

Version 1.0

Deliverable D2.6

Report on Brussels Conference



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 689229.



DECISIVE

A DECENTRALISED MANAGEMENT SCHEME FOR
INNOVATIVE VALORISATION OF URBAN BIOWASTE



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 689229.

A Decentralised Management Scheme for Innovative Valorisation of Urban Biowaste

D2.6 – Report on Brussels Conference

Grant Agreement N°	6689229		
Acronym	DECISIVE		
Full Title	A Decentralised Management Scheme for Innovative Valorisation of Urban Biowaste		
Work Package (WP)	WP2 - Communication and Dissemination		
Authors	Jean-Benoit Bel & Erneszt Kovacs		
Document Type	Report		
Document Title	Report on Brussels Conference		
Dissemination Level	CO	Confidential, only for partners of the Consortium (including the Commission's Services)	
	PU	Public	X
	PP	Restricted to other programme participants (including the Commission Services)	
	RE	Restricted to a group specified by the Consortium (including the Commission Services)	

ABSTRACT

This deliverable reports on the Final Conference which took place on 20 October 2021, as the final event marking the end of the project. Belonging to WP 2 on Communication and Dissemination, it was aimed at one last mass dissemination and communication activity targeting a wide audience composed of the most various stakeholders – EU institutions, tourism and waste associations, NGOs, local and regional authorities, industry, media and activists and individuals.

DOCUMENT HISTORY

version	date	editor	modification
1	28/10/2021	ACR+	

CONTRIBUTORS

name	company	contributions include
Jean-Benoit Bel	ACR+	Compiling the report
Erneszt Kovacs	ACR+	
Anne Tremier	INRAE	Feedback and validation

Table of content



Executive summary	4
1. Introduction	5
2. The objectives and the idea behind the Final Conference	6
2.1 Conference structure and the proposed agenda	6
2.2 Speakers and final agenda	7
3. The participants	12
4. Conclusions	13

Executive summary

This report on the Brussels conference is in practice the report on the Final Conference which was decided to take place in Brussels replacing the originally planned event in 2020. Due to the COVID-19 pandemic in 2020, no events could take place and it was decided to postpone the event until the sanitary conditions allow it to take place. In July 2021, a few months before the end of the project during the General Assembly, it was further decided to abandon the idea of having a physical event due to sanitary conditions, travel limitations, among other.

This deliverable explains in details the objectives of the Conference, its format, the proposed and approved agenda with speakers. It further gives a reflection on the composition of the participants and the overall outreach the Conference managed to achieve. The deliverable ends with key conclusions.

1. Introduction

This Final Conference was organised as a part of the communication and dissemination activities foreseen by the project. It came as one of the last such activities and served as an opportunity to present the key findings, outputs, and achievements to a wide audience. And a what a wide audience it was, with 129 registered participants from different backgrounds – waste, industry, NGOs, local and regional authorities, EU institutions, media, science with and a few curious individuals interested by the project’s topic.

It has been five years since a consortium of 13 partners launched a Horizon 2020 project titled “DECISIVE”. The project brought together key stakeholders along biowaste management to develop eco-innovative decentralised biowaste management schemes in order to prove that short circuits, circular solutions for such biowaste management is possible in practice.

Three demonstration sites, in Lyon, France, Dolina, Italy and Barcelona, Spain were on the frontline of this 5-years long journey redefining the way biowaste could be managed and treated. Thanks to a number of universities, companies, NGOs and consultants who provided valuable input and skills, the demonstration sites had the opportunity to implement different solutions, scale them to their available capacities and run a demonstration phase which attracted attention from local and regional authorities, companies, investors and others.

After five years, these three demonstration sites, together with the rest of the consortium were proud to be able to present the wider public, European institutions and organisations, local and regional authorities the outcomes, facts and findings and most importantly – the way forward that has been paved by the DECISIVE project.

The Conference took place online, although previously planned to have it in Brussels. The decision for this came in August 2021, when it was still obvious that mass gatherings are rather difficult to organise and security and sanitary conditions difficult to grant to the audience, and that travelling is still limited by many organisations.

