



LIFE20 Welcome Meeting

Environment & GIE Sessions Group: Waste/Resource Efficiency 1

Thematic Session: 23 November 2021

Event link (please be sure to use the latest Zoom version, please see details at the end of this document):

<https://us06web.zoom.us/j/85256939259?pwd=aCt3NzNBMEEd2VW1YMUJUTNxeW92QT09>

Meeting ID: 852 5693 9259

Passcode: 136734

Plenary session (all LIFE20 ENV & relevant GIE projects participate in this plenary session):

TIME (CENTRAL EUROPEAN TIME)	TOPIC / CONTENT	SPEAKER
08:30 – 09: 00	Registered participants join the event. Please feel free to turn on camera & microphone and network with other participants.	
09:00 – 09:05	Moderation: Agenda and structure of the meeting, housekeeping rules	Francesca Ettore – Project Manager Circular Economy & Quality of LIFE (CINEA)
9:05 – 09:15	Welcome to the LIFE Programme	Fabio Leone – Head of Sector Circular Economy & Quality of LIFE (CINEA)
9:15 – 9:40	Roles of CINEA Project Manager and external monitoring team Family Photo Split into 6 groups and closing of plenary session: <ul style="list-style-type: none"> • Water 1 • Water 2 • Waste/Resource Efficiency 1 • Waste/Resource Efficiency 2 • Air & Noise • Health 	Francesca Ettore (CINEA) Pavlos Doikos (NEEMO)

9:40 – 13:00 (indicative timing)	Thematic Group Sessions	
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Thematic group session Waste and Resource Efficiency 1 (plastic, CDW, ceramics)

Facilitator: Cesar Seoanez & Francesca Ettore, CINEA

Elias Demian, NEEMO

(Please note that timing is indicative.)

9:40 – 9:45	Introduction	Francesca Ettore & Cesar Séoanez, CINEA D.D2.1 – Circular Economy & Quality of Life
9:45 – 10:15	Latest Policy Developments	Christian Wimmer, DG Environment B.3 – Waste Management & Secondary Materials
10:15 – 10:30	<i>e-Coffee break</i>	
10:30 – 11:35	Project presentation (5 min) plus Q&A	Presentations by beneficiaries (according to project order presented below) Questions by facilitators
11:35 – 11:45	<i>e-Coffee break</i>	
11:45 – 12:50	Project presentation (5min) plus Q&A	Presentations by beneficiaries (cont.) Questions by facilitators
12:50 – 13:00	Final remarks	Francesca Ettore & Cesar Séoanez, CINEA D.D2.1

Project Distribution WORKING GROUP Waste/Resource Efficiency 1 (plastic, CDW, ceramics)

LIFE20 GIE/FR/000118	LIFE WASTE2BUILD	Using the Waste Demolition to Build within a Circular Economy approach
LIFE20 GIE/FR/000282	RE-PLAN CITY LIFE	RElevant Audience Plan Leading to Awareness Network for Circular Economy Use of Recycled TYre materials in city LIFE
LIFE20 ENV/DE/000312	LIFE CFCycle	Low energy chemo-thermal recycling of carbon fibre composites, a central step to a circular economy for CFRP products
LIFE20 ENV/ES/000115	LIFE REPLAY	Unveiling a recycling-source of Heavy Metal-based solids component and organic effluent for use in the ceramic industry
LIFE20 ENV/FR/000596	LIFE CYCLE OF PET	Towards a true circular economy of PET plastics and textiles thanks to enzymatic recycling of waste
LIFE20 ENV/IT/000423	LIFE NEW4CARTRIDGES	A new circular paradigm for reuse and recycling of ink cartridges

LIFE20 ENV/NL/000200	LIFE CarbonGreen	Sustainable recycling of (Carbon) Fibre Composites and biomass waste to valued added CarbonGreen products
LIFE20 ENV/SK/000392	LIFE PowerCylinder	Demonstrating lower emissions and higher efficiency through innovative hydraulic systems in demolition machinery
LIFE20 ENV/UK/000630	LIFE BOSS	Novel recycling process for the full range of post-consumer plastic waste feedstocks including black plastic

PROJECT SUMMARIES

LIFE20 GIE/FR/000118 – LIFE WASTE2BUILD

More circular construction and public works in Toulouse Metropole

Construction and demolition waste accounts for a third of the total waste generated in the EU. Most is sent to dumps or landfill, resulting in pollution and a loss of reusable resources, in addition to the economic cost. In Toulouse Metropole, the local authority plans to tackle this through the LIFE WASTE2BUILD project, preventing waste from construction and public works at source locally and making these sectors more circular. It will set up an innovative system to optimise resources and recover waste from local construction and public works. As a result, the bulk of construction waste across the metropolis will be recycled, a total of 2.3 million tonnes – almost 250 times the weight of the Eiffel Tower. Practices in the building sector should also change thanks to new tools and processes. A “tiny house” built entirely from reused materials will showcase the project’s results.

