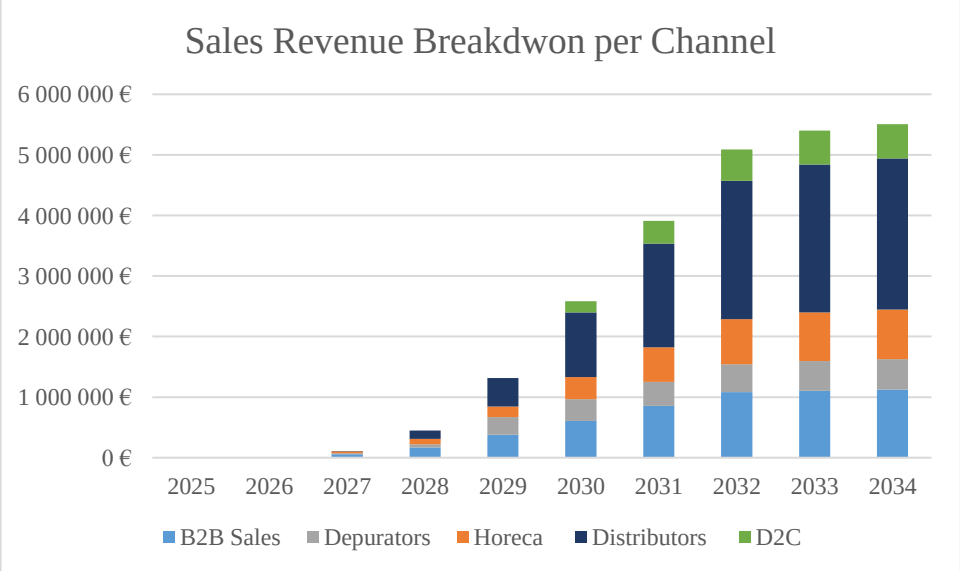
Appendix 71: Capex Grants Impact

$$NWC = \text{Inventory} + \text{Accounts Receivable} - \text{Accounts Payable}$$

Appendix 72: NWC Equation



Appendix 73: Sales Breakdown per Channel, in Number of Oysters



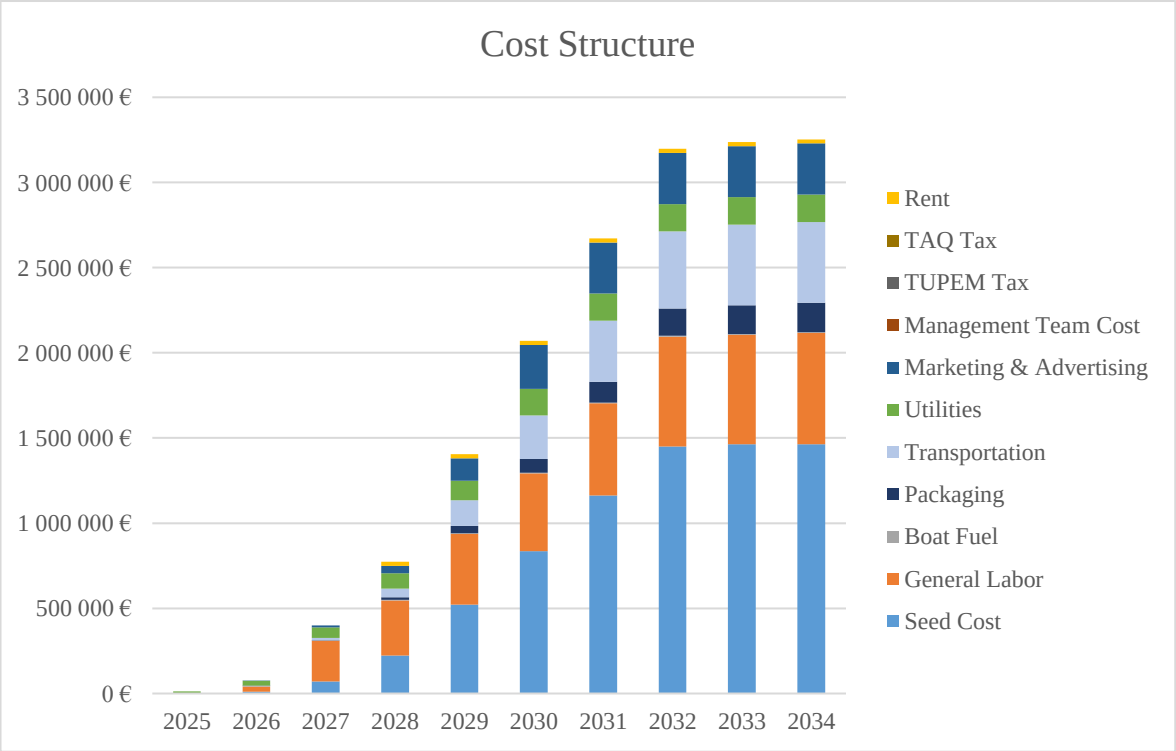
Appendix 74: Sales Revenue Breakdown per Channel

Year	2025	20226	2027	2028	2029	2030	2031	2032	2033	2034
Revenue	0	€8 469	€112 598	€448 638	€1 316 798	€2 586 537	€3 909 236	€5 089 796	€5 400 454	€5 508 463
Gross Margin	-	-739%	-297%	-60%	7%	34%	42%	44%	47%	48%
EBITDA Margin	-	-3635%	-555%	-144%	-31%	8%	23%	30%	34%	34%
EBIT Margin	-	-4941%	-697%	-183%	-46%	-2%	15%	23%	27%	28%
Net Profit Margin	-	-4799%	-604%	-155%	-38%	-2%	12%	18%	21%	21%

Appendix 75: Profitability Ratios from the Stand-alone Perspective

Year	2025	20226	2027	2028	2029	2030	2031	2032	2033	2034
Revenue	0	€8 469	€112 598	€448 638	€1 316 798	€2 586 537	€3 909 236	€5 089 796	€5 400 454	€5 508 463
Gross Margin	-	-438%	-190%	-37%	14%	37%	44%	47%	49%	50%
EBITDA Margin	-	-792%	-254%	-73%	-7%	20%	32%	37%	40%	41%
EBIT Margin	-	-865%	-271%	-80%	-12%	15%	28%	33%	36%	37%
Net Profit Margin	-	-1139%	-241%	-68%	-10%	12%	21%	26%	28%	29%

