

Sustainable bunkering on the Danube: Marine Gasoil ECO20

Danube Commission



## OMV Strategy 2030.

OMV is an Austria's largest listed industrial company. As a global energy and chemicals company, our goal is to become a leading supplier of sustainable fuels, chemicals and materials by 2030.

Sustainability and circular economy solutions are at the heart of our strategy. Our goal is to become carbon neutral by 2050 at the latest.

Putting Fuel & Feedstocks on a sustainable footing for the energy transition

- Our goal is to increase our production of sustainable fuels and chemical feedstocks to 1.5 million metric tons per year by 2030.
- At the same time, fossil throughput will be reduced by 2.6 million metric tons per year by 2030.
- OMV's ambition is to increase the sustainable product share in total Marine fuels sales to 10% by 2030.



#### DANUBE NAVIGATION IN FIGURES



Danube Infrastructure - REWWay

### 2414 KM

km of navigable waterway

2500

Barges, pushers, and self-propelled vessels

3

Bunker stations 2 on the Upper Danube and 1 on the Lower Danube



### <u>What's HVO?</u> (youtube.com)

#### (Hydrotreated Vegetable Oil)

- •is a road-ready, high-performance fuel derived from renewable or waste-based feedstocks
- used 100% or in various blends
- -long term stability, similar with fossil diesel
- •very good cold weather performance (CFPP -22 to -40)
- •very good combustion properties due to high cetane number
- •is bringing environmental benefits while having similar properties to conventional Diesel fuel
- can reduce up to 80% CO<sub>2</sub> emissions compared to conventional fuel
- is suitable for all diesel engines, no odifications required
  additives are required for lubricity

### FAME

#### Fatty Acid Methyl Esters

is a renewable alternative that can be blended with fossil diesel in various proportions
used blended from 7% to 20%.
less stable as can absorb water and lead to microbial growth
poorer cold flow properties (CFPP 0 to -10)
moderate combustion properties due to tendency to coking
good lubricity
can reduce with 55% CO<sub>2</sub> emissions compared to conventional fuel

 is suitable for all diesel engines only blended, no modifications required

## OMV Marine Gas Oil ECO20 – Our sophisticated solution for the challenges of inland shipping.

Innovative solution in inland navigation

- 20% HVO-share by ISCC certified mass balancing; an established approach as already used in the aviation (SAF) sector
- Excellent storability, low hygroscopicity
- Free of FAME and sulphur



- Drop-in product, no change to the equipment needed
- Loading via barge, truck and RTC possible
- Same norms standards as conventional marine gas oil



Proven CO2 savings in shipping

- GHG-savings of min. 11 %\* over the entire life cycle of the product
- HVO is produced via hydrotreating-process from feedstocks such as plant oils, waste, residue, as well as advanced oils

\*) compared to the fossil comparator by EU RED II

### **Production & certification with ISCC**

#### An established and efficient supply chain that offers flexibility

OMV Marine Gasöl ECO20 is certified according to the ISCC Plus standard. This ensures the traceability of sustainable materials through international supply chains to the end product. The greenhouse gas emission savings, calculated and certified according to the highest European standards, are fully compliant with EU RED II.



## ISCC mass balancing tracks the material flow through complex value chains

- The mass balance system is a type of accounting system in which the sustainability characteristics of the materials are recorded and precisely tracked for input, output and stock.
- Assuming an actual physical material input, the stock of sustainable materials and the associated sustainability characteristics can be allocated to different product outputs for accounting purposes.
- Mass balancing is subject to strict requirements in terms of calculation, accounting period and transparency. In addition, the balance sheet must always be site-specific and confirmed annually by an external audit.



/https://www.iscc-system.org/certification/chain-of-custody/mass-balance/

## The certificate - ISCC Sustainability Declaration

- 1. Conventional and bio-based raw materials are mixed and processed together.
- 2. The physical mixing causes the mixture to lose its individual properties. The sustainability properties and GHG savings can therefore only be determined via accounting.
- 3. Output products with different sustainability characteristics can be generated from the same storage system.
- 4. The sustainable share of the delivered product is documented with ISCC Sustainability Declaration (SD), sample certificate on the right.

Sustainability Declaration a	according to ISC	C PLUS		V3.5.2
Unique number of Sustainability Declaration:	01/2024-06_HVO			
Date of issuance (DD.MM.YYYY):	05.06.2024			6 Carbon Certificatio
Supplier		Recipient		
Name:		Name:		
OMV Downstream GmbH / OMV Raffi	nerie Schwechat			
Address:		Address:		
Mannswörtherstraße 28				
2320 Schwechat				
Austria				
Certificate number:		Contract number:		
ISCC-PLUS-Cert-DE102-23120227				
Address of dispatch/shipping point of the sustainable material:	<ul> <li>✓ Same as addre</li> </ul>	ss of supplier		
Address of receipt/receiving point of the sustainable material:	□ Same as addre	ss of recipient		
Date of dispatch of the sustainable material (DD.MM.YYYY):	01.06.2024			
1. General Information				
Type of product:	HVO			
Product specification (if applicable):	HVO used as compo	nent for marine gasoil		
Raw material category <sup>1</sup> :	Circular	Bio-Circular 🛛	Bio 🗆	Renewable- energ derived
Unit (please select) : mt				
Total quantity of certified material:	mt			
Total quantity of delivery (optional):	mt			
Percentage of certified material:	N/A % (o	the total quantity of delive	ery)	
Type of recycling operations (circular/bio-circular):	Chemical	Mechanical	P	Not applicable
Waste status (circular/bio-circular):	Post-consumer	material 🗌 🛛 Pre-consun	ner material 🛛 🕖	Mixed/unspecifie
Type of raw material (optional):				
Raw material specification (if applicable):				
Country of origin of the raw material (optional):				

Our promise:

#### PROGRESSING TOGETHER

Progressing together through a reliable supply of highest quality products delivering future innovative sustainable products



### RELIABLE

Reliable supply and delivery Industry expertise Value-driven solutions

### INNOVATIVE

Highest-quality products and services Future innovative solutions Seamless digital journey

# all the set

SUSTAINABLE

Highest safety standards Sustainable products and services Sustainability knowledge providers

# "The future will either be sustainable, or there will not be a future at all."



OMV



## Thank you!

#### How are GHG emissions from fuels determined? Scope 1 How are GHG emissions Burn Example : inland navigation Scope 3 from fuels determined? - A Scope 3 Beyond Scope 2 glance at the product life Bevond Buv cvcle NF<sub>2</sub> **HFCs** CO<sub>2</sub> CH₄ N<sub>2</sub>O Transport Investments & Purchased Company distribution electricity Ō vehicles 俞 Use of sold Waste products / generated in service provided operations 6 h Heating Ō 曲 Plant. Facilities. End-of-life Processing of Transport Employee Purchased Business travel Equipment Cooling treatment of sold products commute aoods & services sold products distribution **Direct Emissions** Indirect (Downstream Activities) Indirect (Upstream Activities) Indirect Emissions **Direct emissions from** Indirectly Emissions that the company is indirectly responsible in its Emissions that the company is indirectly responsible in its caused emissions value chain, e.g. when it buys products and services from company operations. downstream value chain, e.g. when produced goods are from the energy the being used and disposed of by buyers. from sources that suppliers. **OMV** Petrom company purchases an organization owns

or controls.

and uses.