

Deliverable report

Deliverable no./title: D8.8 Stakeholders Engagement

Lead beneficiary:ITBNature of deliverable:ReportDissemination level:PU

Due date: Postponed to 30/11/2020

Grant Agreement number: 820477 **Project acronym:** CREATOR

Project title: Collection of raw materials, Removal

of flAme reTardants and Reuse of

secondary raw materials

Funding scheme: H2020-SC5-2018-2019-2020

Coordinator: FRAUNHOFER GESELLSCHAFT ZUR

FOERDERUNG DER ANGEWANDTEN

FORSCHUNG E.V.

Project Website: www.creatorproject.eu



Version Management

VERSION NR	REVISER	CONTENT	
V0	Christina Dalla	Deliverable Template	
V1	Arturo Sanabria (ITRB)	First draft	
V2	Carolyn Fisher & Irma Mikonsaari	Second Draft	
V3	Arturo Sanabria (ITRB)	Review	

Partners' contribution to the deliverable

PARTNER	SHORT NAME	ROLE IN THE WP	CONTRIBUTION TO THE DELIVERABLE
ITRB Group	ITB	Leader task 8.6	Author of deliverable 8.8
		Leader	
Fraunhofer gesellschaft zur foerderung der angewandt n forschung E.V.	ICT re	Contributor	Deliverable 8.8 Reviewer

All partners have contributed to the planning and implementation of the events





TABLE OF CONTENTS

1 INTRODUCTION	4
2 STAKEHOLDER WORKSHOPS	6
2.1 PLASTICS RECYCLING WORKSHOP	6
2.2 Innovation Forum	7
3 CONFERENCES ATTENDED /CREATOR PRESENTED T	O SPECIFIC STAKEHOLDERS 8
3.1 PLASTIC MULTICIRCULARITY MULTIPLIER CONFERENCE	8
4 CONCLUSIONS	10
4.1 RECYCLERS WORKSHOP	10
4.2 In Plastic Circularity Multiplier Conference	10
4.3 STAKEHOLDERS ENGAGEMENT IN NUMBERS	11
5 NEXT PERIOD	12





1 Introduction

PARTICIPANT NAME	SHORT NAME	COUNTRY
ITRB LTD	ITB	Cyprus
FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.	ICT	Germany
VOLBAS SA	VLB	Spain
MACHINEFABRIEK OTTO SCHOUTEN BV	MOS	Netherlands
COOLREC BV	CLR	Netherlands
RELIGHT SRL	REL	Italy
FUDACION GAIKER	GKR	Spain
TRANSFERECENTER FUR KUNSTSTOFFTECHNIK GMBH	TCK	Austria
EREMA ENGINEERING RECYCLING MASHINEN UND ANLAGEN GESELLSCHAFT MBH	RMA	Austria
CENTRE SCIENTIFIQUE & TECHNIQUE DE L'INDUSTRIE TEXTILE BELGE	СТВ	Belgium
MAIER SCOOP	MAI	Spain
DAW SE	DAW	Germany
CYCLEFIBER \$L	CYC	Spain
FUNDACION CIDAUT	CID	Spain
KUHNE LOGISTIC UNIVERSITY GGMBH	KLU	Germany
OPENBARE VLAAMSE AFVALSTOFFENMAATSHAPPIJ	OVM	Belgium
WUDARCZYK ROBERT	RWE	Spain





CREATOR focusses on the development and demonstration of processes to remove hazardous, already banned bromine-containing flame-retardants from waste streams. It covers the entire value chain, starting from the collection of thermoplastic waste streams from building and construction and from waste electrical and electronic equipment.

In order to meet this aim, the project needs to mobilize stakeholders all along the re-valorization chain, active in plastic waste collection, logistics and processing, solvent development and chemical processing towards end products that can be recycled again. The project has consequently planned stakeholder workshops to generate strategic partnerships with organisations outside the consortium and collect market data which allows the project to have a clear "insider view" of the considered markets, key trends and barriers to the recycling and use of materials¹.

CREATOR will benefit the industry both as a value-creating disposal option for plastic waste, and as a source of secondary raw materials for reuse. The initial target markets are:



construction & demolition



electrical & electronic



aeronautics & automotive



Recycling polymers parts

The continuous dialogue with stakeholders in the value-chain will bring to CREATOR a deeper knowledge on the analysis of the market from industry requirements to end-users behaviour to better adapt the exploitation strategy.

A part the stakeholders events previewed in the project envolving industrial stakeholders and consumers associations, some of the deliverables preview as well to establish a dialogue with relevant stakeholders. As an example of these contacts we can mention Deliverable 5.1 "Mapping of best practices for reverse cycle logistics" which made a deep analysis using among other type of data interviews with representatives of companies.

