Closing the HOOP:

A legacy of circular innovation

The HOOP project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°101000836.

Contents

Introduction from the coordinator

After four-and-a-half years of successful implementation, the pioneering HOOP project comes to an end having harvested successes, lessons learnt, and valuable results. We have leveraged over 120 M € in urban circular bioeconomy projects, helped territories to thrive innovation through technical, regulatory and financial project development assistance (PDA), including open market consultations. Our results include self-assessment tools for circularity and bankability, a comprehensive library on biowaste collection and valorisation, and resources for stakeholder engagement, strategy evaluation, and improvement. Moreover, we have engaged 850 stakeholders in our 8 lighthouses and created the largest European Network for Urban Circular Bioeconomy, that counts on almost 130 cities and regions.

HOOP's project coordinators team (CETENMA)

Project overview

The HOOP project supported 8 lighthouse cities and regions in developing large-scale urban circular bioeconomy initiatives that focus on making bio-based products from urban biowaste and wastewater.

HOOP provided Project Development Assistance (PDA) in the fields of technologies, regulation, market, public procurement of innovation and stakeholder engagement to Albano Laziale (Italy), Almere (The Netherlands), Bergen (Norway), Kuopio (Finland), Münster (Germany), Murcia (Spain), Greater Porto (Portugal), and Western Macedonia (Greece). To ensure the replication of the success cases and capacity building activities, HOOP created a network of cities and regions and an online platform, the HOOP Urban Circular Bioeconomy Hub, with self-evaluation tools and learning material to help other territories in their circular bioeconomy journey.

hoop-hub.eu/evaluate.html

The HOOP tools help evaluate circular performance, the financial attractiveness and maturity level of circular projects.

hoop-hub.eu/
virtual_academy.html

The Virtual Academy provides resources related to the implementation of Urban Circular Bioeconomy solutions, including handbooks, manuals, factsheets, and videos on technologies and financial engineering for circular bioeconomy projects.

Steps to make your bioeconomy project a reality

1. **Preliminary diagnosis:** baseline, indicators

2. **Choose your technology:** State-of-the-art technology article

3. **Develop your project:** PDA

- Regulatory analysis
- Technical support
- Business models
- Financial engineering and/or bidding
- Mobilisation of stakeholders

4. **Obtain the necessary funding:** Financial tools

Replicability Strategy

The Urban Circular Economy Hub (UCEB)

HOOP Network

Circularity Label

Knowledge Exchange Activities

Virtual Academy

This is what we achieved in our four-and-a-half years long project execution period.

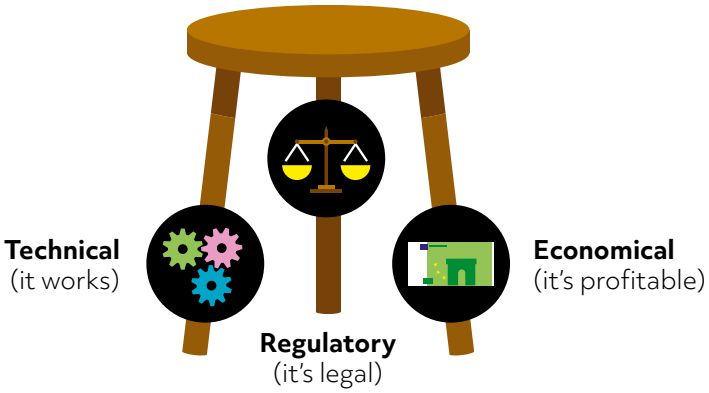
During its lifetime, 18 UCEB projects were identified, 25 technologies for innovative circular biowaste valorisation were evaluated, 40 technical studies and 11 environmental studies were elaborated in the framework of the HOOP development assistance to the projects. The project HOOP elaborated more than 50 reports and manuals, 30 webinars on UCBE and 7 UCBE tools produced. 33 Biowaste Club meetings were held, with the mobilisation of 850 stakeholders. 3 open market consultations were launched, and 2 policy conferences were organised. In February 2025, the growing HOOP Network of Cities and Regions had almost 130 members all around Europe and organised 9 study tours. The HOOP project mobilised 120+ M€ of investments in UCBE in the Lighthouses, with a leverage estimated in x15.

What are the keys to success? Keep reading and discover them first-hand from our partners and Lighthouse territories.

The Keys to success

HOOP Cross-cutting PDA

Project Development Assistance covers technical, regulatory, and economic aspects, carried out by specialised yet coordinated teams of technical partners. This multidisciplinary approach helped identify key challenges in project development and address them, bridging the gap between plans, strategies, and investment.



"If something goes wrong on one of the legs, the project fails"

> *The HOOP PDA introduced us to sustainable technologies for biogenic waste valorisation, enabling us to identify suitable solutions, whose implementation we are now actively advancing. This support came at a crucial time, aligning with stricter national regulations on biowaste quality and the environmental impacts of their valorisation. As a result, many recommended measures have proven highly effective, leading to pilot projects, including AI-based contaminant detection, emissions reporting under new EU regulations, and participation in further funding proposals focused on the local bioeconomy and climate resilience."* - Christoph Baumann. awm (Münster).

> *HOOP provided PDA to help raise capital for start-ups that are developing high-added value circular bio-products. HOOP partners performed regulatory assessment, Life Cycle Assessments and a proof of concept in pilot-scale facilities in Spain. Moreover, the stakeholder engagement activities fostered the dialogue among local biowaste producers and waste management companies, resulting in the creation of Voss Biopark."* - Toralf Igesund. BIR (Bergen).

Stakeholder engagement

The 8 HOOP lighthouse cities and regions implemented several successful stakeholder engagement campaigns throughout the 4.5 years of project lifetime. Dozens of activities ranging from small-scale co-creation meetings

all the way to large conferences with over 100 participants took place. All these activities were part of the HOOP Biowaste Clubs, an open and collaborative stakeholder engagement framework, which helped in reaching over 800 stakeholders total throughout the years. Discover how they work in this short explanatory video.

