IMPRESS - Five impressive innovations

Project:
Integration of efficient downstreaM ProcessEs for Sugars and Sugar alcohols

Project website: https://www.aspire2050.eu/impress

IMPRESS integrates disruptive upstream and downstream technologies developed by the project partners. IMPRESS concept uses 2nd generation biomass and turns process streams into value added products and green chemicals to replace existing fossil-based products.

The IMPRESS consortium consists of 10 leading European companies as well as research, development and educational organisations.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 869993.

Image not found or type unknown

Image not found or type unknown

Sector:

Chemicals

found or type unknown

Engineering

found or type unknown

Refining

Summary:

The IMPRESS Project H2020 has developed the following five remarkably impressive innovations:

Chemical hydrogenolysis technology that converts carbohydrates into plant-based mono-ethylene glycol (MEG) and monopropylene glycol (MPG) for the production of resin and functional fluids

AVANTIUM CHEMICALS BV - The Netherlands

Market maturity: Market Ready
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
https://www.innoradar.eu/innovation/49306

Conversion of hemicellulose hydrolysates into “added value products – xylitol and fodder yeast” by fermentation

VOGELBUSCH BIOCOMMODITIES GMBH - Austria

Market maturity: Tech Ready
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
13 CLIMATE ACTION
https://www.innoradar.eu/innovation/49309

Direct conversion of wood-derived Dawn acidic sugar streams for platform chemicals other than glucose

AVANTIUM CHEMICALS BV - The Netherlands

Market maturity: Market Ready
Market creation potential: High
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
https://www.innoradar.eu/innovation/49307

New high throughput adsorbent testing device for quick screening of suitable process conditions and type of adsorbents for purification purposes

AVANTIUM CHEMICALS BV - The Netherlands

Market maturity: Market Ready
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
14 LIFE BELOW WATER
https://www.innoradar.eu/innovation/49305

Technology of converting of Dawn process lignin into lignin nanospheres for broad range of value-added applications

AALTO KORKEAKOULUSAATIO SR - Finland

Market maturity: Exploring
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
6 CLEAN WATER AND SANITATION
8 DECENT WORK AND ECONOMIC GROWTH
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
https://www.innoradar.eu/innovation/49308

Innovation Radar aims to identify high-potential innovations and innovators. It is an important source of actionable intelligence on innovations emerging from research and innovation projects funded through European Union programmes. For more information https://www.innoradar.eu/methodology

Theme:
Efficient integrated downstream processes - CE-SPIRE-04-2019
Keywords:
IMPRESS, H2020, biorefining, greentech, resources efficiency, separation, purification, education, elearning, Massive Open Online Course, mooc
Type:
Other

Resources

Link:
IMPRESS project video
IMPRESS leaflet
IMPRESS E-platform (Free MOOC)

Image not found or type unknown