

# ICT-BIOCHAIN

## ICT - BIOCHAIN

ICT Tools in Efficient Biomass Supply Chains for Sustainable Chemical Production

<https://ictbiochain.eu/about-ict-biochain/>

## Summary

The main aim of the ICT-BIOCHAIN project is to identify ways to use ICT effectively to increase the efficiency of biomass supply chains for the bio-based industry.

**Type of Action:**  
Coordination and Support Action

**Value Chain:** Across VCs

**Start date:** 01 June 2018

**End date:** 31 May 2020

**BBI JU contribution:** € 949,685

The use of technology will help improve the efficiency of biomass supply chains, maintaining a future competitive advantage for the European bio-economy.

## Objectives

ICT-BIOCHAIN's overarching objective is to identify opportunities for using ICT to increase the efficiency of biomass supply chains for the bio-based industry. This will support Europe's bio based supply chains by helping make them more efficient. Specifically, it intends to:

- Establish multi-actor digital innovation hubs for biomass supply chains;
- Produce a feedstock-specific database of best practice and new opportunities where digitisation could improve the efficiency of biomass supply chains within MDRs;
- Establish a user friendly online platform to allow for wider exploitation of ICT, IoT and Industry 4.0 tools for improving supply chain efficiency;
- Pave the way for replicating digital hubs in other EU bio-economy regions;

Disseminate and exploit ICT-BIOCHAIN results.

## Expected impacts

By 2020, the ICT-BIOCHAIN project plans to:

- Increase biomass supply by 10 per cent;
- Ensure 20 percent of Europe's chemicals and materials production will be bio-based;
- Guarantee a secure and sustainable supply of biomass feedstock for European biorefineries;
- Increase the use of currently-unused resources by 15 per cent.

ICT-BIOCHAIN will contribute to the achievement of objectives included in the BIC SIRA mentioned above. Specific impacts of the project are:

- Contribute to KP1: Create at least 2 new cross-sector interconnections in bio-based economy clusters
- Diverse disciplines, value chains, sectors and types of organizations.
- Reduce biomass losses and costs associated with feedstock supply logistics compared with similar existing benchmark supply chains.
- Improve direct involvement and commitment of biomass suppliers and technology providers, and the resulting introduction of ICT in the biomass feedstock supply chain for the bio-based industry.

Other related impacts include:

- Pushing the EU to the forefront of bio-based economy by improving competitiveness
- Creation of new jobs in valorisation, supply chain and ICT development fields
- Unlocking substantial volumes of biomass that remains as unexploited resource within the EU

Improving the awareness, acceptance and trust of society in sustainable biomass valorisation thanks to greener, improved biomass supply Chain.

## Project coordination

- Regional Ministry of Agriculture, Livestock, Fisheries and Sustainable Development of Andalusia (Spain)
- Fundación Corporación Tecnológica de Andalucía (Spain)
- Irish Bioeconomy Foundation (Ireland)
- Institute of Technology, Tralee (Ireland)
- VTT Technical Research Centre of Finland (Finland)
- Fraunhofer Institute of Material Flow and Logistics (Germany)
- Sustainable Innovations Europe (Spain)
- Industrial Biotechnology Innovation Centre, University of Strathclyde (United Kingdom)

**Organisation name:** Regional Ministry of Agriculture, Livestock, Fisheries and Sustainable Development of Andalusia (Spain)

**Phone:** +34 955 03 25 15