Additionally, to this task, CREATOR partners have attended several conferences where the main stakeholders from the recycling industry and academia and circular economy actors were present. The partners have regular conversations with their clients on the CREATOR aims and are updated on external demands in this field.

For example, the coordinator Fraunhofer ICT has discussed matters of later recycling of the brominates from the extracted flame retardants, which is not considered within the project, with external industrial partners.

² https://www.creatorproject.eu/wp-content/uploads/2020/12/D5.1-Mapping-of-best-practices-for-reverse-cycle-logistics-1.pdf



¹ https://www.creatorproject.eu/news/



2 STAKEHOLDER WORKSHOPS

2.1 PLASTICS RECYCLING WORKSHOP



The workshop, organised by the CREATOR consortium, had two main topics:

- Supply chain design in recycling
- Plastics labelling & codification systems

The objective of the workshop was to identify for both topics:

- Status quo and current problems
- Possibilities for future developments

The <u>plastic recycling workshop</u>³ took place on Tuesday, 10th of March 2020 at the Kühne University in Hamburg and in parallel online for participants who already weren't able to travel due to the COVID-19 outbreak. The workshop hosted 21 participants in total from Spain, Italy, Belgium and Germany; 7 joined the workshop im Hamburg and 14 joined the meeting online. Besides the project partners, 7 representatives from external companies attended included recycling companies, academics and consultants.

During the first session, the project partner KLU presented initial results on their research on the topic "Best practices in supply chain design in recycling". This presentation was followed by a discussion on the topic focusing on additional information about supply chains.

The second session was led by project partner ITRB and gave an overview on the demand of "Plastics labelling & codification systems" in the project. This topic was also discussed by the participants, who gave

 $^{^4\} https://www.creatorproject.eu/wp-content/uploads/2020/12/D5.1-Mapping-of-best-practices-for-reverse-cycle-logistics-1.pdf$



³ https://www.creatorproject.eu/workshop/



valuable information on the perception of labels in today's recycling companies. The presentation can be found as well in the news section of the website⁵.

In the final session Fraunhofer ICT gave a short overview of the CREATOR research on purification process. Additionally, OVAM presented the results of their deliverable on waste regulation in the EU⁶.

2.2 Innovation Forum

Another important platform for engaging with stakeholders is the Innovation Forum⁷, which is a permanent cluster of projects aiming to create and foster synergies between H2020 projects, encompassing the topics of raw materials scarcity, development of new processes and the circular economy.

The forum consists of more than 21 projects and over 200 organizations. 13 H2020 projects participated in its initial meeting, along with representatives from ITRB, ADMIRIS, SINTEF, MIP, NTNU, AoG, PNO Consultants, Vito, LOMARTOV S.L., NTUA, including stakeholders in mining, construction and automotive sectors in order to explore commercial opportunities.

The 2nd meeting of the Innovation Forum, with participation of CREATOR, was planned to be held in Brussels in March 2020, but due to the COVID-19 pandemic it was postponed and is now planned for June 2021. The Forum format has been designed to be presencial and includes 5 sector Sessions:

- Metal Processing + Metal LCA
- Plastic Processing
- Stationary Energy Storage
- Battery Recycling
- Sustainability PEF

Additionally, and previewing potential travelling restrictions, Innovation FORUM will offer mixed presencial/Online sessions on very specific topics:

- Plastic Recycling
- Plastics LCA and Sustainiability

The Second Edition of the Innovation Forum expect to welcome partners from:

- H2020 Projects: Coordinators, Representatives, Communication, and Innovation Managers
- EC Project Officers and Representatives
- End Users and Industry Representatives
- Governments.
- Research and Education Institutions (Universities).
- Material Producers and Recyclers
- Private & Public Investors
- Innovative Start-ups and SME's

⁷ https://www.h2020innovationforum.com/



⁵ https://www.creatorproject.eu/news/

 $^{^6\} https://www.creatorproject.eu/wp-content/uploads/2020/12/D17-Assessment-of-existing-legislations-and-regulations.pdf$



3 CONFERENCES ATTENDED / CREATOR PRESENTED TO SPECIFIC STAKEHOLDERS

3.1 PLASTIC MULTICIRCULARITY MULTIPLIER CONFERENCE

The Plastics Circularity Multiplier Initiative⁸ is composed by 21 innovation projects which look forward to boost European efforts towards a circular economy for plastics. The initiative seeks to improve value chain collaboration and create cross cooperation between EU projects.

In the light of the recent developments of the coronavirus (Covid-19) situation, the <u>Plastics Circularity Multiplier</u> conference scheduled to take place on 10 June 2020, has been postponed to 14-15 and 16th October 20209.

The event brought together policy-makers, representatives from industry and academia that communicated on a range of EU-funded innovations that aim bringing plastic materials into the circular economy.

