

# Unlocking the Potential Beyond Compliance: Türkiye's Holistic Biofuel Solutions



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# AGENDA

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# Strategic Vision: Bio Bunkering Hub



## Geostrategic Bridge

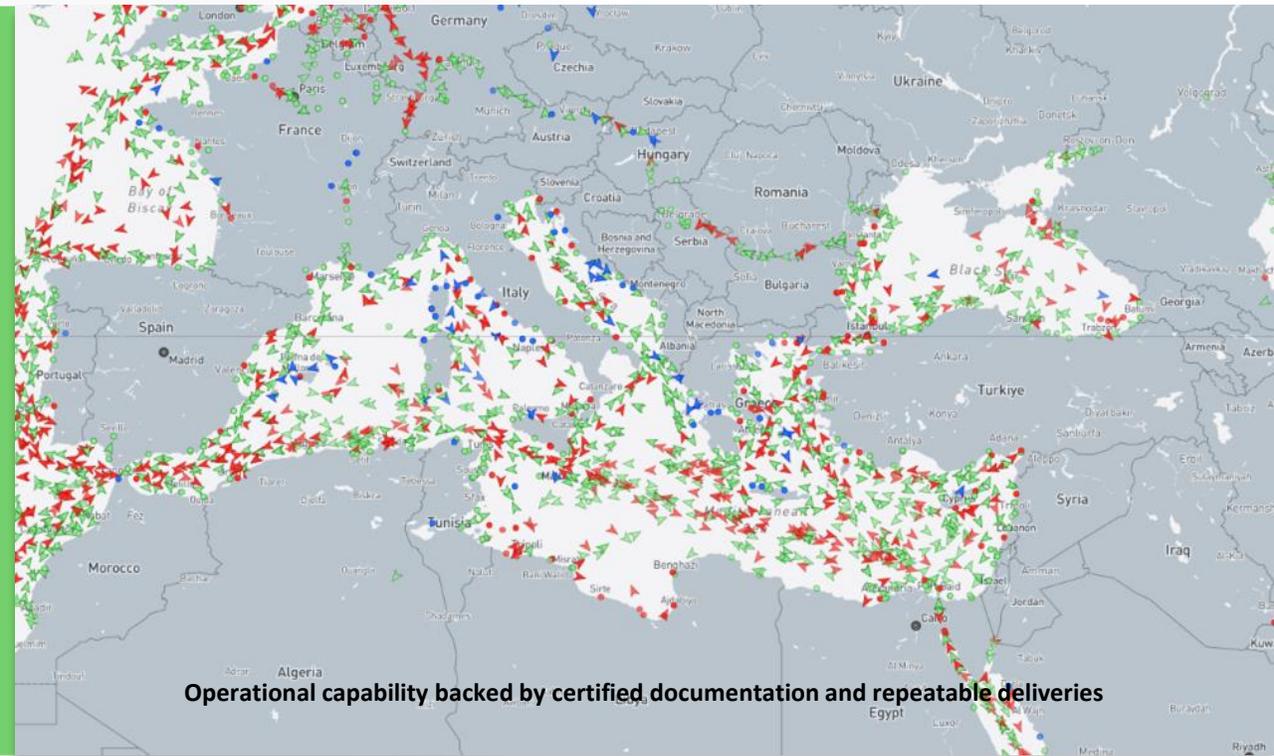
- ✓ Connecting Asia & Europe
- ✓ Critical Energy Hub

## The Initiative of Marine Biofuel

- ✓ **Arkas Bunker**: Physical marine fuel supplier since 2006
- ✓ Türkiye's **first ISCC-EU certified** & first bio marine fuel supplier company
- ✓ Public & Private Synergy

## Global Commitment

- ✓ Alignment with IMO 2030 & 2050 targets



# From Local Waste to Global Fuel: Circular Economy Model



DB Tarımsal Enerji as the leading player in Türkiye's biofuel market for the past 20 years,

- Produces biofuels using 100% local feedstock,
- Annual production capacity 100.000 tons of biodiesel, 60.000 tons of sustainable marine fuels, 15.000 tons of refined glycerin.