Appendix 76: Profitability Ratios from the Incremental Perspective



Appendix 77: Cost Structure Breakdown

Figures in 000 EUR	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Current Assets	976	1 051	1 718	2 536	3 319	4 214	4 632	4 567	4 424	4 253
Inventory	263	675	1 150	1 756	2 326	3 127	3 551	3 580	3 616	3 652
Accounts Receivable	0	0	6 346	27 480	102	179	256	328	352	359
Deferred Tax	64	176	362	552	690	707	624	458	255	40
Cash and Cash Equivalents	649	200	200	200	200	200	200	200	200	200
Non-current Assets	1 729	1 770	2 413	2 256	2 178	2 182	2 048	1 932	1 809	1 632
PP&E	1 832	2 009	2 889	3 009	3 260	3 653	3 944	4 276	4 612	4 904
Cumulative Depreciation	-102	-238	-474	-740	-1 045	-1 397	-1 771	-2 155	-2 550	-2 955
Total Assets	**2 706**	**2 822**	**4 131**	**4 793**	**5 498**	**6 397**	**6 681**	**6 500**	**6 234**	**5 885**
Current Liabilities	32	43	56	61	67	87	92	93	95	96
Accounts Payable	32	43	56	61	67	87	92	93	95	96
Non-current Liabilities	2 859	2 922	2 962	2 531	2 144	1 650	1 973	1 719	1 465	1 212
Long-Term Debt	2 000	2 000	1 600	1 200	800	400	800	600	400	200
Deferred Grant Income	859	922	1 361	1 325	1 329	1 237	1 161	1 109	1 552	1 005
Total Liabilities	**2 892**	**2 966**	**3 017**	**2 587**	**2 196**	**1 724**	**2 053**	**1 803**	**1 552**	**1 302**
Ordinary Share Capital	50	50	50	50	50	50	50	50	50	50 000
Supplementary Capital Contributions	0	448	2 387	4 172	5 773	7 204	6 692	5 832	4 676	3 371
Retained Earnings	-236	-642	-1 323	-2 017	-2 524	-2 588	-2 129	-1 213	-91	1 091
Total Equity	**-186**	**-144**	**1 114**	**2 205**	**3 301**	**4 672**	**4 627**	**4 697**	**4 681**	**4 583**

Appendix 78: Balance Sheet from Stand-alone Perspective

Figures in 000 EUR	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Current Assets	1 033	940	1 328	2 067	2 769	3 569	3 908	3 984	4 040	4 079
Inventory	171	516	1 015	1 649	2 238	3 014	3 425	3 455	3 487	3 520
Accounts Receivable	0	0	6	27	102	179	256	328	352	359
Deferred Tax	6	32	107	190	228	174	26	0	0	0
Cash and Cash Equivalents	856	391	200	200	200	200	200	200	200	200
Non-current Assets	7	23	65	107	324	434	474	483	535	703
PP&E	12	39	117	225	574	860	1 100	1 318	1 590	1 987
Cumulative Depreciation	-3	-15	-52	-118	-249	-426	-625	-834	-1 054	-1 284
Total Assets	**1 042**	**964**	**1 394**	**2 174**	**3 093**	**4 002**	**4 383**	**4 467**	**4 756**	**4 783**
Current Liabilities	11	22	34	41	46	63	67	68	69	70
Accounts Payable	11	22	34	41	46	63	67	68	69	70
Non-current Liabilities	1 003	1 011	833	659	577	321	882	661	440	232
Long-Term Debt	1 000	1 000	800	600	400	200	800	600	400	200
Deferred Grant Income	3	11	33	59	177	121	82	61	40	32
Total Liabilities	**1 015**	**1 033**	**867**	**701**	**624**	**385**	**949**	**730**	**510**	**302**
Ordinary Share Capital	50	50	50	50	50	50	50	50	50	50
Supplementary Capital Contributions	0	0	868	2 125	3 267	4 113	3 094	2 081	880	0
Retained Earnings	-23	-119	-390	-696	-833	-532	300	1 616	3 143	4 437
Total Equity	**23**	**-69**	**528**	**1 479**	**2 484**	**3 630**	**3 445**	**3 747**	**4 073**	**4 448**

Appendix 79: Balance Sheet from Incremental Perspective

Figures in 000 EUR	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
EBITDA	-225	-307	-625	-647	-407	203	908	1 542	1 812	1 898
Taxes	0	0	0	0	0	0	-44	-87	-107	-113
Change in NWC	-230	-401	-468	-622	-639	-857	-496	-99	-58	-41
Cash Flow from Operating Activities	**-455**	**-709**	**-1 093**	**-1 269**	**-1 046**	**-654**	**367**	**1 355**	**1 647**	**1 743**
Capex	-1 832	-177	-877	-108	-228	-356	-239	-268	-272	-227
Capex Grants	916	88	513	54	114	0	0	0	0	0
Cash Flow from Investing Activities	**-916**	**-88**	**-363**	**-54**	**-114**	**-356**	**-239**	**-268**	**-272**	**-227**
Unlevered Cash Flow	-1 371	-797	-1 457	-1 323	-1 160	-1 010	127	1 085	1 373	1 513
Debt	2 000	0	0	0	0	0	1 000	0	0	0
Debt Repayments	0	0	-400	-400	-400	-400	-600	-200	-200	-200
Upfront Fee	-30	0	0	0	0	0	-15	0	0	0
Interest Payment	0	-99	-81	-61	-41	-20	0	-25	-17	-8
Cash Flow from Financing Activities	**1**	**-99**	**-481**	**-461**	**-441**	**-420**	**385**	**-225**	**-217**	**-208**
Share Capital	50	0	0	0	0	0	0	0	0	0
Supplementary Capital Contributions	0	448	1 938	1 784	1 601	1 431	-512	-860	-1 155	-1 304
Dividends	0	0	0	0	0	0	0	0	0	0
Cash Flow from Equity	**50**	**448**	**1 938**	**1 784**	**1 601**	**1 431**	**-512**	**-860**	**-1 155**	**-1 304**

