

Welcome and introduction to BIOFIT

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Ptolemaida V 600 MWe power station (under construction), Due to the 2028 Greek Coal phase-out, a bioenergy retrofit is considered.

Overview and overall objective

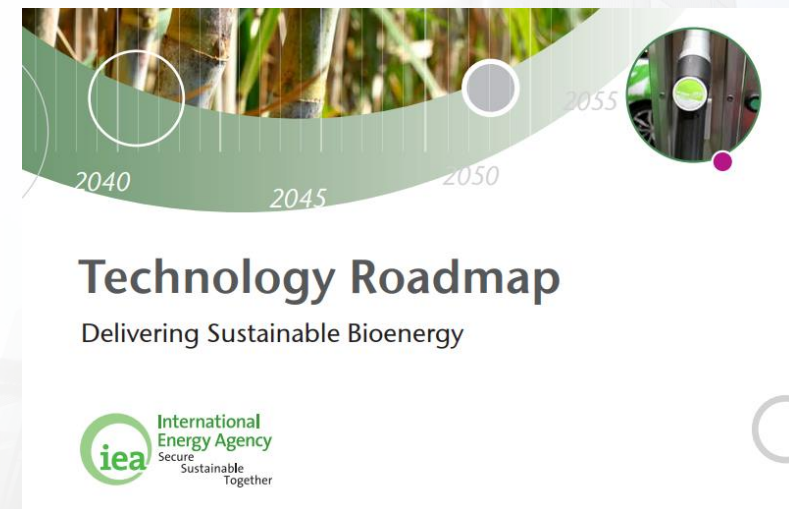
58% of EU's renewable energy in 2018 was provided by bioenergy



IEA Technology Roadmap (2017)

“Modern bioenergy plays an essential role in the International Energy Agency (IEA) 2°C Scenario (2DS) providing nearly 17% of final energy demand in 2060 compared to 4.5% in 2015”

EU Taxonomy (2021): “bioenergy is no longer labelled as transitional...”



Bioenergy retrofitting

Bioenergy retrofitting can be used to replace fossil fuels or upgrade outdated renewable technologies

Retrofitting often means lower capital expenditure, shorter lead times, faster implementation, less production time losses and lower risks

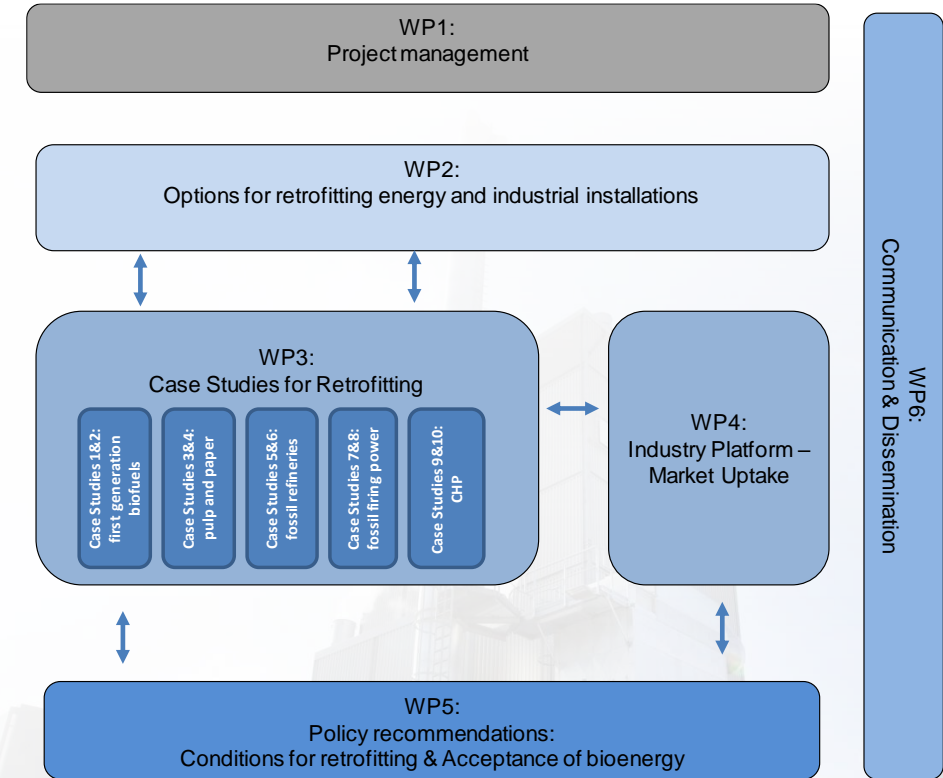
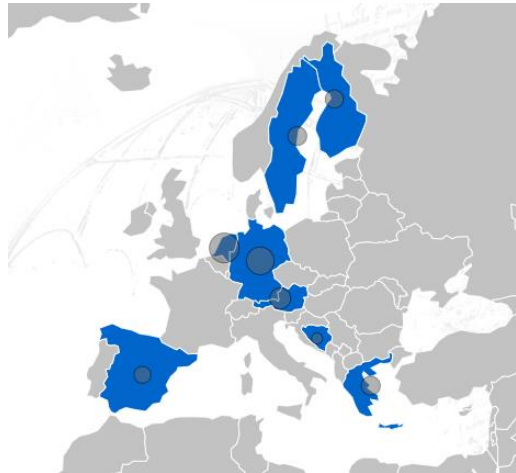
Overall objective BIOFIT

