

Founded in 1896, we have celebrated our 125th anniversary

**SYF90** (Sustainable Yachting Fuels -90%CO<sup>2</sup>)

**ULTRA LOW CARBON  
SUPERIOR SYNTHETIC BIO FUEL  
SECOND GENERATION ECO-CIRCULAR**

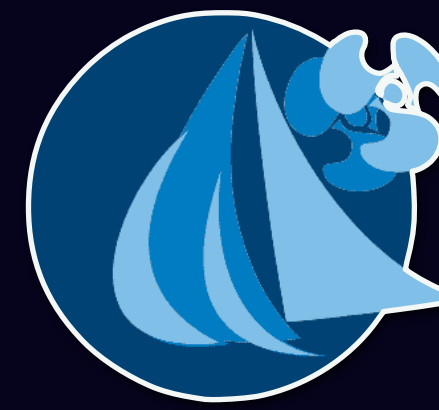


# ***Sustainable Alternative Fuels for the MARINE***

TODAY, WE ARE GOING TO ANSWER A FEW  
QUESTIONS

- What does ICOMIA tell us in its categorical MESTRADE report...
- **IS IT LEAGAL ?**
- What is a Sustainable Alternative Synthesis FUEL?
- **WHAT SOURCES DO WE USE?**
- WHAT IS THE ADVANTAGE OF USING XTLS (GTL, BTL, PTL)?
- SOME EXAMPLES WITH VERY LOW CARBON CONTENT!
- OBJECTIVE! Conclusion and Question...

# WHAT DOES IT TELL US?



**ICOMIA**  
INTERNATIONAL COUNCIL OF  
MARINE INDUSTRY ASSOCIATIONS

For those who do not know them ICOMIA, or International Council of Marine Industry Associations, is an international organization that represents the global nautical industry.

**METS**  
**TRADE**.COM  
NOV 2023



**ICOMIA**  
INTERNATIONAL COUNCIL OF  
MARINE INDUSTRY ASSOCIATIONS



## **Pathways to Propulsion Decarbonisation for the Recreational Marine Industry**

: "Sustainable liquid marine fuels, such as XTL synthetic renewable alternative fuels, should be the most appropriate energy source to decarbonize pleasure boats by 2035 - up to 90% - without compromising the distance a boat can travel or its performance".

IS IT LEAGAL TO FILL YOUR VESSEL  
WITH SYNTHETIC SUSTAINABLE  
FUELS in FR, IT, ES ?

**NO ITS NOT LEGAL !**  
**BUT YOU CAN DO IT UNDER STRICT DEROGATION**  
**(Control carefully this derogation , risk is 7000€/M3 bill ! )**

SYNTHETIC FUELS HAVE BEEN AUTHORISED FOR ROAD TRANSPORTATION ONLY (code DOUANES ART. 256b)