What is a Biowaste Club? | HOOP

Overall, stakeholder engagement was incremental to the success of the HOOP project by building bridges to the numerous stakeholders in each city and region and thus enabling intensive and ongoing collaboration to advance the urban circular bioeconomies.

"The Biowaste Clubs have been instrumental in building a strong network to lay the foundation for a value chain dedicated to transforming used cooking oils into bioplastics for cosmetic applications. Stakeholders involved included technology providers, oil waste management companies, and the cosmetics industry, both within the Lazio Region and at the national level. Additionally, we successfully raised awareness among citizens about the true potential of biowaste to generate high-value bioproducts." - Andrea Vignoli, ANCI Lazio (Albano Laziale).

"HOOP helped us to strengthen our stakeholder engagement strategy, fostering the dialogue among R&D actors to refine business models for the valorisation of fibers from kitchen and garden waste, a biowaste stream very abundant in our green city." - Johan Splinter, Almere Gementee (Almere).

Citizen science

Through participative sessions and the HOOP Trainers App, we engaged more than 1500 citizens as co-scientists. We deepened our understanding of citizens' perspectives on biowaste separation and acceptance of bioproducts and circularity. Building upon citizen-generated data and policy recommendations, citizen science interventions has proven to be effective to move towards circularity, by generating new data sets, empowering citizens, raising awareness, boosting behavioral changes, and engaging 4-helix stakeholders.

"HOOP team adapted the HOOP Trainers App to the specific challenges of our territory and thanks to it we could evaluate citizens knowledge of biowaste potential valorisation routes into high-added value products, as well as their motivation and struggles with separate collection. Its funny interface made it attractive, especially to younger citizens." - Harri Auvinen, Savonia University (Kuopio).

"We intend innovation in waste management as a journey to be shared with our citizens. Thanks to HOOP team and tools, we could work with 501 co-investigators and set up 2 co-creation events to transform the outcomes of HOOP Trainers into recommendations to improve the actual separation system." - Nikos Ntavos, CluBE (Western Macedonia Region).

Open market consultations and public procurement of innovation

When public procurers seek innovative tailored solutions to their challenges, Open Market Consultations (OMC) helps to analyse market structures, identify barriers, and assess technological readiness. The process offers procurers valuable insights into innovative solutions, promotes competition, and aligns procurement strategies, whether through PPI, R&D services, or partnerships. It is the first step towards significantly reducing information asymmetry, reinforcing competition neutrality, and helping to identify optimal procurement procedures balancing innovation, cost efficiency, and risk.

> *Murcia municipality has been at the forefront of water cycle innovation and efficiency for decades and we keep pushing for research and development to recover resources and make processes more sustainable. HOOP assistance in public procurement of innovation helped us to give another step forward in this field.*" - Manuel Valls Sevilla, Murcia municipality (Murcia).

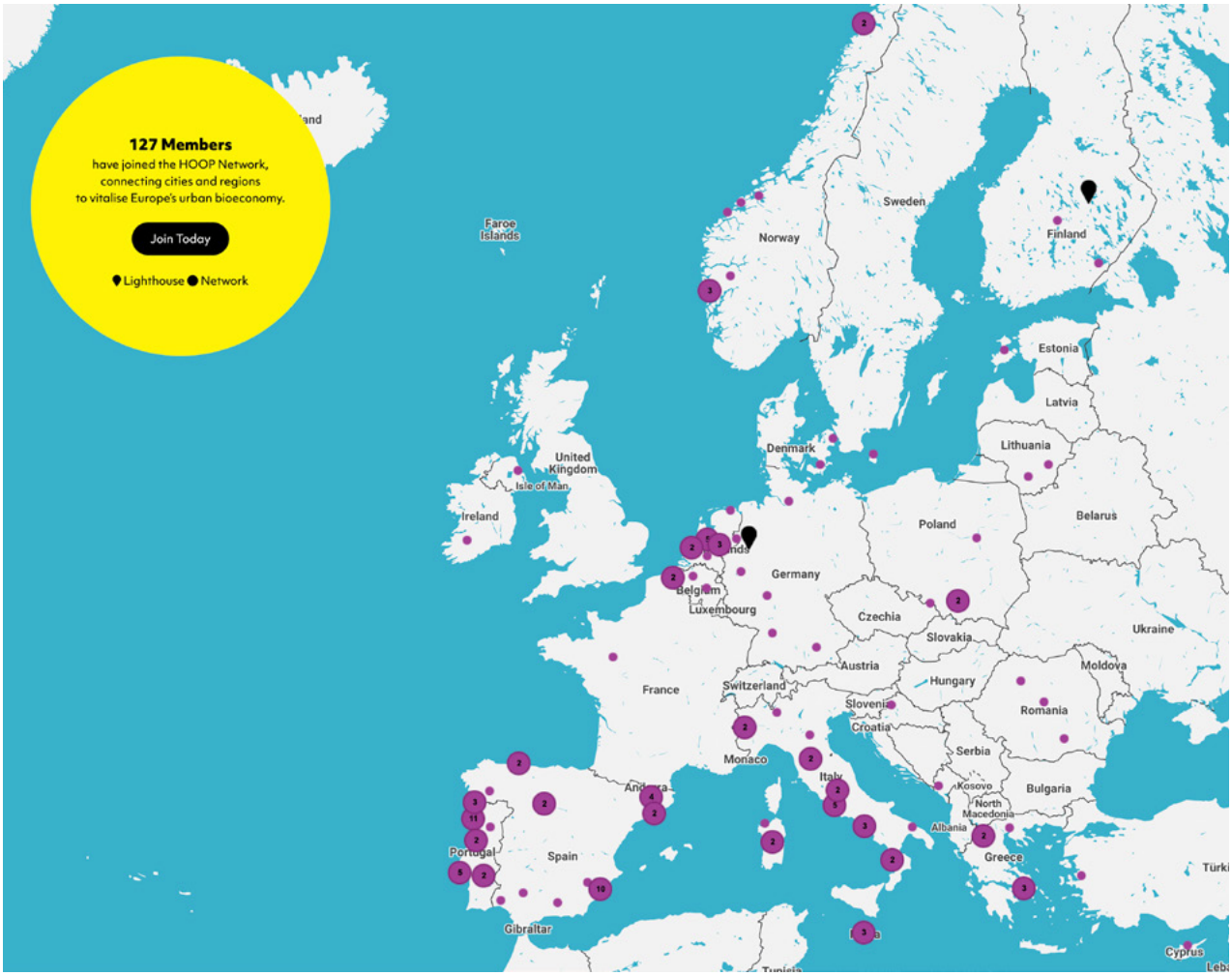
> *HOOP team's knowledge of nutrient recovery technologies and public procurement of innovation was crucial for our team. They helped us launching an open market consultation to find technology providers able to address our double challenge: reduce the excessive content of phosphate and nitrate in the liquid fraction of digestate and produce recycled fertilisers to widen our portfolio of circular products for soil health and plant nutrition.*" – Benedita Chaves, LIPOR (Greater Porto metropolitan area).

