Circular Plastics Conference 2022

18TH AND 19TH MAY, 2022

Igluu, Eindhoven

Powered by the Circular Plastics Initiative

DPI
Shaping polymer innovation

Institute for Sustainable Process Technology

CIRCULAR PLASTICS CONFERENCE 2022

WELCOME

Dear participant to the CPC'22,

We welcome you to our 2nd Circular Plastics Conference. We're looking forward to your active participation as we will show you what is going on in the world of circular plastics and what the technological and value chain challenges are laying ahead.

With your input we will be able to map the directions for future research and development lines. And thanks to the granting of the National Growth Fund proposal on circular plastics we will have ample opportunity to implement these directions in the coming years.

So engage in the keynote and parallel session discussions and enjoy the live interaction during and in-between the sessions.

We thank you for your participation and wish you a wonderful day,

The CPI-team

RONALD KORSTANJE
PROGRAM DIRECTOR

KLAARTJE RIETKERKEN
PROGRAM MANAGER

PACO RUTTEN
PROGRAM OFFICER

CIRCULAR PLASTICS CONFERENCE 2022 PROGRAM

DAY 1

Wednesday, May 18th

9:00 - 10:00 Check-in

10:00 - 12:00 Plenary session Lichttoren

12:00 - 13:30 Lunch and networking

13:30 - 16:00 Parallel sessions

- Thermo-chemical depolymerization Lichttoren
- Design for recycling Led
- Progress in sorting and characterization Kelvin

16:00 - 16:30 Researcher pitches Lichttoren

16:00 - 17:30 Networking and drinks

17:00 - 18:00 Information session Growth Fund Kelvin

18:00 - 19:30 Dinner

CIRCULAR PLASTICS CONFERENCE 2022 KEYNOTES

DAY 1

Wednesday, May 18th

EVA EIKHOUT

Moderator

Eva was born perfectly healthy with her limbs largely absent. She is a presentator at BNNVara, podcast maker, dancer and did her first TedxTalk at the age of 20.

JACQUELINE VAESSEN

Chairman Nationaal Platform Plastics Recycling (NPPR)

Jacqueline was appointed as chair for the Top Sector Chemistry in 2021. In that role, she is also chair of National Platform Plastics Recycling (NPPR) and chair of the Mission team Circular Economy.

STEFANO SORO

Head of Unit - Green and Circular Economy European Commission

Stefano holds a degree in Management and Economics from Università Bocconi, Milan. He joined the European Commission in 1994, serving in a variety of posts. Since 2021 he is the Head of the DG's new Green and Circular Economy Unit.

THOR TUMMERS

Public Affairs | Unilever

Thor is representing Unilever externally, in various fora and trade & industry associations.

PROF. KIM RAGAERT

University of Maastricht

Kim Ragaert is full professor at Maastricht University, holding the key domain chair of Circular Plastics within the department Circular Chemical Engineering (CCE).

CIRCULAR PLASTICS CONFERENCE 2022 PARALLEL SESSIONS

DAY 1

Wednesday, May 18th

13:30 - 16:00 - Thermo-chemical depolymerization - Lichttoren
Sascha Kersten | Session moderator
Full professor Sustainable Process Technology at the University of Twente

Thermo-chemical recycling of plastic streams is a fundamental part to close the chain. In this session partners from the chemical industry and academia discuss their role and which challenges lie ahead. Special attention will be payed to purification technologies and enabling feeding recyclate in existing assets.

Speakers:

- Chalmers University (Isabel Cañete Vela); Gasification and pyrolysis towards feedstock for plastics
- Dow (Henk Hagen); Challenges with regard to the quality of pyrolysis oils
- Shell (Luis Grau); The road for Shell towards recycling of plastics; a technical show case
- ExxonMobil (Pierre Conrath); Enabling advanced recycling solutions for plastics.
- University of Twente (Pilar Ruiz); Pyrolysis of plastic waste (DKR-350): effect of washing procedure

13:30 - 16:00 - Design for recycling - LED
Roland ten Klooster | Session moderator
Professor Packaging design and management at University of Twente and Owner of Plato Product Consultants

The important questions for design engineers are how to come to higher recycle percentages, and how to set up a future proof strategy. Recycling of products and packaging can only be realized by integrating the requirements in cooperation with all stakeholders. This asks for management of development processes but also provides opportunities.