Appendix 80: Cash Flow Statement from Stand-alone Perspective

Figures in 000 EUR	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
EBITDA	-12	-67	-286	-325	-88	515	1 237	1 892	2 163	2 255
Taxes	0	0	0	0	0	-28	-79	-333	-418	-435
Change in NWC	-159	-334	-493	-647	-659	-836	-483	-101	-54	-38
Cash Flow from Operating Activities	**-172**	**-401**	**-780**	**-973**	**-747**	**-349**	**673**	**1 4**	**1 690**	**1 781**
Capex	-12	-27	-77	-108	-348	-286	-239	-218	-272	-397
Capex Grants	6	13	38	54	174	0	0	0	0	0
Cash Flow from Investing Activities	**-6**	**-13**	**-38**	**-54**	**-174**	**-286**	**-239**	**-218**	**-272**	**-397**
Unlevered Cash Flow	-179	-414	-819	-1 027	-921	-635	434	1 238	1 417	1 383
Debt	1 000	0	0	0	0	0	1 000	0	0	0
Debt Repayments	0	0	-200	-200	-200	-200	-400	-200	-200	-200
Upfront Fee	-15	0	0	0	0	0	-15	0	0	0
Interest Payment	0	-49	-40	-30	-20	-10	0	-25	-17	-8
Cash Flow from Financing Activities	**985**	**-49**	**-240**	**-230**	**-220**	**-210**	**585**	**-225**	**-217**	**-208**
Share Capital	50	0	0	0	0	0	0	0	0	0
Supplementary Capital Contributions	0	0	868	1 257	1 142	845	-1 019	-1 013	-1 200	-1 175
Dividends	0	0	0	0	0	0	0	0	0	-15
Cash Flow from Equity	**50**	**0**	**868**	**1 257**	**1 142**	**845**	**-1 019**	**-1 013**	**-1 200**	**-1 175**

Appendix 81: Cash Flow Statement from Incremental Perspective

$$Terminal\ Value = \frac{\text{Final Year UFCF} * (1 + \text{Terminal Growth Rate})}{Discount\ rate - Terminal\ Growth\ Rate}$$

Appendix 82: Terminal Value Formula

	Base-Case Scenario		Scenario 1		Scenario 2		Scenario 3	
Perspective	Stand-alone	Incremental	Stand-alone	Incremental	Stand-alone	Incremental	Stand-alone	Incremental
NPV	€595 399	€2 680 181	-€137 037	€2 068 670	€11 216 499	€13 782 590	-€58	€2 117 838
IRR	15%	28%	13%	27%	38%	61%	13%	25%

Appendix 83: NPV and IRR

NPV SENSITIVITY

Terminal Growth Rate

Terminal WACC	1,5%	2,0%	**2,5%**	3,0%	3,5%
9%	4 331 617	4 893 989	5 537 004	6 279 347	7 145 961
11%	1 758 677	2 060 032	2 394 969	2 769 433	3 190 859
13%	226 085	402 695	595 399	806 502	1 038 771
15%	-735 140	-625 022	-506 417	-378 303	-239 489
17%	-1 356 000	-1 284 132	-1 207 464	-1 125 499	-1 037 668

IRR SENSITIVITY

Terminal Growth Rate

Terminal WACC	1,5%	2,0%	**2,5%**	3,0%	3,5%
9%	19,68%	20,65%	21,71%	22,86%	24,12%
11%	16,64%	17,39%	18,18%	19,04%	19,95%
13%	14,28%	14,88%	15,51%	16,18%	16,89%
15%	12,37%	12,88%	13,40%	13,95%	14,52%
17%	10,80%	11,22%	11,67%	12,13%	12,61%

Appendix 84: Sensitivity Analysis of the Stand-alone Base-Case Scenario

NPV SENSITIVITY

Terminal Growth Rate

Terminal WACC	1,5%	2,0%	**2,5%**	3,0%	3,5%
9%	6 340 193	6 854 377	7 442 294	8 121 029	8 913 386
11%	3 859 256	4 134 789	4 441 026	4 783 403	5 168 719
13%	2 342 512	2 503 989	2 680 181	2 873 196	3 085 563
15%	1 359 437	1 460 119	1 568 561	1 685 698	1 812 617
17%	697 359	763 069	833 168	908 109	988 414

IRR SENSITIVITY

Terminal WACC	Terminal Growth Rate				
	1,5%	2,0%	**2,5%**	3,0%	3,5%
9%	33,15%	34,26%	35,46%	36,77%	38,21%
11%	29,73%	30,57%	31,47%	32,43%	33,46%
13%	27,10%	27,77%	28,48%	29,23%	30,02%
15%	25,00%	25,55%	26,13%	26,74%	27,38%
17%	23,27%	23,73%	24,22%	24,73%	25,26%

Appendix 85: Sensitivity Analysis of the Incremental Base-Case Scenario

		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Sales Mix											
B2B Mix	%	0,0%	100,0%	91,6%	87,6%	82,8%	81,5%	81,1%	80,8%	80,0%	80,0%
B2C Mix	%	0,0%	0,0%	8,4%	12,4%	17,2%	18,5%	18,9%	19,2%	20,0%	20,0%
Contribution Margin											
B2B CM	€/Oyster	0,00	-0,37	-0,33	-0,14	-0,08	-0,06	-0,05	-0,05	-0,04	-0,04
Selling Price	€/Oyster	0,00	0,05	0,05	0,06	0,06	0,06	0,06	0,06	0,06	0,06
Variable Costs	€/Oyster	0,00	0,42	0,39	0,19	0,13	0,11	0,11	0,11	0,10	0,11
B2C CM	€/Oyster	0,00	0,00	0,08	0,34	0,44	0,61	0,69	0,72	0,74	0,75
Selling Price	€/Oyster	0,00	0,00	0,60	0,64	0,67	0,83	0,90	0,93	0,95	0,97
Variable Costs	€/Oyster	0,00	0,00	0,52	0,30	0,23	0,21	0,21	0,21	0,21	0,21
Weighted Average Selling Price	€/Oyster	0,00	0,05	0,10	0,13	0,16	0,20	0,22	0,23	0,24	0,24
Weighted Average Variable Costs	€/Oyster	0,00	0,42	0,40	0,21	0,15	0,13	0,13	0,13	0,13	0,13
Weighted Average CM	**€/Oyster**	**0,00**	**-0,37**	**-0,30**	**-0,08**	**0,01**	**0,07**	**0,09**	**0,10**	**0,11**	**0,12**
Fixed Costs	000 €	225	245	290	377	494	667	715	720	725	729
Break-Even Point											
BE Quantity	Million Oysters	-	-	-	-	46.237	9.928	7.941	7.150	6.479	6.296
BE Sales	000 €	-	-	-	-	7 502	1 981	1 723	1 620	1 542	1 529
BE Price	€/Oyster	-	1,85	0,66	0,31	0,21	0,18	0,17	0,16	0,16	0,16

