From throw away and replace culture to circularity

Finnish-Argentinian project CIBIECO. Circular Bioeconomy: From Concept to Practice (2022-2024) funded by TFK 2022 Team Finland Knowledge Programme

Press-Release

The Finnish-Argentinian project CIBIECO focuses on the ideas of the circular bioeconomy and their practical implementation in small enterprises in Finland and Argentina.



Circular bioeconomy: Biogas tank – a container for treating manure from livestock and green waste (Loue, Finland). Photo: Anna Stammler-Gossmann

As humans we have adopted a linear so-called "take, make and dispose" approach. In the living world, there is no waste disposal site – the waste of one species is the food of another, things grow and then die, and nutrients return to the soil. Can we change our linear ways of thinking so that we operate in the same circular way as the more-than-human world?

The concept of circular economy, which offers new ways to achieve more sustainable economic growth and go beyond a merely recycling process, is still a field in its infancy. While recycling begins at the end, a circular economy goes right back to the beginning preventing waste from being created in the first place. However, there are many structural, legal, efficiency and cost-related challenges in implementing this concept in practice.

CIBIECO project focuses on the ideas of the circular economy and their practical implementation in small enterprises in Finland and Argentina - "doing more with less",

"building capital from waste rather than reducing it", and "keeping economy in the circular loop".

Objectives of the project are built around four critical fronts:

- 1. Education: To develop and integrate a new field of study on circularity based on research and the needs of communities working life in a comparative context;
- 2. Research: To assess the experiences of transferring the circular concept to practice in both polar regions and identify best practices;
- 3. Working life cooperation: To enhance the co-production of knowledge between education and local community enterprises;
- 4. Long-term partnership: To develop ideas for future educational and research activities.

The project partners represent different disciplines – social anthropology, applied biology, food science, chemistry, material technology, and biomass refining technology. The project consortium includes Higher Educational Institutions as members: Arctic Centre (University of Lapland, Finland, lead institution), Centria University of Applied Sciences (Finland), National University of Río Cuarto (Argentina), National University of Tierra del Fuego, Antarctica and South Atlantic Islands (Argentina).

The CIBIECO project combines research, teaching and local communities working life. In this way, it offers a great opportunity for the expertise exchange on issues of regional transition from a "linear" to a "circular" economy, identifying the local approaches to cycle the valuable resources and contributing to the empowerment of local communities.

More information:

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What is the difference between recycling – upcycling – circularity?



Recycling: Reuse of a previously processed or waste material. (Photo: Anna Stammler-Gossmann) Recycling is an important process, but it is still not enough to overcome the amount of waste we produce; materials are getting weaker during the recycling process and cannot be recycled repeatedly



Upcycling: From car tyres to flowerbed (Photo: Anna Stammler-Gossmann). Upcycling is a valuable strategy and a creative process in producing a higher quality product that already have a story. However, the resulting product still needs to enter the recycling infrastructure.



Circularity in a small household: A farmer and artist in a Siberian village uses cow manure for his winter sculptures and later as the soil fertilizer for the potato field (Photo: Courtesy of Mikhail Bopposov; fieldwork materials by A. Stammler-Gossmann)