Circularity tour: Replace meeting Brussels 11/03/22

Presentation of DigiPrime and Pilot 5:

Cross regional value chain identification and open innovation services

VELTHA

Presenter: Gabriel Carlin
gabriel.carlin@veltha.eu

DigiPrime overview

CALL

H2020-DT-ICT-07- 2018-2019

Digital Manufacturing Platforms for Connected Smart Factories

BUDGET

Project costs: *19.257.130,00€*
Funding: *15.963.173,50€*

DURATION

January 2020 – Dec 2024

OBJECTIVE

To develop a new concept of Circular Economy digital platform overcoming current information asymmetry among value-chain stakeholders, in order to unlock new circular business models based on the data-enhanced recovery and re-use of functions and materials from high value-added post-use products with a cross-sectorial approach.

- ➢ 36 European organizations from 11 EU states;

- ➢ 6 manufacturing sectors;

- ➢ 25 **industrial partners**, 18 of which are SMEs;

- ➢ 8 **academic and research partners.**

The 4 Value Chain Oriented services targeted at regional officers

Pilot 5: Cross regional value chain identification and open innovation services

Service 3.6 "Cross regional value chain identification"

Service 3.7 "Material flow monitoring and aggregated system oriented KPIs"

Service 3.8 "Circular Innovation Hubs Integration"

Service 3.9 "Barrier Identification and Legislation support"

Main source

Overall framework for Service 3.6

Policy instruments

SCREEN
Synergic CirculaR Economy across European regioNs

REPLACE
Interreg Europe

European Union
European Regional Development Fund

2016-2018: participated by 17 EU Regions. Validated methodologies and tools

2019-2023: 8 EU Regions. Actual implementation of the SCREEN methodologies in their policy instruments for the next programming period
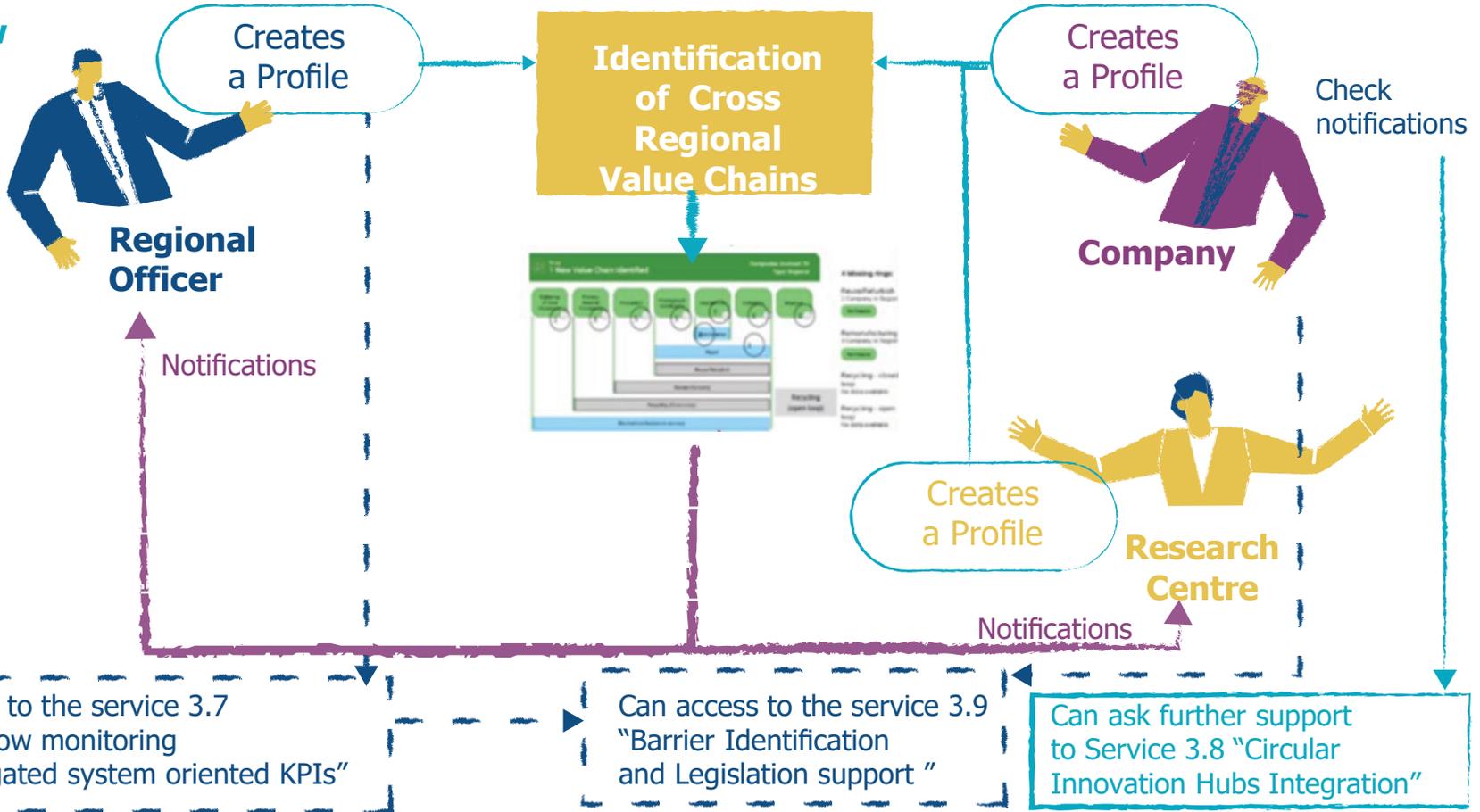
Digitalization of the services