Appendix 86: Stand-alone BEP

		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
B2B CM	€/Oyster	0,00	-0,22	-0,23	-0,11	-0,07	-0,05	-0,04	-0,04	-0,04	-0,04
Selling Price	€/Oyster	0,00	0,05	0,05	0,06	0,06	0,06	0,06	0,06	0,06	0,06
Variable Costs	€/Oyster	0,00	0,27	0,28	0,16	0,12	0,11	0,10	0,10	0,10	0,10
B2C CM	€/Oyster	0,00	0,00	0,23	0,38	0,45	0,62	0,69	0,72	0,74	0,76
Selling Price	€/Oyster	0,00	0,00	0,60	0,64	0,67	0,83	0,90	0,93	0,95	0,97
Variable Costs	€/Oyster	0,00	0,00	0,37	0,27	0,22	0,21	0,21	0,21	0,21	0,21
Weighted Average Selling Price	€/Oyster	0,00	0,05	0,10	0,13	0,16	0,20	0,22	0,23	0,24	0,24
Weighted Average Variable Costs	€/Oyster	0,00	0,27	0,29	0,18	0,14	0,13	0,12	0,12	0,12	0,12
Weighted Average CM	**€/Oyster**	**0,00**	**-0,22**	**-0,19**	**-0,05**	**0,02**	**0,07**	**0,10**	**0,11**	**0,12**	**0,12**
Fixed Costs	000 €	12	30	72	157	270	438	482	483	484	485
Break-Even Point											
BE Quantity	Million Oysters	-	-	-	-	12.047	5.951	5.057	4.572	4 .150	4.017
BE Sales	000 €	-	-	-	-	1 954	1 187	1 097	1 036	988	975
BE Price	€/Oyster	-	0,44	0,36	0,22	0,17	0,16	0,15	0,14	0,14	0,14

Appendix 87: Incremental BEP

The following appendices belong to the Mediterranean and Nordic clusters, which were not covered in this report.

Production - Mediterranean (kg)

Species	2018	2019	2020	2021	2022
Edulis B2C	334 173	418 229	257 784	259 245	283 428
Gigas B2C	802 550	900 615	941 337	1 467 479	1 602 368
Total	**1 136 723**	**1 318 844**	**1 199 121**	**1 726 724**	**1 885 796**

Production - Mediterranean (€)

Species	2018	2019	2020	2021	2022
Edulis B2C	1 768 002 €	2 180 194 €	1 325 532 €	1 416 948 €	1 573 055 €
Gigas B2C	2 398 888 €	2 735 198 €	2 946 879 €	5 690 689 €	7 354 380 €
Total	**4 166 890 €**	**4 915 392 €**	**4 272 411 €**	**7 107 637 €**	**8 927 435 €**

Appendix 88: Mediterranean Production

Imports - Spain (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Denmark	Edulis S-A	63 384	66 989	14 106	6 596	1 993
	Oysters Adult	195 692	1 157 108	88 504	24 598	2 603
France	Edulis S-A	462 158	510 568	294 755	412 424	669 334
	Oysters Adult	286 448	522 017	320 596	554 481	745 669
Ireland	Edulis S-A	32 577	16 385	11 620	66 407	72 477
	Oysters Adult	101 088	71 905	45 240	162 455	132 458
Italy	Edulis S-A	23 035	195	n.d.	6 650	41 512
	Oysters Adult	23 147	33 710	31 451	16 771	18 086
Netherlands	Edulis S-A	243 259	224 843	98 575	122 087	166 234
	Oysters Adult	276 660	159 650	73 806	111 846	123 595
Portugal	Edulis S-A	46 988	59 094	32 312	107 006	187 758
	Oysters Adult	97 587	31 974	26 825	75 537	2 402
Others	Edulis S-A	12 886	3 137	2 718	52 606	39 842
	Oysters Adult	180 359	358 740	47 142	1 851	789
Total		**2 045 268**	**3 216 315**	**1 087 650**	**1 721 315**	**2 204 752**
Subtotal Edulis Semi-Adult		884 287	881 211	454 086	773 776	1 179 150
Subtotal Oysters Adult		1 160 981	2 335 104	633 564	947 539	1 025 602

Imports - Spain (€)

Top Markets	Species	2018	2019	2020	2021	2022
Denmark	Edulis S-A	468 059 €	452 499 €	83 900 €	48 446 €	20 016 €
	Oysters Adult	1 105 878 €	2 373 728 €	527 920 €	179 515 €	25 945 €
France	Edulis S-A	2 324 465 €	2 659 272 €	1 619 258 €	2 748 379 €	4 551 119 €
	Oysters Adult	1 392 973 €	3 393 684 €	2 397 863 €	4 161 952 €	6 655 392 €
Ireland	Edulis S-A	171 782 €	69 481 €	49 689 €	357 559 €	572 042 €
	Oysters Adult	587 191 €	271 935 €	180 641 €	888 363 €	948 064 €
Italy	Edulis S-A	116 810 €	1 141 €	n.d.	20 644 €	180 886 €
	Oysters Adult	120 614 €	195 191 €	169 556 €	83 162 €	102 119 €
Netherlands	Edulis S-A	545 209 €	476 659 €	250 257 €	331 294 €	776 760 €
	Oysters Adult	920 566 €	504 359 €	340 579 €	422 232 €	458 268 €
Portugal	Edulis S-A	126 082 €	126 499 €	84 520 €	206 851 €	335 233 €
	Oysters Adult	450 663 €	161 396 €	114 220 €	483 295 €	17 563 €
Others	Edulis S-A	97 870 €	-981 949 €	17 302 €	383 193 €	277 240 €
	Oysters Adult	772 858 €	2 531 375 €	73 900 €	21 503 €	10 186 €
Total		**9 201 020 €**	**12 235 270 €**	**5 909 605 €**	**10 336 388 €**	**14 930 833 €**
Subtotal Edulis Semi-Adult		3 850 277 €	2 803 602 €	2 104 926 €	4 096 366 €	6 713 296 €
Subtotal Oysters Adult		5 350 743 €	9 431 668 €	3 804 679 €	6 240 022 €	8 217 537 €

