

Partners



FALCON Factsheet

Project Title

Fuel and chemicals from lignin through enzymatic and chemical conversion

Project duration

48 months

1 January 2017 - 31 December 2020

Grant Agreement Nr

720918

Project Coordinator

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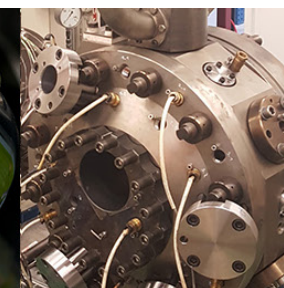
@FALCON-H2020



Fuel and chemicals
from lignin through
enzymatic and
chemical conversion



This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 720918



About FALCON

Falcon is a project funded by the EU that aims at turning lignin-rich industrial waste from second generation biofuel plants into higher value products. These value chains will include fuels for ships, fuel additives and chemical building blocks.

Objectives

The project is divided in 7 Workpackages as follows:

WP1 – Management

Achieving an efficient interactive and well-managed interdisciplinary consortium

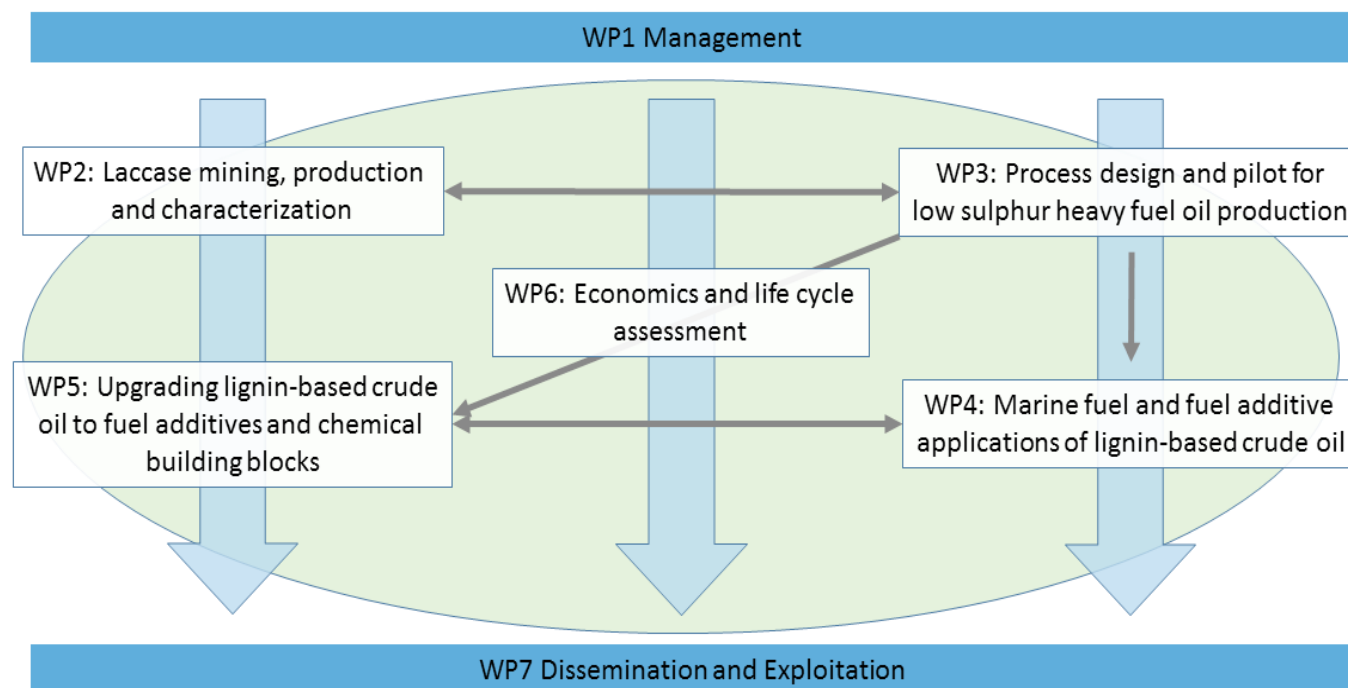
WP2 – Laccase mining, production and characterization

Identification and production of selected laccases. Protein engineering for optimal characteristics of selected enzymes

WP3 – Process design and pilot for low-sulphur heavy fuel oil production

Development of a mild, economically viable and sustainable process for conversion of solid lignin from 2G ethanol process to a lignin-oil suitable for further conversion into high value chemicals or suitable as renewable marine diesel fuel or bunker fuel

FALCON Workplan



WP4 – Marine fuel and fuel applications of lignin crude oil

Demonstration of low-sulphur heavy fuel oil and fuel additives

WP5 – Upgrading lignin crude oil to fuel additives and chemical building blocks

Depolymerization of the low-sulphur heavy fuel oil to aromatic mono- and oligomers and enzymatic conversion to chemical building blocks

WP6 – Economics and life cycle assessment

Development of a base case for benchmarking, systems engineering to integrate the FALCON process into existing processes and multi criteria assessment of the FALCON process

WP7 – Dissemination and Exploitation

Communication to the general public as well as to a target audience of news relevant to the FALCON project

