



YOUR BROKER FOR WASTE-BASED
FEEDSTOCK & BIODIESEL

Waste-based feedstock and biofuels market in Europe

19 October 2016



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Agenda

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|---|------------------------|--|-------|
| 1 | MARKET OVERVIEW | Current situation on the waste-based feedstock and biofuel markets | P. 3 |
| 2 | PRICING | Overview of UCO and UCOME prices | P. 12 |
| 3 | HVO | Map of current and planned plants, capacity development | P. 15 |
| 4 | CONCLUSION | Market trends, future opportunities and challenges | P. 18 |
| 5 | WHY GREENEA? | Company introduction | P. 20 |



Overview of the current market situation





**European UCO resources
are estimated
at 806,000 MT per year**

European UCO market is already mature with limited growth possibilities



To secure enough feedstock waste-based biodiesel producers have to look for alternative sources



Household collection

-  **Supply:** low quantities and difficult to collect
-  **Interest:** low due to high collection costs

Not really a viable option due to high operational costs, relatively low quantities to gain and unsure quality.





Imports from overseas

-  **Supply:** decreasing due to rising local demand
-  **Interest:** high due to mature market in Europe

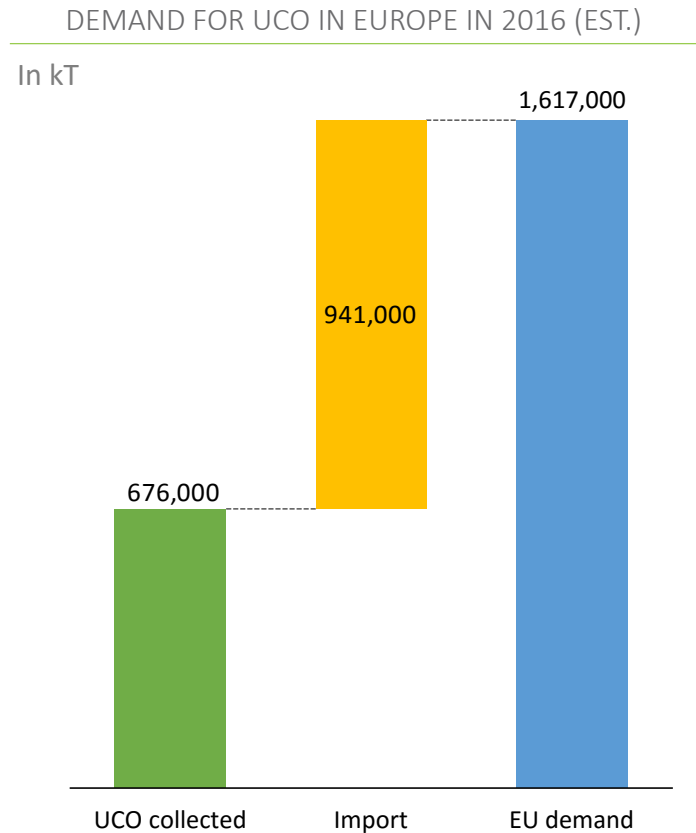
Interesting option, however, the quantities offered are decreasing and the competition is fierce.

Requires some initial investment but allows more flexibility on quality and thus gives access to bigger volumes.

High acidity feedstock

-  **Supply:** high availability
-  **Interest:** still moderate due to processing difficulty

Europe relies on UCO imports for biodiesel production but competition overseas is fierce



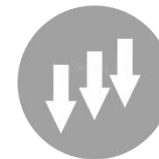
58%

Percentage of European UCO demand covered by imports in 2016 (est.)