HOOP toolkit to replicate results in your territory

The HOOP Network of Cities and Regions facilitated the exchange of knowledge and mutual learning among cities and regions willing to recover valuable resources from urban biowaste and wastewater to make bio-based products.

The HOOP Network of Cities and Regions brought together any organisation, municipal waste management or wastewater treatment at local and regional level that is interested in circular bioeconomy. Registration is free, but only open to authorised representatives of cities and regions, or of waste management and wastewater treatment companies.

Members of the Network get the opportunity to interact with other cities and regions and HOOP experts, and are invited to the different workshops, conferences, and study visits organised by the HOOP project. A total of 127 members have joined the HOOP Network, connecting cities and regions to vitalise Europe's urban bioeconomy.



By joining the network, cities and regions gained information about innovative urban bioeconomy solutions and engaged in activities relevant to their context and specific interests. Participants had direct exchanges with the 8 HOOP Lighthouse cities and regions, sharing experiences and expertise. During this process, partners developed a novel methodology with a suite of open-source tools to support cities and regions in launching urban circular bioeconomy projects, which are outlined in this section of the publication.

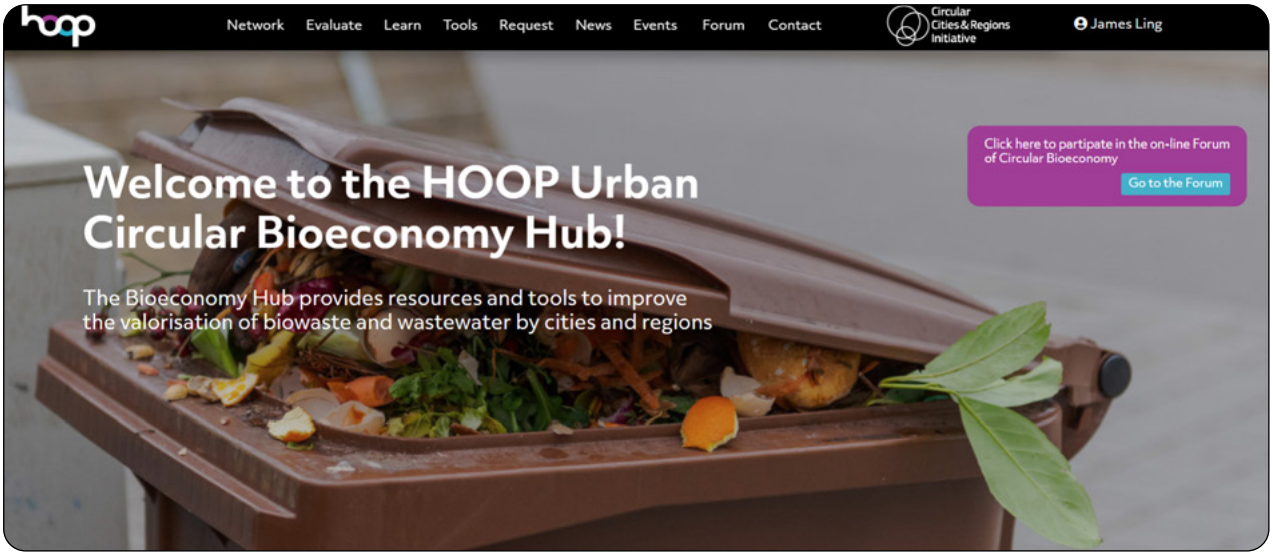
hoopproject.eu/hoop-toolkit

The HOOP tools help evaluate circular performance and the financial attractiveness and maturity level of circular projects.

HOOP Urban Circular Bioeconomy Hub - everything you need in one place

hoop-hub.eu

A pioneering online platform to foster knowledge exchange and replication in circular bioeconomy across Europe. The virtual place-to-be for those who want to self-assess their projects, learn and network with fellow cities, regions, project developers and technical support organisations.



For

- Cities and regions
- Researchers
- Project developers
- Policy makers

Purpose

The HOOP Urban Circular Bioeconomy Hub is an online platform that hosts all the HOOP tools presented in this toolkit, as well as additional interesting resources and services.

Instructions

The HOOP Urban Circular Bioeconomy Hub can be accessed at hoop-hub.eu. While most tools are openly available, it is recommended to make an account in order to access all the features.

Use the menu bar in the website header to navigate the site. The 'Network' page presents the 127 members of the HOOP Network of Cities and Regions. The page on 'Tools' compiles a range of tools developed by external projects and organisations to advance urban bioeconomy. You can ask your questions and enter the discussion on the 'Forum' page.