Coordinating beneficiary: Toulouse Metropole

External Monitoring Expert: Mathilde Redon

CINEA Project Manager: Cesar Seoanez

Contact: Isabelle Durou

Email: isabelle.durou@toulouse-metropole.fr

LIFE20 GIE/FR/000282 – RE-PLAN CITY LIFE

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Post-Consumer Tyres are an important waste stream generated every year in Europe and the world.

Tyre recycling has some peculiarities that distinguish it from other recycling sectors, as Recycled Tyre Materials (RTMs) are not used to produce new tyres. The project aims in raising awareness among relevant stakeholders, expand the visibility of those works related to RTMs through a web app for technicians, promote green public procurement (GPP) and implement practical initiatives to develop the circular economy principles for RTMs and their application in urban environment. Moreover, the project will bring together government authorities, SMEs and training facilities in 5 Member States. Among the project’s outputs are the development of guidelines for GPP, a circular economy action plan, ICT tools and several workshops aiming above all at increasing the material recycling by 1% each year for at least 5 years.

Coordinating beneficiary: European Tyre Recycling Association

External Monitoring Expert: Not yet allocated – the project is still at revision stage

CINEA Project Manager: Cesar Seoanez
Contact: Marco Mangiantini
Email: m.mangiantini@libero.it

LIFE20 ENV/DE/000312 – LIFE CFCycle

Current manufacturing methods for carbon fibre reinforced polymers (CFRP) parts produce large quantities of scrap. These include automotive parts, aircraft wings, wind turbine blades and sporting & consumers goods. Less than 5% of the CFRP is currently recycled. The project aims to solve the problem of recycling of CFRP without the thermal damage and the high energy consumption still associated with other recycling processes. The project will demonstrate an innovative technology for CFRP recycling, which can potentially be transferred to an industrial scale. This technology will recover the binder matrix of carbon fibre objects and be CO2 neutral. The project will establish first industry-scale recycling plant with a capacity of 2000 tons per year, recycle 95% of fibre material and 90% of binder polymers and establish a supply chain of CFRP that could provide up to 1,000 tons CF scrap per year.

Coordinating beneficiary: V-Carbon GmbH
External Monitoring Expert: Claudia Pfirrmann
CINEA Project Manager: Francesca Ettore
Contact: Hau Michael
Email: michael.hau@v-carbon.com

LIFE20 ENV/ES/000115 – LIFE REPLAY

Treating hazardous inkjet waste for its re-use in the production process

The presence of heavy metals and solvents in ceramic inkjet inks poses a significant environmental and health threat. The project team aims to address this problem by demonstrating the technical and economic feasibility of re-using ceramic inkjet ink wastes as a new raw material for the ceramic industry. Its methodology separates this waste into a heavy metal inorganic pigment and an organic solvent, two components that can then be reintroduced into the production process of pigments, ceramic inkjet inks, cleaners and ceramic tiles.

Coordinating beneficiary: Asociación de Investigación de las Industrias Cerámicas
External Monitoring Expert: Estibaliz Gabilondo
CINEA Project Manager: César Seoanez
Contact: Emilie Bannier
Email: otri@itc.uji.es

LIFE20 ENV/FR/000596 – LIFE CYCLE OF PET

Making the business and environmental case for recycling PET waste

The level of recycling of polyethylene terephthalate waste remains low in the EU, with around a half of such waste incinerated and a quarter sent to landfill. The project team aims to demonstrate the economic viability of enzymatic recycling of PET waste, leading to the technology being applied in a newly construction production plant by end of the project. Recycling this waste will reduce greenhouse gas emissions associated with incineration, as well as the consumption of energy and resources. Eight PET recycling plants are expected to be completed worldwide by 2030.