DigiPrime

DIGITAL PLATFORM FOR CIRCULAR ECONOMY IN CROSS-

2020-2023: 25 companies, including 18 SMEs. SCREEN tools inserted into a Pan-European digital platform
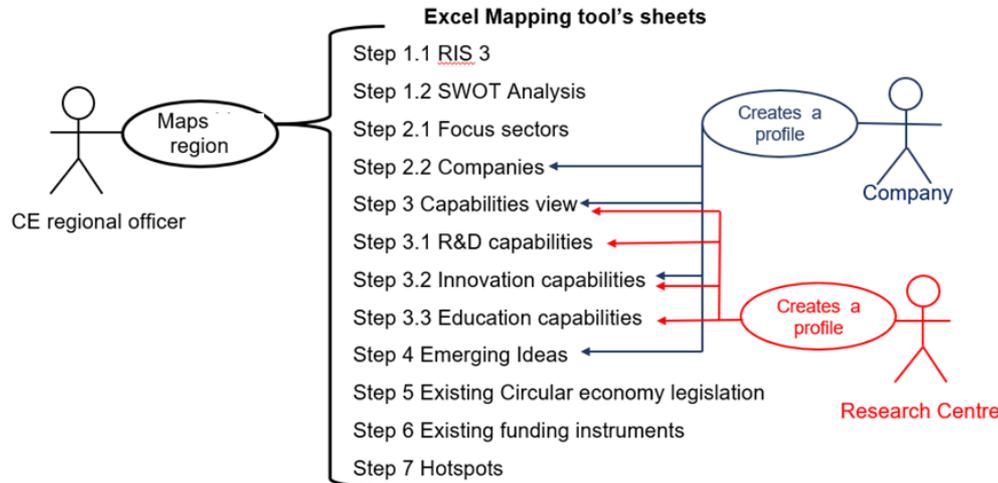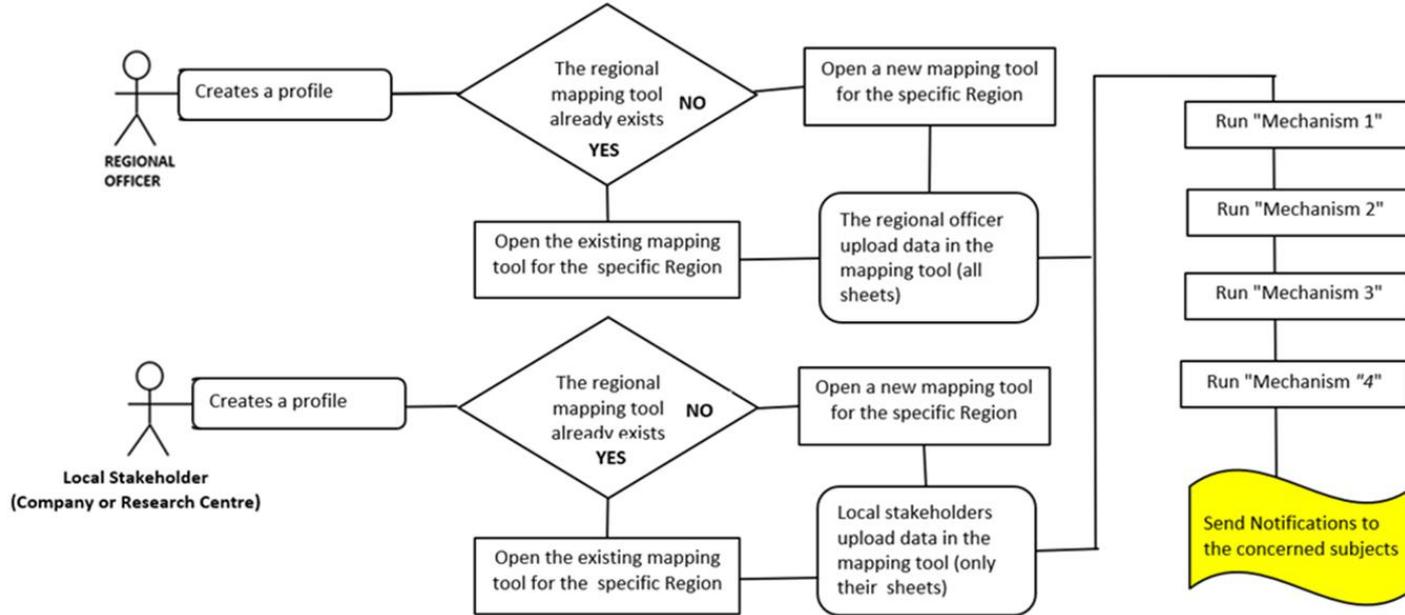
DigiPrime

Service 3.6 Cross Regional Value Chain Identification

Overview

Check notifications

Creates a Profile

Regional Officer

Identification of Cross Regional Value Chains

Creates a Profile

Check notifications

Company

Notifications

Creates a Profile

Research Centre

Notifications

Can access to the service 3.7 "Material flow monitoring and aggregated system oriented KPIs"

Can access to the service 3.9 "Barrier Identification and Legislation support "

Can ask further support to Service 3.8 "Circular Innovation Hubs Integration"

DigiPrime

REGIONAL OFFICER — Creates a profile → The regional mapping tool already exists? NO → Open a new mapping tool for the specific Region; YES → Open the existing mapping tool for the specific Region → The regional officer upload data in the mapping tool (all sheets) → Run "Mechanism 1" → Run "Mechanism 2" → Run "Mechanism 3" → Run "Mechanism "4""

Local Stakeholder (Company or Research Centre) — Creates a profile → The regional mapping tool already exists? NO → Open a new mapping tool for the specific Region; YES → Open the existing mapping tool for the specific Region → Local stakeholders upload data in the mapping tool (only their sheets) → Send Notifications to the concerned subjects

Excel Mapping tool's sheets

CE regional officer — Maps region

- Step 1.1 RIS 3
- Step 1.2 SWOT Analysis
- Step 2.1 Focus sectors
- Step 2.2 Companies
- Step 3 Capabilities view
- Step 3.1 R&D capabilities
- Step 3.2 Innovation capabilities
- Step 3.3 Education capabilities
- Step 4 Emerging Ideas
- Step 5 Existing Circular economy legislation
- Step 6 Existing funding instruments
- Step 7 Hotspots