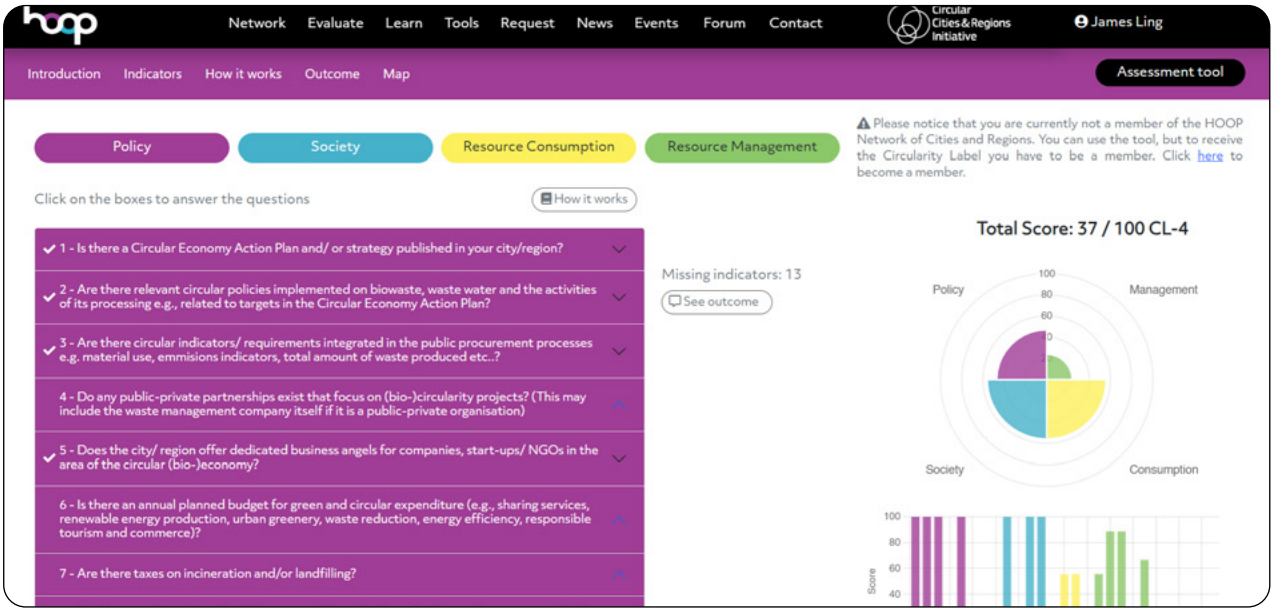
Contact

SAV Sociedad Anónima Agricultores de la Vega de Valencia fample@sav.es

HOOP Circularity Label – understand territorial performance

hoop-hub.eu/
circularity_label.html

The HOOP Circularity Label tool is a self-assessment tool to understand the current performance of a city or region regarding the implementation of bio-circular measures. With the score, you receive a series of suggestions to advance toward bio-circularity.



For

- Cities and regions
- Waste managers

Purpose

The HOOP Circularity Label tool is an instrument to understand the current performance of a city or region regarding the implementation of bio-circular measures.

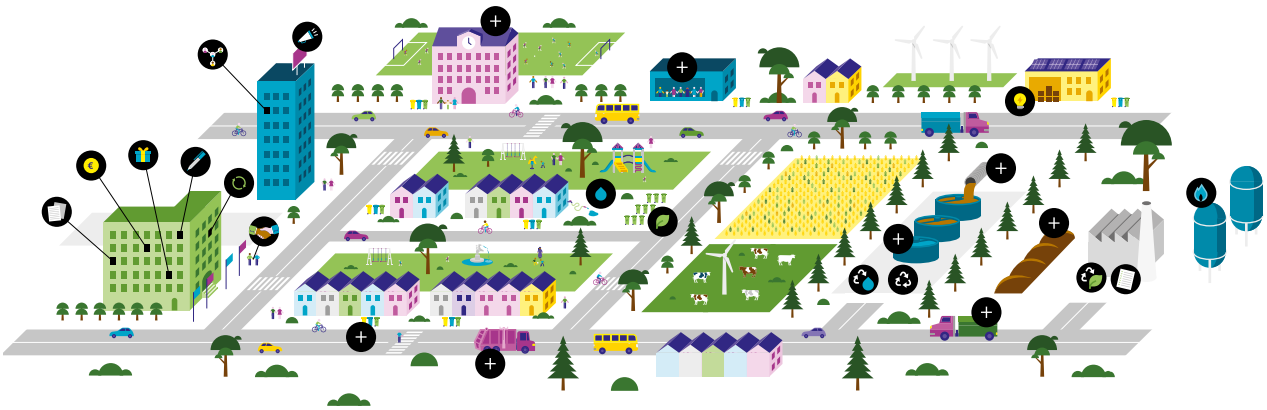
Instructions

To discover the level of circularity in a city or region and to obtain the HOOP Circularity Label, an online questionnaire consisting of 27 questions must be completed. The questions relate to qualitative and quantitative indicators from four dimensions: policy, society, consumption & waste patterns, and resource management. The questionnaire should take around 1 hour to complete.

Based on the answers provided, a city's 'circularity level' is determined, on a scale of 1 to 9. The higher the level obtained, the better a city or region is performing. 5 is the European average, and cities at this level and above are awarded a HOOP Circularity Label.

