

HOW CAN WE SUPPORT CONSUMERS TO ENGAGE IN THE TRANSITION TO CIRCULAR ECONOMY?

BRIEF DESCRIPTION OF CHALLENGE:

The shift from a traditional linear value chain (where we "take-makedispose") to a circular value cycle is based on changing consumption patterns and sustainable resource utilization. We are in this challenge looking for digital solutions or concepts that can be developed to support consumers in their daily lives in taking an active role in the transition toward a more circular economy and push the industry and society in that direction.

BACKGROUND:

Today we see humanity consume nature 1.75 times faster than our planet's ecosystems can regenerate. In Sweden that figure is even larger, we consume nature 4 times faster than the earth can regenerate (Global Footprint Network). We all need to

CHALLENGES:

- How can we support consumers in identifying and choosing sustainable and circular products?
- How can we help consumers in becoming more knowledgeable, engaged and to contribute to the circular economy and the circular flow of materials?
- How can we enhance transparency and traceability of materials and products among different stakeholders to enable effective collaborations and closed material loops?
- How can we develop solutions that utilize different company's capability to solve circular issues? I.e. solutions that might prolong usage or enables recycling.

contribute in maximize the reuse of the earth's finite resources.

In a circular economy, the concept of "take-make-dispose" is replaced by "reduce-reuse-recycle". In this approach, the extraction of raw materials is reduced to a bare minimum. After being used, the products and their included materials are

either re-used, refurbished or recycled and taken back in to the society as new products or materials. But to achieve that, designers and product developers must create products that are both reusable, repairable and recyclable. It is therefore a matter of being smart from the start and taking reusability, repairability and





recyclability in to consideration already in the design phase of a product.

A circular product lifecycle enables sustainable products and sustainable consumption and to develop circular products is a great concrete way of contributing to a more sustainable society. See Stena Recycling The sustain-ability hub article What is sustainable products? For further principles and concepts around Circular Economy visit Ellen MacArthur Foundation.

The Swedish government recently released their strategy for a circular transition in Sweden (government. se). It gives support and direction for industry, public sector, universities and society as well as private persons who want to drive business

opportunities and to do conscious choices with the circular transition in mind. Through entrepreneurship and innovation based on circular material flows and business models, will development of a resource efficient, non-toxic, circular and biobased economy strengthen in the whole country.

The consumers responsibility is two folded - She needs to secure that products are correctly taken care of after usage and at the same time, she can request, require and do responsible choices. Most of the Swedish population expect producers to use recycled material in their products and 57% of the Swedish population are prepared to pay more for circular produced products. By

making it easier for consumers to choose circular, the more pressure we put on producers to use recycled material in their manufacturing (recycling.net, in Swedish).

This challenge adheres to at least three of the seventeen Sustainable Development Goals for 2030. SDG no 9 refers to the change of the industry and how collaboration between different segments will enable circular development.

SDG no 11 is about that we need to develop solutions that make industries, transports, buildings and cities more sustainable. SDG no 12 refers to that we need to develop solutions that support sustainable production and consumer behavior.

SPECIFIC GOALS OR CONSTRAINTS:

The solution should be scalable and easy to use

