

Pilots4U



A network of bioeconomy open access pilot and multipurpose demo facilities

Summary

A key challenge for the bio-economy is to bring newly developed molecules and techniques from the lab to the market. The main bottleneck in the innovation chain is the step from technology development to deployment. This step has to be performed first in a pilot plant and later in a demonstration plant where a production process can be tested and optimized in an industrial production setting. Pilot- and demo-plants are expensive, require specific expertise to run and most SMEs and also a lot of large companies have no direct access to such facilities. As a result, promising innovation processes can grind to a halt.

A solution to this problem are 'open access pilot- and multipurpose demo-infrastructures'. These are infrastructures that are open to all companies and research institutes, and can thus be seen as shared investments in research infrastructure. However, these infrastructures are not well known in Europe. Potential user communities are often unaware of the nature and type of equipment and facilities available.

Pilots4U aims to address this problem by grouping all European open access bio-economy pilot- and multipurpose demo facilities under one, very visible and easily accessible network. Pilots4U also wants to assess the current and future needs of the European bio-economy, and take the first steps to invest in equipment modules that are judged essential to catalyse the European bio- economy.

Objectives

To set up a highly visible and easily accessible network of open access pilot and multipurpose demo-infrastructures for the European bio-economy, with Europe-wide coverage and IP user rights protection.

To provide an analysis of the current capabilities of the open access pilot-and multipurpose demo infrastructure network.

To provide an analysis of the needs of the European biobased industry regarding pilot-and multipurpose demo-infrastructures, both now and in the near term, and provide a gap analysis to identify deficiencies in the current offer of scale-up equipment.

<https://biopilots4u.eu/>

Type of Action:

Coordination and Support Action

Value Chain: Across VCs

Start date: 01 June 2017

End date: 31 May 2019

BBI JU contribution: € 902,461.78

Expected impacts

Pilots4U will have the following impacts:

(at the end of the project)

- Detailed analysis of the relevant open access pilot plant and equipment modules available for use by research organisations and industry
- Assessment of the status of existing bioeconomy pilot plant and equipment modules and identifying key assets for scale-up of biorefinery-relevant processes
- Assessment of industry and SME needs, at present and in the near-future
- Assessment of any deficiencies in the existing offer of bioeconomy relevant pilot plant and equipment modules which affect

Draft a plan with remedies, actions and proposals for bridging the identified gap(s) between the current capabilities of the pilot facilities and the actual needs of the European biobased industries. This will involve identifying priorities and potential funding mechanisms for future investments in scale-up equipment and pilot facilities, as well as identifying how existing open access facilities can better serve client needs, by drawing on best practice examples and means of improving cooperation.

the EU's ability to demonstrate commercial processes

- Identification of options for future investments in relevant plants and equipment to enable the scale-up and demonstration of biorefinery processes
- Opportunities to learn from best operational practices for demonstration
- Development of operational and legal models to encourage joint working and collaboration
- Awareness raising
- One Europe-wide network of open access pilot and multipurpose demo-facilities with a single point of entry (containing a searchable database of infrastructure and equipment modules)
- Business plans for future investments

(during and after the project)

- Increase the number of promising innovations that are scaled-up, leading to new investments in production facilities and concomitant job creation
- Environmental impact by scaling up new processes with a lower environmental footprint than current processes
- Social impact by an increase in SMEs that scale-up their invention with own means in open access facilities instead of selling the technology because of lack of budget

Achievements & milestones

Explore the network of open access pilot facilities for the European bioeconomy

January 2019

The project has set up an easily accessible open access database of pilot facilities around Europe where you can search for the perfect partner to scale-up your innovative process. Would you like to add your open access pilot or demo equipment to the database? [Access the database here!](#)

Project coordination

- Bio Base Europe Pilot Plant vzw (Belgium)
- CLIC Innovation Oy (Finland)
- Teknologian tutkimuskeskus VTT Oy (Finland)
- Kungliga Tekniska högskolan (Sweden)
- Swansea University (United Kingdom)
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- Innovation Network (Belgium)
- National Non-Food Crops Centre (United Kingdom)

Organisation name: Bio Base Europe Pilot Plant vzw (Belgium)