

# Biofuels from WASTE TO ROAD transport

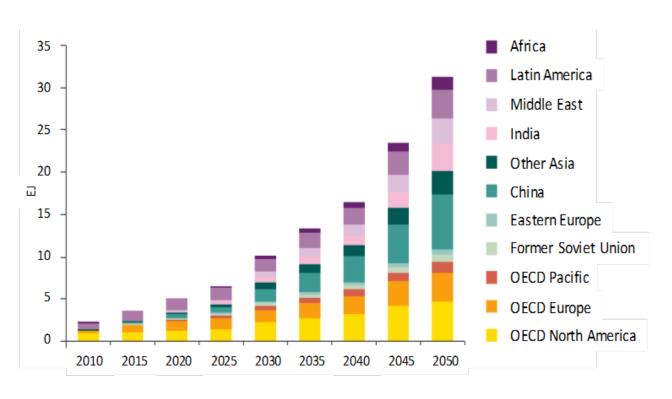
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Approved by the Consortium

## Background for project





### Biofuel demand by region 2010-2050 (source: IEA, 2010)

### **Waste and Residues as Resource - Challenges**

- The wastes are diverse and not homogeneous throughout Europe.
- The conversion of wastes (due to heteroatoms, contaminants, geographic diversity and availability) is more complex compared to fossil oils.
- The overall costs and process performance (such as carbon yield).























## Waste2Road Value Chain



Waste Sorting

Primary Conversion

Refinery Integration

Process Design

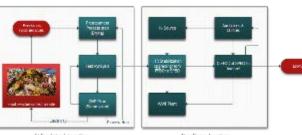












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Proprietary Information

#### **European Waste Feedstocks** Waste management and logistics Representative organic waste feedstocks Costing **Environment - Regulation** Acceptance Municipal and Industrial Product Quality Waste sorting fractions Cycle efficiency **Primary Conversion Technologies Pyrolysis** Hydrothermal Energy Liquefaction Value chain integration Intermediate Bio-Liquids Risk Assessment-Standardisataion Health, Safety & Selection and Blending **Co-processing Technologies** Co-FCC Co-Hydrotreating **Bio-Gasoline Bio-Diesel** Toolbox of scenarios for Plant designs for European Deployment

recycling sites



### Concept

Cost-effective biofuels from a carefully selected range of low cost and abundant biogenic residues and waste fractions.

Iterative aproach

for Risk Mitigation

- Cover the value chain from waste collection and recycling via
- co-refining through to road transport.
- Realise industrial implementation, yielding a potential demonstration unit achieving up to 40,000 tpa within 2022.

**European Refineries** 



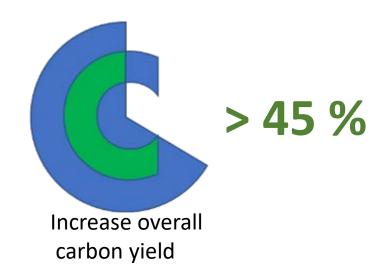
## Objectives

- To develop a representative and cost-effective waste supply and management system to reduce and optimise the supply costs while diversifying the (biomass) feedstock basis
- 2. To develop new biofuels production technology while increasing understanding and control of the whole value chain
- 3. To scale up materials and testing procedures to define scenarios for the best exploitation through implementation of process schemes in existing refineries
- 4. To develop solutions to answer key societal & environmental challenges

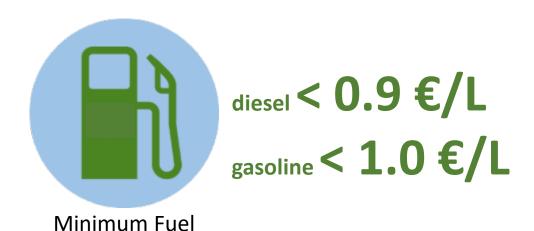
### WASTE2ROAD KPIs

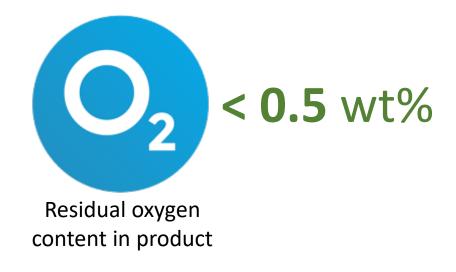
Selling Price













# Thank you for your attention!



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