



PRIMUS

Increasing transparency: EcoProfiles for Plastic Recyclates

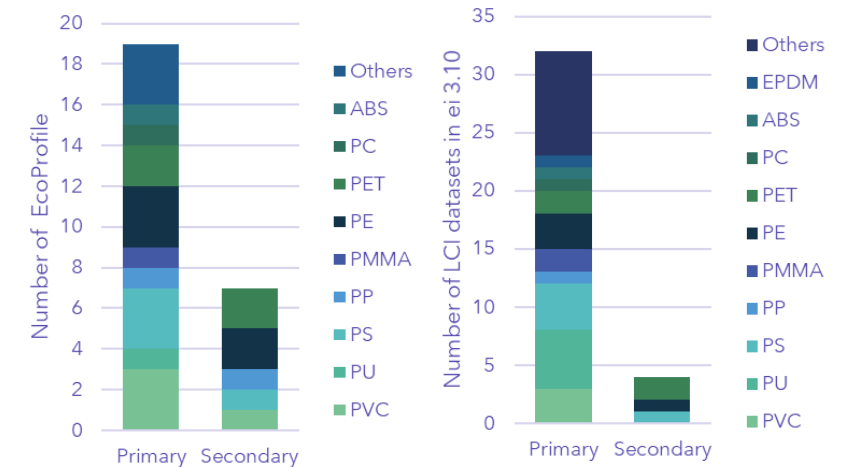
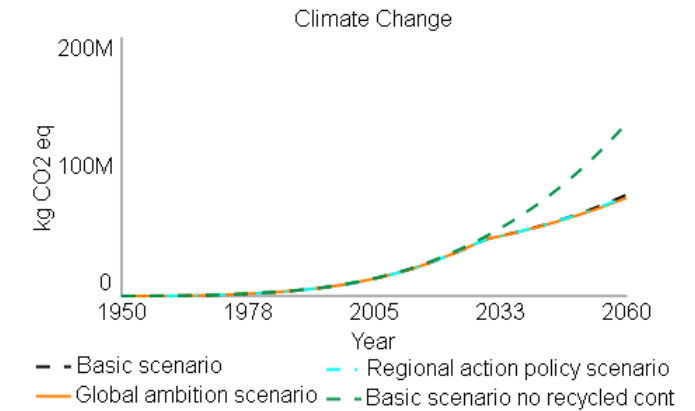
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GmbH