Contact

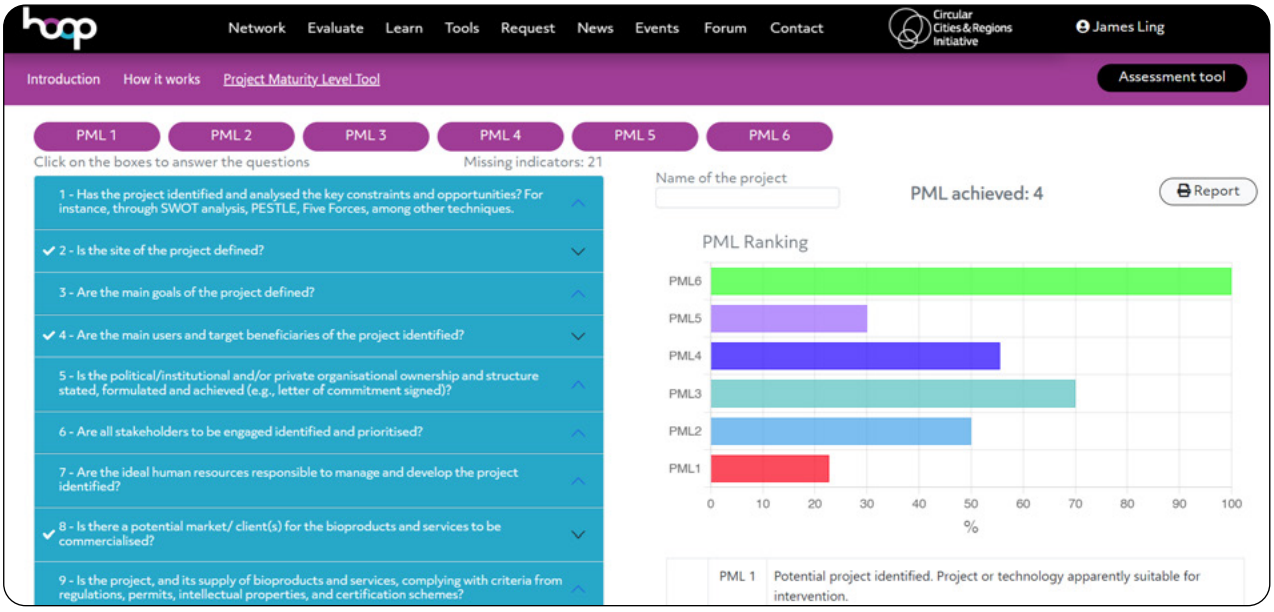
Bax & Company ✉ hoop@baxcompany.com



Project Maturity Level – identify the work ahead for bankability

hoop-hub.eu/
project_maturity_level.html

The HOOP Project Maturity Level (PML) is a standard guidance and ranking tool that evaluates the maturity level of projects in accordance with several criteria. It aims to improve bankability and mobilise green financing and funding for their realisation.



For

- Project developers and promoters
- Investors

Purpose

The HOOP Project Maturity Level is a standard guidance and ranking tool to evaluate the maturity and bankability of urban circular bioeconomy projects.

Instructions

The Project Maturity Level tool is based on a 43-part online questionnaire. Using this information, the tool ranks the maturity of the project on a scale of one to six – one being the least mature ('Potential project identified. Project or technology apparently suitable for intervention') and six being the most mature ('Investment offer or tendering requirements created. Ready to sign or launch the tender').

A report can be downloaded showing the results and overall Project Maturity Level. This can be used to identify ways to increase the bankability of low-ranking projects. Higher-ranking projects can use the report to show their investment-readiness to potential funders or financiers.

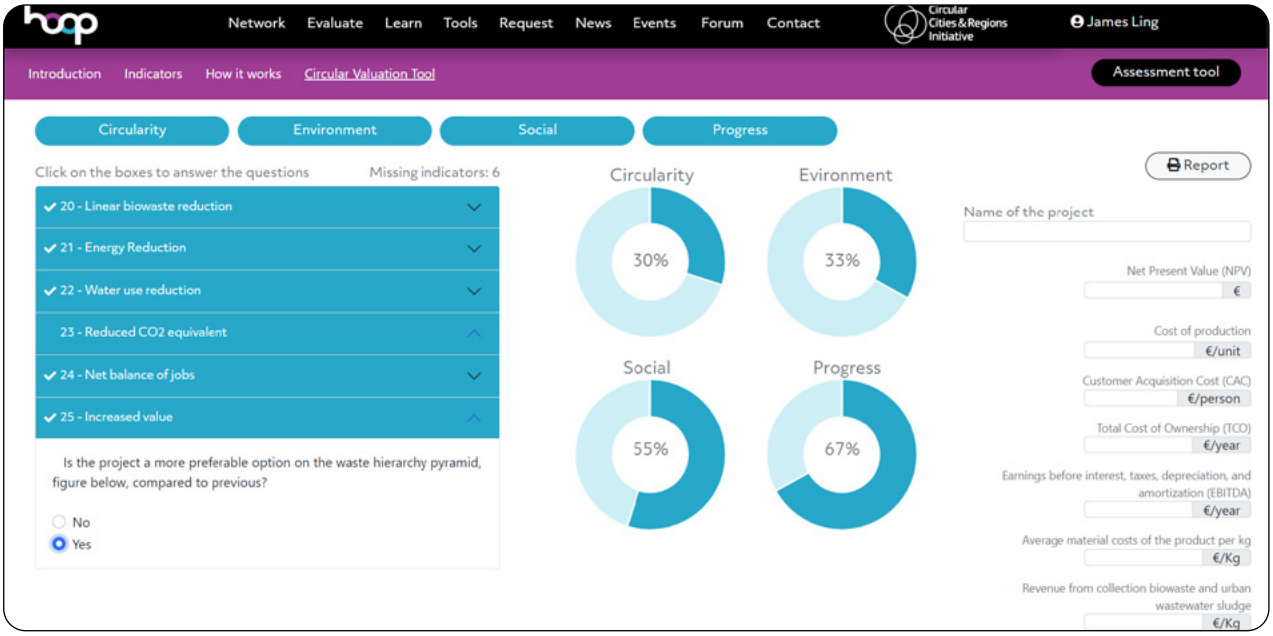
Contact

RdA Climate Solutions rda@rda.pt

Circular Valuation Method – how circular and innovative is your project?

hoop-hub.eu/
circular_valuation.html

Circular Valuation Method is a clear and simple method for companies and public bodies to assess whether circular projects are financially attractive.