Company — Creates a profile
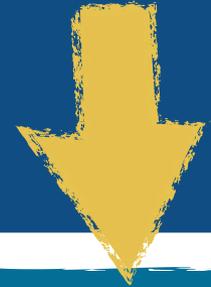
Research Centre — Creates a profile

Isabel: a regional officer in charge for circular economy

Example of how to benefit from using the platform

Isabel's Profile

She belongs to a Region without a circular economy policy, with the sole exception of same waste management

Recently appointed as leader of circular economy team in the regional administration

She needs to define which sectors should be mainly supported through regional programmes

As a regional representative, you are asked to fill in the following data sheets:

(Steps' numbering refers to the SCREEN methodology at the basis of this Service and described in the document (Link to http://xxx.xx)

Step 1.1 RIS 3
Step 1.2 SWOT Analysis
Step 2.1 Focus sectors
Step 2.2 Companies
Step 3 Capabilities view
Step 3.1 R&D capabilities
Step 3.2 Innovation capabilities
Step 3.3 Education capabilities
Step 4 Emerging Ideas
Step 5 Existing Circular economy legislation
Step 6 Existing funding instruments
HOTSPOTS

The precision and reliability of the output depends on the quantity and reliability of data you are going to input
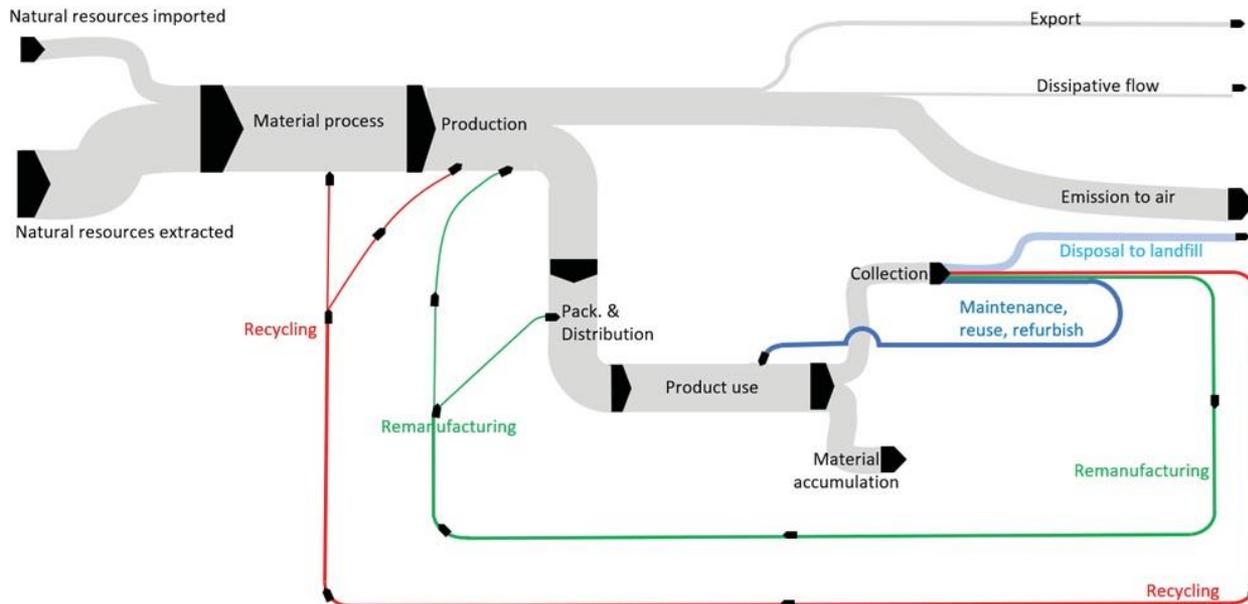
3.6 Identification of cross-regional value-chains...
open innovation

Which Region do you repre...

