



A Europe-wide network of existing open access pilot and multipurpose demo infrastructures for the bio-economy

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Horizon 2020 research and innovation programme under grant



What is open access

- ▶ In the context of infrastructure, open access involves physical infrastructure (*in this case pilot equipment*) being made available to clients other than the owners, for a fee (Source: Wikipedia)
- ▶ Joint investment in pilot infrastructure that can be used, for a fee, by any entrepreneur in need of scale-up

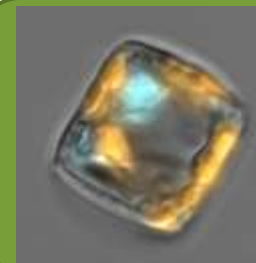
What bio-economy equipment



Industrial
Biotechnology



Thermal
conversion



Algal
cultivation



Chemical
conversion



Pulping



Anaerobic
digestion



Fractionation
Purification



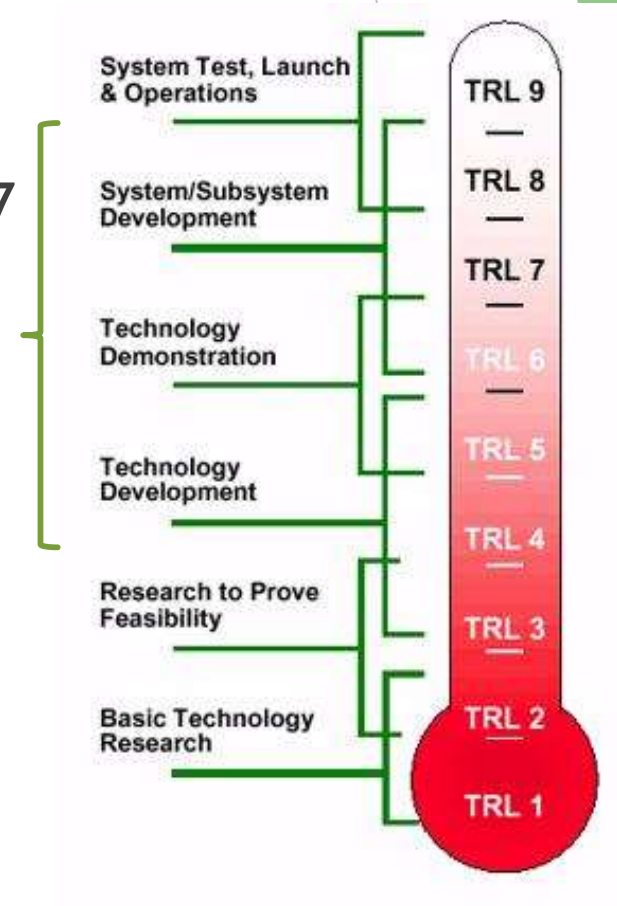
Material
technologies



Nutrient
recovery

What is pilot and demo equipment

- ▶ Pilot scale: TRL4 - TRL5
- ▶ Demonstration scale: TRL6 - TRL7
- ▶ Public and private
- ▶ Open access
- ▶ In EU28



1. **Faster:** Accelerated development: faster time to market
2. **Cheaper:** Saved development costs
3. **Better:** Improved characteristics of the process or final product
4. **Stronger:** Improved network


Different open access model 'stereotypes'

Entity	Stereotype mission
Technology center	Bring new technology to the market <i>Innovation - service oriented</i>
University	Generate new knowledge <i>Research - upcoming technologies</i>
Project	Knowledge sharing <i>Exchange of data</i>
Equipment manufacturer	Answer customer equipment needs <i>Customised equipment, diversify application field of equipment</i>
Technology developer	Technological solutions for a problem <i>Customised technology - license</i>
Private company	Toll-manufacturing (Use idle equipment) <i>Production</i>

Guidelines & best practices for working with scale-up centers

biopilots4u.eu/documents

PRESENTATIONS FROM THE PILOTS4U WORKSHOP 'SCALE ME UP, SCOTTY'



01/06/2018
 Pilots4U held a workshop 'Scale me up, Scotty' on 18th April 2018 in Brussels. Attached are the presentations that were presented during this workshop.

SUPPORTING DOCUMENT:


Attachment	Size
Pilots4U Introduction_Lieve Heffack_BBEPP.pdf	1.18 MB
Pilot Infrastructure Run by a Technology Centre_Hendrik Waegeman_BBEPP.pdf	2.38 MB
Technology Developer Gives Access to Pilot Infrastructure_Marisa Hernández Latorre_Ingelia.pdf	2.76 MB
University Gives Access to Pilot Infrastructure_Claudio Fuentes Grunewald_Swansea University.pdf	1.01 MB
Private Company Gives Access to Pilot Infrastructure_Raimo Van der Linden_BPF.pdf	2.46 MB
Equipment Manufacturer Gives Access to Pilot Infrastructure_Florence Lutin_EURODIA.pdf	4.26 MB
BRISK2_Mahrokh Samavati_KTH.pdf	687.22 KB
Intellectual Property Collaboration (RMC April 2018)_Ross Cummings_Gill Jennings and Every LLP.pdf	439.95 KB
Funding Sources & Their Influence on IPR_Ritchie M. Head & Marc Van de Craen_Biotechsubsidy.pdf	2.04 MB
Pilots4U Database_Paulina Tukiainen_VTT.pdf	284.74 KB
Pilots4U Survey_Andrea Muñoz Garcia_NNFCC.pdf	563.32 KB

