## C-PlaNeT ESR 6 – Consumer Practices in a Circular Society

Chair for Transdisciplinary Sustainability Research in Electronics/ TU Berlin

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# Outline of the Presentation



Research Context and Relevance



**Research Objectives** 



Conceptual Framework



Methodology



**Research Challenges** 



Scientific and Societal Contributions



## Research Context and Relevance

- There is a general demand for a transition from a linear economy (take, make, dispose) to a more environmentally friendly circular economy (reduce, recycle, reuse) of production and consumption
- Consumers are key drivers of global sustainability problems but also key actors of a transition towards circularity; thus it is crucial to understand unsustainable consumption patterns and the social practices they result from
- Implementation of circular practices requires a profound change of current consumer roles in the economy, of consumer's self-perception and their consumption patterns
- C-PlaNeT ESR 6 will penetrate the European consumer and consumption pattern and move beyond just stating the willingness of consumers to engage in CE to understanding the practical know-how and structures necessary for consumers to appropriate sustainable practices.

### Research objective



To understand the requirements for the acceptance and adoption of circular practices in the everyday life of a consumer



Examine the possibilities and benefits of a circular value proposition to consumers in the case of circular plastics



Understand how social innovations such as repair cafes can contribute to the flow of information and generate data on repair, usage practices and experience



Recommend design and co-creation processes that best fit the everyday practices of consumers

#### Conceptual Framework

Human-Centred Design (HCD); a framework that considers human perspectives throughout the design process:

Understand the Consumer

Evaluate and Modify Design Solution Human-Centred Design

Identify Consumer requirement

Design a Solution

Cont.. Conceptual Framework

Social Practice Theory

Meaning

- Motivation
- Aspiration
- Emotion

Material

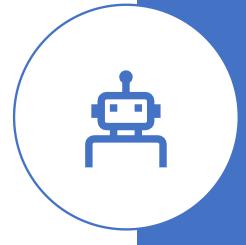
- Infrastructure
- Tool
- Technology

Skills

- Know-how
- Competence
- Ability

### Methodology

- The project will incorporate quantitative and qualitative components within a Participatory Action Research approach
- Conduct an experiment with consumer groups based on a mapping of available service and sharing alternatives to their usual everyday practices
- Measurement of consumers' daily usage and environmental impacts of the service or product consumed.
- A Semi-structured, in-depth interviews with consumer groups covering meanings, perceptions, and needs to engage in circular practices
- Analysis will be based on a comparison with consumer groups and comparisons between the everyday life lived before, during and after the experiment



#### Scientific and societal contribution

Expand	Expand academic understanding of consumers' roles and engagement in CE
Provide	Provide a classification of current perceptions, needs and practices of consumers on plastics and strategies for a successful diffusion
Outline	Outline alternative modes of coupling production and consumption that is regenerative and benefits the everyday practices of a consumer
Make	Make recommendation for a co-creative design and product development that matches with consumers' reality

## Research Challenges

- The knowledge gap between academics and participants
- Recruitment of participants for the experiment and interactive workshop
- Ethical issues
- The interdisciplinary exchange in the C-PlaNeT team

#### Conclusion

- The project is still evolving and therefore Consumer groups or associations, products and services (electronics, plastics in electronics...) to be considered are not yet finalized
- Consumer aspect of the circular economy is as important as the environmental and productive aspects
- Consumer practices and consumption patterns can support or hamper the appropriation of circular practices in the development of a Circular Society



# Thank you for your time!



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