For

- Cities and regions
- Project developers

Purpose

The Circular Valuation Method is a clear and simple method for companies and public bodies to assess whether circular projects are financially attractive.

Instructions

Users are invited to complete 25 questions about their circular project. The questions are multiple choice or yes/no and cover five domains: financial, circularity, environment, social. It is estimated to take 90 minutes to complete.

Users will receive an overall score between 0-100%, with the higher the score the better the result. A separate score is also given for each domain, with the financial part comprising of a written report. The results can be downloaded as a pdf to show the circular value of the project and help boost investments.

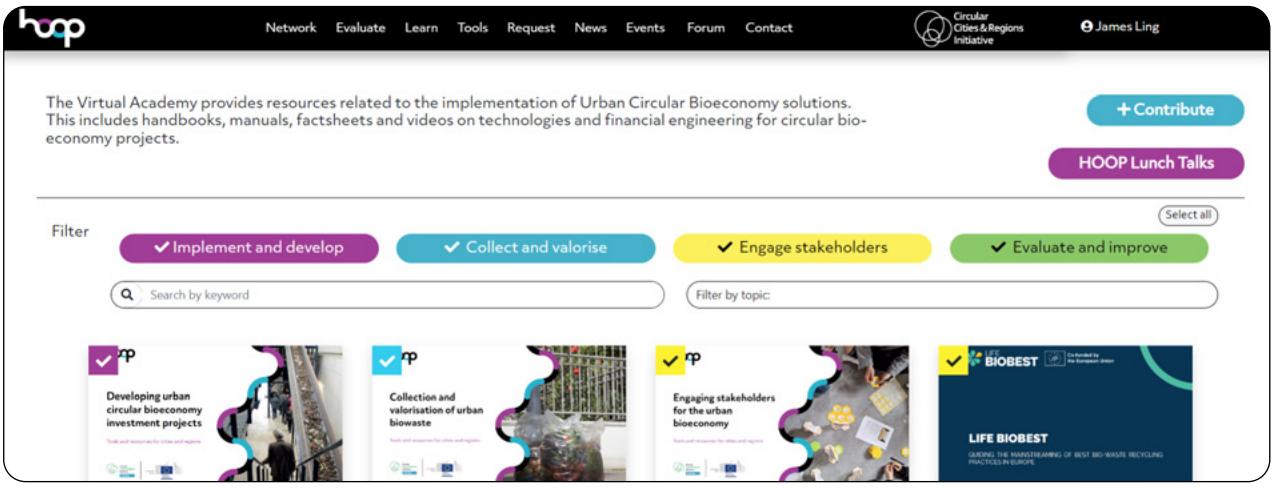
Contact

Bax & Company hoop@baxcompany.com

Virtual Academy

hoop-hub.eu/
virtual_academy.html

The Virtual Academy is a curated repository of resources related to the implementation of Urban Circular Bioeconomy solutions. This includes handbooks, manuals, factsheets and videos that can be filtered by categories or directly found through the search bar.



For

- Cities and regions
- Researchers
- Project developers
- Policy makers

Purpose

The Virtual Academy provides information on the implementation of Urban Circular Bioeconomy solutions by compiling relevant resources such as handbooks, manuals, factsheets, videos.

Instructions

When visiting the Virtual Academy users have direct access to all resources on the main page. The entries are categorised into four themes, shown at the top of the page: implement and develop; collect and valorise; engage stakeholders; evaluate and improve. Users can see content related to one or more of these themes by clicking on the corresponding button(s). The first row features four handbooks, one for each of the themes, presenting some of the key tools and resources in that area.

All content on the Virtual Academy has been tagged with relevant keywords. Users can search for content on a specific topic by using the 'filter by topic' dropdown box, or by entering a term into the 'search by keyword' area. New content is continually being added, and users can propose content of their own via the 'Contribute' button in the top right of the page.

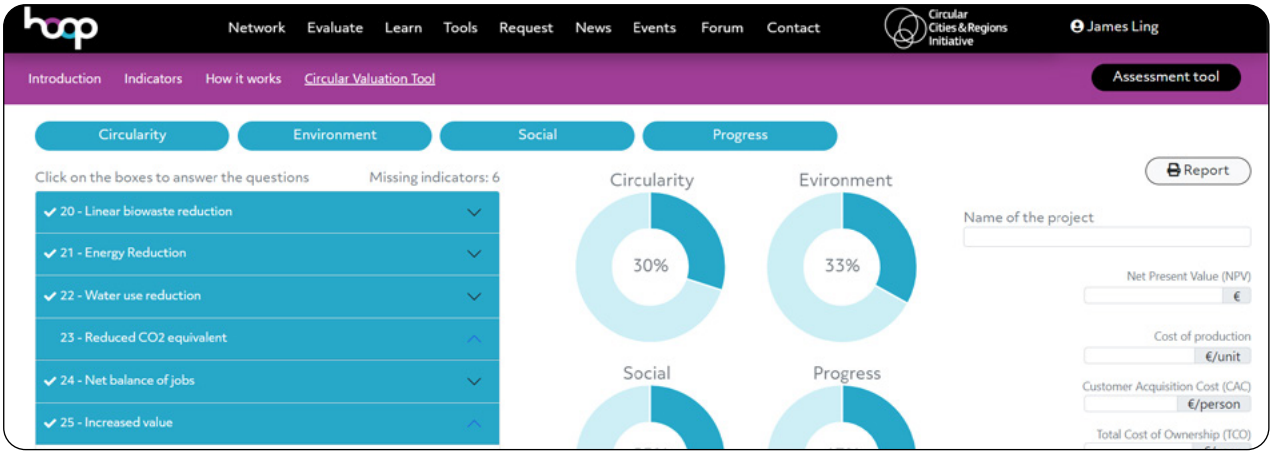
Contact

Greenovate! Europe ✉ info@greenovate-europe.eu

Expert support and services beyond HOOP lifespan

hoop-hub.eu/connect.html

In need for a more personalised support? Contact HOOP experts.