“to facilitate the introduction of bioenergy retrofitting in five exemplary industries, namely **first-generation biofuels, pulp and paper, fossil refineries, fossil firing power and Combined Heat and Power (CHP) plants**, leading to an increase in the share of renewable energy in the final EU energy consumption.”

Project characteristics and partners

Project characteristics

- Duration; 1 October 2018 – 31 March 2022
- Budget: 2,6 MEuro
- Six Work Packages
- Partners: 14 partners from 8 countries



Mapping of retrofitting options

Biofit has identified, studied and is disseminating **existing retrofit examples** focusing both on **technical** and **non-technical** aspects via a survey, an Industry Map, Fact Sheets, a Handbook

A set of DST tools will be available on our website

BIOFIT Industry Map


Filter Projects

Projects

Search Company/Project Name/Project Location Country/Project Location City Submit

Company	Project Name	Project Location Country	
Alcogroup SA	Alcogroup Ghent	Belgium	Info
Alholmens Kraft	AK2 (Jakobstad Power Station or Pietarsaari Power Station)	Finland	Info
Atlantis Energy (SIMEC group)	Uskmouth Power	United Kingdom	Info
AustroCel Hallein GmbH	AustroCel Bioethanol	Austria	Info
BillerudKorsnas/Bornhus Energi AB	Korsnas Gavle	Sweden	Info
Biocarburantes Castilla y Leon (Vertex Bioenergy)	Vertex Bioenergy Babilafuente	Spain	Info
Boehringer Ingelheim Pharma KG	Boehringer	Germany	Info
Borregaard AS	Bioethanol upgrade	Norway	Info
BP	BP Castellon	Spain	Info
Cartiera dell'Adda	Biomass Cogeneration Plant	Italy	Info

Map



BIOFIT
Bioenergy Retrofits for Europe's Industry


HORIZON 2020 BIOFIT PROJECT

BEST PRACTICE FACTSHEET

RETROFIT OF VOLOS BIODIESEL PLANT (GREECE)

KEY INFORMATION

Plant owner: Elin Verd
Plant name: Elin Verd biodiesel plant
Location: Volos, Greece




TECHNICAL OPTIONS FOR RETROFITTING INDUSTRIES WITH BIOENERGY

A HANDBOOK



Case studies

Biofit has developed 10 Concrete proposals – 2 per industry sector – in cooperation with industrial market players with actual retrofitting plans



1G biofuels: Biocarburantes de Castilla y Leon and Swedish Biofuels



Pulp and Paper: AustroCell Hallein and C-Green



Fossil refineries: Total and Hellenic Petroleum



Fossil fired power: Elektroprivreda BiH and EP Produzione



Combined heat and Power: Elektroprivreda BiH and Solvesborgs Energi



Main conclusions:

- There are many new technological options for bioenergy retrofitting
- Nearly all case studies result in an economically feasible project.
- Retrofitting will often result in a significant CAPEX reduction of around 50%, or in some cases over 85%.

Other BIOFIT activities

Evaluating **framework conditions** (legal, institutional and political) to identify – generic and industry-specific – barriers and enablers

Biofit is focusing on **actual barriers** for industry retrofitting, and tackle **acceptance issues** of bioenergy

Provision of **advice to policy makers** at national and regional level



Framework conditions for retrofitting Europe's industry with bioenergy

August 2019



Summary Paper for policy makers: retrofitting Europe's industry with bioenergy

November 2019



Other BIOFIT activities

Biofit aims to inform, support and facilitate dialogue with industry, through dedicated meetings, direct contact, surveys, and presentations at conferences



