

SAFs & Maritime Fuels: Industry Reflections on Market Readiness and Strategic Challenges

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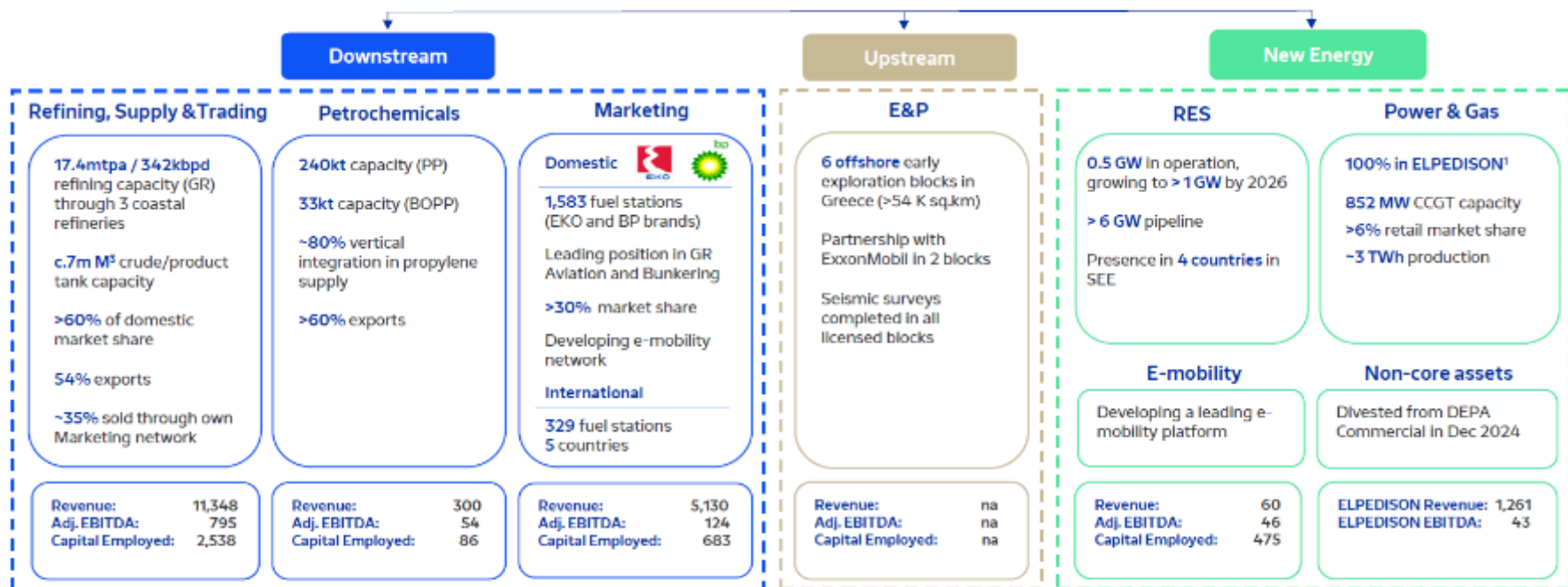


Building Social Acceptance for Biofuels
and Carbon-Neutral Fuels in Europe
workshop – CAPTUS Webinar

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Southeast Europe's leading downstream Group with presence along the energy value chain



Notes: ¹ Completion of the acquisition of the remaining 50% of the share capital of ELPEDISON on 15 July 2025

In €m, FY 24



Fuels marketing – leading in the Greek market across all segments

With a local market share of >30%, economic recovery drives results improvement



Ground fuels

~31% market share¹
6% volume growth

Ongoing transformation program focusing on customer centricity, decarbonization and operational improvement

- ✓ Non-fuel retail growth
- ✓ Premium products offering
- ✓ Differentiated fuels penetration
- ✓ EV charging network expansion
- ✓ Customer experience (loyalty & digital)



Marine

~31% market share¹
-3% volume growth

- ✓ Leading position in coastal shipping, cruise and deep-sea segments
- ✓ New partnerships to increase sales in leisure
- ✓ Increase sales to cruise operators