Coordinating beneficiary: CARBIOS

External Monitoring Expert: Laurence Menet
CINEA Project Manager: Aurelio Politano
Contact: Marion Beguerie
Email: marion.beguerie@carbiosa.com

LIFE20 ENV/IT/000423 – LIFE NEW4CARTRIDGES

A new circular approach for reusing and recycling ink cartridges

The European ink cartridges market is worth around €9.4 billion, with 370 million units sold annually. However, reuse and recycling rates for ink cartridges are relatively low. Most are still incinerated or landfilled, generating significant environmental impacts. The LIFE NEW4CARTRIDGES project will provide solutions for both the upcycling of exhausted reusable cartridges and the recycling of cartridges no longer suitable for reuse. Project leader Eco Store, an Italian SME specialising in printer consumables, will develop and demonstrate a semi-automated ink cartridge regeneration process to replace the currently manual workflow, enabling the same cartridge to be reused up to 10 times instead of the current 3 times limit. The project team will implement a new cleaning procedure for used cartridges, recycle end-of-life cartridges using an innovative technology to obtain high-quality secondary raw materials, and raise consumer awareness to increase use of reusable ink cartridges.

Coordinating beneficiary: Eco Store S.R.L.
External Monitoring Expert: Simone Pagni
CINEA Project Manager: César Seoanez
Contact: Stefania Melandri
Email: stefania.melandri@warranthub.it

LIFE20 ENV/NL/000200 – LIFE CarbonGreen

Sustainable recycling of carbon and glass fibre composites to produce green carbon products

Recycling solutions are needed for carbon/glass fibre reinforced polymer (CFRP/GFRP) composites in end-of-life automotive, aerospace and wind energy components. The LIFE CarbonGreen project team, led by the Dutch SME BlueXPRT BV, will scale-up their ThorSpin process to recycle CFRP/GFRP waste. GFRP waste into CarbonGreen products. These products will contain activated carbon produced/regenerated by the technology. Their use in real-world situations will be demonstrated in applications where micro-pollutants must be removed from indoor air or water, especially wastewater treatment. The project will significantly reduce the amount of waste landfilled or incinerated, and reduce greenhouse gas emissions due to the more energy-efficient process. It will also provide a boost to the wind energy sector, by providing the first economically-viable solution for recycling the growing number of end-of-life wind turbine blades.

Coordinating beneficiary: BlueXPRT BV
External Monitoring Expert: Baiba Gaile
CINEA Project Manager: Aurelio Politano
Contact: Ludwin Daal
Email: ludwin.daal@blue-expert.com

LIFE20 ENV/SK/000392 – LIFE PowerCylinder

Developing green hydraulic systems for demolition tools

The project will develop innovative, downscaled hydraulic systems that will reduce greenhouse gas emissions related to demolition activities and improve the efficiency of the machinery. The beneficiary will manufacture a range of CAs for use in hydraulic cylinders, with the resulting PowerCylinders integrated into different types of demolition tool excavator attachments, such as crushers, rotating

pulverisers and fixed pulverisers. Six prototypes, with two different sizes of each, will be produced and demonstrated on an artificial test site.

Coordinating beneficiary: PistonPower S.R.O

External Monitoring Expert: Daniel Svoboda

CINEA Project Manager: Francesca Ettore

Contact: Bernhard Wagner

Email: bwagner@pistonpower.eu

LIFE20 ENV/UK/000630 – LIFE BOSS

Upscaling a sustainable and effective plastic separation process

Baffled Oscillation Separation System is a water-based, density separation process for plastics that is as effective for dark plastic waste as other colours. The project will upscale this process at an automated demonstration plant that can recycle 25 000 tonnes of post-consumer mixed rigid waste a year. It will then carry out large-scale demonstrations at industrial plants in France and the Netherlands in order to evaluate the technology's potential for replication across the EU. The technology offers significant CO2 emission, water and energy savings compared to other recycling processes.

Coordinating beneficiary: Impact Recycling Limited

External Monitoring Expert: Lauren Jeffries

CINEA Project Manager: Aurelio Politano

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Email: David@impact-recycling.com

Please use the latest Zoom version: The LIFE Welcome Meeting Thematic session (23 November 2021) will take place on the Zoom platform. Zoom [regularly provides new versions](#) of the Zoom desktop client and mobile app to release new features and fix bugs. **We recommend upgrading to the latest Zoom version.** You can [check which version you're currently running for video conferencing here](#).