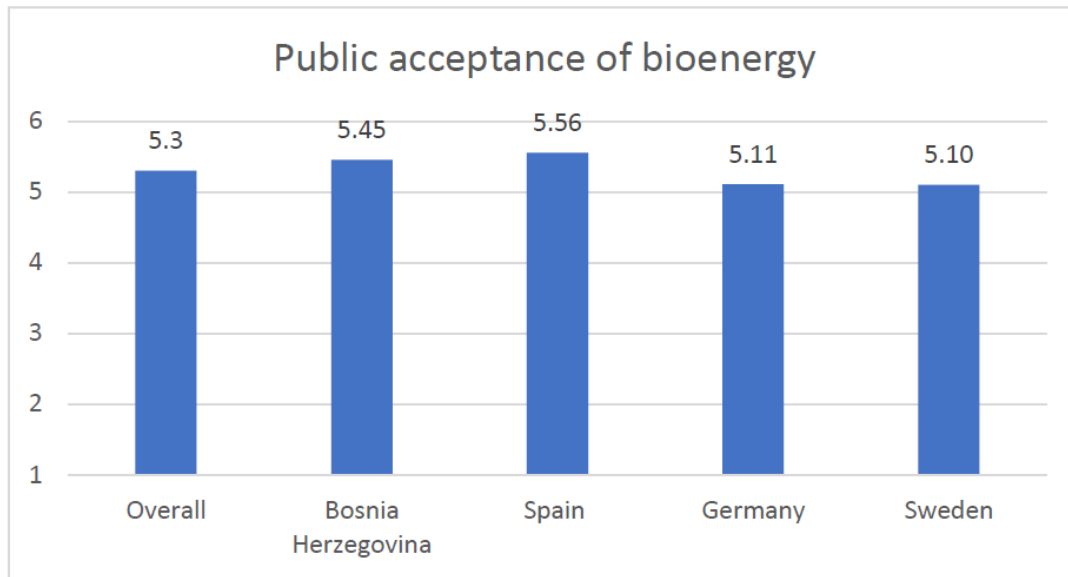
ETIP Bioenergy @ETIP_Bioenergy · Nov 21, 2019

Dimitrios Kourkoumpas @CERTHellas presenting #BIOFITH2020 project aimed at facilitating the introduction of #bioenergy retrofitting in first-generation #biofuels, pulp & paper, fossil refineries, fossil firing power & combined heat & power plants sectors.

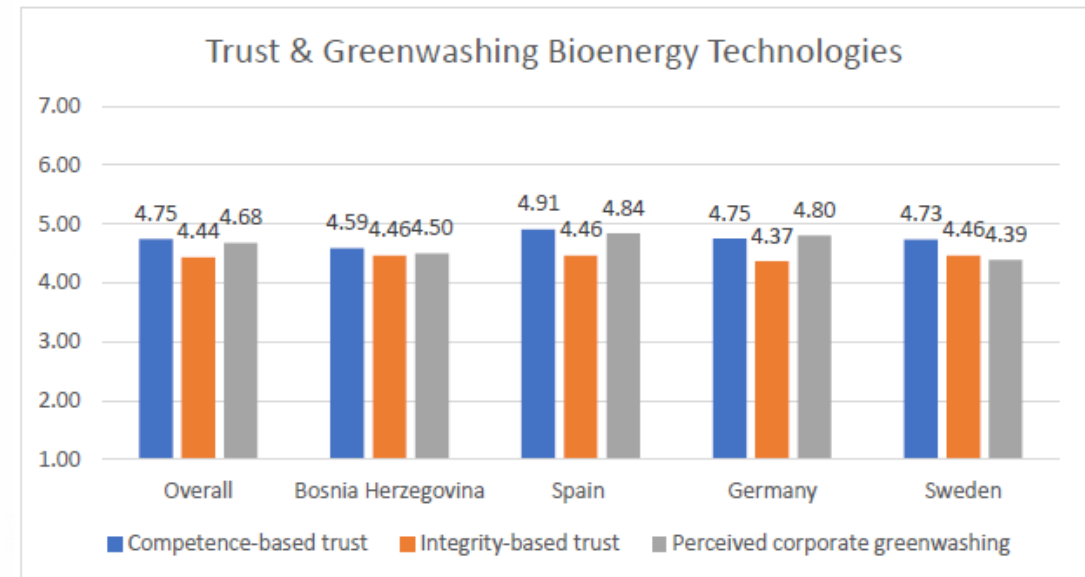


Other BIOFIT activities

In a survey of 3,200 members of the general public in four countries (Bosnia and Herzegovina, Germany, Spain, and Sweden), attitudes towards bioenergy and retrofitting were investigated.



Public acceptance of bioenergy is relatively high....



..but less so when asked about the companies behind it.

Visit biofit-h2020.eu

Thank you!

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