



RED II – HVO AND CO-PROCESSING

ISCC conference, Brussels, 14/02/2019

François loos, Vice President Biofuels

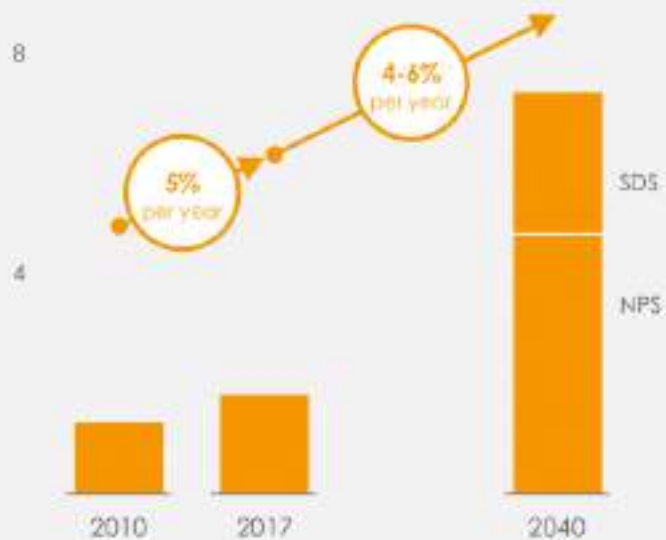
INTEGRATING CLIMATE INTO STRATEGY

Taking into account anticipated market trends



PROMOTING SUSTAINABLE BIOFUELS

Biofuels world consumption
Mboe/d



Supportive government policies

Source: IEA scenarios - SDS, NPS (in millions of barrels equivalent)

Leading European biofuel distributor in 2018
with 2.4 Mt/y

Entering **M&S business in Brazil**, a major
biofuel market

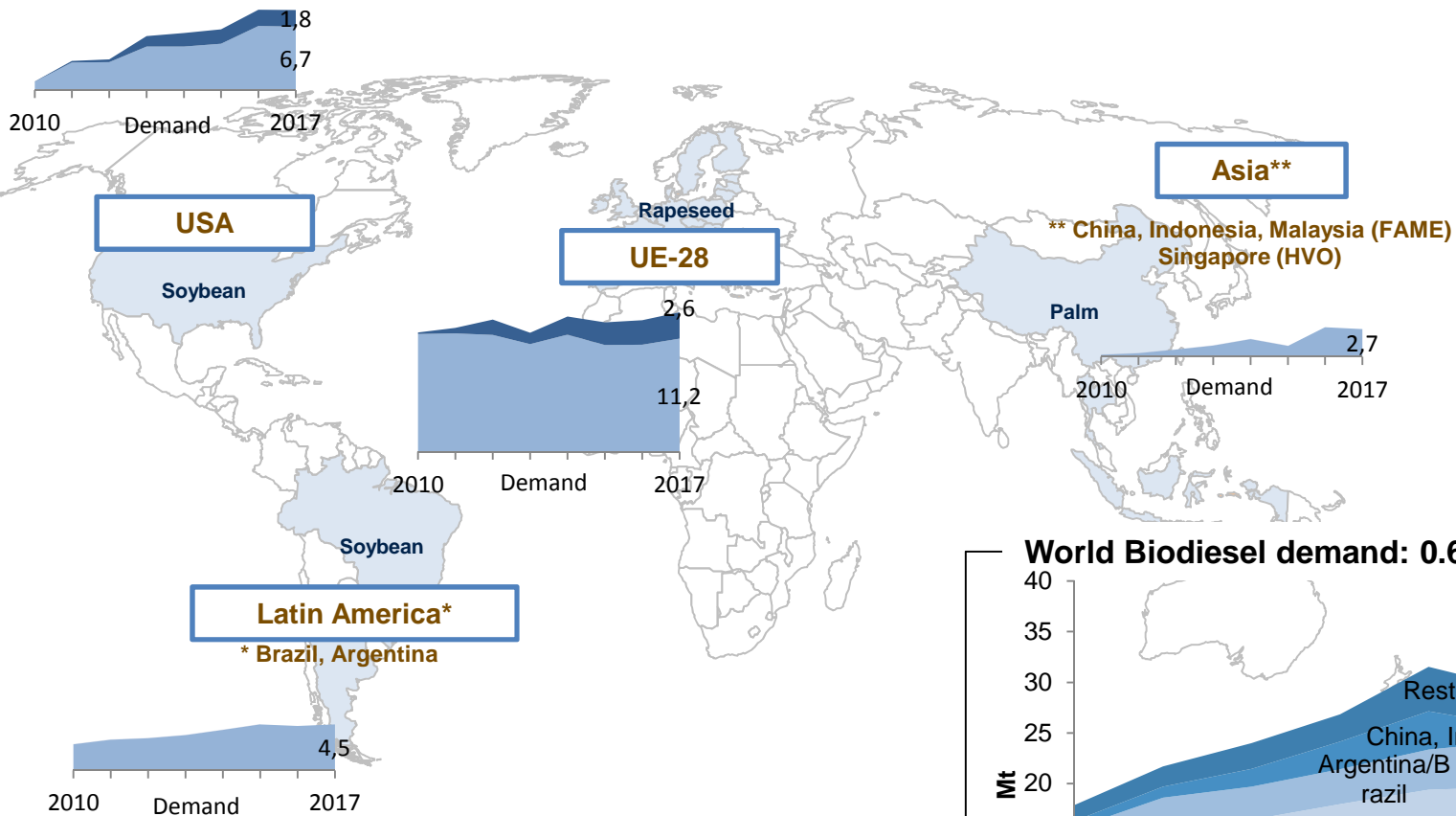
Starting-up HVO production in La Mède
based on sustainable vegetable oil

