



**Interreg**  
North-West Europe  
**Di-Plast**  
European Regional Development Fund



# Digital Circular Economy for the Plastics Industry

HMI 2019 – Tech Transfer Forum, April 4th

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**Hannover Messe, Hall 2, Booth A18**

# Agenda

1. What is Interreg NWE?
2. The Project Consortium
3. The Di-Plast Project
  - 3.1. Background
  - 3.2. Aims and outcomes
  - 3.3. Activities
  - 3.4. Opportunities

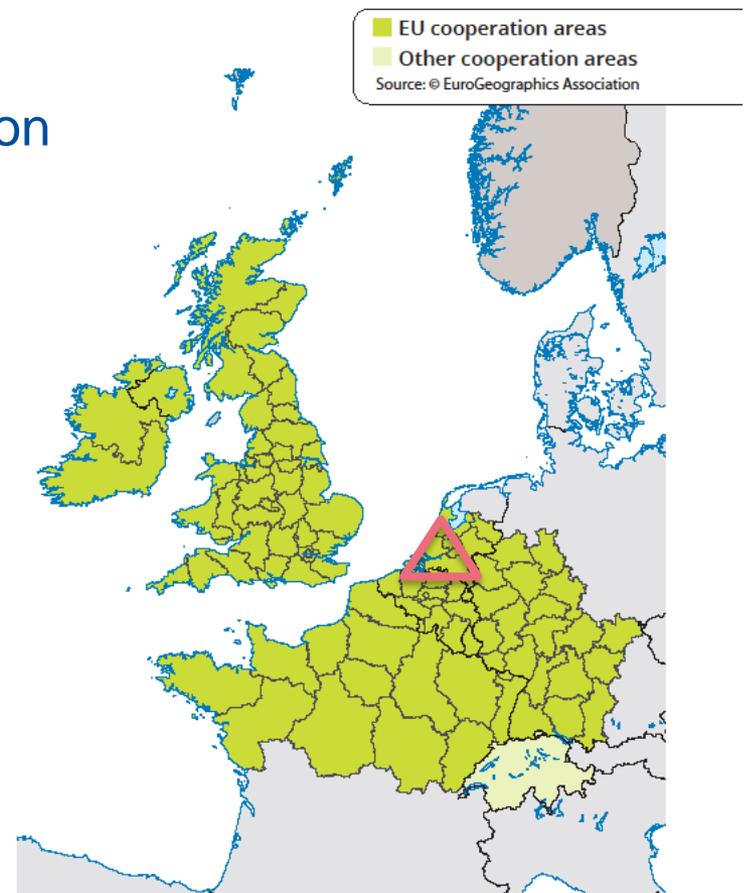
# 1. What is Interreg NWE?

EU funding program for the NWE region

Cross-border cooperation

Different themes – here:

*Resource & materials efficiency*



## 2. The Project Consortium

1. Wuppertal Institut für Klima, Umwelt, Energie gGmbH, Germany (Lead partner)
2. Ontwikkelingsmaatschappij Oost Nederland NV, Netherlands
3. SKZ - KFE gGmbH, Germany
4. Stichting Katholieke Universiteit Brabant, Netherlands
5. Stichting Polymer Science Park, Netherlands
6. Umwelttechnik BW GmbH, Germany
7. University of Luxembourg, Luxembourg

# 3.1. The Project Background

Focus on building and packaging

Main products in both are thermoplasts employed in extrusion production processes.

These similarities may result in synergies between the sectors

Share of plastic converter demand per market



Source: Plastics Europe 2018

# 3.1. The Project Background

Recycling of *packaging* plastics

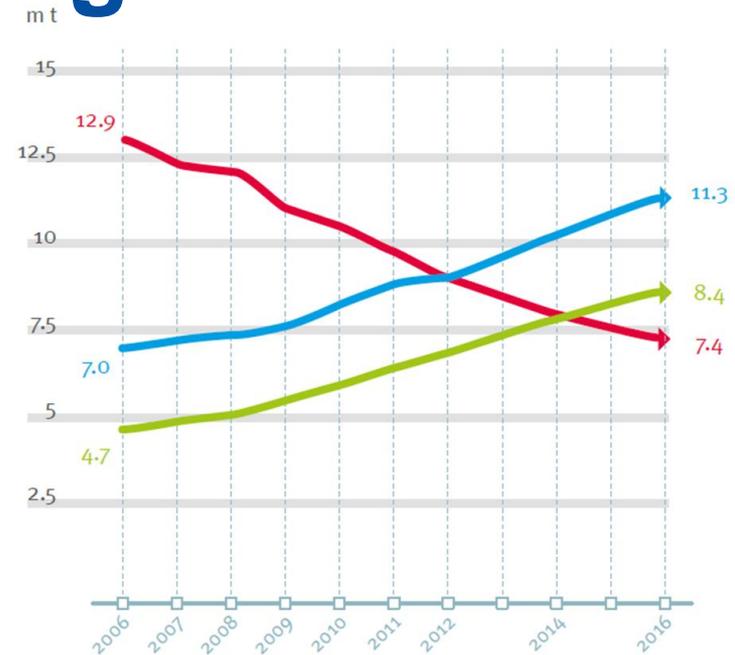
Example Europe

Rates in Germany are higher

Ratio thermal/material is similar

Focus on *output* of plastic value chain

New laws with higher minimum recycling rates!