Aviation

~37% market share¹
11% volume growth

- ✓ 9% increase in Greek airports' traffic
- ✓ Increasing flight connectivity between mainland and islands
- ✓ HELLENiQ 1st to introduce SAF² in Greece
- ✓ Transition to e-fueling



bp



>1,500
Stations



The diagram illustrates the COCPT decision tool for the production of sustainable aviation fuel (SAF) from microalgae. The process begins with microalgae strains (Chlorella, Nannochloris, and Rhodospirillum rubrum) growing in semi-transparent photobioreactors. These are then processed via two pathways: HEFA (Hydrothermal Extraction) and HTL (Hydrothermal Liquefaction). The HEFA pathway involves lipid extraction and VFA extraction, leading to HEFA and VFA extraction. The HTL pathway involves HTL reactor and biocrude production, leading to biocrude and hydrochar. Both pathways lead to two-step dark fermentation, which produces H₂ and CO₂. The H₂ is used for aromatisation, and the CO₂ is used for mild upgrading. The aromatisation step leads to gasoline and shipping fuel. The mild upgrading step leads to shipping fuel. The final products are gasoline and shipping fuel, which are then used in an aircraft. The process is evaluated using Techno-economic evaluation, LCA, sLCA, and COCPT decision tool.



Stakeholders' Insights



Top Management

- Age 38 -60
- 70% Men – 30% Women
- Refinery Installations
- Headquarters

Business Units

- Strategic Planning & New Activities
- New Technologies & Alternative Energy Sources
- R&D, Competitiveness & New Technologies
- Technical Services & Process
- HSE & Sustainable Development
- Supply and Trading

FEEDBACK

40% participation

Stakeholder Mapping

60%

Refineries

Identifying Key Players

Identifying stakeholders such as ship owners, regulatory bodies, fuel suppliers, and port authorities is crucial in maritime decarbonization.

Analyzing Stakeholder Interests

Understanding the interests of stakeholders helps in anticipating their support or resistance to decarbonization efforts.

Understanding Power Dynamics

Mapping stakeholders helps to understand power dynamics and influence in the maritime sector, crucial for implementing strategies.

Identifying Potential Barriers

Effective stakeholder mapping identifies potential barriers to implementing decarbonization strategies in the maritime sector.