40%

Percentage of UCO imported to the EU that came from Asia



Due to investments in UCOME production in Asia, UCO quantities for export will be limited there

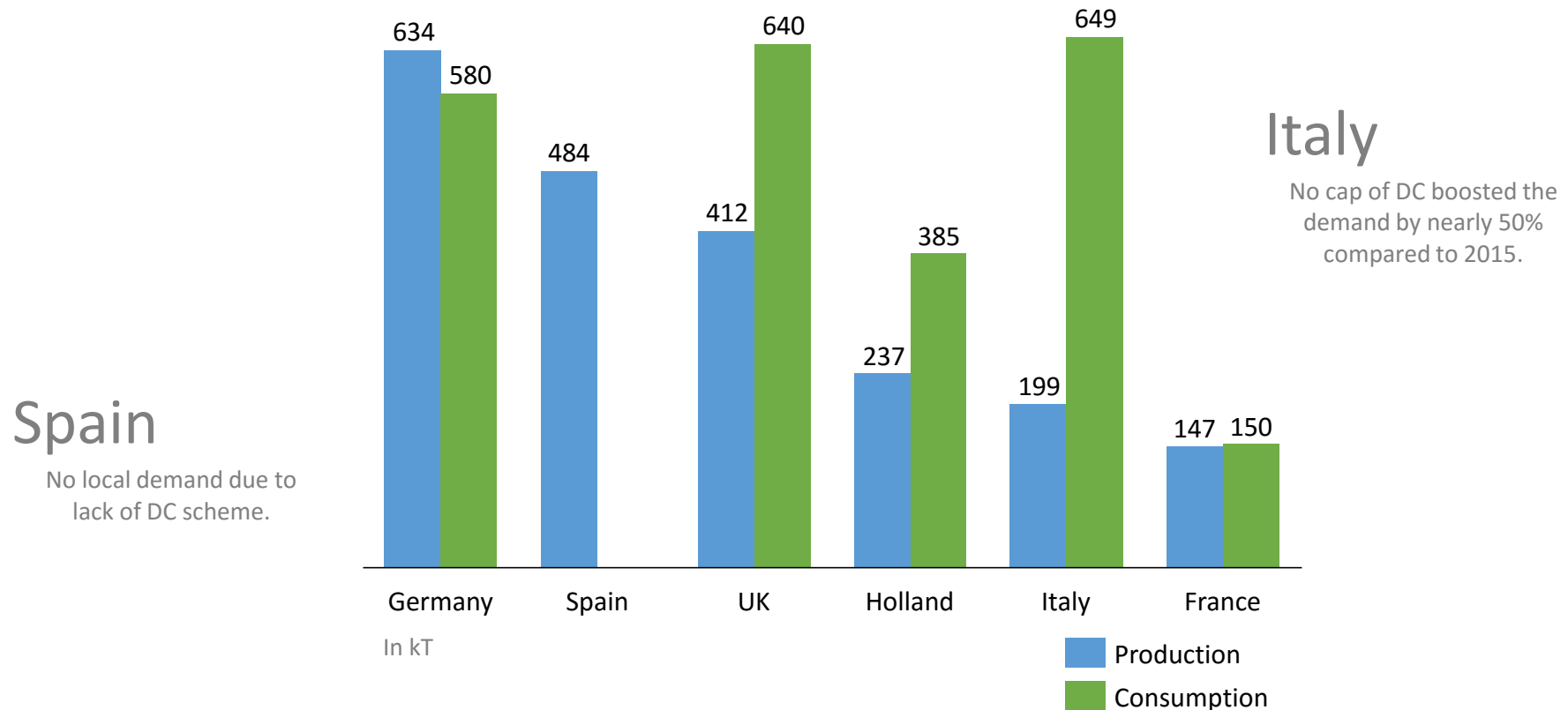


European biodiesel market is estimated at 14 million tons

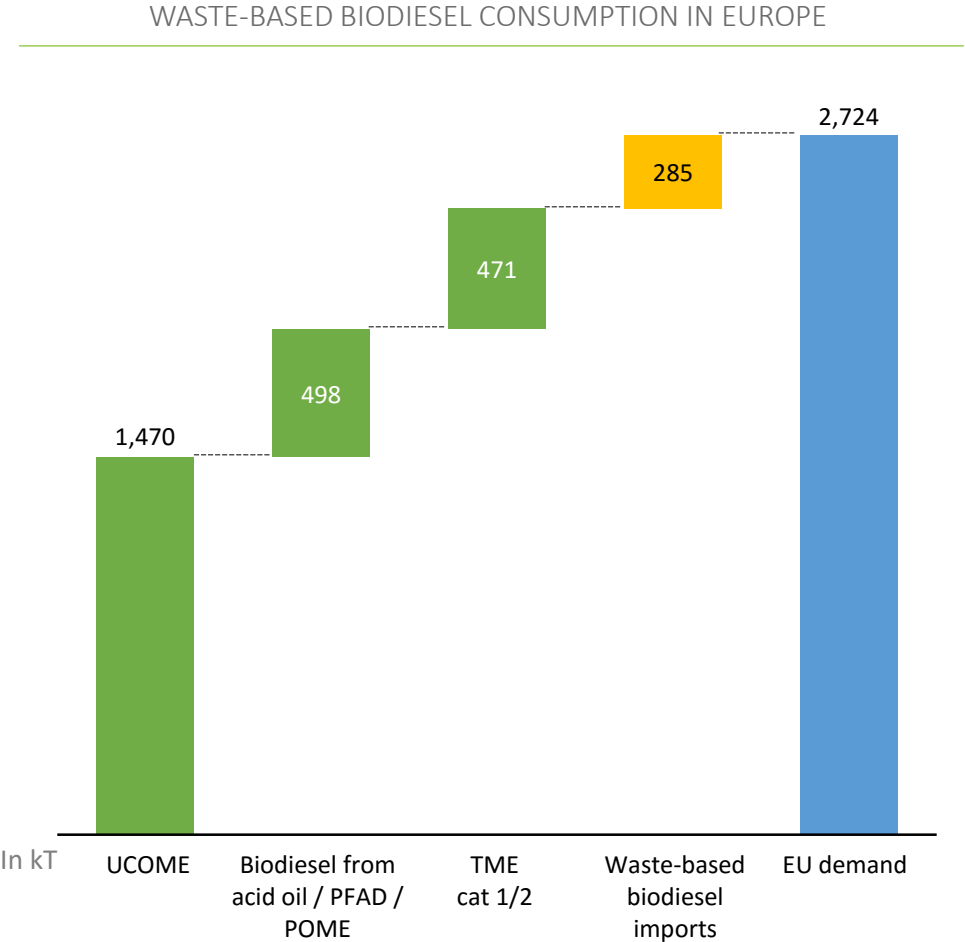
Germany, Italy and the UK are key players on the waste-based biodiesel market



WASTE-BASED BIODIESEL PRODUCTION AND CONSUMPTION IN 2016 (EST.)



