



Second Generation MethylMethAcrylate

*Do circular plastics have politics?
And if so, should we care?*

Prof. dr. Erik Paredis



MMAtwo
workshop

15/09/2020



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement N° 820687.
The MMAtwo project results presented reflect only the author's view.
The Commission is not responsible for any use that may be made of the information it contains.

Some background

- Since 2019: Associate professor in the field of “transition governance and socio-technical system innovation for the circular economy”
- Part of the Department of Political Sciences, Ghent University
- Member of the research group **Centre for Sustainable Development:**

Social science research with a multidisciplinary team

Main research lines are applied in different fields (food, energy, circular economy...)

Sustainable Cities



Science, Technology and Politics



Indicators, Assessments and Monitoring



Sustainability Education



Transitions and Future Studies



Website:

www.cdo.UGent.be

Starting points

MMAtwo is mainly technology-driven. Technological innovation is a necessity,

Bringing plastic waste under control and developing a circular (plastic) economy will never solely be a technological challenge.

Other lenses lead to other questions, other ways of seeing and interpreting problems and solutions. Today I will rely on insights from two fields of scholarships:

- **Critical policy studies:** What is the role of power relations and interests? What is the role of ideas and interpretations? Who wins, who loses? Who has a voice? What are implications for governance?
- **Sustainability transitions:** Why is socio-technical system change needed (energy, mobility, agrofood...)? How do systems change? What is the role of niches? How do regimes resist?

1. The need for a systems perspective

- Complexity and global reach of the plastics problem
- **Political disputes are present throughout the whole life cycle of plastics**



“The whole plastics life cycle is political, but it has not yet been equally politicized” (Nielsen et al., 2020)

- Solutions and decisions in one part influence other parts: necessity of cooperation, networking, common visions, strong governance
- Presently: weak governance system, with a patchwork of partial regulations, highly reliant on voluntary agreements and boosting consumer responsibility

2. Interpretations and interests matter

- How we understand the problem informs solution strategies.
- **Interpretations/visions exert power.**
- There is an interaction between interests, incumbent actors and challengers, and interpretations.
- Interpretations and discourse coalitions can change

One of the main **competing visions in the plastics discussion**:

Waste management and recycling



Reduce and reuse



What with the waste hierarchy?

- Industry usually resists reduce and reuse, and related policies (such as deposits on plastic bottles and cans)
- **Is a growing economy and plastics production compatible with recycling capacity?** And with planetary boundaries?

3. Consumer behaviour as social practice

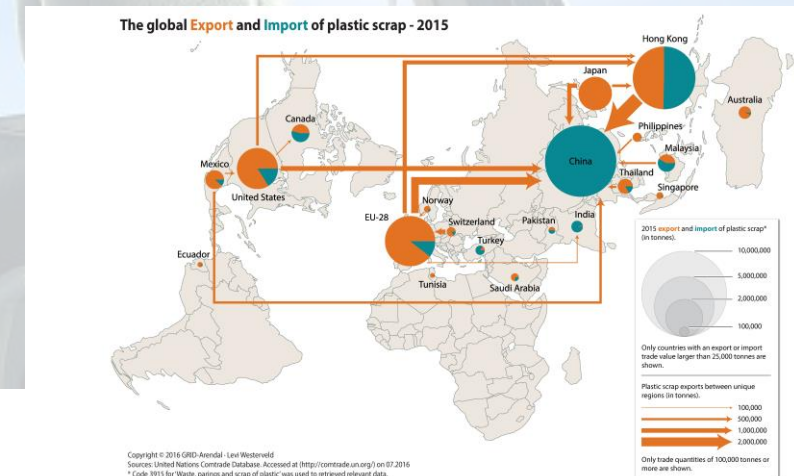
- Main theory: better information and better 'choice editing' leads to other attitudes and better consumer choices. The consumer has responsibility and power.
- **Social practice theory**: individual autonomy is constrained. We overestimate the role of individual choice, and underestimate the extent to which behavior is constrained by access to resources, by social norms, modes of provision, infrastructures.
- **Huge plastics consumption is part of a specific lifestyle, carried by social practices** of food provisioning, clothing and fashion, fast consumption.



- How do we change social practices that are part of **broader unsustainable production and consumption patterns** (with disposability as one of its characteristics)?