2. The objectives and the idea behind the Final Conference

Being a part of the communication and dissemination activities, the partner responsible for its organisation was ACR+ who started developing the idea back in July 2021, when it was presented to the project consortium at the General Assembly.

The main objective of the Final Conference was to summarise the work done over the last five years and highlight the most outstanding findings, results and achievements to the audience which was composed of a set of various stakeholders representing the biowaste management value chain, local, national and European policy makers, all accompanied by the voice of the academia. The Conference also had to give visibility to the 3 demonstration sites (“demos” hereafter) and their stakeholders to share their experiences and present their achievements. Furthermore, the Conference had to allow discussion on the project’s afterlife in terms of business opportunities and policy assessment for easier deployment of solutions such as the DECISIVE’s one.

Given the fact that the project consortium was composed of 14 project partners, including the 3 demos and taking into consideration the Conference’s objectives, the very first task was to determine the structure of the Conference. This structure had to enable all the three demos to present their achievements together with their local stakeholders, as well as to provide space for necessary background information and for explaining the underlying principles of the projects. Nonetheless, several technical partners who contributed to the project with their skills, knowledge and scientific and technical work through research, data analysis etc. were supposed to provide the audience with the background information on how DECISIVE’s eco-innovative solutions were developed, as well as assessed at the later stage. During its lifetime, the project also created many synergies with other projects and external stakeholders whose participation was valuable for the dissemination of the DECISIVE principles and approaches – local authorities, European projects, European associations and similar.

The chosen date for the Final Conference was 20 October 2021, based on the availability of project partners and for the sake of convenience and having enough time after the Conference to close the finances, reporting and other follow up tasks. Based on the structure, agenda and choice of speakers which is described below, the Conference was titled “The way towards decentralised biowaste management”. It was planned to last around 4 hours. The platform chosen for the Conference was GoToWebinar.

2.1 Conference structure and the proposed agenda

Having a long-standing experience in organising such events, ACR+’s idea to go for a storytelling experience was later proven to be the most adequate when it comes to keeping the audience’s attention and presenting the project’s lifetime coherently and understandable for the audience. The very first draft of the agenda, presented in July 2021 during the General Assembly contained the following outline and the structure of the project:

- Session 1: Key-note speeches

This session was imagined as the opening one, receiving the biggest attention from the audience which would also explain the very beginnings of the project – its objectives, relation to the Horizon 2020 programme, concept but also expected impacts. This session also had the intention to acknowledge

those project partners who were behind the original idea and who carried out the project. The presence of a representative of a local or regional authority was imagined linking the technology and the practical solution with the needs of these authorities. The European Commission was invited to participate and to designate a speaker, but unfortunately, they couldn't provide a positive answer.

- Session 2: The Idea

The solutions developed within the DECISIVE project's framework were all results of carefully designed and elaborated scientific premises, based on the knowledge upon which the project built its hypothesis and aims.

- Session 3: The Reality

Following the first session, this one had the objective to present the way the underlying principles and premises were applied in practice. This was the session where the three demos had the opportunity to present their achievements and results, including challenges and all the lessons learnt for the future.

- Session 4: The Outlook

Given the complexity of the two topics planned to be included in this session – business uptake and policy recommendation and the number of different views and opinions, it was decided to opt for a panel discussion which would allow more people and voices to be heard during a limited amount of time.

2.2 Speakers and final agenda

Based on the presented structure and the different sessions the agenda would include, this task had the objective to appoint suitable speakers for the different topics planned. As the Final Conference was held online, there wasn't much possibility to play with the scene, the venue, the visual experience etc. However, at the time of approving the proposed structure and knowing that the Conference would take place online, several partners started shooting a video in Lyon at the demonstration site which would see its premiere at the Conference.

Apart from that, the story-telling approach could be maintained with ensuring a reasonable flow of information understandable and interesting for the audience. The Conference's host title and the tasks which go with it were allocated to Ernest Kovacs, of ACR+.

Key-note speeches

The key-note speeches included Anne Tremier, the project coordinator and the president of ACR+ and director of Zero Waste Scotland, Iain Gulland. While Anne Tremier reflected at the key motivations and inspiration for even starting such a project back in 2016, Iain Gulland expanded this with his opinions and observations when it comes to local and regional authorities and their struggles in setting up sustainable and suitable biowaste management schemes in rural or remote areas, but also decentralised ones in urban areas.