Appendix 89: Spain Imports

Exports - Spain (kg)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	22 112	28 841	31 433	43 608	25 434
	Oysters Adult	8 956	18 312	12 989	17 618	12 757
Hong Kong	Edulis S-A	560	341	256	155	346
	Oysters Adult	6 532	3 557	4 317	20 360	57 110
Italy	Edulis S-A	30 992	55 218	79 119	124 834	150 657
	Oysters Adult	69 436	112	16 650	10 491	55 839
Portugal	Edulis S-A	12 677	8 347	5 346	10 848	6 461
	Oysters Adult	3 153	4 293	1 827	7 791	1 892
UK	Edulis S-A	n.d.	634	399	4 571	9 027
	Oysters Adult	3	40	n.d.	24	n.d.
Others	Edulis S-A	6 330	3 202	5 533	10 966	20 107
	Oysters Adult	20 994	9 515	10 740	18 303	9 055
Total		**181 745**	**132 412**	**168 609**	**269 569**	**348 685**
Subtotal Edulis Semi-Adult		72 671	96 583	122 086	194 982	212 032
Subtotal Oysters Adult		109 074	35 829	46 523	74 587	136 653

Exports - Spain (€)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	111 188 €	1 335 887 €	164 605 €	237 063 €	233 822 €
	Oysters Adult	54 064 €	63 118 €	50 492 €	64 728 €	53 009 €
Hong Kong	Edulis S-A	3 517 €	5 660 €	3 838 €	2 344 €	4 572 €
	Oysters Adult	18 959 €	38 418 €	36 508 €	228 632 €	458 887 €
Italy	Edulis S-A	153 170 €	197 091 €	234 070 €	409 725 €	605 736 €
	Oysters Adult	342 784	421 €	103 492 €	40 071 €	193 880 €
Portugal	Edulis S-A	15 573 €	11 018 €	5 890 €	16 057 €	32 138 €
	Oysters Adult	21 259 €	21 984 €	11 978 €	51 982 €	12 360 €
UK	Edulis S-A	n.d.	6 937 €	5 880 €	35 228 €	80 793 €
	Oysters Adult	32 €	483 €	n.d.	60 €	n.d.
Others	Edulis S-A	37 346 €	-1 178 816 €	38 030 €	72 709 €	87 069 €
	Oysters Adult	93 200 €	102 605 €	99 728 €	83 048 €	101 104 €
Total		**851 092 €**	**604 806 €**	**754 511 €**	**1 241 647 €**	**1 863 370 €**
Subtotal Edulis Semi-Adult		320 794 €	377 777 €	452 313 €	773 126 €	1 044 130 €
Subtotal Oysters Adult		530 298 €	227 029 €	302 198 €	468 521 €	819 240 €

Appendix 90: Spain Exports

Imports - Italy (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Austria	Edulis S-A	194	198	235	924	1 134
	Oysters Adult	671	2 406	6 023	11 892	2 952
France	Edulis S-A	665 505	677 006	402 692	770 754	947 783
	Oysters Adult	3 406 839	3 634 525	4 292 088	6 892 593	7 342 834
Netherlands	Edulis S-A	n.d.	8 919	9 707	3 177	n.d.
	Oysters Adult	62 110	55 816	8 417	50 847	76 440
Spain	Edulis S-A	34 416	16 840	25 581	105 757	82 737
	Oysters Adult	174 487	544 277	240 961	418 926	341 408
Others	Edulis S-A	68 172	48 698	1 404	69 103	80 592
	Oysters Adult	761 578	1 003 924	587 066	640 295	505 840
Total		**5 173 972**	**5 992 609**	**5 574 174**	**8 964 268**	**9 381 720**
Subtotal Edulis Semi-Adult		768 287	751 661	439 619	949 715	1 112 246
Subtotal Oysters Adult		4 405 685	5 240 948	5 134 555	8 014 553	8 269 474

Imports - Italy (€)

Top Markets	Species	2018	2019	2020	2021	2022
Austria	Edulis S-A	1 803 €	1 902 €	3 296 €	7 465 €	17 264 €
	Oysters Adult	1 839 €	21 327 €	48 636 €	62 701 €	41 784 €
France	Edulis S-A	3 433 000 €	3 585 972 €	2 033 450 €	3 874 986 €	5 433 888 €
	Oysters Adult	17 910 276 €	18 817 522 €	14 079 251 €	23 540 264 €	35 511 014 €
Netherlands	Edulis S-A	n.d.	51 284 €	51 697 €	17 245 €	n.d.
	Oysters Adult	169 713 €	166 035 €	46 395 €	580 531 €	432 457 €
Spain	Edulis S-A	64 416 €	54 618 €	39 814 €	404 993 €	348 537 €
	Oysters Adult	2 217 517 €	3 265 864 €	1 547 905 €	1 893 088 €	3 384 740 €
Others	Edulis S-A	196 002 €	126 704 €	1 597 €	678 269 €	452 821 €
	Oysters Adult	2 251 764 €	3 964 469 €	1 999 816 €	1 791 758 €	1 675 001 €
Total		**26 246 330 €**	**30 055 697 €**	**19 851 857 €**	**32 851 300 €**	**47 297 506 €**
Subtotal Edulis Semi-Adult		3 695 221 €	3 820 480 €	2 129 854 €	4 982 958 €	6 252 510 €
Subtotal Oysters Adult		22 551 109 €	26 235 217 €	17 722 003 €	27 868 342 €	41 044 996 €

Appendix 91: Italy Imports

Exports - Italy (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Albania	Edulis S-A	2 784	1 950	630	2 625	300
	Oysters Adult	450	3 748	n.d.	10 215	13 511
Austria	Edulis S-A	1 097	231	201	177	227
	Oysters Adult	3 474	3 622	3 116	3 594	4 279
France	Edulis S-A	861	3 078	2 826	7 757	20 458
	Oysters Adult	5 809	2 166	1 024	2 731	5 656
Malta	Edulis S-A	1 340	3 399	628	450	6 639
	Oysters Adult	19 984	21 092	29 301	69 365	60 211
Switzerland	Edulis S-A	n.d.	n.d.	n.d.	128	n.d.
	Oysters Adult	65 483	59 837	68 047	60 081	30 384
Others	Edulis S-A	31 554	4 648	1 000	9 708	5 771
	Oysters Adult	122 942	70 686	215 636	93 801	258 588
Total		**255 778**	**174 457**	**322 409**	**260 632**	**406 024**
Subtotal Edulis Semi-Adult		37 636	13 306	5 285	20 845	33 395
Subtotal Oysters Adult		218 142	161 151	317 124	239 787	372 629

Exports - Italy (€)