For

- Cities & regions
- Investors
- Project developers

Purpose

To help further the urban bioeconomy, stakeholders can request technical, financial or procurement support from HOOP experts.

Instructions

Via the 'Request' page on the Urban Circular Bioeconomy Hub, any user can apply for support from the HOOP experts. Three types of support are available:

- Technical support: intended for cities and regions looking for advice on a specific topic, such as a bio-economy technology, collection systems, or stakeholder engagement practices. HOOP experts can also provide assistance related to technology scale-up, including proof of concept and validation testing.
- Financial support: for project developers and investors to get in contact in order to mobilise green financing and funding.
- Procurement processes support: for the preparation of public procurement processes and instruments for launching tendering processes.

Contact

CETENMA ✉ cetenma@cetenma.es

HOOP Impact in the Lighthouses

Discover the biocircular journey of our lighthouse cities and regions.

Albano: Golden Biowaste for Local Benefit

Before HOOP

Decades of continuous improvements in waste collection had already positioned Albano Laziale among the leading municipalities in terms of biowaste quality and quantity.

Despite the high quality of the biowaste stream, there was no valorisation of urban biowaste within the municipality, as biowaste was managed externally.

After HOOP

Municipal and regional stakeholders gained insight into innovative biowaste valorisation technologies presented by HOOP, leading to policy recommendations at the national level to go beyond composting and anaerobic digestion.

The separate collection of used cooking oils was expanded in Albano Laziale and Ciampino, following Albano's best practices. This initiative strengthened the stakeholder network and fostered a steady progression toward bioplastic valorisation.

A composting facility was introduced to produce compost locally, reducing the need to export biowaste for anaerobic digestion.

Almere: Cluster the Innovation to build up

Before HOOP

Small biowaste valorisation projects in the framework of the Raw Materials Collective

Separate collection system based on dual bins, with not satisfactory collection rates and important presence of impurities in the biowaste stream.

After HOOP

Refined project concept and business model: the multipurpose fibrebank. Specifying and fine-tuning local and small-scale projects aimed at biowaste recovery with Almere's stakeholders.

Improved separate collection system, leading to an increased awareness among citizens on sorting biowaste and a significant increase in the quantity and the quality of the biowaste collected.

Bergen: Start up the Symbiosis

Before HOOP

Invertapro and Greentech Innovators start-ups in the phase of product development and facility upscale.

Biowaste separate collection implemented for market and food retails.

After HOOP

Over 8 M€ raised from equity funds, crowdfunding and R&D funding to produce insect protein, insect frass, microalgae and secondary sugar hydrolysate from biowaste.

Creation of the spin-off Ommat, that gives back non-animal food leftovers to the food supply chain. Scale-up of mealworm production.

33 M € invested in the creation of a Biopark for the valorisation of regional manure and household biowaste by anaerobic digestion and industrial symbiosis. Separate collection of biowaste from households was implemented on large-scale. Testing of a new PAYT (pay-as-you-throw) system to improve waste sorting.

Porto: Circular Agriculture

Before HOOP

A proven separate collection system already supplied the pioneering composting plant to produce the market-demanded Nutrimais.

LIPOR R&D department was working on improving the quality of the biowaste and the food waste reduction, as well as planning the creation of a large-scale anaerobic digestion (AD) plant to expand the biowaste valorisation possibilities.

After HOOP

The planned AD plant is meant to be equipped with nutrient recovery units to produce circular fertilisers from AD dewatering liquid, for a total investment of 53 M €.

The company reinforced its interest in biochar production from composting refuse and invasive plants, to enlarge their catalogue of products for soil health to improve their circularity.

A new composting facility for green waste only (animal by-products free) was created and separate collection of biowaste was extended.

Kuopio: Do not waste, learn

Before HOOP

The urban biowaste collection system was already in place but there was the need to improve the quantity and quality of the biowaste streams, that was being home composted or sent to anaerobic digestion.

After HOOP

800,000 € were rose to install a pilot plant to produce biochar from different lignocellulosic biowaste streams.

Moreover, citizen awareness activities focused on the obtention of better quality biowaste.

Münster: Bioexcellence and Circular Carbon

Before HOOP

Excellent waste collection system, with engaged citizens and high quality of biowaste stream, valorised through a cascade of anaerobic digestion and digestate composting.

After HOOP

Explored high-added value biowaste valorisation routes, from the techno-economic feasibility and the regulatory points of view.

Regional stakeholder engagement and 3 M € of own funds planned to be invested to promote projects to adopt slow pyrolysis of biowaste as production method of biochar as soil amendment.

80,000 € invested to further improve the biowaste quality with the aim to obtain high quality bio-products, through a pilot system of artificial intelligence installed on biowaste collection trucks.

50,000 € invested for the preparation of a greenhouse gas balance in accordance with the GHG-Protocol standard.

Murcia: Prepare the Land

Before HOOP

The separate collection of biowaste was implemented at pilot scale in the neighbourhood La Flota and the valorisation was conceived at R&D scale in the framework of the ValueWaste EU project.

After HOOP

The local wastewater management company, who explored the feasibility of volatile fatty acid production during the sludge treatment, is currently leading a R&D project on nutrient recovery through innovation public procurement.

The municipality is shaping their biowaste valorisation routes towards the formulation of high-quality soil amendments from compost and digestate.

Besides getting inspirations from other Lighthouses on how to effectively extend the separate collection of biowaste, they kicked off the collection of used cooking oils and food waste prevention programs.