The Conference also wanted to include a speaker on behalf of the European Commission, but due to not establishing a contact with the Project Officer on time, such intervention had to be left out.

The Figure 1 below shows a screenshot of the opening session.



Figure 1. Screenshot of the opening session with Iain Gulland speaking

The Idea

This session had the objective to expand Anne Tremier’s opening speech by elaborating the key principles that the DECISIVE solution was based on – separate biowaste collection, anaerobic digestion and solid-state fermentation, as well as the assessment of current biowaste collection and treatment models existing in cities and regions.

- Functional separate biowaste collection which is the underlying requirement for an efficient biowaste management and the maximising factor for the best valorisation of this feedstock was covered by Ina Koerner and Steffen Walk of the Technical University of Hamburg
- Micro Anaerobic Digestion and Solid-State Fermentation as the drivers towards biowaste valorisation and two technologies which can give an array of valuable outputs to be used and applied in other units or processes, such as biopesticides, electricity production, compost/digestate utilisation and after all food production and closing the circuit. The speakers who covered this topic were those who worked on their downscaling to micro anaerobic digestion level, Anne Tremier, INRAE, and Oscar Prado, AERIS
- Allowing local and regional authorities to assess their biowaste collection and treatment schemes is something that is an important step in reaching out to these authorities with proposals such as the DECISIVE one. Without doing so, the authorities might not understand all the benefits decentralised schemes could bring. Rosaria Chifari, on behalf of Fundacio ENT who was developing a Decision Support Tool, covered this topic.

The Reality

In other words, this was the session dedicated to the three demonstration sites. As each of them had different features and objectives, every single presentation was highlighting what was making them different from each other. The idea of this session was to present how the DECISIVE concept was confronted to the actual challenges of waste management, including both the successes and the current limits.

The session started with the premiere of the newly filed video at the demonstration site in Lyon.

- Collecting and valorising biowaste from food producers and caterers was the title of the presentation which focused on the Lyon demonstration site. It reflected on the performances, challenges, results obtained through the operation phase but also highlighted the consequences brought by the COVID-19 pandemic. It was presented by Axelle Degueurce of INRAE who has been overlooking the operation of the demonstration site.
- Separate collection and its challenges were covered in the framework of the demonstration site in Barcelona and the Bellaterra campus of the Autonomous University of Barcelona. This demonstration site had the objective to showcase what separate biowaste collection should look like within a particular perimeter. It was presented by Teresa Guerrero on behalf of the Catalan Waste Agency.
- Collecting biowaste from households is what makes the Italian demonstration site different from the French one. As the demonstration site would be operated by the regional waste management company, it would be fed with biowaste generated and sorted by inhabitants. The presentation was given by Alberto Piani of A&T 2000.

The Outlook

The two panel discussions in this last session were:

- Policy recommendations moderated by Anne Tremier, INRAE which gathered a few more policy officers of relevant European associations who focus on biowaste treatment, such as the biogas association and compost network and biomass. While Marianne Thomsen of the Aarhus University, as a project partner, gave the DECISIVE point of view on policy limitations, the other panellists added their views on policy limitations and their recommendations, based on the industries they represented. The panel discussion included therefore:
 - Marianne Thomsen, Aarhus University
 - Giulio Poggiaroni, European Biomass Industry Association
 - Marco Giacomazzi, European Biogas Association/European Compost Network
- Business uptake and replication, moderated by Jean-Benoit Bel of ACR+ wanted to look at the potential of the DECISIVE solution on the market out there. Pablo Kroff opened the panel discussion with his observations and opinions from an industry's point of view on how far the DECISIVE solution is from being marketable and all the limits the solution showed during its demonstration phase. His expose was later expanded with the views of other technology providers, such as Claudio Fontana who looked at the role and benefits of using a Stirling engine. The two panellists on behalf of the full package provider ENWISE, who shipped the complete installation to Europe from China reported on the emerging need for decentralised biowaste schemes and the fact that several solutions are already available, yet how the conclusions of the DECISIVE project were important for further development of these solutions. In the end, the presence of Nicolas Scherrier of Brussels Environment, the regional agency for environment in Brussels was very valuable as he could reflect on the needs of cities and regions and what would the optimal solutions be for them, how to combine centralised and decentralised solutions and put all available solutions in a framework that would allow cities to decrease their carbon footprint. The panel included:
 - Pablo Kroff, SUEZ
 - Claudio Fontana, ITS Energy
 - Paul-Edouard Koeltz and Stephane Vernede, ENWISE
 - Nicolas Scherrier, Brussels Environment