And WE HAVE THESE DEROGATIONS UNDER ISCC AND CUSTOMS AGREEMENT WE DELIVERED 30 YACHTS AND VESSELS IN 2023

# What is a Sustainable Alternative Fuel?

European Directives RED II

It exists in EUROPE,

2 types of Durable alternative fuels for diesel engines

**The B100 AGRAIRE or "FAME"**

**XTL SYNTHETIC Fuels our SYF90**

**CIRCULAR ECO of  
Waste & Residues**



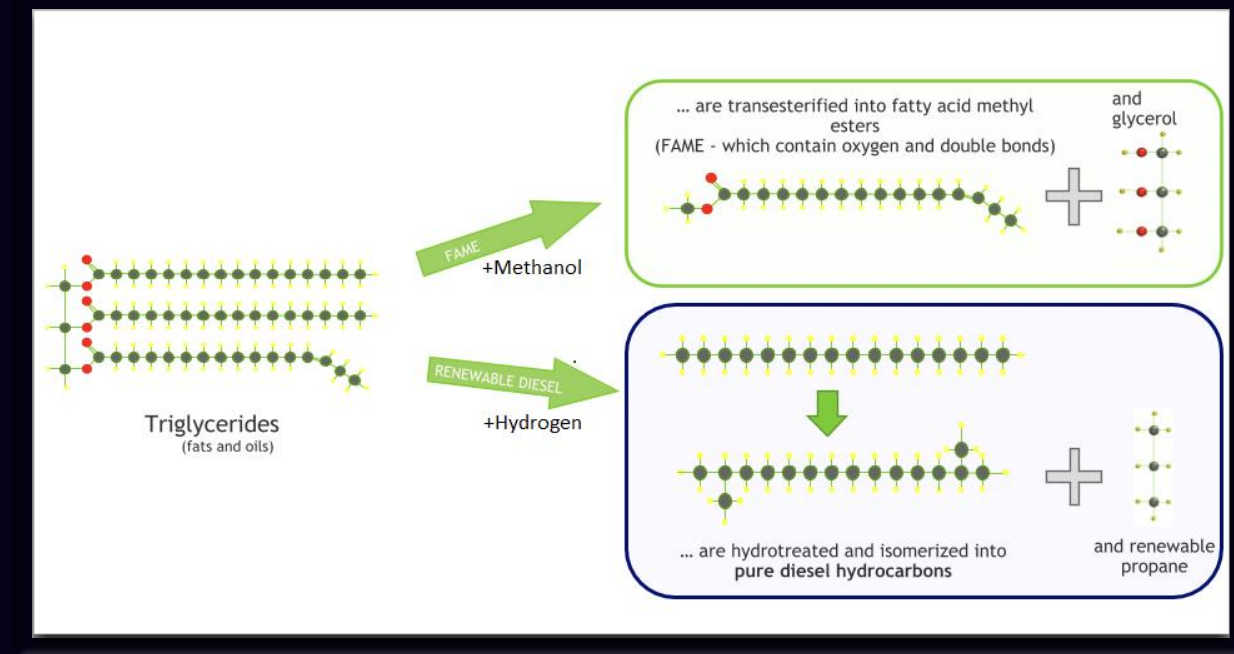
1er Génération



2em Génération



# A BIO-SYNTHETIC FUEL?



3 CATEGORIES OF XTLs co-exist within the same DIN EN 15940 standard:

BTL/WTL (used oils, animal fats, solid lignocellulosic): BIO TO LIQUID and HYDROTREATED OIL

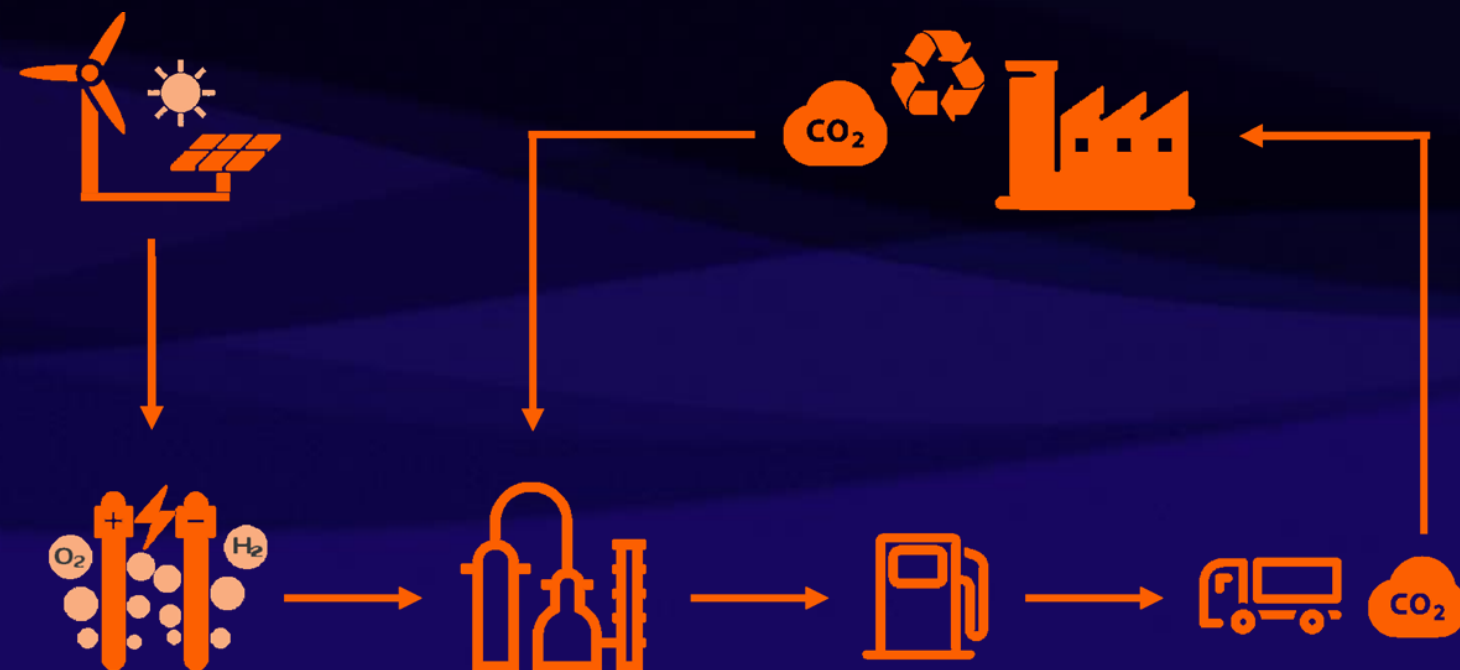
GTL BIO-GAZ & Nat. GAZ (methane) TO LIQUID

HVO Agricultural vegetable oils (palm?)

