
## Consortium partners

SINTEF

cnrs

btg biomass technology group

VTT

cea

btg-btl biomass-to-liquid

TU WIEN

OMV

PDC Process Design Center

EGE Energigjenvinningsetater

CRF

## WASTE2ROAD Profile

**Funding Programme**

WASTE2ROAD is funded within the LC-SC3-RES-21-2018 call, "Development of next generation biofuels and alternative renewable fuel technologies for road transport", as a Research and Innovation Action of the European Union's Horizon 2020 Programme.

**Grant Agreement No:** **818120**

**Project ID:** **818120**

**Project duration:** **01.10. 2018 – 30. 9. 2022**

**Total EC contribution:** **EUR 4,996,155**

**Website:** **www.sintef.no/waste2road**

**Project coordinator**

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WASTE2ROAD

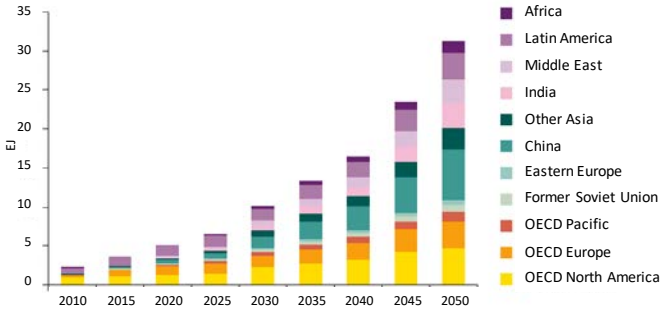
# Biofuels from WASTE TO ROAD transport


This project receives funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 818120.

## WASTE2ROAD Project Overview

In 2014, total waste production in the EU amounted to 2.5 billion tons. From this total only a limited (albeit increasing) share (36%) was recycled, while the rest was landfilled or burned, of which some 600 million tons could have been recycled or reused.

Conversion of all sustainably available biogenic wastes and residues to biofuels could provide 27% of total transport fuel by 2050, achieving around 2.1 gigatons of $CO_2$ emission reductions per year.

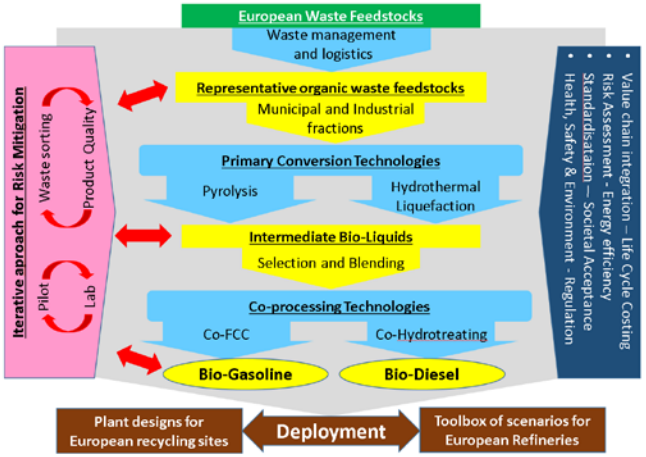



*Biofuel demand by region 2010-2050 (source: IEA, 2010).*

To meet the timescale and quantity needed while keeping cost effectiveness, biomass implementation **should be done through integration into existing refineries and infrastructure** rather than requiring investment in new large bio-refinery units and infrastructures to support them.

The biogenic wastes are diverse and not homogeneous throughout Europe. It is therefore essential to select wastes that are representative and available at European level and to define an accurate and effective waste supply and management system.

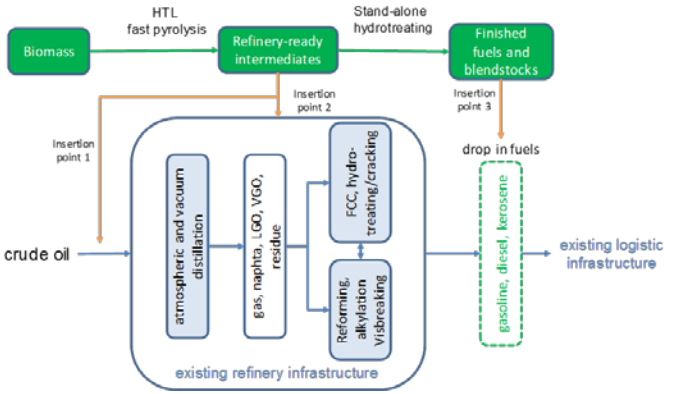
**WASTE2ROAD** project aims to develop a **new generation of cost-effective biofuels** from a carefully selected range of **low cost and abundant biogenic residues and waste** fractions, aiming to achieve **high overall carbon yields > 45%** while reducing **greenhouse gases emissions (GHG) > 80%**. The WASTE2ROAD focuses on co-refining, leading to a mixture of bio-based and fossil fuels.




*WASTE2ROAD project concept.*


*The full spectrum of biomass derived liquids from pyrolysis liquids (sides) to gasoline/diesel biofuels in the middle.*

Co-processing of biomass offers a promising and potentially cost-effective alternative for the production of partially renewable hydrocarbon fuels compared to blending of biofuels into finished petroleum products.




*Possible insertion points for bio-liquids, biofuel intermediates, or finished hydrocarbon biofuels into existing refinery infrastructure.*

## WASTE2ROAD Objectives

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