Top Markets	Species	2018	2019	2020	2021	2022
Albania	Edulis S-A	10 580 €	5 964 €	1 323 €	5 675 €	1 440 €
	Oysters Adult	1 778 €	11 919 €	n.d.	39 528 €	49 717 €
Austria	Edulis S-A	7 001 €	2 078 €	1 889 €	1 965 €	2 367 €
	Oysters Adult	28 102 €	33 460 €	28 473 €	36 333 €	42 134 €
France	Edulis S-A	9 045 €	26 114 €	24 911 €	42 803,00 €	88 018 €
	Oysters Adult	104 285	44 820 €	25 204 €	21 486 €	48 955 €
Malta	Edulis S-A	6 902 €	33 458 €	5 741 €	6 445 €	107 523 €
	Oysters Adult	114 191 €	118 493 €	134 201 €	345 151 €	351 565 €
Switzerland	Edulis S-A	n.d.	n.d.	n.d.	2 990 €	n.d.
	Oysters Adult	848 060 €	784 369 €	824 810 €	790 258 €	513 063 €
Others	Edulis S-A	127 736 €	27 456 €	7 129 €	73 514 €	57 647 €
	Oysters Adult	707 796 €	441 352 €	1 301 708 €	718 419 €	1 019 889 €
Total		**1 965 476 €**	**1 529 483 €**	**2 355 389 €**	**2 084 567 €**	**2 282 318 €**
Subtotal Edulis Semi-Adult		161 264 €	95 070 €	40 993 €	133 392 €	256 995 €
Subtotal Oysters Adult		1 804 212 €	1 434 413 €	2 314 396 €	1 951 175 €	2 025 323 €

Appendix 92: Italy Exports

Apparent Consumption - Mediterranean (kg)

Species	2018	2019	2020	2021	2022
Oysters Adult	6 376 173	8 697 916	6 603 593	10 374 442	10 671 590

Apparent Consumption - Mediterranean (€)

Species	2018	2019	2020	2021	2022
Oysters Adult	29 734 232 €	38 920 835 €	23 182 499 €	38 796 305 €	55 345 405 €

Appendix 93: Mediterranean Apparent Consumption

The categories of data collected for Denmark, Norway, Sweden, and Finland are not equal. In Denmark and Sweden, there is a production breakdown by species, while Norway only presents totals, and Finland does not grow oysters. Therefore, the following tables will not have clustered data, only country-specific figures, except for apparent consumption.

Production - Denmark (kg)

Species	2018	2019	2020	2021	2022
Edulis B2C	292 000	268 000	165 000	74 000	13 000
Gigas B2C	15 000	29 000	16 000	26 000	34 000
Total	**307 000**	**297 000**	**181 000**	**100 000**	**47 000**

Production - Denmark (€)

Species	2018	2019	2020	2021	2022
Edulis B2C	n.d.	n.d.	n.d.	n.d.	n.d.
Gigas B2C	n.d.	n.d.	n.d.	n.d.	n.d.
Total	**1 442 900 €**	**1 395 900 €**	**850 700 €**	**470 000 €**	**220 900 €**

Appendix 94: Denmark Production

Imports - Denmark (kg)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	n.d.	2 960	n.d.	n.d.	352
	Oysters Adult	55 963	60 738	93 911	158 453	340 401
Netherlands	Edulis S-A	154	n.d.	n.d.	n.d.	1 800
	Oysters Adult	54 130	54 452	21 526	71 108	97 507
Norway	Edulis S-A	2 790	2 055	5 435	4 657	6 962
	Oysters Adult	n.d.	110	395	168	6 549
Germany	Edulis S-A	n.d.	n.d.	n.d.	n.d.	357
	Oysters Adult	5 178	1 147	n.d.	1 459	3 710
UK	Edulis S-A	n.d.	n.d.	n.d.	n.d.	n.d.
	Oysters Adult	7 407	6 731	n.d.	n.d.	82
Others	Edulis S-A	2 532	0	0	1	303
	Oysters Adult	1	0	1	101	4 381
Total		**128 155**	**128 193**	**121 268**	**235 947**	**462 404**
Subtotal Edulis Semi-Adult		5 476	5 015	5 435	4 658	9 774
Subtotal Oysters Adult		122 679	123 178	115 833	231 289	452 630

Imports - Denmark (€)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	n.d.	21 784	n.d.	n.d.	2 653 €
	Oysters Adult	353 765 €	382 701 €	620 306 €	1 157 829 €	2 822 347 €
Netherlands	Edulis S-A	2 708 €	n.d.	n.d.	n.d.	2 407 €
	Oysters Adult	447 851 €	546 115 €	210 968 €	443 827 €	403 800 €
Norway	Edulis S-A	19 357 €	13 861 €	34 682 €	40 340 €	49 645 €
	Oysters Adult	n.d.	1 307 €	4 337 €	3 067 €	44 964 €
Germany	Edulis S-A	n.d.	n.d.	n.d.	n.d.	2 688 €
	Oysters Adult	75 319 €	21 450 €	n.d.	24 520 €	29 427 €
UK	Edulis S-A	n.d.	n.d.	n.d.	n.d.	n.d.
	Oysters Adult	98 642 €	90 192 €	n.d.	n.d.	13 242 €
Others	Edulis S-A	50 546 €	0 €	0 €	12 €	2 941 €
	Oysters Adult	64 €	0 €	213 €	1 297 €	34 516 €
Total		**1 048 252 €**	**1 077 410 €**	**870 506 €**	**1 670 892 €**	**3 408 630 €**
Subtotal Edulis Semi-Adult		72 611 €	35 645 €	34 682 €	40 352 €	60 334 €
Subtotal Oysters Adult		975 641 €	1 041 765 €	835 824 €	1 630 540 €	3 348 296 €

Appendix 95: Denmark Imports

Exports - Denmark (kg)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	32 545	13 484	n.d.	n.d.	n.d.
	Oysters Adult	n.d.	n.d.	n.d.	n.d.	20 365
Germany	Edulis S-A	1 961	2 521	1 349	811	474
	Oysters Adult	2 264	2 582	1 419	2 217	2 276
Netherlands	Edulis S-A	28 934	15 569	7 486	3 856	900
	Oysters Adult	n.d.	365	20	10	2 300
Norway	Edulis S-A	74	n.d.	n.d.	n.d.	n.d.
	Oysters Adult	4 104	1 870	702	928	1 830
Spain	Edulis S-A	149 369	176 388	99 069	35 468	1 150
	Oysters Adult	23 585	10 575	n.d.	n.d.	109
Sweden	Edulis S-A	210	2 554	987	1 532	153
	Oysters Adult	4 789	25 151	51 062	55 803	16 699
Others	Edulis S-A	2 877	1 012	641	278	211
	Oysters Adult	2 933	419	690	234	1 264
Total		**253 645**	**252 490**	**163 425**	**101 137**	**47 731**
Subtotal Edulis Semi-Adult		215 970	211 528	109 532	41 945	2 888
Subtotal Oysters Adult		37 675	40 962	53 893	59 192	44 843