The supply of waste-based biodiesel in Europe does not cover the local demand



10%

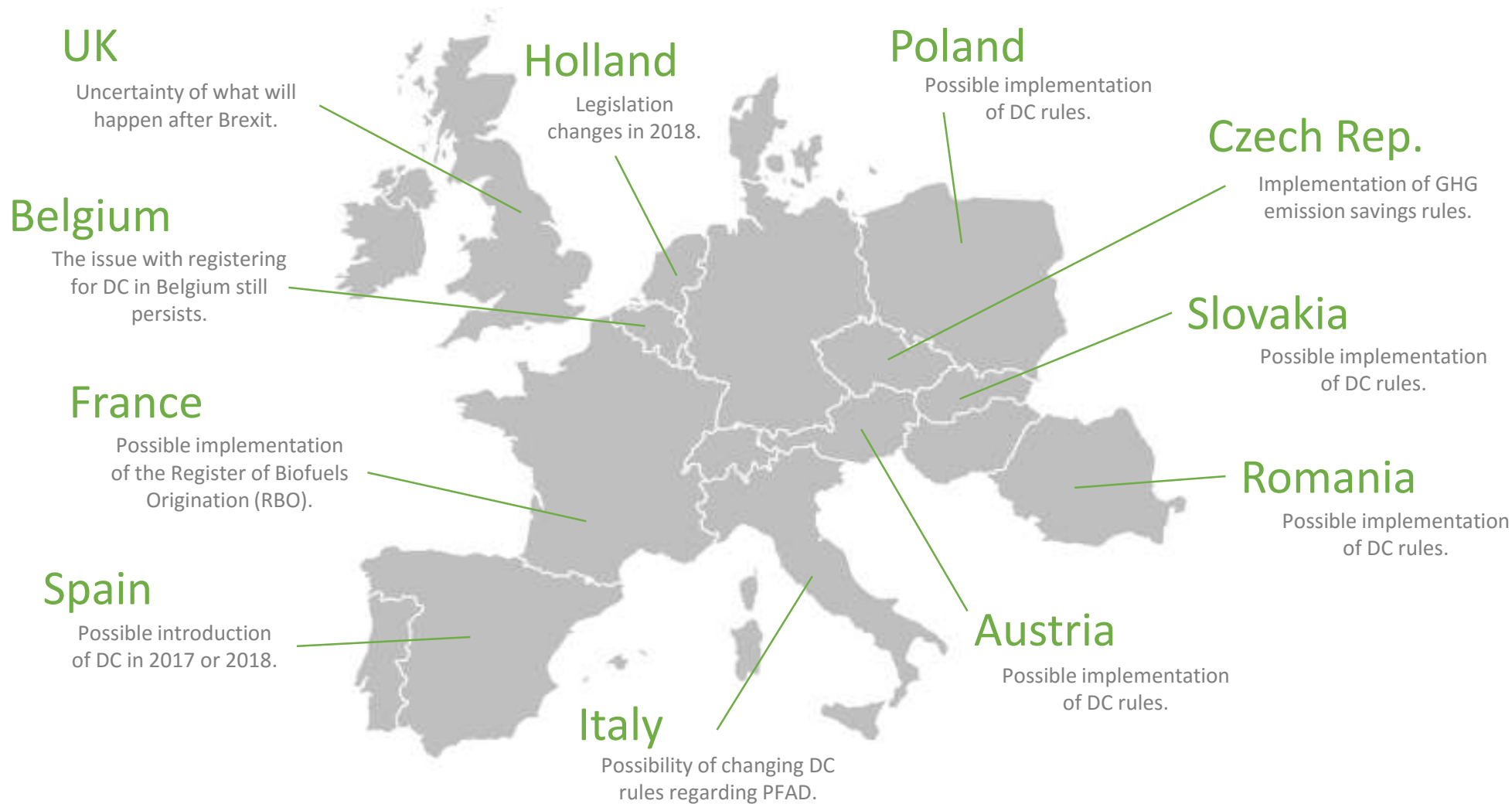


Percentage of waste-based biodiesel demand in Europe that has to be covered by import