# Project Highlights



- **Duration Period** : 2 years of R&D activities
- **Local Waste-Based Feedstock**: 100%
- **Fuel Type**: distillate and residual
- **First Delivery**: May 16, 2024
- **Standards & Certifications**:
  - ISO 8217:2017
  - ISCC EU &RSB EU Certificate
- **GHG Performance**:
  - 5.96 g CO<sub>2</sub>-eq/MJ
  - 93.7% Emission Reduction Potential

# Strategic Pillars of the Project

Policy Making And Compliance With Regulations

The local legal framework was established, and efforts were made to ensure that these laws comply with international standards. Today, Türkiye is recognized as one of the countries where biofuel bunkering is actively implemented.

Technical Standards and End-Use Compatibility

Project partners collaborated to have third-party authorities in different countries evaluate and approve product samples.

Compliance with EU Sustainability Standards

Compliance with EU sustainability standards was ensured at all stages of the supply chain, from feedstock selection to the final product, following EU biofuel criteria and certification.

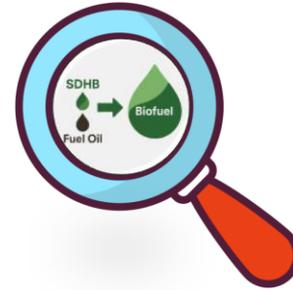
Feedstock

On the production side, feedstock availability and diversification are key priorities for scalability.

Strong Partnerships

*A strong partnership with **Arkas Line and Arkas Bunker** has been maintained to achieve sustainability objectives.*

# Integrity & Certification: An Unbroken Chain of Trust



## Verified Supply Chain

End to End Certification  
(Arkas Bunker is the first  
ISCC EU certified marine fuel  
supplier)

PoS Transfer

Global Validity

## Traceability Mechanism

Mass Balance Transparency

Independent Audits

No Double Counting

## Regulatory Compliance

EU ETS



Fuel EU Maritime



CII Ratings



Sustainability Goals



# Our Biofuel Journey



# Execution: Operational Excellence & Infrastructure

## Robust Infrastructure

- › **Arkas Bunker** owned barge fleet
- › Dedicated loading terminal

## Proven Success

- › Milestone: Türkiye's first biofuel supply executed by **Arkas Bunker** in May 2024
- › No technical issues were reported: Arkas Bunker completed biofuel deliveries without any technical problems or complaints.

## True «Drop in» Solution

- › No engine mods/ No CAPEX
- › Plug & Play



## Firsts in Our Biofuel Journey

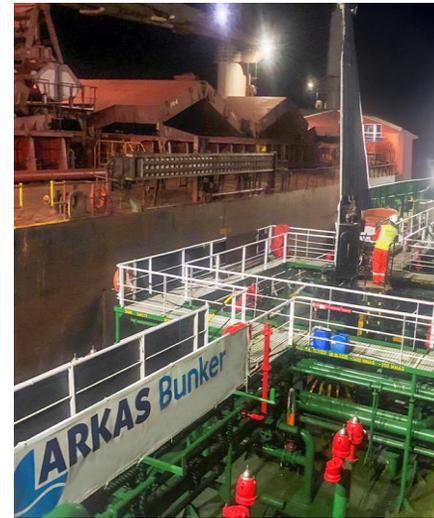
- › Türkiye's first company in the marine fuels sector to receive ISCC EU Certification
  - › Türkiye's first Bio24F supply
  - › Türkiye's first Bio30F supply
- › Türkiye's first UCOME Biodiesel supply

# Execution: Operational Excellence & Infrastructure



Bio30F

Bio24F



# What's Next: Opportunities & Open Questions

## Opportunities

### Production & Technical Experience

3.724 tons produced; proven laboratory and onboard ship performance

### Renewable Energy Management

Biorefinery powered by local renewable Energy sources;  
GHG reduction: Year 1- 92.3%, Year 2-93.7%

### Fully Supply Chain Management

Cost-effective Operations and decarbonisation

### Local Feedstock Advantage

Feedstock diversification and accessibility in Türkiye

## Open Questions

### Regulated Industry

First scope and implementation timeline

### Policy & Incentives

Development of regulatory framework, policy support, and market formation in Türkiye

### Long-term Demand Planning

Ensuring long-term market balance and demand visibility

### Voluntary Market Mechanism

Book & claim system and other emerging mechanisms

# Conclusion: Ready for the Future



## Scalability

- ✓ Capacity aligned with 2026–2030 demand growth



## Holistic Solution

- ✓ Waste management + Production + Bunkering



## Trusted Partner

- ✓ Certified and traceable delivery framework



**TÜRKİYE IS READY FOR**

**Bio**

**MARINE FUELS**

**ARE YOU?**



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