SETAC Europe 26th LCA Symposium, Gothenburg

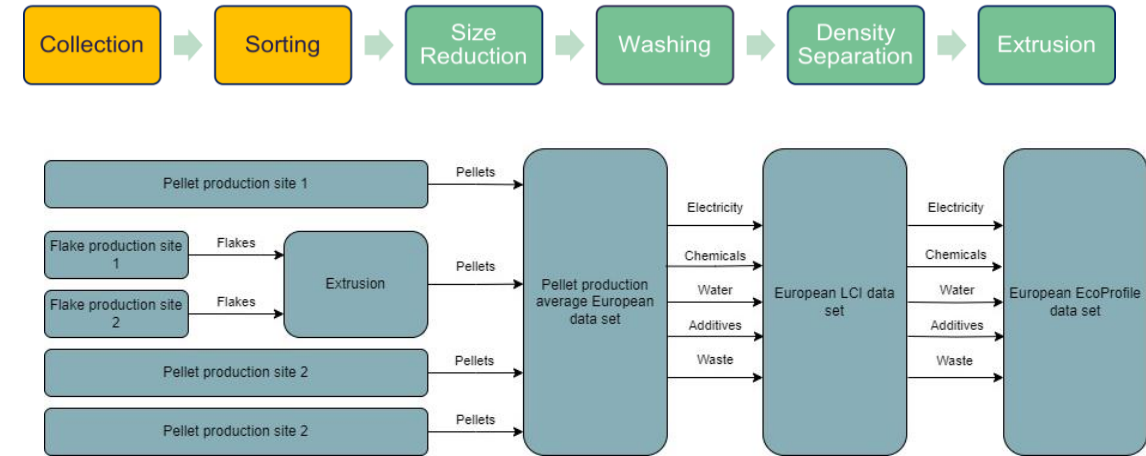


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the European Union

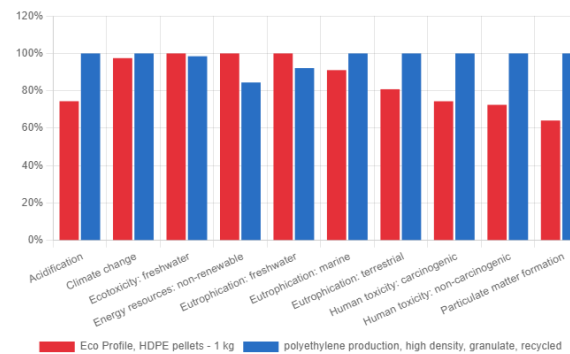
- By 2050, plastic production is projected to triple
 - contributing to 15% of global greenhouse gas emissions
- Performing **Life Cycle Assessments (LCAs)** of plastic products is crucial for understanding their **environmental impacts**
- EcoProfiles (PlasticsEurope) focus on **cradle-to-gate** analysis for plastics/chemicals to **provide LCI data (aggregated)**
- Existing EcoProfiles and LCI datasets (ei 3.10, EF 3.1) focus on primary materials and neglecting secondary materials
- PRIMUS project aims to close this gap by providing EcoProfiles of **mechanically recycled** plastics emphasizing **high-value polymers**, such as **rPS, rPVC, rHDPE, rPET and rABS** for Europe
- We are producing **50 partly-aggregated**, European datasets for recyclates allowing to follow environmental impacts transparently



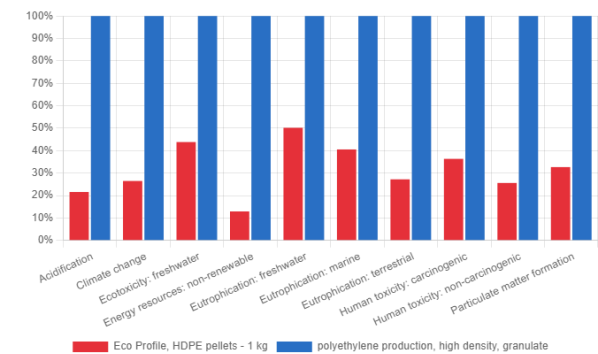
- Data from 22 recycling sites collected together with PlasticsRecyclersEurope
- Methodology similar to PlasticsEurope
- EcoProfiles **Gate-to-Gate** and Cradle-to-Gate
- Averaged by share of installed capacity
- Generating 13 core EcoProfiles from: rPET, rPVC, rLDPE, rHDPE, rABS, rHIPS and rMPO
- Regionalization approach
- EcoProfiles validated; impacts vs. Primary assessed
- Hot spots are **waste treatment** and **energy**



rHDPE EcoProfile vs. rHDPE ecoinvent 3.10



rHDPE EcoProfile vs. HDPE ecoinvent 3.10



- Data from 22 recycling sites collected together with PlasticsRecyclersEurope
- Created 13 core EcoProfiles and regionalization will lead to 50 EcoProfiles for rPET, rPVC, rLDPE, rHDPE, rABS, rHIPS and rMPO
- Datasets will be independently reviewed by VTT and published as fully and **partly-aggregated**
- Implementation of in-situ VOC data from VTT and plastic littering from PLEX database
- Regionalization will focus on technical polymers within the scope of PRIMUS
- **Publication of ILCD and JSON-LD data on our LCDN server and EcoProfiles with PRE**



The Second Edition.
10 – 11.4.25 Berlin, Germany
Submit Your Abstract Until 1.12.24

Feel free to contact us for plastic recyclate