Western Macedonia: Circular Agriculture

Before HOOP

This rural area was transitioning from coal mining economy to a circular biobased economy. Biowaste collection was implemented in the main urban centres but needed improvements in terms of quantity and quality of the biowaste streams and innovation in terms of valorisation processes.

After HOOP

A separate collection system for spent coffee grounds was installed.

Three European project proposal were submitted to raise funds for the local biowaste valorisation innovation hub.

Moreover, Western Macedonia got familiar with the mechanisms of public procurement of innovation, to keep fostering sustainable development.

hoopproject.eu/the-hoop-tales-discover-the-biocircular-journeys-of-our-lighthouse-cities-and-regions/

Discover more in the HOOP tales, a set of factsheets telling the HOOP journey of the lighthouses.

Key project publications

Technologies

Innovative Circular Biowaste Valorisation - State of the Art and Guidance for Cities and Regions is a peer-reviewed article, accepted in the open-access journal Sustainability. The article, with almost 2000 visualisations, offers critical insights into advanced biowaste valorisation technologies and their potential impact on urban bioeconomies. It identified and assessed 25 cutting-edge technologies that transform biowaste into high-value products for sectors including agriculture, chemistry, and bioplastics.

Funding and Financing

The HOOP Due Diligence Standard is a first-of-a-kind standard procedure specifically designed for urban circular bioeconomy investment projects. It is a guide for project parties (promoters, public entity, contractor, etc.) that covers the several relevant risk areas characterising biowaste-to-value initiatives.

The **Investment Package Manual for European Cities and Regions** is an extensive and informative manual delivers all needed information to starting to navigate the funding and financing landscape. It offers an overview on funding and financing schemes and opportunities at European, National and Regional levels. It is divided into 3 volumes:

Volume I – EU taxonomies applied to bio-based activities

Volume II – European investment package on circular bioeconomy for European Member States, Regions and Cities

Volume III – National and Regional investment package on circular bioeconomy for European Regions and Cities

Business Models

The report Novel Circular Business Models Applied in the Value Chain of Bio-Waste Valorisation explores Circular Business Models (CBMs) for 15 biowaste-derived circular products and proposes a template business canvas for biowaste valorisation.

Legal framework and policy recommendations

Policy recommendations: Circular policies for changing the biowaste system is a concise open letter proposes policies and regulatory framework improvements for unlocking safe valorisation routes and changing the biowaste management systems and circular bioeconomy across Europe.

The HOOP Cities Conference report presents a thorough dissertation on the barriers and drivers for the uptake of circular bioproducts, including regulatory landscape, perceived economic and regulatory risks and technology de-risking mechanisms.

Stakeholder engagement

The report on the engagement activities implemented through the BioWaste Clubs in the lighthouse cities showcases all our stakeholder engagement achievements and offers inspiration from the meeting topics.

The outcome reports of the co-designed Citizen Science Interventions in HOOP highlight how citizens were engaged in collaboratively identifying and improving sorting, collection, and recycling systems. Through HOOP trainers, efforts were made to actively raise awareness about the production of circular bioproducts, with all details available in this report.

Replicability

The report Tools for Supporting Future Investment Decisions in Urban Bio-Based Circular Projects identifies and assesses the most important existing tools for guiding future investments in Urban Circular Bioeconomy (UCBE) projects, making it a great starting point if you're unsure where to begin.

The Guidelines for local and regional authorities provide guidance through the key steps to identify, design, and implement innovative valorisation routes for urban biowaste and wastewater sludge. It summarises key recommendations, as well as relevant resources and tools that can be used to produce high-quality biowaste-based products and materials.

All HOOP reports and publications

Check out our Zenodo Community.

Partners and contact

Coordinated by CETENMA, HOOP includes 22 partners from 9 countries around Europe.

ACR+	info@acrplus.org	https://www.acrplus.org/en/
anci lazio	project@ancilazio.it	https://www.ancilazio.it/
Ayuntamiento de Murcia	fondoseuropeos@ayto-murcia.es	https://www.murcia.es/
bax	hoop@baxcompany.com	https://baxcompany.com/
biomass research	info@biomassresearch.eu	https://biomassresearch.eu/
BIR	bir@bir.no	https://www.bir.no/
CETAQUA GALICIA	info@cetaqua.com	https://www.cetaqua.com/
cetenma Centro Tecnológico de la Energía y del Medio Ambiente	cetenma@cetenma.es	https://www.cetenma.es/

	info@cscp.org	https://www.cscp.org/
	info@clube.gr	https://clube.gr/
	info@draxis.gr	https://draxis.gr/
	info@almere.nl	https://www.almere.nl/
	info@greenovate-europe.eu	https://greenovate-europe.eu/
	info@itene.com	https://www.itene.com/
	info@lipor.pt	https://www.lipor.pt/en/
	sara.bedin@pcpacademy.eu	https://pcp.pcpacademy.eu/
	rda@rda.pt	https://www.rda.pt/en/home/

AGRICULTORES DE LA VEGA DE VALENCIA	info@sav.es	https://www.sav.es/
SAVONIA University of Applied Sciences	savonia@savonia.fi	https://www.savonia.fi/
SCIENCE FOR CHANGE COLLECTIVE MATTERS	hello@scienceforchange.eu	https://scienceforchange.eu/
STADT MÜNSTER	baumann@awm.stadt-muenster.de, AWMVorzimmer@awm.stadt-muenster.de	https://awm.stadt-muenster.de/
2GO OUT CONSULTING	geral@2goout-consulting.com	https://www.2goout-consulting.com/en

HOOP is a Horizon 2020 project that supports 8 lighthouse cities and regions in developing large-scale urban circular bioeconomy initiatives that focused on making bio-based products from urban biowaste and wastewater.

Visit our website

Circular Cities & Regions Initiative
CCRI Project

An initiative of the European Commission

The HOOP project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°101000836.