Speakers:

- Circo (Ingeborg Gort); Circular plastics examples and way of working Circo Tracks
- Auping (Geert Doorlag, Principal Researcher); The details of the Evolve case explained
- Hordijk (Rik Hennink, CEO); Circular packaging examples and future challenges
- Filigrade (Han Meiberg, CTO); How watermarking can assist packaging design to become effective

CIRCULAR PLASTICS CONFERENCE 2022 PARALLEL SESSIONS

DAY 1

Wednesday, May 18th

13:30 - 16:00 - Progress in sorting and characterization - Kelvin
Martine Brandsma | Session moderator
Director at the Nationaal Testcentrum Circulaire Plastics

Quality is essential for application driven plastic recycling. In the different process steps from waste to recyclate this quality is in focus. In the workshop you will learn about application driven feedstock quality, alternative washing methods, use of AI in characterisation and sorting and alternative sorting technologies. With you we will discuss these applications in the plastic value chain of the future.

Speakers:

- Renewi (Olaf Fennis); Challenges & role of a waste management company along the recycling chain
- Universiteit van Gent (Martijn Roosen); Modelling of plastic sorting
- Tusti (Jan Kolijn); Challenges in washing for plastic recycling
- NTCP (Marcel van Eijk); Role of characterisation, sorting & washing in plastic recyclate quality
- RTT (Henrik Beel); Flake analysis as quality control
- Umincorp (Lucy van Keulen); Pitch magnetic density separation

16:00 - 16:30 - Research pitches by young researchers

- Homer Genuino - University of Twente
- Amir Khaki - Maastricht University
- Hamid Seyed Khabhaz - Maastricht University
- Francisco Souza - Radboud Universiteit

CIRCULAR PLASTICS CONFERENCE 2022 PROGRAM

DAY 2

Thursday, May 19th

8:30 - 9:30 Check-in

9:30 - 12:00 Parallel sessions

- Addressing bottlenecks in mechanical recycling Lichttoren
- Chemical depolymerization Led
- The value chain and business model(s) Kelvin

12:00 - 12:30 Researcher pitches Lichttoren

12:00 - 13:30 Lunch and networking

13:30 - 16:00 Plenary and concluding session Lichttoren

16:00 - 17:30 Networking and drinks

CIRCULAR PLASTICS CONFERENCE 2022 PARALLEL SESSIONS

DAY 2

Thursday, May 19th

9:30 - 12:00 - Addressing bottlenecks in mechanical recycling - Lichttoren
Gijs Langeveld | Session moderator
Managing Director at Polymer Science Park

The session aims to identify and discuss improvements in recyclate use: What top-priority bottlenecks need to be solved to optimize the re-use of plastics using mechanical recycling? Bottlenecks and hurdles in mechanical recycling, such as quality issues and regulation, will be discovered and discussed during the follow-up panel discussion and lively interaction with the public.

Speakers:

- Ghent University (Prof. Steven de Meester, Department Green Chemistry); Solutions to be implemented and challenges to be tackled
- KraussMaffei (Mr Jan Bruys, Business development and Sales); New techniques to solve future challenges
- FBR-WUR (Dr Ulphard Thoden van Velsen, Principal Researcher); How to deal with the complex matrix of plastics
- Veolia Polymers (Gerrit Klein Nagelvoort); Mechanical recycling: advantages and bottlenecks

9:30 - 12:00 - Chemical depolymerization - Led
Jan Jager | Session moderator
Lector circular plastics at NHL Stenden

Chemical recycling of plastics is an emerging sector developing innovative new technologies that turn plastic waste into base chemicals, monomers and feedstocks. In this session, future perspectives and business opportunities will be discussed for the chemical recycling of polyesters and polyamides.

Speakers:

- Corbion (Gerrit Gobius du Farp) PLA depolymerisation towards recycling
- Saxion (Jens Oelerich) The chemical depolymerization of textiles
- Ioniqa (Maarten Stolk) What will chemical depolymerization bring to the future of circular plastics

CIRCULAR PLASTICS CONFERENCE 2022
PARALLEL SESSIONS

DAY 2

Thursday, May 19th

9:30 - 12:00 - The value chain and the business model(s) - Kelvin
Jan Harm Urbanus | Session moderator
Senior research scientist circular plastics at TNO

In this interactive session we bring together all aspects that facilitate the transition toward circular plastics: economic & societal drivers, technology, business case, policy & regulations, behavior. We'll bring insights from a systemic perspective: what are white spots, hurdles to tackle, actors to involve, cooperation models to establish, etc. We aim to strengthen collaboration & coordination throughout the value chain, join us!