Asia is Europe's main supplier of waste-based biodiesel

The supply-demand structure might alter due to coming regulation changes

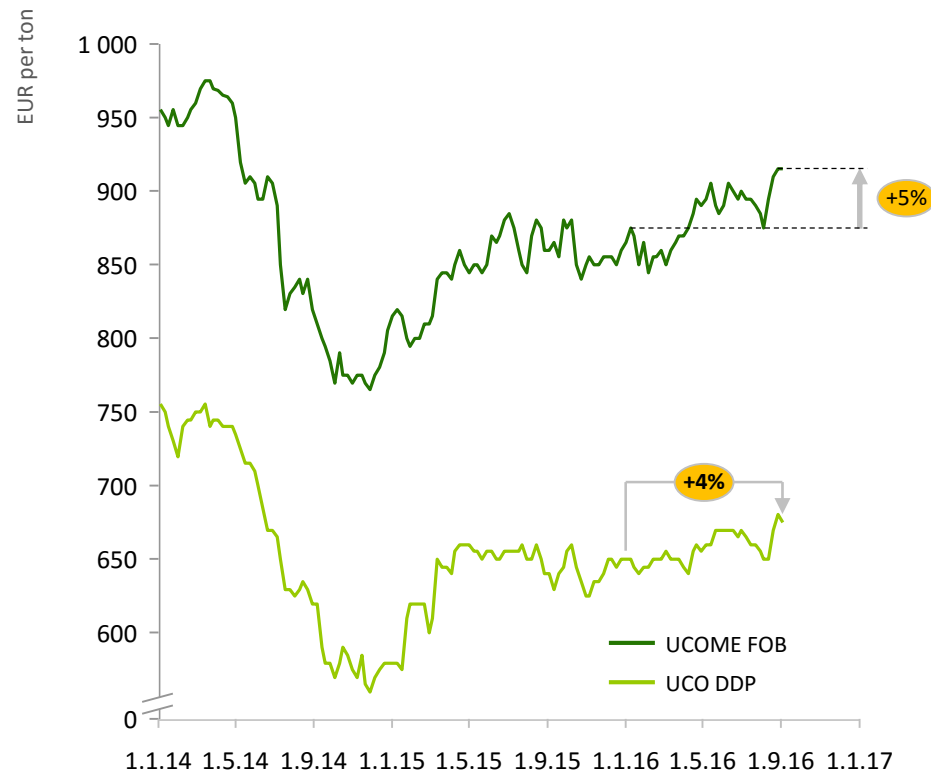


Pricing



The margins for UCOME producers have been increasing since the beginning of the year