CREATOR presented its approach to the sorting of brominated flame retardant contaminated WEEE materials at the third session of the online conference, October 16th 2020. In her presentation, titled "Compliancy and recycling: A way to sort it all out", Mathilde Taveau from CREATOR partner Coolrec, discussed in detail the approaches to the sorting of the high density waste stream using MWIR and LIBS sensoring and their contribution to compliant reuse of this fraction was described (a recording of the presentation can be found on Creator's website¹⁰)

CREATOR's active presence through COOLREC occurred during the 3rd conference day, in the framework of the Session "Collection and Sorting of plastic waste &monitoring of recycled plastics"¹¹. The session was shared with the following projects:

- PlastiCircle project
- Life-Repolyuse Project
- PolyCE project
- Multicycle project

As per PCM's organizers statistics, the session hosted around 300 participants from policy makers to industry representatives passing through end-users' associations with an aim on bringing plastic material into the circular economy.

A part the direct contact and potential synergies with other EU implementing partners (21 EU plastic projects presented), CREATOR have been presented under a focus of 300 attandants linked to Circular economy in plastic sectors, which give the project a high visibility and the potential contacts to evaluate industrial requirements, markets behaviours and look for future buyers/clients.

¹¹ https://www.plasticscircularitymultiplier.eu/conference2020



⁸ https://www.plasticscircularitymultiplier.eu/

⁹ https://www.plasticscircularitymultiplier.eu/conference2020

¹⁰ https://www.creatorproject.eu/creator-presented-at-pcm-conference/



PCM is structured in 4 main areas and CREAToR is part of the 2^{nd} "Climate Action, Environment, resource Efficiency and Raw Materials" together with the following 6 Projects 12:

- Circular Flooring
- DEMETO
- NONTOX
- REACT
- PUReSmart
- REDMADYL

¹² https://www.plasticscircularitymultiplier.eu/synergies



Grant Agreement Number 820477



4 CONCLUSIONS

During the first 18 months of implementation CREATOR has organized a workshop focused on plastic recycling and has participated in the PCM conference held online in October 2020. It is possible to follow every update on new events through the dedicated section on Creator's website 13.

4.1 RECYCLERS WORKSHOP

The workshop hosted 21 stakeholders and 7 were external. It allowed to show the work related to T1.3 where we established contact with recycling stakeholders to collect information on the following issues

- Labelling for traceability
- Information to decide with kind of labelling was better to implement
- Information about the needed information for this labelling

As per CREATOR visibility, the workshop enabled us to

- Show the CREATOR project to possible newly adapters that could be interested in implement the purify technology.
- Show the inverse logistic process from KLU to design a better value chain for plastic recycling to stakeholders

4.2 IN PLASTIC CIRCULARITY MULTIPLIER CONFERENCE

The conference hosted more than 300 stakeholders from policy makers, industry and end-users. CREATOR had direct contact with 5 EU funded projects on its session and is included in a group of other 6 projects focused on "Climate Action, Environment, resource Efficiency and Raw Materials".

In total 21 projects are making part of the initiative and the membership is now open for 2021.

A part the visibility generated by the presentation of COOLREC, the conference allowed CREATOR to:

- Learn about other projects with common characteristics to look for synergies between them
- Know potential competitors of CREATOR's purification technology.
- To have conversations about the plastic recycling market and its possible evolution, together with the problems derived from the coronavirus crisis
- Learn about initiatives within the European Union that may be interesting for the consortium
- Show CREATOR technology to recycling companies and other research centers that could be interested in implement this technology for other types of waste materials.

¹³ https://www.creatorproject.eu/news/





4.3 STAKEHOLDERS ENGAGEMENT IN NUMBERS





5 NEXT PERIOD

During the next period our events organization capacity will be influenced by COVID-19 situation and its development.

We are currently planning to organize:

- Innovation Forum 2021 with presencial and online sessions
- Innovation Forum 2022 with presential and online sessions

With the organization of the Innovation forum we would like to reach more than 250 stakeholders in plastics circular economy and other plastics recyclability related issues.

We will be as well active in the framework of the *Plastics Circularity Multiplier* bringing our inputs and exchanging as much as possible with other 21 projects to boost potential market synergies.

As we are now on a crucial moment where market behaviours and consequently, industrial requirements are changing significantly, the stakeholders engagement is a key task to have a clear view of the considered markets, key trends and barriers to the recycling and use of materials.

Organizing the events and being pro-actives in participating in conferences will be crucial to reach agreements with other stakeholders to introduce in the market CREATOR's Innovations.

As said before, in the current moment, with the situation generated by COVID-19, is difficult to target the events. CREATOR's partners will be monitoring constantly the potential events to decide weather to go and present the project. A constant dialogue will be as well maintained with other projects representatives and EU project officers to better choose and coordinate between SC5 – funded projects group.