You've selected "Lazio" Re...
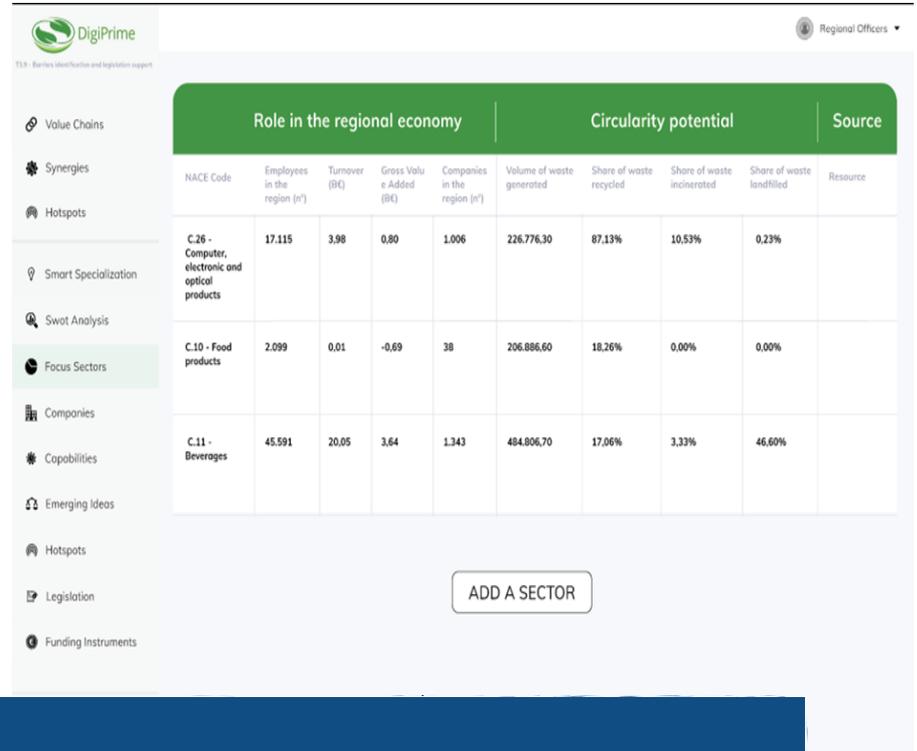
DigiPrime
T3.9 - Barriers identification and legislation support

Regional Officers ▾

Value Chains
Synergies
Hotspots
Smart Specialization
Swot Analysis
Focus Sectors
Companies
Capabilities
Emerging Ideas
Hotspots
Legislation
Funding Instruments

| NACE Code	Role in the regional economy				Circularity potential				Source
	Employees in the region (n°)	Turnover (B€)	Gross Value Added (B€)	Companies in the region (n°)	Volume of waste generated	Share of waste recycled	Share of waste incinerated	Share of waste landfilled	Resource
C.26 - Computer, electronic and optical products	17.115	3,98	0,80	1.006	226.776,30	87,13%	10,53%	0,23%	
C.10 - Food products	2.099	0,01	-0,69	38	206.886,60	18,26%	0,00%	0,00%	
C.11 - Beverages	45.591	20,05	3,64	1.343	484.806,70	17,06%	3,33%	46,60%	

ADD A SECTOR

Through the service 3.6 she fills in the mapping tool and obtains a dashboard with a complete overview of the regional situation