20%

Port
Authorities



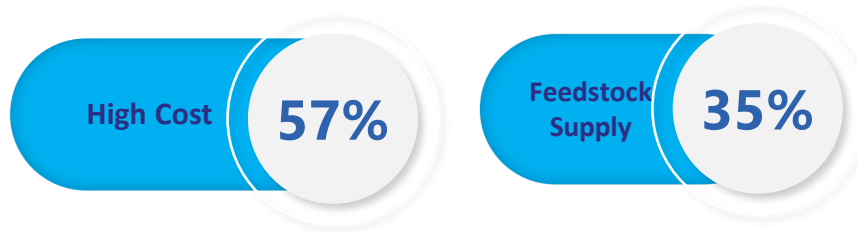
20%

Maritime Sector

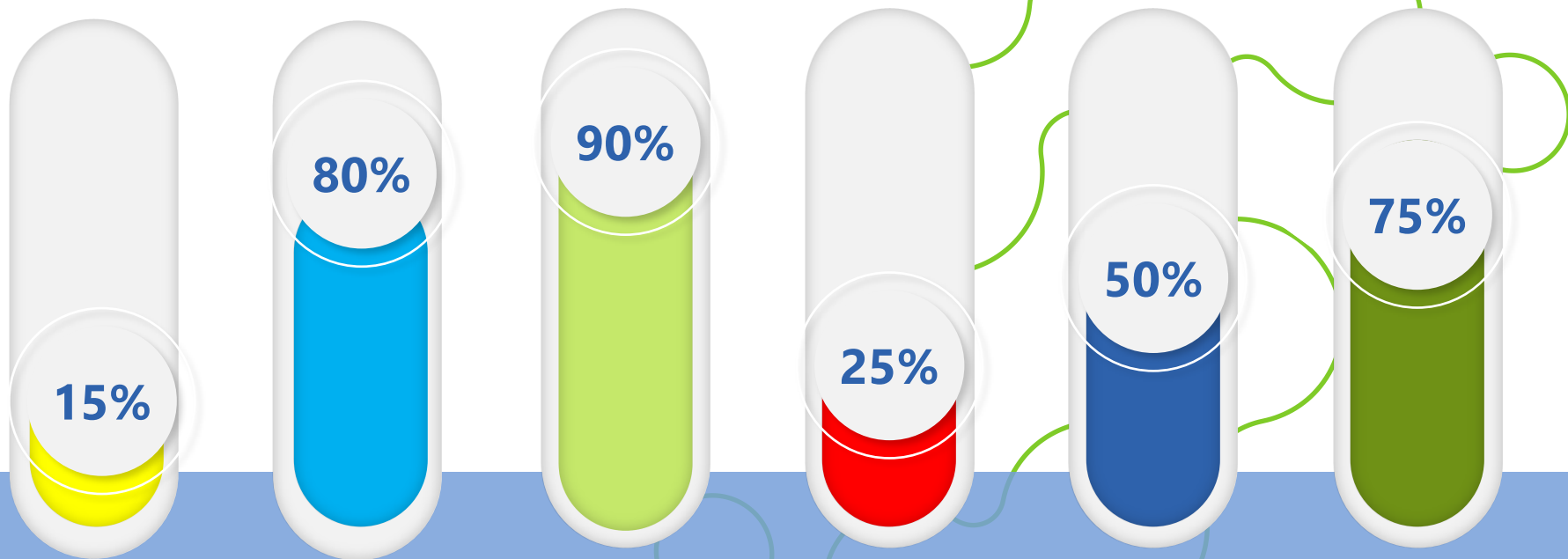
Main opportunity for the implementation of SAF technologies in Europe



Main barrier for implementing SAF technologies



Main Outcomes



Fostering Economic
Growth

Low TRL

Decarbonization
Aviation Industry

Social
Acceptance

Clean
transportation

Energy Security



Strengths

- Contribution to Sustainability Goals
- Compliance with Regulations

Weaknesses

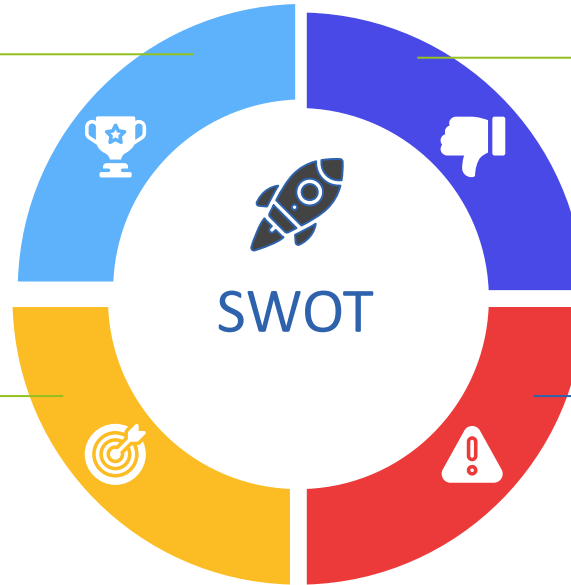
- Not aware of microalgae production pathway
- Lack of certification / infrastructure
- Production price of microalgal SAF
- Feedstock shortage

Opportunities

- Decarbonization of maritime industry
- Promoting Clean Transportation
- Strengthen Energy Security
- Regulatory Framework
- EU Funding

Threats

- Raw Material Shortage caused by geopolitical threats
- Unconventional shipping routes
- Emerging technologies competing advanced biofuels
- Lack of a biorefinery culture



Thank you!



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 HELLENIQ
ENERGY

 WINGS

 LEITAT

 atatoranca
renewable
energies

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