



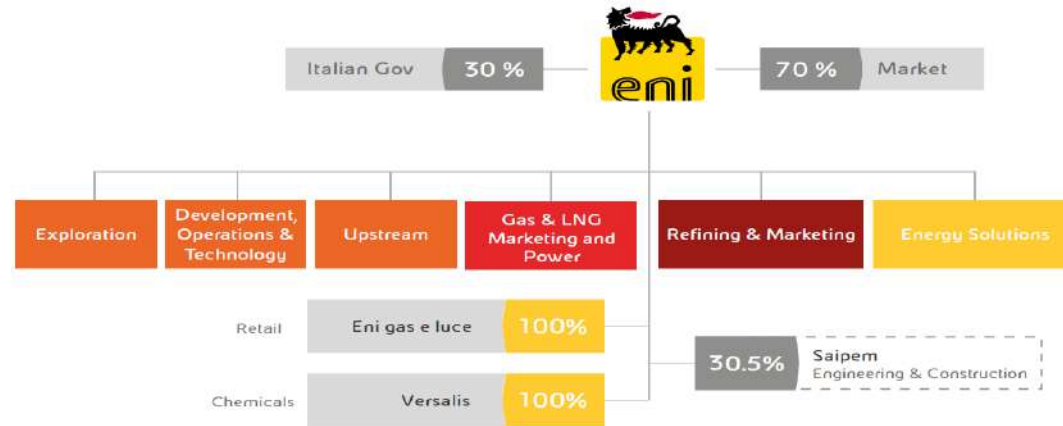
Sourcing Waste and Residue Feedstock for the European Market

ISCC Stakeholder Dialogue - Shanghai

2 July 2019

eni trading & shipping

Eni – a major integrated energy company



PRESENT IN



Source: Eni data

 **1.9 Mboe/d**
Hydrocarbon Production (2018)

 **7.2 B boe**
Proven reserves (2018)

 **7.9 B USD**
Capital expenditure (2018)

 **~ 56 B USD**
Market cap as of 12 04 2018

 **14 B boe**
Resources discovered since 2008

Introduction of Green refineries



- *Leading renewable diesel producer worldwide*
- *In-house Ecofining technology*
- *Key assets: Venice (300kt/yr), Gela (700kt/yr)*
- *Operational excellency:*
 - *Environment friendly*
 - *Reliability*
 - *Flexibility*
 - *Sustainability*
- *Products suitable for global market*

Benefits of HVO in the energy complex



- *Premium quality fuel:*
 - *High cetane*
 - *Low density*
 - *High energy content*
 - *Can be blended up to 100% with diesel*
- *Environment friendly fuel:*
 - *Low sulphur*
 - *Low carbon dioxide emission*
 - *Low NOx emission*
- *Economical fuel:*
 - *No extra Capex to meet environmental requirements*



■ Trends

- *Less vegetable oil, especially palm oil*
- *More traditional waste feedstock, uco/tallow*
- *More advanced feedstock with limited ILUC implication*

■ Complex Market

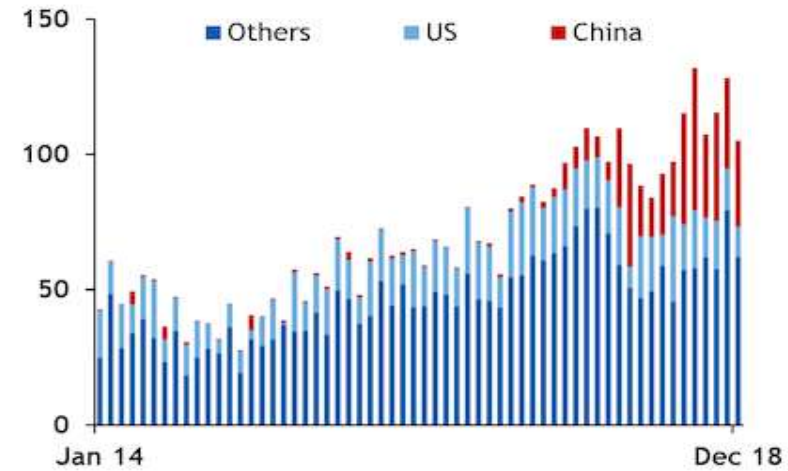
- *RED II as guidance, at EU level, different implementation across various Member States*
- *Same feedstock may not share the same status among Member States*
- *Member States may impose additional requirements, i.e. categorization, sustainability*

■ Solution

- *Certified feedstock for the right market*
- *Flexibility to switch to the most economical feedstock*
- *Adapt the finished products to Market requirements of the target Member state*
- *Work closely with suppliers to achieve the above*

■ Current Flows

- *Increasing Flows of UCO into EU (1.2m t 2018)*
- *Increasing Flows of POME, SBEO into EU*



(EU UCO Imports, Source: Argus)

■ Current Challenges

- *Finding incremental volumes of sustainable UCO, Animal Fat and POME*
- *Sustainability documentation and Frauds are a growing problem*
- *The Market needs to find additional streams of residues*
 - *Industrial waste flows*
 - *Low grade waste (i.e. yellow grease etc.) refined to acceptable specifications*



Thank you!