Early **biogas** positions (France, Netherlands, US)

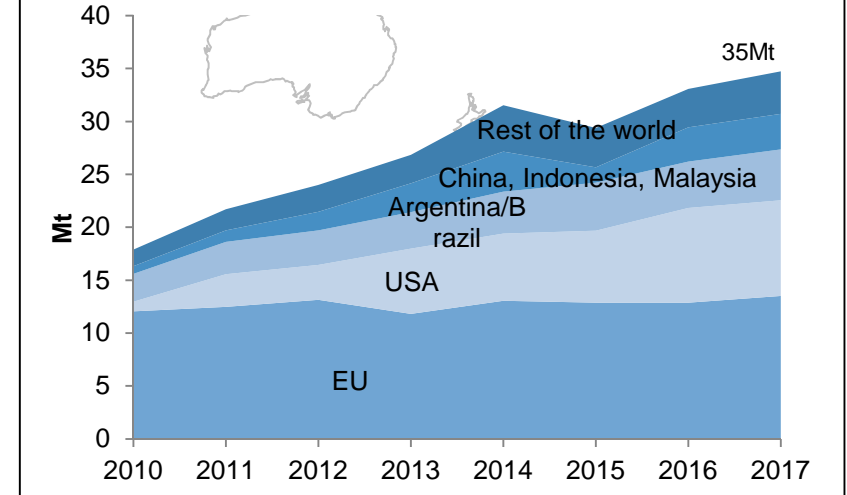
GROWING DEMAND FOR BIODIESEL WORLDWIDE

Legend:
Biodiesel in Mt/y

Demand (2017) HVO ---
FAME ---



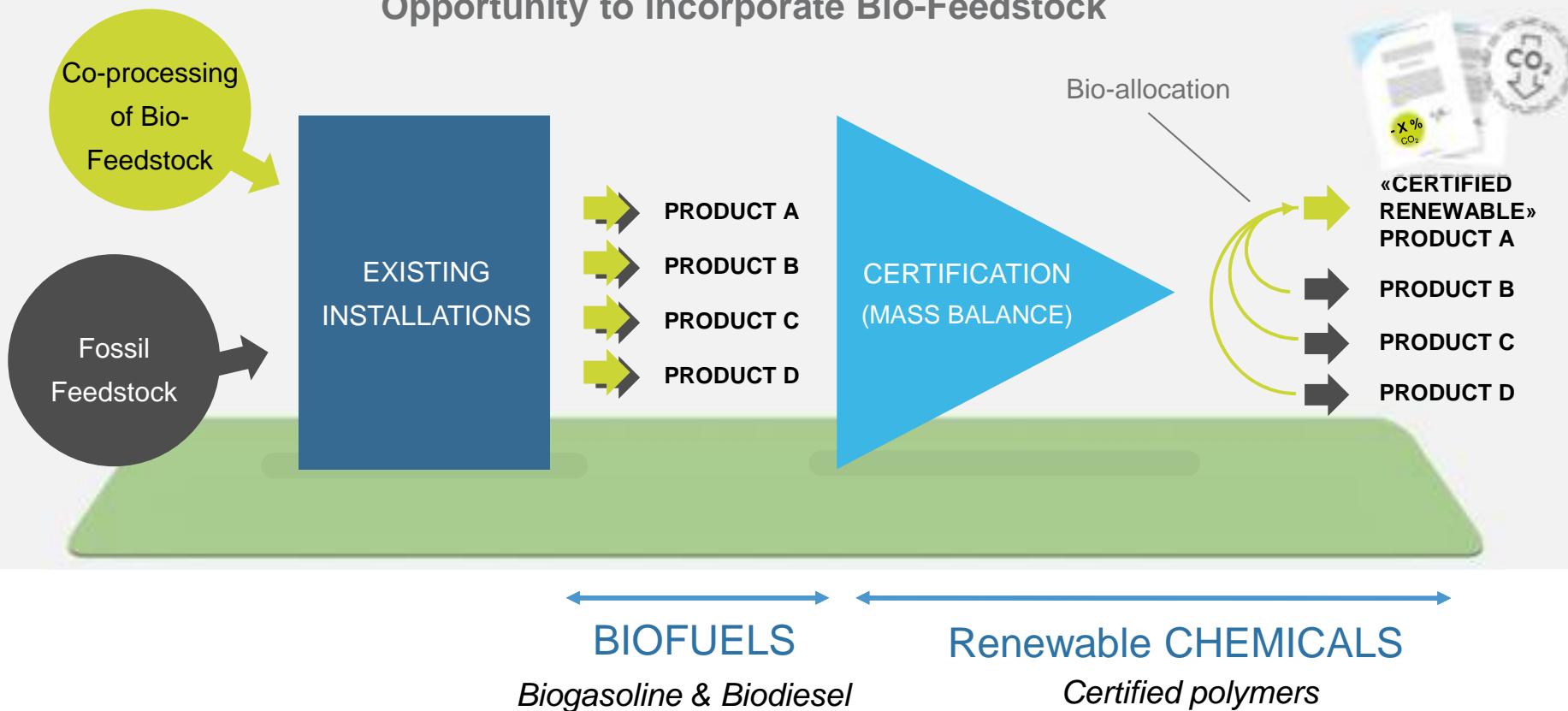
World Biodiesel demand: 0.6 Mboed in 2017