PTL (Electricity water and capture: demo plants): POWER TO LIQUID

# WHAT ARE OUR BIO-SOURCES in detail?

- USED OILS
- ANIMAL FATS SQUAREDING
- TALL OIL Paper Craft
- LIGNOCELLULOSIC
- RECYCLED PLASTICS
- NATURAL GAS and BIOGAS METHANIZATION
- WATER, ELECTRICITY & CAPTURE!

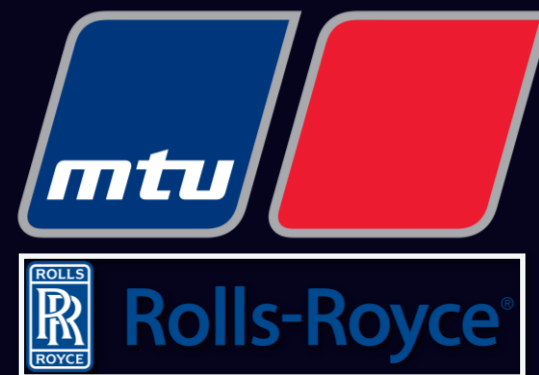


# WHAT IS THE BENEFIT OF USING THE SYF90?

- 100 % COMPATIBLE  
« Drop in Fuel »
- 100 % Miscible gas oil  
from traditional oil



# 100% COMPATIBLE



## SUSTAINABLE FUELS: E-DIESEL AND XTL MAKE *mtu* ENGINES (ALMOST) CLIMATE-NEUTRAL

HVO fuel enables a 90% decrease in emissions with no compromise on power output. **XTL** can therefore make a major contribution to climate protection and is already being used in many *mtu* engines.




VOLVO PENTA



Reducing fossil CO2 emissions by up to 90%

All Volvo Penta diesel engines run safely and efficiently on **XTL (Synthetic Bio Fuel)** a renewable, paraffinic fuel produced from either vegetable or animal sources. **XTL** can reduce fossil CO2 emissions by 90% and is suitable for both marine and industrial power systems.

# WHAT IS THE BENEFIT OF USING XTL (GTL, BTL, PTL)

- 100 % COMPATIBLE « Drop in Fuel »
- -90% CO<sub>2</sub>eq (GHG) THIS MEANS 3 TIMES LESS THAN FRENCH ELECTRICITY (FR 90g/kWh... XTL: 30g/kWh)
- 100 % Sustainable & Circular Economy (waste and residues)
- ZERO LOSS OF AUTONOMY  and better efficiency and can expect greater autonomy +5%

**-90%**  
DE RÉDUCTION  
DE CO<sub>2</sub>

**100%**  
ENERGIE  
RENOUVELABLE

# WHAT IS THE BENEFIT OF USING XTL (GTL, BTL, PTL) PART 2?

- NO SMELL of Diesel,
- NO SMOKE
- ZERO SULPHUR without SO<sub>x</sub>
- -50 to -70% NO<sub>x</sub>
- -60 to -90% less Particles (PM<sub>10</sub>)
- 100 % BIODEGRADABLE AND NON-TOXIC in the terrestrial and marine environment. OECD 301 and 307 tests showed that XTL Fuel can be classified as "easily biodegradable" and was not detectable in the soil 51 days after its introduction
- NO FAME, ultra low risk of developing bacteria compared to dieselX

**ZÉRO**  
ODEUR

**ZÉRO**  
FUMÉE

**ZÉRO**  
SOUFRE

**-80%**  
DE PARTICULES  
FINES

**100%**  
BIODEGRADABLE  
Marin

**100%**  
BIODEGRADABLE  
Terrestre



# Last but not least in benefit...

- Can reduce the noise level of some engines thanks to more uniform combustion and twice Cetane quality from 3 db to 12 db.
- Better starting performance in cold weather thanks to a higher number of cetanes.
- Better security, handling and storage features thanks to a higher flash point.
- Consumption reduced by up to -4.5%.
- According to criteria recognized by the European Chemicals Agency (REACH), XTL Fuel is classified as having health and environmental benefits... This<sup>12</sup> is because it is not harmful if inhaled, smoke presents less risk of eye irritation, there is less risk of skin irritation and it does not cause significant damage to organs through prolonged or repeated exposure. In vitro tests also indicate that the fuel is not carcinogenic.

# PRACTICAL CASE

Decarbonized from A to Z  
Commitment ZERO PETROL  
From PALMA to MC's F1 GP  
In St TROPEZ

Increase in the rate  
Reservations of 130%

Economy on its TCO  
(Total Cost Ownership)

success)

Decarbonization technique and Commercial Marketing



#NOWAR

MONACO INFO



UN BIOCARBURANT POUR UN YACHTING PLUS DURABLE