Exports - Denmark (€)

Top Markets	Species	2018	2019	2020	2021	2022
France	Edulis S-A	268 848 €	102 436 €	n.d.	n.d.	n.d.
	Oysters Adult	n.d.	n.d.	n.d.	n.d.	164 272 €
Germany	Edulis S-A	26 089 €	36 146 €	19 763 €	8 224 €	4 218 €
	Oysters Adult	36 002 €	34 064 €	18 092 €	27 546 €	28 615 €
Netherlands	Edulis S-A	217 797 €	104 727 €	43 815 €	34 605 €	8 222 €
	Oysters Adult	n.d.	3 544 €	20 €	126 €	22 152 €
Norway	Edulis S-A	714 €	n.d.	n.d.	n.d.	n.d.
	Oysters Adult	38 967 €	15 692 €	6 611 €	10 947 €	27 155 €
Spain	Edulis S-A	1 120 186 €	1 195 943 €	590 291 €	257 196 €	9 932 €
	Oysters Adult	117 486 €	75 244 €	n.d.	n.d.	4 274 €
Sweden	Edulis S-A	2 971 €	19 928 €	6 702 €	16 756 €	2 006 €
	Oysters Adult	33 256 €	169 738 €	381 881 €	430 500 €	195 964 €
Others	Edulis S-A	16 822 €	1 722 €	2 312 €	3 401 €	480 €
	Oysters Adult	88 733 €	7 195 €	1 961 €	4 873 €	11 214 €
Total		**1 967 871 €**	**1 766 379 €**	**1 071 448 €**	**794 174 €**	**478 504 €**
Subtotal Edulis Semi-Adult		1 653 427 €	1 460 902 €	662 883 €	320 182 €	24 858 €
Subtotal Oysters Adult		314 444 €	305 477 €	408 565 €	473 992 €	453 646 €

Appendix 96: Denmark Exports

Production - Norway (kg)

Species	2018	2019	2020	2021	2022
Total	**18 000**	**10 000**	**20 000**	**15 000**	**16 000**

Production - Norway (€)

Species	2018	2019	2020	2021	2022
Total	**312 914 €**	**94 233 €**	**84 630 €**	**88 367 €**	**101 500 €**

Appendix 97: Norway Production

Imports - Norway (kg)

Top Markets	2018	2019	2020	2021	2022
Canada	2 471	6 078	6 205	7 683	6 926
France	48 645	53 992	50 107	65 604	81 555
Ireland	633	601	1 788	6 416	3 275
Netherlands	3 215	1 265	258	184	0
Portugal	0	40	873	419	316
Sweden	1 218	221	487	2 212	1 539
Others	48	18	0	317	3 280
Total	**56 230**	**62 215**	**59 718**	**82 835**	**96 891**

Imports - Norway (€)

Top Markets	2018	2019	2020	2021	2022
Canada	40 218 €	93 504 €	83 311 €	131 613 €	156 756 €
France	411 874 €	421 066 €	347 736 €	488 773 €	703 041 €
Ireland	7 930 €	7 783 €	19 339 €	72 737 €	44 613 €
Netherlands	24 907 €	9 839 €	1 816 €	997 €	0 €
Portugal	0 €	458 €	9 288 €	4 334 €	3 645 €
Sweden	14 403 €	3 667 €	5 372 €	8 196 €	17 023 €
Others	643 €	138 €	0 €	6 479 €	66 483 €
Total	**499 975 €**	**536 455 €**	**466 862 €**	**713 128 €**	**991 560 €**

Appendix 98: Norway Imports

Exports - Norway (kg)

Top Markets	2018	2019	2020	2021	2022
Denmark	0	666	150	320	1 186
Netherlands	6 500	890	0	419	0
Sweden	3 112	6 405	4 481	4 717	10 172
Others	0	33 244	26 114	24 756	5 970
Total	**9 612**	**41 205**	**30 745**	**30 212**	**17 328**

Exports - Norway (€)

Top Markets	2018	2019	2020	2021	2022
Denmark	0 €	6 931 €	1 717 €	3 927 €	18 693 €
Netherlands	72 100 €	15 150 €	0 €	8 716 €	0 €
Sweden	36 212 €	76 035 €	53 856 €	80 389 €	137 556 €
Others	0 €	134 876 €	106 764 €	119 590 €	29 861 €
Total	**108 312 €**	**232 992 €**	**162 337 €**	**212 621 €**	**186 110 €**

Appendix 99: Norway Exports

Production - Sweden (kg)

Species	2018	2019	2020	2021	2022
Edulis B2C	12 000	21 000	13 000	13 000	5 000
Gigas B2C	0	0	2 000	6 000	14 000
Total	**12 000**	**21 000**	**15 000**	**19 000**	**19 000**

Production - Sweden (€)

Species	2018	2019	2020	2021	2022
Edulis B2C	n.d.	n.d.	n.d.	n.d.	n.d.
Gigas B2C	n.d.	n.d.	n.d.	n.d.	n.d.
Total	**87 600 €**	**153 300 €**	**109 500 €**	**138 700 €**	**138 700 €**

Appendix 100: Sweden Production

Imports - Sweden (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Denmark	Edulis S-A	150 031	53 315	14 349	14 981	14 301
	Oysters Adult	9 563	8 183	26 046	109 219	163 267
France	Edulis S-A	210	82 631	71 005	60 659	279
	Oysters Adult	61 838	56 374	22 939	64 029	222 909
Netherlands	Edulis S-A	67 990	37 059	28 968	62 657	17 566
	Oysters Adult	309 492	300 357	213 722	187 537	193 562
Norway	Edulis S-A	1 061	1 518	852	159	1 300
	Oysters Adult	1 698	2 810	2 026	1 584	6 952
Canada	Edulis S-A	601	2 037	1 639	1 991	2 078
	Oysters Adult	n.d.	n.d.	n.d.	971	498
Others	Edulis S-A	0	20	0	1 059	3
	Oysters Adult	109	90	76	567	4 793
Total		**602 593**	**544 394**	**381 622**	**505 413**	**627 508**
Subtotal Edulis Semi-Adult		219 893	176 580	116 813	141 506	35 527
Subtotal Oysters Adult		382 700	367 814	264 809	363 907	591 981