Figure 2 shows a screenshot of the second panel discussion with Pablo Kroff opening the discussion.

The DECISIVE concept: A contribution for the future of biowaste management systems

- **Positioning:** The DECISIVE system constitutes a complementary solution to existing centralized solutions for biowaste treatment in urban areas.
- **Perspective & goals:** Towards higher levels of efficiency in biowaste treatment, in service, in environmental performance, and in social impact.
- **Multiple benefits:** A decentralized system for the treatment of biowaste could integrate a local ecosystem of service providers like logistics, application of fertilizer, production of biopesticide, remote monitoring & maintenance, educational hubs, etc.
- **Circular economy principles:** All stakeholders involved in the "loop" at local level should benefit from the outcomes of the decentralized system both economically and environmentally.
- **Design and education are key for the future:** Diagnostic/Design of the system (Decision Support Tool, safety analysis), awareness of system impacts foster higher engagement and quality of the separated collection → better functioning of the system.

20/10/2021 | DECISIVE Final Conference: The way towards decentralised biowaste management | SUEZ

3:56:03 / 4:43:40

Figure 2. Screenshot of the 2nd panel discussion

The overall final agenda looked like the following:

09.00 | Keynote speeches

09.05 | Welcome speech from the project coordinator; Anne Tremier, INRAE

09.15 | Final Conference official opening; Iain Gulland, ACR+ president and Executive Director at Zero Waste Scotland

09.30 | The Idea

09.35 | Functional separate biowaste collection; Ina Koerner, Technical University of Hamburg

09.45 | Micro Anaerobic Digestion and Solid-State Fermentation as the drivers towards biowaste valorisation; Anne Tremier, INRAE, Oscar Prado, AERIS

10.00 | Allowing local and regional authorities to assess their biowaste collection and treatment schemes; Rosaria Chifari, Fundacio ENT

10.15 | Q&A session with the speakers

10.30 – 10.45 | *Grabbing a coffee/tea/breakfast break*

10.45 | The Reality

10.50 | Collecting and valorising biowaste from major producers; Axelle Degueurce, INRAE

11.05 | Separate collection and its challenges; Teresa Guerrero, Catalan Waste Agency

11.20 | Collecting quality biowaste from households; Alberto Piani, A&T 2000

10.35 | Q&A session with the speakers

11.45 | The Outlook

11.50 | Policy recommendations (panel discussion); moderated by Anne Tremier, INRAE

- Marianne Thomsen, Aarhus University
- Giulio Poggiaroni, European Biomass Industry Association
- Marco Giacomazzi, European Biogas Association/European Compost Network

12.35 | Business uptake and replication; moderated by Jean-Benoit Bel, ACR+

- Pablo Kroff, SUEZ
- Claudio Fontana, ITS Energy
- Paul-Edouard Koeltz and Stephane Vernede, ENWISE
- Nicolas Scherrier, Brussels Environment

13.20 | Closing the Final Conference

3. The participants

144 people registered for the Conference, including 19 participants coming from different project partners (in addition to the speakers), 17 speakers (from project partners and externals) and 108 external participants. These 108 participants represented a variety of backgrounds as shown in Table 1.

Table 1. The structure and backgrounds of external participants.

Local/regional authority	Science	Industry	Media	NGO	Private company
44	63	6	1	3	27

Among these 165 registered participants we had 77 male and 67 female participants.