4. The global scale and justice

- Plastics value chains are global; costs and benefits are spread, but unevenly. Two examples.
- **Sourcing of oil and gas:** ecological and social conflicts that go along with exploitation. Well-documented and highly relevant if 90% of plastics if based on virgin fossil fuel feedstocks.
- **Trade in plastic waste:**
 - Growth in EU recycling rate (19% in 2007 to 30% in 2015) strongly relies on export of collected plastics for recycling to China
 - After China's Operation National Sword (2018): diversion to Vietnam, Indonesia..
 - “**distancing of waste**” (Clapp, 2002): (corporate) responsibility is obfuscated and environmental costs are deflected to the Global South



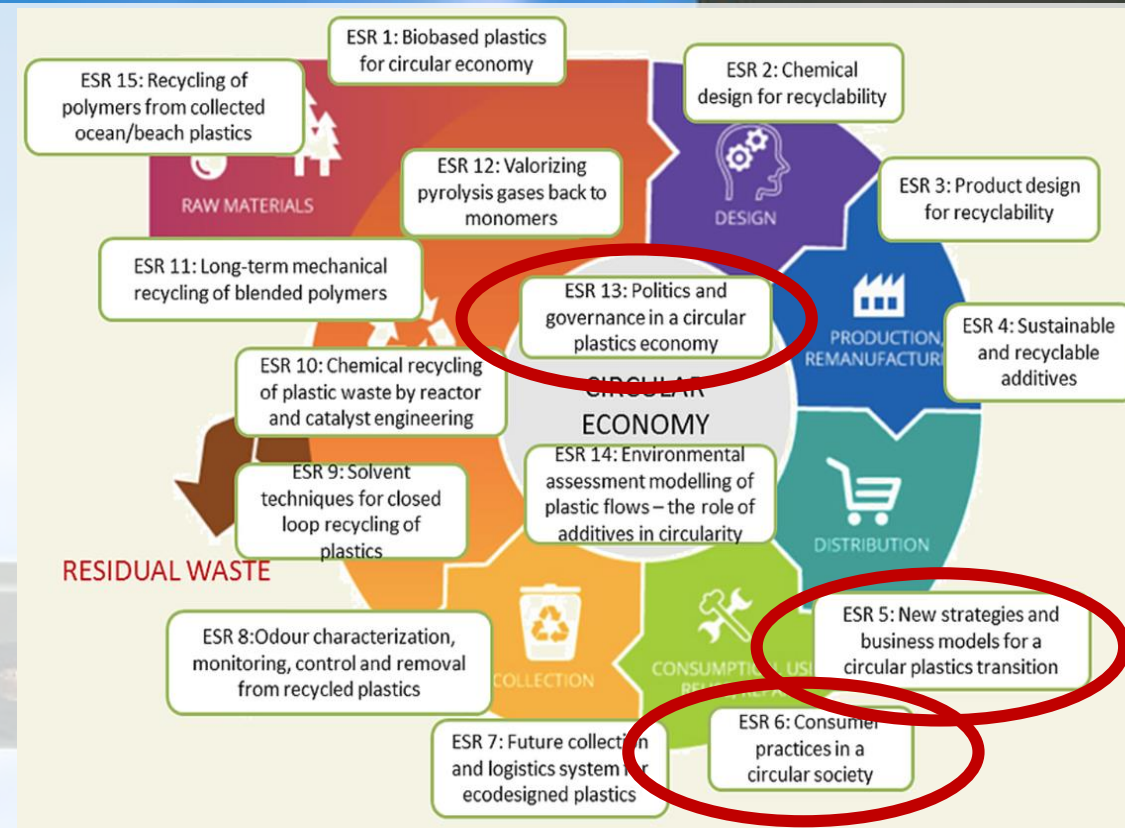
5. *Some interim conclusions*

- Bringing plastic waste under control and developing a circular (plastic) economy will never solely be a technological challenge.
- Difficult and complex problem face a transition to a circular plastics economy, in which huge political, economic and social questions are at stake.
- Other lenses lead to other questions, other ways of seeing and interpreting problems and solutions;
- Necessity for **broadening the debate and involving other expertise and stakeholders**: social scientists, as well as stakeholders beyond industry (such as environmental ngo's, consumer organisations, civil society movements...)

Future research: the C-PlaNeT project

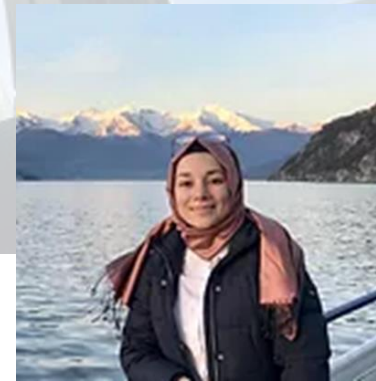
H2020_ITN C-PlaNeT, 2020-2023,
Circular Plastic Network for Training
(15 PhDs)

Objectives: decouple plastics from fossil resources; design for circularity; involve consumers; develop waste-to-resources recycling technologies; develop effective policy frameworks for circular plastics



ESR13: The politics and governance of a circular plastics economy (PhD Nur Gizem Yalcin)

1. An analysis of obstacles, opportunities, actors interests;
2. Policy models, proposals and pathways;
3. Insights in policy development in frontrunner regions/states (Flanders, Germany)





Second Generation MethylMethAcrylate

Prof. dr. Erik Paredis

**DEPARTMENT OF POLITICAL SCIENCES
Centre for Sustainable Development**

Erik.Paredis@UGent.be

+32 9 264 82 14

www.cdo.ugent.be

www.mmatwo.eu



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement N° 820687.
The MMAtwo project results presented reflect only the author's view.
The Commission is not responsible for any use that may be made of the information it contains.