Imports - Sweden (€)

Top Markets	Species	2018	2019	2020	2021	2022
Denmark	Edulis S-A	156 423 €	128 244 €	58 682 €	67 080 €	78 454 €
	Oysters Adult	27 365 €	37 196 €	188 153 €	364 306 €	859 625 €
France	Edulis S-A	4 423 €	205 043 €	258 683 €	300 696 €	2 541 €
	Oysters Adult	477 136 €	360 050 €	170 247 €	448 524 €	1 255 332 €
Netherlands	Edulis S-A	231 826 €	103 541 €	95 135 €	128 937 €	83 554 €
	Oysters Adult	842 434 €	760 501 €	595 476 €	724 995 €	1 236 450 €
Norway	Edulis S-A	10 385 €	13 493 €	18 464 €	2 634 €	5 410 €
	Oysters Adult	21 060 €	33 051 €	9 959 €	7 761 €	55 907 €
Canada	Edulis S-A	11 398 €	36 018 €	30 652 €	51 871 €	74 815 €
	Oysters Adult	n.d.	n.d.	n.d.	19 585 €	12 942 €
Others	Edulis S-A	0	207	0	12 047	3
	Oysters Adult	4 485 €	3 687 €	3 301 €	5 253 €	26 870 €
Total		**1 786 935 €**	**1 681 031 €**	**1 428 752 €**	**2 133 689 €**	**3 691 903 €**
Subtotal Edulis Semi-Adult		414 455 €	486 546 €	461 616 €	563 265 €	244 777 €
Subtotal Oysters Adult		1 372 480 €	1 194 485 €	967 136 €	1 570 424 €	3 447 126 €

Appendix 101: Sweden Imports

Exports - Sweden (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Finland	Edulis S-A	12 012	4 669	5 574	4 183	8 656
	Oysters Adult	4 587	244	857	1 777	2 318
Norway	Edulis S-A	4 892	765	5 480	1 862	210
	Oysters Adult	226	126	560	831	2 154
Others	Edulis S-A	0	0	195	24	9
	Oysters Adult	1	141	61	1 061	525
Total		**21 718**	**5 945**	**12 727**	**9 738**	**13 872**
Subtotal Edulis Semi-Adult		16 904	5 434	11 249	6 069	8 875
Subtotal Oysters Adult		4 814	511	1 478	3 669	4 997

Exports - Sweden (€)

Top Markets	Species	2018	2019	2020	2021	2022
Finland	Edulis S-A	26 038 €	48 081 €	33 526 €	45 117 €	99 456 €
	Oysters Adult	10 969 €	4 282 €	10 119 €	30 332 €	19 170 €
Norway	Edulis S-A	11 836 €	5 551 €	15 118 €	9 389 €	3 588 €
	Oysters Adult	1 269 €	856 €	1 332 €	3 907 €	14 204 €
Others	Edulis S-A	0 €	0 €	461 €	261 €	456 €
	Oysters Adult	21 €	543 €	370 €	149 €	7 520 €
Total		**50 133 €**	**59 313 €**	**60 926 €**	**89 155 €**	**144 394 €**
Subtotal Edulis Semi-Adult		37 874 €	53 632 €	49 105 €	54 767 €	103 500 €
Subtotal Oysters Adult		12 259 €	5 681 €	11 821 €	34 388 €	40 894 €

Appendix 102: Sweden Exports

Production - Finland (kg)

Species	2018	2019	2020	2021	2022
Edulis B2C	n.d.	n.d.	n.d.	n.d.	n.d.
Gigas B2C	n.d.	n.d.	n.d.	n.d.	n.d.
Total	**n.d.**	**n.d.**	**n.d.**	**n.d.**	**n.d.**

Appendix 103: Finland Production

Imports - Finland (kg)

Top Markets	Species	2018	2019	2020	2021	2022
Sweden	Edulis S-A	2 050	3 281	2 416	983	412
	Oysters Adult	1 496	873	1 456	3 091	6 373
France	Edulis S-A	1 310	1 193	196	n.d.	n.d.
	Oysters Adult	101	129	15	n.d.	n.d.
Netherlands	Edulis S-A	740	367	131	180	252
	Oysters Adult	7 881	8 259	6 332	6 637	8 248
Others	Edulis S-A	14	24	0	0	0
	Oysters Adult	216	6	146	0	112
Total		**13 808**	**14 132**	**10 692**	**10 891**	**15 397**
Subtotal Edulis Semi-Adult		4 114	4 865	2 743	1 163	664
Subtotal Oysters Adult		9 694	9 267	7 949	9 728	14 733

Imports - Finland (€)

Top Markets	Species	2018	2019	2020	2021	2022
Sweden	Edulis S-A	19 981 €	33 818 €	11 730 €	14 990 €	4 401 €
	Oysters Adult	10 952 €	9 553 €	15 157 €	31 589 €	57 225 €
France	Edulis S-A	18 257 €	21 906 €	4 498 €	n.d.	n.d.
	Oysters Adult	1 990 €	2 274 €	300 €	n.d.	n.d.
Netherlands	Edulis S-A	12 393 €	7 444 €	3 915 €	4 025 €	4 265 €
	Oysters Adult	93 746 €	103 777 €	82 570 €	84 927 €	98 735 €
Others	Edulis S-A	694 €	974 €	0 €	0 €	0 €
	Oysters Adult	3 322 €	166 €	1 983 €	0 €	995 €
Total		**161 335 €**	**179 912 €**	**120 153 €**	**135 531 €**	**165 621 €**
Subtotal Edulis Semi-Adult		51 325 €	64 142 €	20 143 €	19 015 €	8 666 €
Subtotal Oysters Adult		110 010 €	115 770 €	100 010 €	116 516 €	156 955 €

Appendix 104: Finland Imports

Exports - Finland (€)

Top Markets	Species	2018	2019	2020	2021	2022

Finnish oyster exports exist, but are irrelevant (hundreds of Euros)

Appendix 105: Finland Exports

Apparent Consumption - Nordics (kg)

Species	2018	2019	2020	2021	2022
Oysters Adult	856 202	807 796	578 193	728 686	1 171 067

Apparent Consumption - Nordics (€)

Species	2018	2019	2020	2021	2022
Oysters Adult	4 366 505 €	3 987 758 €	2 831 939 €	4 006 674 €	7 724 388 €

Appendix 106: Nordics Apparent Consumption