2015-2016: UCO AND UCOME PRICE DEVELOPMENT



5% ↑

Increase of UCOME price since the beginning of 2016

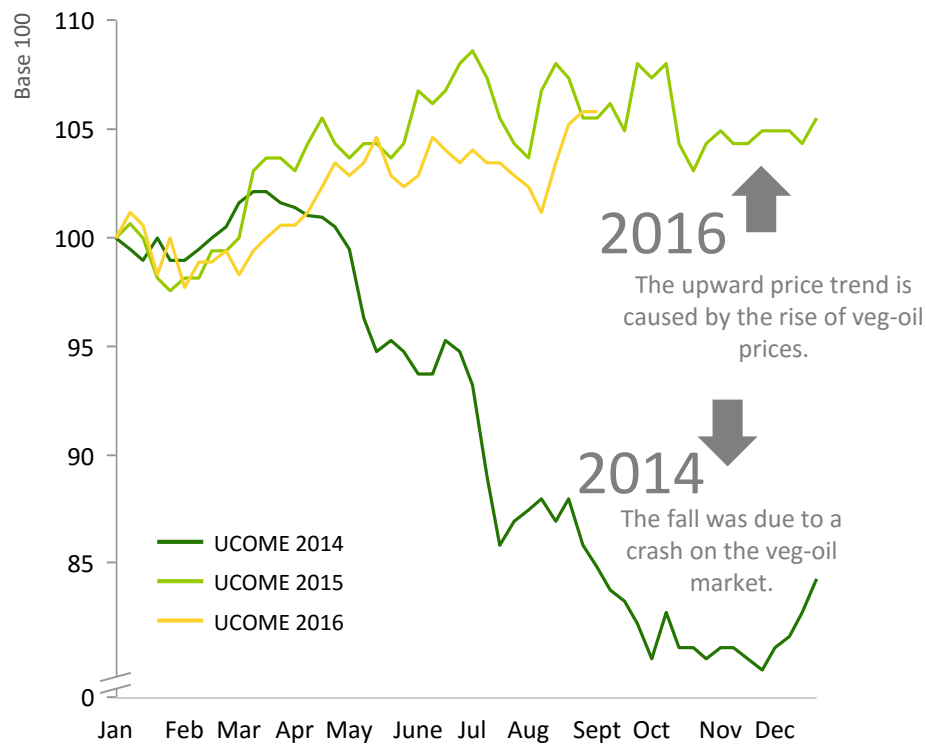
4% ↑

Increase of UCO price since the beginning of 2016

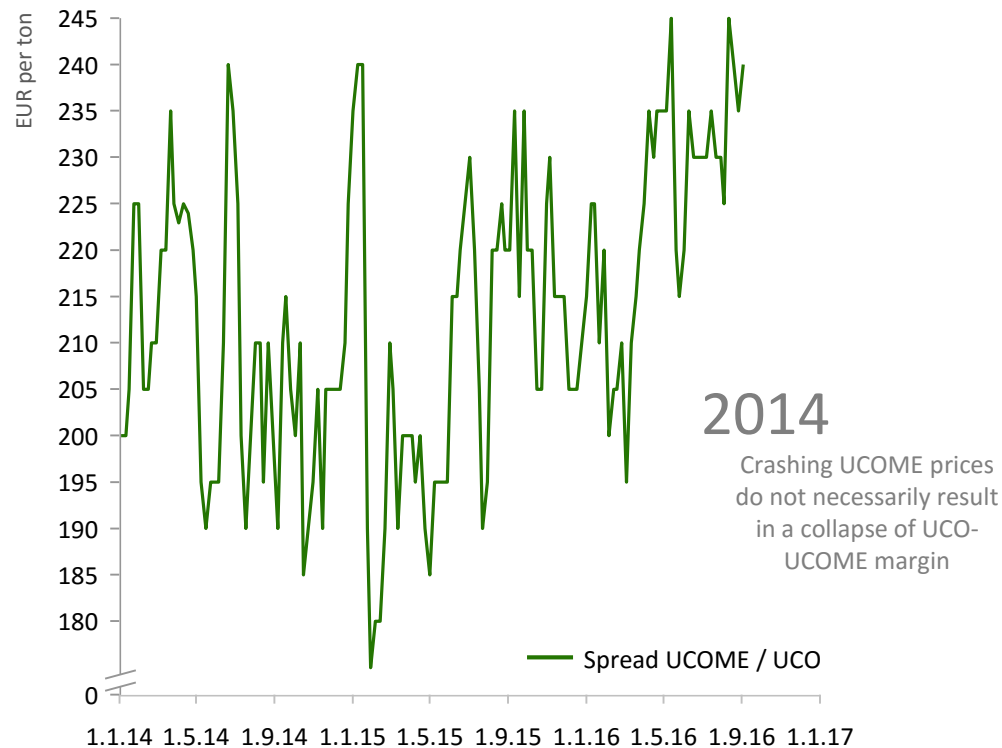


In 2016, UCO and UCOME show again an upward price trend

2014-2016: YEARLY UCOME PRICE TREND



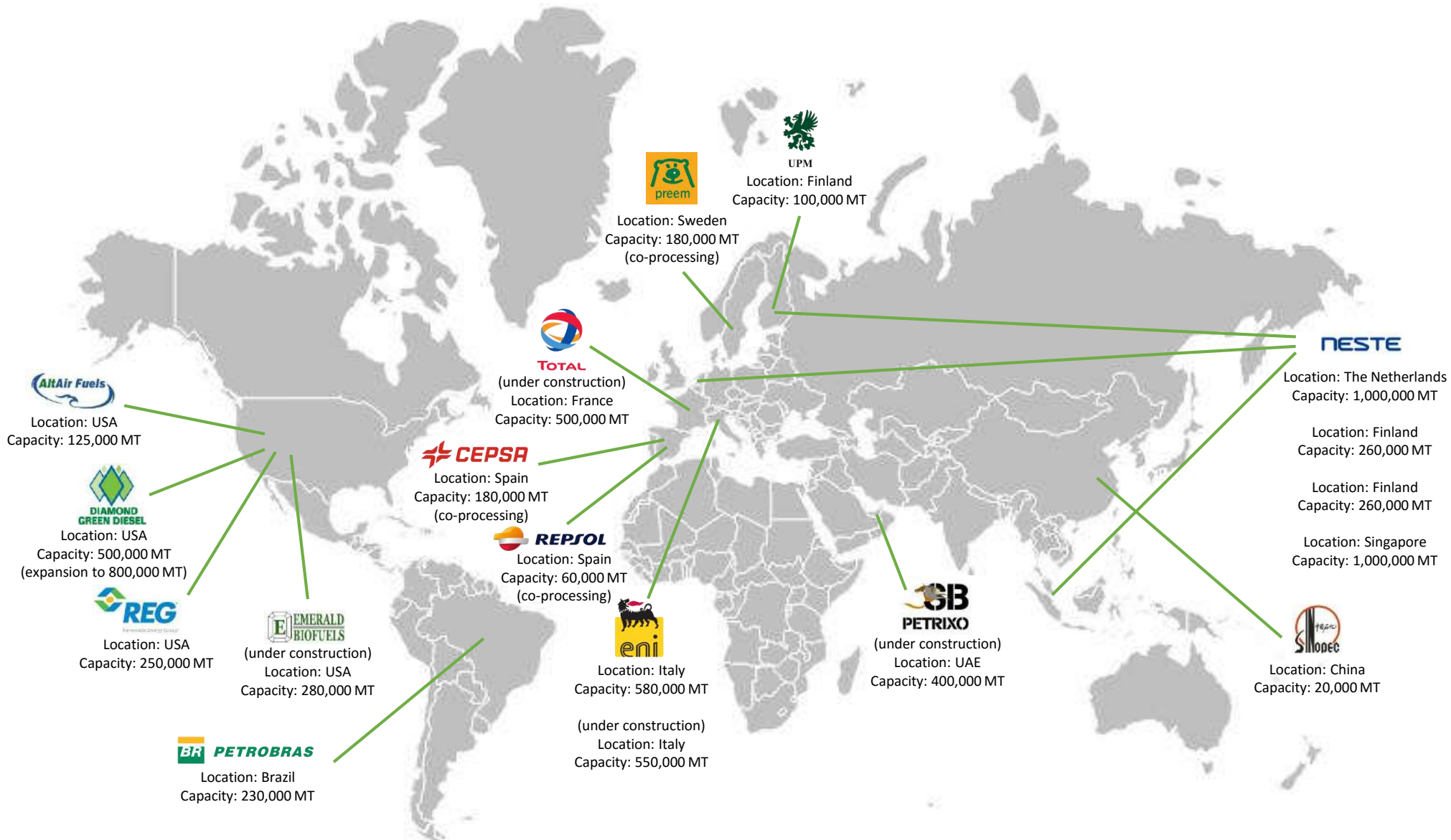
2014-2016: SPREAD BETWEEN UCO AND UCOME



HVO: market development




In the last 5 years, HVO has been developing rapidly

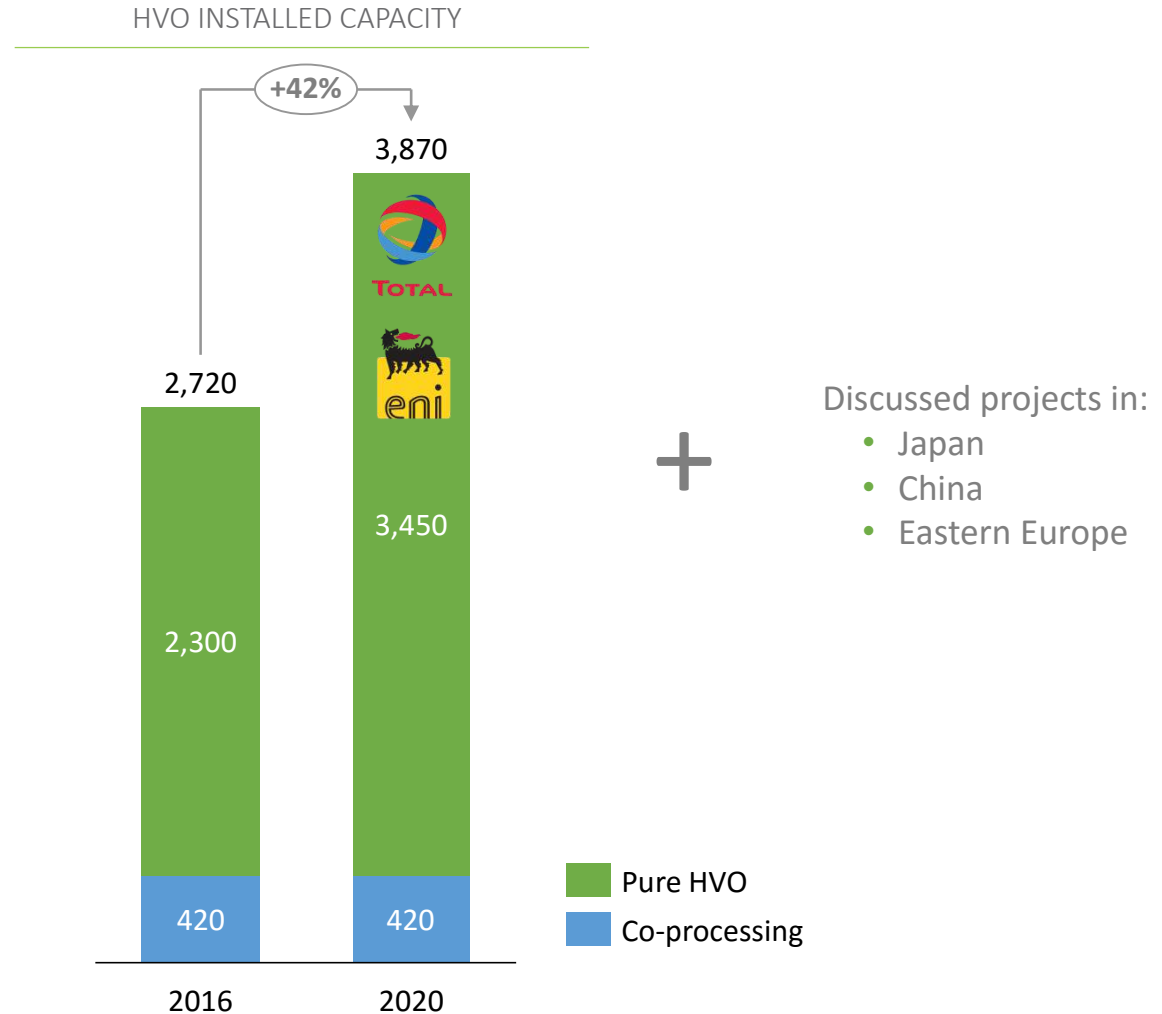