LATEST TWEET

Pilots4U
@BioPilots4U


How can you join the growing network of #openaccess pilot demonstration #infrastructure

You only need to fill in your infrastructure in our online d
bit.ly/2J9dVTM



HyperBioCoat
@HyperBioCoat

#WorldEnvironmentDay is for #plasticpollution... But why #bioplastics? @BB2020 is a biobased solution as the one developing a new #biobased #biodegradable coating for #plastic packaging. hyper







Pilots4U network: what's in it for users? -Asset Database-

- ▶ Asset Database: searchable by
 - ▶ Country
 - ▶ Scale (semi-pilot, pilot, demo)
 - ▶ Technology area
 - ▶ Technology
 - ▶ Organisation name

www.biopilots4u.eu

ASSET DAT

- ASSET DATABASE
- DATABASE HELIX
- TECHNOLOGY SCOPE
- DATABASE FORM

Database / Asset Database



Scale

Technology Area

Technology

Organisation

Asset Information	Raw Material	Technology	Technology Area	Organisation	Scale	Country
disc-stack centrifuge	Biomass - any	Centrifugation	Mechanical separations	Bio Base Europe Pilot Plant	Pilot, Demonstration	Belgium
Filter Dryer: Nutsche filter + drying + reactor	Biomass - any	Membrane filtering	Mechanical separations	Bio Base Europe Pilot Plant	Pilot, Demonstration	Belgium
Filter Dryer: Nutsche filter + drying + reactor	Biomass - any	Particle filtering	Mechanical separations	Bio Base Europe Pilot Plant	Pilot, Demonstration	Belgium

AEROBIC FERMENTERS (RANGING FROM 10 TO 15 000L)

PERSONAL INFORMATION



Name:
Business Development

Organisation
Bio Base Europe Pilot Plant

READ MORE →

CONTACT US →

Date:
Wednesday, November 8, 2017

Type of Collaboration:
Fee paying basis, Funded collaborative project, Joint ventures, Negotiable

What 'non-technical' services relevant to scale-up does your organisation offer?:
Technoeconomic Assessment

View

Edit

ASSET INFORMATION

Asset Information: Aerobic Fermenters (ranging from 10 to 15 000L)

Raw Material: Biomass - any

Process Stage: Secondary Processing

Technology Area: Industrial biotechnology

Technology: Industrial fermentation

Scale: Semi Pilot, Pilot, Demonstration

Size: 10 - 99 L, 100 - 999 L, 1000 - 99999 L

Additional technical information:

More info on <http://www.bbeu.org/pilotplant/expertise/fermentation/>

Batch, fed-batch and continuous (with or without cell recycle) fermentations

Experience with bacterial, yeast and fungal systems

Examples of products: industrial enzymes, fine and bulk chemicals, biofuels, biochemicals, bioplastics, biosurfactants, biosolvents, nutraceuticals, food ingredients, bioflavours...

Contact Information:

Rodenhuizekaai 1, 9042 , Ghent , Belgium

ASSET DATABASE

Database / Asset Database



Scale

- Any -

Technology

- Any -

Service Provider

Apply

Reset

How can I cooperate with Pilots4U: Survey of industry needs

- ▶ Assessment of future needs of potential users of pilot and demonstration facilities:

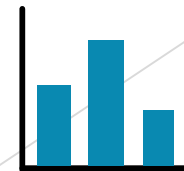
survey closed



- ▶ Comparison of the survey results with our equipment database (gap analysis)

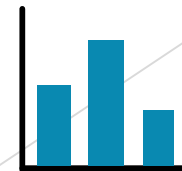


- ▶ Development of business cases to address gaps in provision



How can I cooperate with Pilots4U: Horizon scan workshops

- ▶ Presentation of gap-analysis
- ▶ Discussion with industry and academia
 - ▶ Are the results in line with your experience
 - ▶ Expectations from Pilots4U network?
- ▶ Influence the gap-analysis



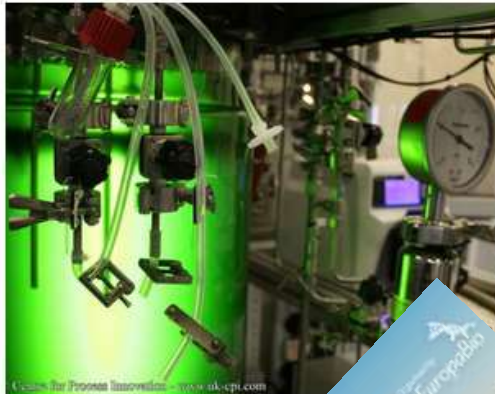
How can I cooperate with Pilots4U: Horizon scan workshops



Centre for Process Innovation - www.ukcpit.com

SEP 26 Horizon Scan Equipment Bio-tech

Pilots4U has a searchable database of pilot plants and demonstration facilities for the European Commission...



Centre for Process Innovation - www.ukcpit.com

OCT 16 Horizon Scan Equipment Bio-tech

Pilots4U has a searchable database of pilot plants and demonstration facilities for the European Commission...



Bio Base Europe Pilot Plant

OCT 22 Horizon Scan Equipment Bio-tech

Pilots4U has a searchable database of pilot plants and demonstration facilities for the European Commission...



Thank you, any questions?

► Networks



► Partners



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Thank you,
any questions?

www.biopilots4u.eu



- ▶ Asset database: www.biopilots4u.eu/add-asset
- ▶ Lieve.Hoflack@bbeu.org
- ▶ Or sign in for the newsletter: scroll down on website

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