3

She has to indicate which sectors should be mainly supported

Natural resources imported

Export

Dissipative flow

Material process   Production

Emission to air

Natural resources extracted

Disposal to landfill

Collection

Recycling

Maintenance, reuse, refurbish

Pack. & Distribution

Remanufacturing

Product use

Material accumulation

Remanufacturing

Recycling

Through the service 3.7 looks at the materials flows in her region

Service 3.6 gives her notification of and existing and potential circular value chains in her region
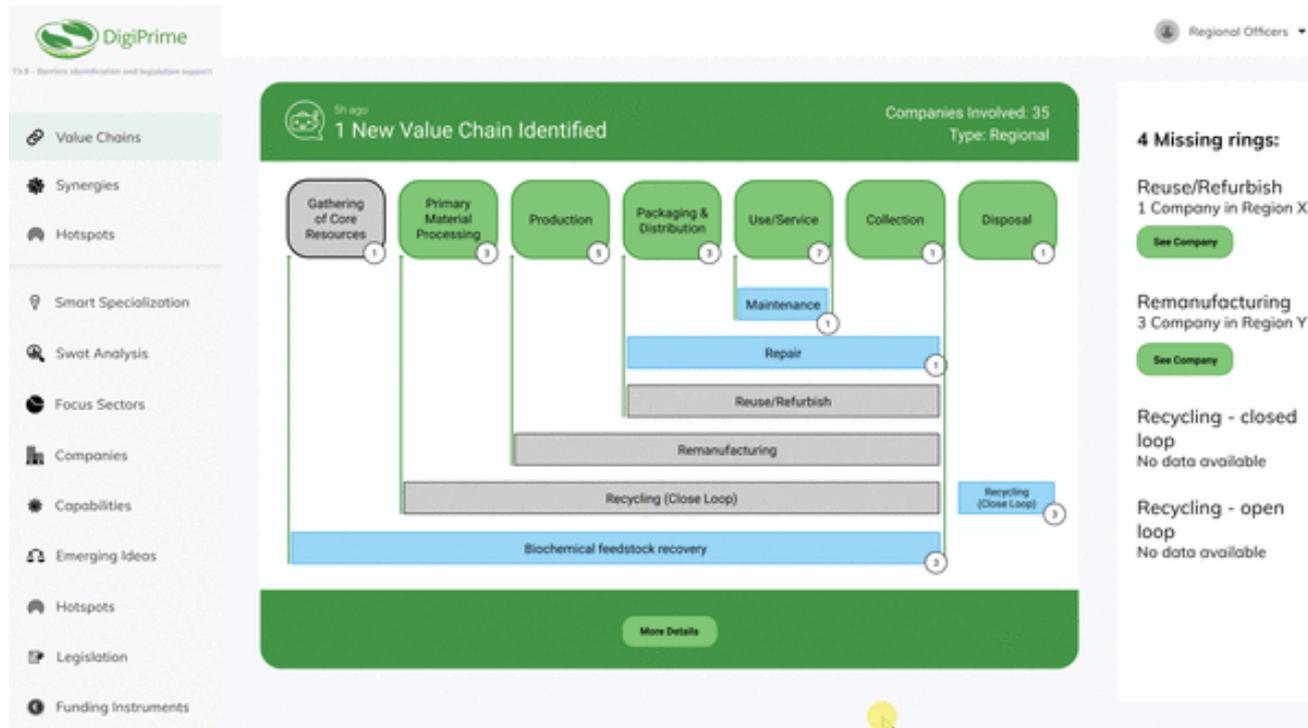
As well as opportunities for cross-regional circular synergies

The most promising notifications
can be further in-depth investigated through the service 3.8

Draft Framework – Starting point for mock-up: Circular Innovation Hubs integration

Level 1: Project-level support: Connecting hubs
Project level support in integration of hubs, e.g., support to specific companies for specific projects by connecting them to different hubs of service providers