TOTAL and ENI plants will significantly increase the HVO production capacity in Europe

23%



The share of European biodiesel market that HVO might get by 2020



Conclusion



HVO development and struggle for feedstock supply will dominate the market in the next 5 years

HVO



New investments in Europe and overseas increase the HVO capacity.

Asia



New investments in UCOME production for export to Europe.

UCO



Maturing market in Europe and increased local demand in Asia will put pressure on UCO supplies.

Law



New countries should implement DC scheme.

Technology



Investments to be able to process high acidity feedstock.

Why Greenea?



Why Greenea?



MARKET EXPERIENCE

GREENEA is an independent **brokerage** and consulting company founded in 2007. It specialises in **waste-based raw materials and biofuels**.

GREENEA offers its **services to companies using raw materials in their production as well as to various other players from the oleo-chemical, animal feed, bioenergy and biofuels markets**.

It was our conscious and strategic choice to position ourselves on the market of **raw materials that do not compete with the food sector**.



Founded in **2007**



Since 2011 our average annual growth is **18%**

GREENEA OFFICES IN EUROPE

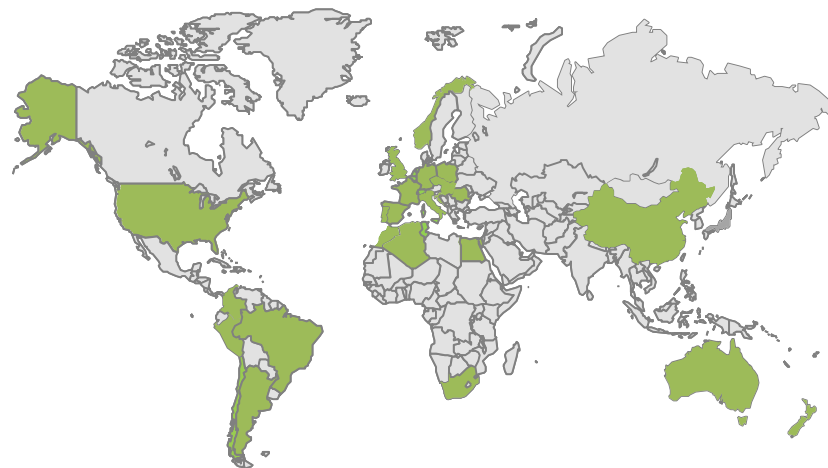


From our two offices in Paris and Prague we communicate with clients from all around the world thanks to our international and multilingual team.



We speak:
**English, Spanish,
Portuguese, Polish, German
French and Italian**

WIDE INTERNATIONAL PRESENCE





**YOUR BROKER FOR WASTE-BASED
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Risk & Energy Risk
COMMODITY RANKINGS
2015
**#1 RESEARCH
IN BIOFUELS**

Member:



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