

New business from industrial side streams

- Circular Economy Service Platform (CEP)

Project introduction

2019



Background

- The significance of circular economy is increasing globally as natural resources are diminishing and waste amounts are growing. Businesses in many sectors are facing the challenge of resource scarcity. Hence waste should be treated as a valuable resource.
- Circular economy is not just about the efficient use and recycling of materials; it involves wholly new economic model
- Industries already applies many circular economy principles. Next step is to reduce significantly wastes gone to landfills and maximize the value of recovered side streams.
- Side streams have major economic potential. The challenge is that the streams are scattered and their overall management is missing. This means that potential customers are not reached, i.e. side streams value network is not working effectively.
- However, efficient utilization of side streams and the commercialization of new value add applications represent a major opportunity to the industries ecosystems



Objectives

- To build 'One Stop Service for CE Clusters and new businesses' which
 - Acts as a market integrator in new innovations support mechanisms
 - Brings together cost-efficiently existing and future solutions
 - Combines critical mass enabling investments for new business opportunities
 - Prevents **silos** between different parties and enhances commercializing of innovations
 - Enables continuous development and resource efficiency
 - Maximizes added value of reuse and enhances objectives of circular economy



Project execution

- The CE platform will be demonstrated in Southeast Finland where most of the ecosystem key players are already present.
- Focus will be on Forest industry's side streams and waste fractions in the region
- The project has four phases / work packages
 - Development of service platform for the cluster (WP1)
 - Value creation and business models
 - Technology pilots (WP2)
 - Utilization of existing technologies and solutions
 - Development of identified emerging technologies (WP3)
 - Co-innovations and technology collaboration
 - Enhancing Sustainability of the CE platform and cluster operation (WP4)



Project structure

Development of service platform for the cluster (WP1)

- Value creation and business models
- Novel products, processes and business models

Technology pilots (WP2)

- Ashes and dregs
- Bio and fibre sludges
 - Woodbased waste

Development of identified emerging technologies (WP3)

Sustainability of the CE platform and cluster (WP4)



Markets and Clusters Landscape construction Construction Nutrients Fuels Other large volume applications





13.3.2019

Further information Pirjo Kaivos

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