Value Chain Segment	Stakeholder type	Materials	Industry/ sector	Location	Etc.
Task 3.6	Service providers, companies, certification bodies, end users	Task 3.2, 3.4, 3.7	Task 3.6	Task 3.6	
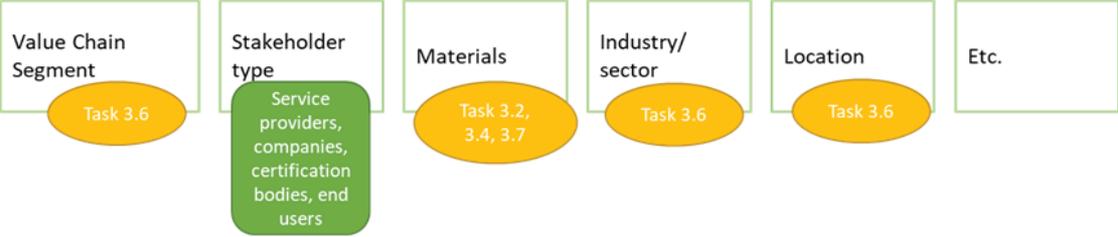
Level 2: Information intelligence across projects: Collaboration around partnerships and their operations (supply and demand when approaching a partnership)
Generating data and information across projects to help improve the functioning of the network, e.g. descriptive statistics, geographic information, sectoral coverage, differences in sizes & sectors covered, types of needs, etc.

Interregional partnerships (De & Remanufacturing, 3DP, etc.)	Stakeholders looking to form a collaboration	Collaboration needs	Strengths	Best practices
Previous projects expertise	Task 3.6	Task 3.6	Previous projects expertise	

Thanks to the DigiPrime services, Isabel is now able to define the supporting regional policy to specific target sectors.

DigiPrime — **DIGITAL PLATFORM FOR CIRCULAR ECONOMY IN CROSS-SECTORIAL SUSTAINABLE VALUE NETWORKS**

The 4 Value Chain Oriented services targeted at regional officers

Service 3.6 "Cross regional value chain identification"

Service 3.7 "Material flow monitoring and aggregated system oriented KPIs"

Service 3.8 "Circular Innovation Hubs Integration"

Service 3.9 "Barrier Identification and Legislation support"

John: a city manager approaching circular economy

Example of how to benefit from using the platform

John's Profile

He has a good knowledge of circular economy practices
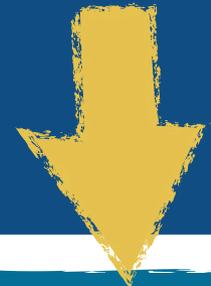
His plan is to shift from "city waste management" to "circular entities valorisation"

Local stakeholders are in general interested, but there is a lack of "stimulus"
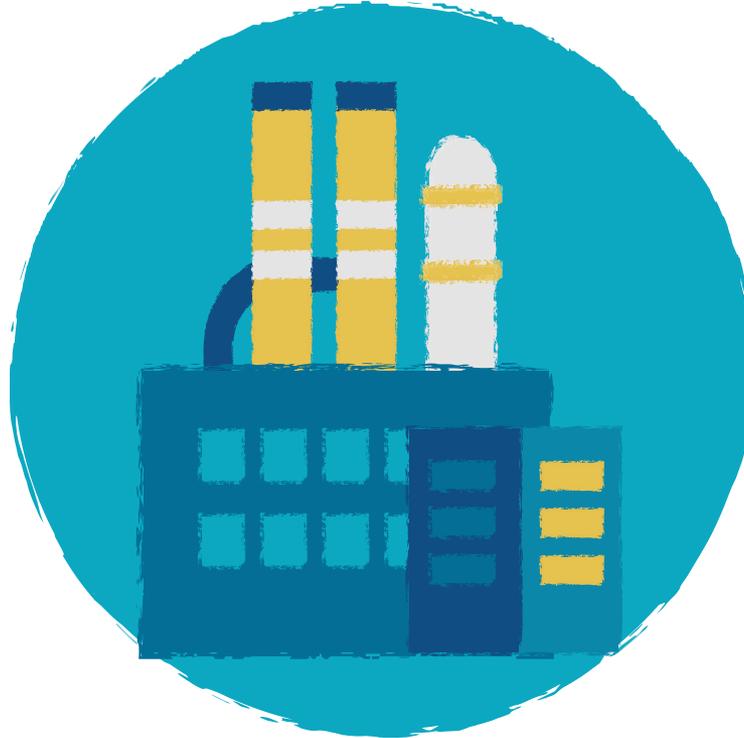
Several companies operating in the city report too much administrative barriers