Speakers:

- TNO (Jan Harm Urbanus); Transition towards circular plastics from a systems perspective
- Afvalfonds Verpakkingen (Hester Klein Lankhorst); The adaptation of the value chain with new developments, with a focus on EPR
- Polestar (Reinier van der Vusse); How to critically invest in circular plastics
- Centraal Planbureau (Joep Tijm); An assessment of EPR in the circular plastics field

12:00 - 12:Researchers 19th

- Juraj Petrík - Utrecht University
- Liron Zada – Vrije Universiteit Amsterdam
- Giusy Santomasi – Wageningen University

CIRCULAR PLASTICS CONFERENCE 2022
LOCATION

LED

Wo 18 May / Thur 19 May

- Breakout (40 theater of school)

KELVIN

Wo 18 May & Thur 19 May

- Breakout (40 theater of school)

LICHTTOREN

Wo 18 May & Thur 19 May

- Plenary room & breakout room
- Conference floor & Reseacher presentations (95 schoolopstelling)

CIRCULAR PLASTICS CONFERENCE 2022

ABOUT CPI

CPC'22 is organized by the Circular Plastics Initiative (CPI), which is a consortium of organizations throughout the plastic value chain.

CPI is founded by DPI - The Polymer Research Platform and the Institute for Sustainable Process Technology (ISPT).

Our mission is to boost circularity in plastics on an industrial scale. We address the entire value chain from an international perspective and focus on the technological, logistic, and societal challenges lying ahead.

Learn more about the Circular Plastics Initiative

The Circular Plastics Initiative is open for more participants. Would you like to join or receive more information? Contact our Program Manager Klaartje Rietkerken +31 610629987 or visit our website ispt.eu/programs/circular-plastics-initiative.

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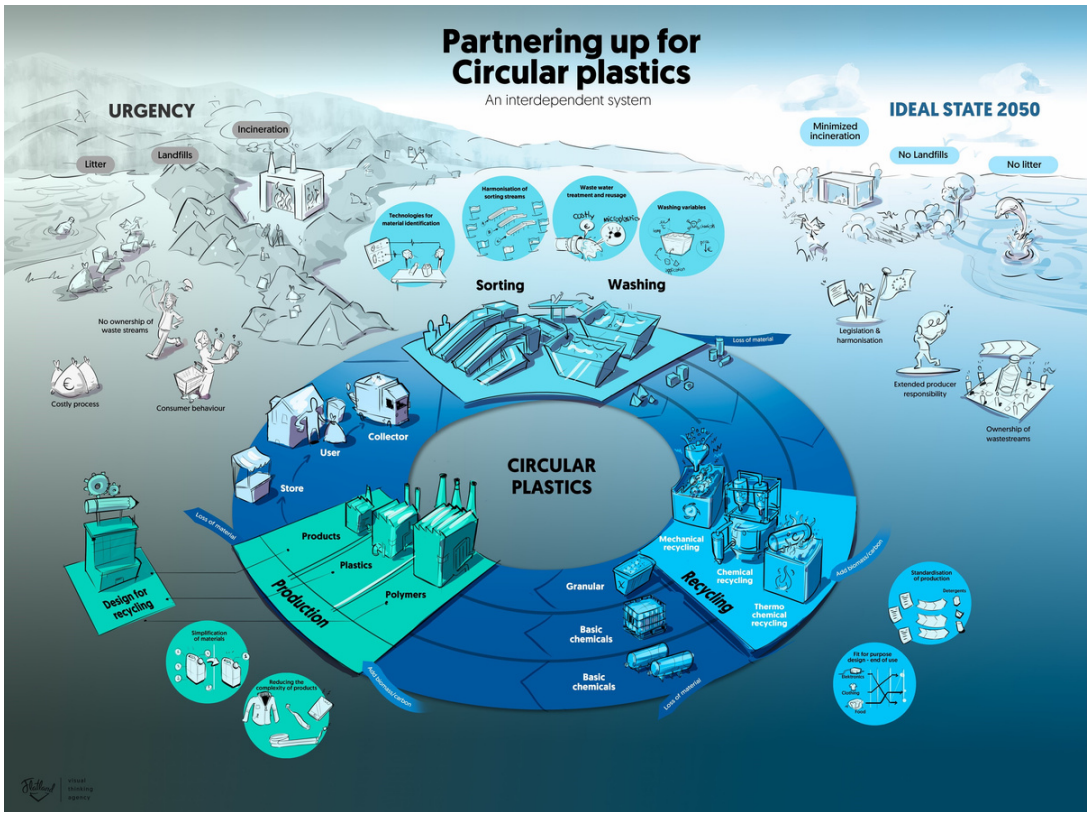
ABOUT THE ROADMAP

In 2021 the Circular Plastics Initiative (CPI) released its Circular Plastics Roadmap, which it developed in collaboration with experts from industry and academia.



The Roadmap is an interactive document that shows what steps will be needed to create a future where recycling has replaced incineration as the norm. The CPI is thus aiming to be a center of excellence for technological developments in circular plastics.

The Circular Plastics Roadmap isn't just a timeline with milestones. It also sets out a vision for the future and shows how it can be realized.

Our ultimate goal is a future in which we have moved from a linear system of production based on fossil fuels to a closed circle. In that circle, plastics will be produced from recycled materials, and CO2 emissions will be drastically reduced.