However, even though the number of registered participants was quite impressive, only 94 people actually attended the Conference by connecting to the provided link which implies an attendance rate of 65.2%. The attentiveness rate was 43.6% which was the percentage of attendees having the GoToWebinar software on top of other applications and watching the webinar compared to those who had it in the background and were in “listening mode” instead. Figure 1 shows the number of attendees (excluding speakers) attending the Conference over its course.

Number of Attendees in Session

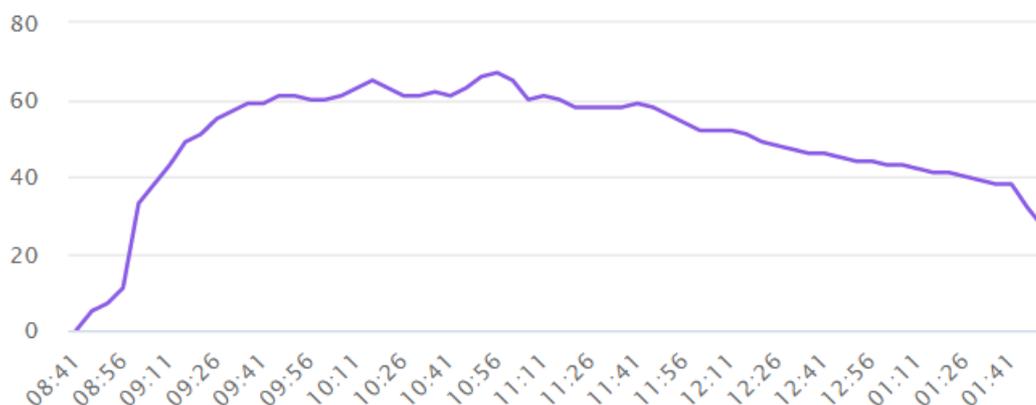


Figure 1. Number of attendees in session

Worth mentioning is that the recording was rewatched after the Conference 15 times as of 27/10/2021. The recording was sent out to all the registrants who didn't attend the Conference and was made available on the project's website, too.

The recording is available [here](#).

4. Conclusions

An unprecedented full-scale test in a dense urban area

After three years of assessing local biowaste flows and research into the most appropriate technology for their recovery, a pilot demonstration site was set up in Ecully in the greater Lyon region in November 2019. The micro-AD unit, built by a French-Chinese company and surmounted by a solar panel, was designed to recycle a minimum of 50 tonnes of biowaste per year – or about one tonne per week – to close the nutrient loop. It was designed to produce biogas, 80% of which was used to heat the unit and provide hot water needed for purifying, and 20% of which was used to generate electricity for an urban farm. This unprecedented pilot site in a dense urban setting was planned to be fuelled mainly by biowaste from the restaurant and catering sector such as collective catering, traditional restaurants, and waste from neighbouring retail premises.

The concept of decentralised schemes tested and showed what needed to be improved

From a technological point of view, the installation of a micro-AD unit in a dense urban space has proved efficient, even attracting new players. The organisation of a short circuit of recycled organic material also ultimately demonstrates the potential for creating jobs. The technology, which can easily be replicated, has also proven to be adaptable since it can be transported as needed. Nonetheless, it allows a progressive implementation of treatment capacities. The micro-AD unit at Ecully is now set up in Narbonne, and a new site in Italy capable of treating up to 200 tonnes of waste per year is currently being installed in a mountainous zone.

A study carried out by the Technical University of Hamburg is looking into how dedicated people are to sorting biowaste in their homes. The results of this sociological study in households of varying socio-economic profiles will help fine-tune policies related to managing waste at the source.

External speakers agree and confirm DECISIVE's potential

Policy officers from the European Associations of biomass, biogas and composting, as well as Brussels Environment and ENWISE, the technology provider for the Lyon demonstration site joined the Conference as external panellists and reflected on challenges and limitation their industries and organisations are facing. It was agreed that decentralised systems need specific regulations, and the current framework conditions do not really value the positive environmental outcomes of such circular biowaste system. What was highlighted during the panel discussions and agreed between panellists was that food waste must be recovered, with priority given to the prevention of food losses.

Contact

Ernest Kovacs

ek@acrplus.org
ACR+
63 Avenue d'Auderghem
1040 Brussels

DISCLAIMER

The sole responsibility for the content of this report lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein.