**John was informed about the DigiPrime service 3.9
"Barriers' identification and legislation
support"**

-Barrier Identification	barrier submission and notification to relevant policy maker
-Solution Proposition	propose solution to policy maker
-Operative Solution	submission and notification of operative solutions allowing to operatively overturn an ineffective legal framework
-Solution of Barrier	solution submission and notification system
-Private Sectors Collab	join barrier, browse: barriers, proposed solutions and operative solution
-Collab Public/Private	chat exchange, proposed solution collection, notification of solution
-Privacy	identification info and data not collected and not shared

He register the City to the Platform and asks all stakeholders to register themselves.

Private companies can now interact in an anonymous way with the administration

Reporting the administrative barriers and suggesting solutions

Companies registered to the service 3.9 "surf" among the other platform services and discover service 3.6, which directly notifies them about potential circular synergies
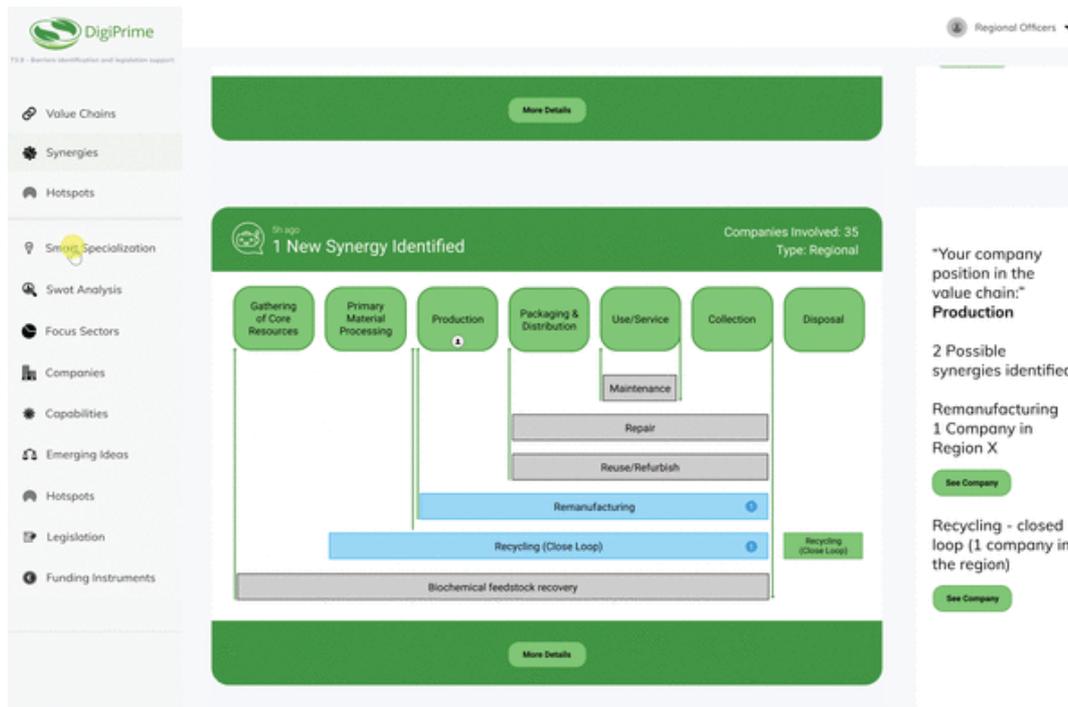
What does pilot user imply and what happens next?

- European-wide visibility, right away;
- Ability to influence the development of a platform that supports the circular economy (central theme for the EU in the coming years) with its own requirements needs

- Have access to the platform and use of DigiPrime services for free for the next 2 years
- Discounts on any paid plans.
- Opportunity to create your own instance of the platform to support your network.

- Start mapping service 3.6 through the existing excel file

- Scheduling meetings with me for further extensive information