Changing the nature of chemistry

We make the Circular Plastics System Work!
Circular plastics is one of the focus areas at Chemport Europe

Chemport is the name of the chemical production and development ecosystem, located in the northern part of the Netherlands.
Circular polymers are a key element in the comprehensive Chemport ecosystem.
All bases are covered at an industrial scale. Together with key partners along the value chain such as:

- Equipment manufacturers
- Industrial service providers
- Scientific partners
- Governmental organizations
√ Highly advanced **Collection & Mechanical Recycling** system of post-consumer waste (>75kT of different products)

√ Integrated **Polymer Production** cluster
  - Production and subsequent processing of a wide range of plastics; (r)PET, PA, PBT, TPE, HDPE, ABS, PS, PLA, PHA, PBAT
  - One of the largest man-made fibre clusters in Europe
  - Largest combined processing capacity of rPET in Europe
  - Largest producer of Aramid in the world

√ European frontrunner in **Chemical Recycling**

√ World Class **Technology Providers**

√ 2nd **Start-up region** of the Netherlands

√ Close **cooperation** within the value chain
World players and innovative SME’s coöperate
Supporting infrastructure

- Analytical labs / polymer labs
- Pilot facilities
- Knowledge
- Demo site

Complimented by an extensive supporting infrastructure
Enabling a fast start- and scale-up

Test and optimize your new circular business model and/or supply-chain

Test the market for circular products at an industrial scale before going to full production. Start regional scale fast(er) to national and European level

Plug into an existing large-scale ecosystem

Joint focus;
Companies, government, knowledge institutes
All aspects of circular design

- Sorting & recycling
- Polymer sciences and chemical engineering
- Circulair Plastics and Sustainable Polymers
- Polymer innovations
- 3D Printing & Plastic Technology
- Shared Smart Factory for collaborative manufacturing
- Sorting & recycling
- 3D-print prototyping and additive manufacturing
- Circular product design and development
- 3D-print prototyping and additive manufacturing
- Industrial Design Minerva School of Arts
- Polymer innovations
- 3D Printing & Plastic Technology
- Shared Smart Factory for collaborative manufacturing
- 3D-print prototyping and additive manufacturing
- Circular product design and development
- 3D-print prototyping and additive manufacturing
- Industrial Design Minerva School of Arts
Benefits of the region

All you need to go green

- Partners available along the chain
- Joint focus
- European funding and exposure
- Governmental support
- Powered by green energy
- Knowledge and workforce
Join us to... make the Circular Plastic system work!

All part of Chemport Europe
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A glimpse of innovations in the Chemport ecosystem
PP from separated residual waste was recycled into a high-quality granulate. Achieved thanks to a collaboration between Philips, Morssinkhof, NHL/Stenden, Groningen University, and Omrin.

This unique breakthrough produces such high quality and high purity raw-material granulate, that it can be re-used on a large scale and to produce high-quality ‘new’ plastic for consumer products in any color.

This unique recycling plant has been designed and build by Bollegraaf Recycling Solutions.
Circular designed and produced climate sensors

Pezy Group helps companies to break free from the traditional 'take-make-waste' design process. Products are 'designed for recycling' or 'designed from recycling'.

Functional range of high-tech products based on recycled polymers

wireless value
Lankhorst Engineered Products, manufacturer of KLP® Hybrid Polymer Sleepers, is the sole supplier of polymer sleepers for KiwiRail in New Zealand. The main reasons for KiwiRail to choose KLP® Hybrid Polymer Sleepers are the high quality combined with the long life-time of the product. The polymer sleepers will be applied in main track and in turn outs.
100% circular carpets through chemical recycling of polyester

Designed for recycling

Designed from recycling
Mobility

- Scooter made from bioplastic composite
- 3D printed boat made from post-consumer waste
- Boat made from PET bottles
Development of sustainable packaging
The example above is a great showcase of the unique ecosystem collaboration in our region. This development is supported by the local and international government (EU) due to its innovative character.
Bollegraaf / Van Dyk Technology & Material Test Center.

Focused on improving the process of achieving purity of recyclable grades. The Test Center allows our customers to experiment with new equipment and conceive of how to reach and improve their operating goals.

Major breakthrough achieved in recycling plastic packaging.

Used polypropylene (PP), obtained from separated municipal waste, recycled into a high-quality raw plastic material.

As this high-quality PP is color sorted into color groups virtually no virgin master batches or other additives are required to create new products.

This breakthrough makes it possible to manufacture recycled polypropylene products that meet the highest quality requirements, in any color.
National Test centre Circular Plastics:

Independent test- and R&D centre for sorting and washing

- Facilities on industrial scale, fully customized for testing and R&D
- Open for all stakeholders in the value chain, integral approach
- Applied research, testing and validation for sorting and washing
- Own development programs, Perfects sorting, Application driven sorting and recycling, method development
- First independent, not-for-profit, organization in Europe with facilities on industrial scale
Bio-aramid production through high thermal recycling of waste

BioBTX and Teijin are looking at sustainable feedstock for super fiber

The Japanese company, Teijin Aramid, and the Dutch BioBTX are working on a synthetic fiber made entirely of sustainable materials. The initiative that is about to start is financially supported by the provinces of Drenthe and Groningen and by Chemport Europe.
Innovative biobased & biodegradable plastics

Compostable & biodegradable alternatives for the agricultural and marine sector

Biodegradable infill

Development of PLA yarn

Biobased medical devices
Selection of relevant companies

Aliancys
Area
Attero
Avantium
AVR
BASF
Bek & Verburg
BioBTX
Bollegraaf
ChemCom
Cumapol
CuRe Technology
Delamine
DOW
DSM
DVC
Elzinga & van der Krieke
Enerpi
EPS Nederland
Essentra
EuroProvyl
EV Biotech
EEW
Flexoplast
Foamplant
Forbo Novilon
FrieslandCampina
H&P Moulding
Hempflax
Icopal
Lankhorst
LIMM
Low&Bonar
LPF
Lubrizol
Lubo Systems
NNZ
Nova Riet
N+P Group
MF Emmen B.V.
Morssinkhof Plastics
Oerlemansplastics
OMRIN
Paques
Pezy Group
Polytech
Philips
Photanol
Plixxent
Polern
Probo
Prodin
Schur Flexibles
Senbis Polymer
Innovations
Sidijk
Soprema
Suez
Sylvaphane
Teijin Aramid
Torrgas
TRH Recycling
Van Afval
Van de Sant
VEPA
Virol
Vita Plastics
VDL Wientjes