Source: IEA

CO-PROCESSING BIO FEEDSTOCK : HOW DOES IT WORK?

Opportunity to incorporate Bio-Feedstock



Mass Balance Allocation

Not allowed

Allowed

LA MÈDE BIOREFINERY

LA MÈDE

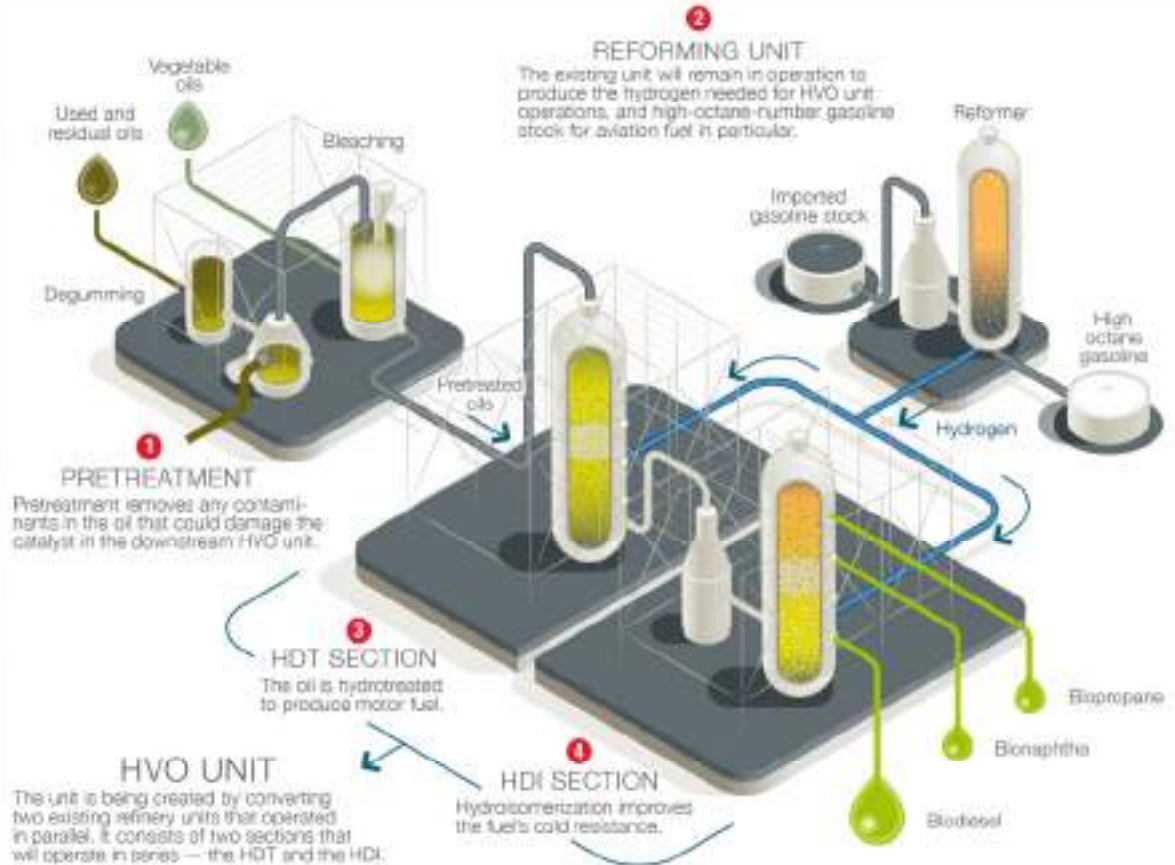
FRANCE'S FIRST WORLD-CLASS
BIOREFINERY,
one of the biggest in Europe.

€275M
INVESTMENT

Redeployment of the site to an activity
that will drive growth. Bio-units will
start up in 2018.

500 kt/year of HVO
to meet growing demand for biodiesel.

TECHNOLOGY THAT CAN PROCESS
ALL TYPES OF OIL:
vegetable, used and residual.



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FEEDSTOCKS, SUSTAINABILITY AND CHALLENGES

RED / members states recognition



1 G



Wastes and residues



Advanced

Sustainability

Availability

Acceptability