Source: Plastics Europe 2018

 **Recycling +79%**

 **Energy recovery +61%**

 **Landfill -43%**

**Total waste collected**  
 **+11%**  
 24.5 m t (2006) to 27.1 m t (2016)

# 3.1. The Project Background

And what about the input?

**Input rates** of recycled plastics

Focus on *input* of plastic value chain

Quite low rates!

High potential for improvement

**Building sector**

18% rPM (978 kt)

**Packaging**

8% rPM (787 kt)



A EUROPEAN STRATEGY  
FOR PLASTICS  
IN A CIRCULAR ECONOMY

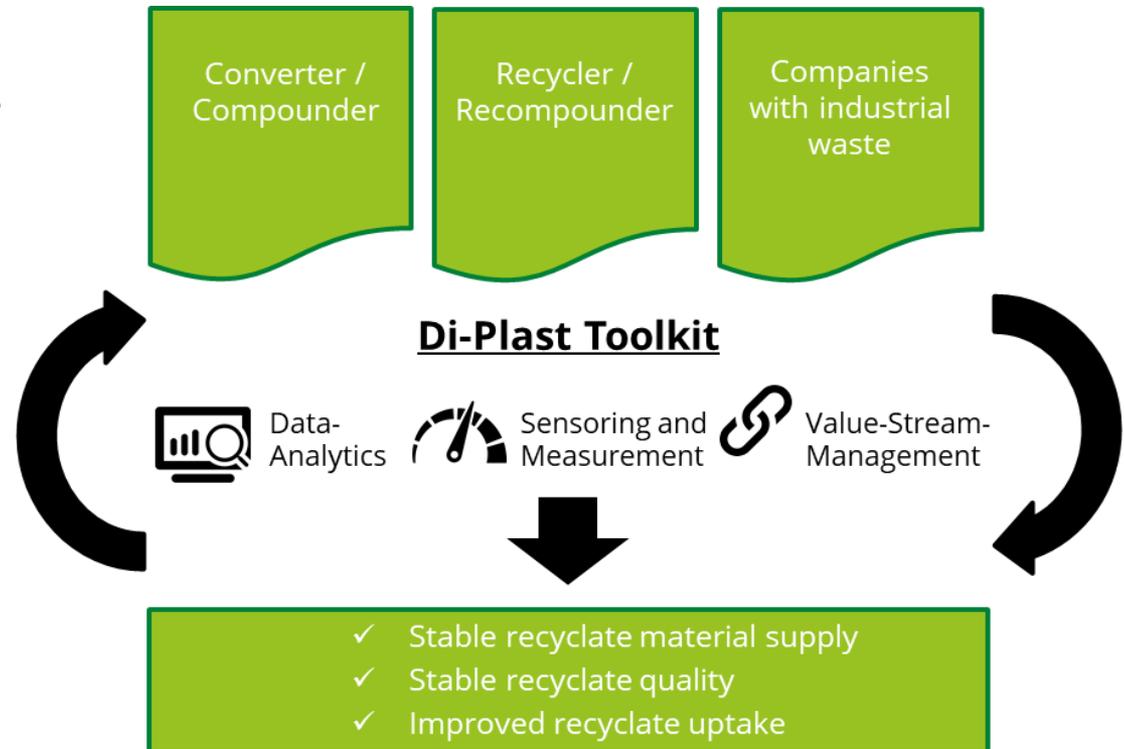


## 3.2. Aims and outcomes

More recycled plastics material (rPM) – *pre consumer*

Digitally validated quality control system

End-to-end tracking of the material flow



## 3.2. Aims and outcomes

Di-Plast improves processes for a more stable rPM material supply and quality

sensing generates data within supply chains

data analytics provides information about rPM quality, amounts and supply timing

Value Stream Management improves rPM processes & logistics, environmental assessments will validate sustainability

Making the plastic circle **smarter** in the **packaging** and **building** sector

## 3.2. Aims and outcomes

Developing digital tools for data management of rPM value chain

Test runs in four pilot projects in **NWE**

Improving the tools and building toolkit with six tools

Rollout of the toolkit within NWE and EU

Increase of rPM uptake of 22.000 tons within the project

## 3.3. Activities

Next: **survey** on needs within the value chain (**April-May 2019**)

Expert interviews to refine results

Development of digital tools that improve rPM uptake

Building up the pilot projects with the tools

Installing regional rPM uptake managers

**Ongoing: looking for industrial partners in Germany, the Netherlands and Luxemburg, NWE and EU**

## 3.4. Opportunities – Join!

Project timeline: **Oct. 2018 – Apr. 2022**

Fill in questionnaire

Participate in expert interviews to refine results

**Contact us:** [www.nweurope.eu/di-plast](http://www.nweurope.eu/di-plast)

## 3.4. Opportunities – Join!

Become a pilot company

Implement tools and improve your rPM uptake

Find new sources/customers for rPM

**Contact us:** [www.nweurope.eu/di-plast](http://www.nweurope.eu/di-plast)

# Interreg



EUROPEAN UNION

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# Thank you!

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