

Open day, 3 October, Staranzano

DECISIVE Strumento di support decisionale: comparazione dell'impatto delle varie strategie di gestione dei rifiuti organici sul territorio

Fundació ENT

Rosaria Chifari



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 689229.



DECISIVE

A DECENTRALISED MANAGEMENT SCHEME FOR
INNOVATIVE VALORISATION OF URBAN BIOWASTE



Decision Support Tool (DST)



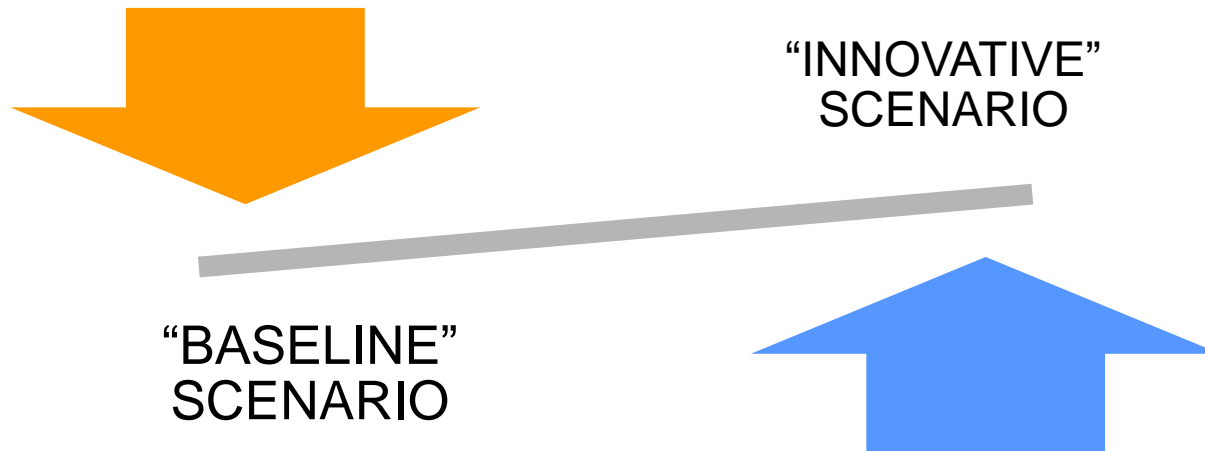
GOAL & SCOPE

- The target users of the Decision Support Tool (DST) will be **competent authorities, consulting firms and waste operators.**

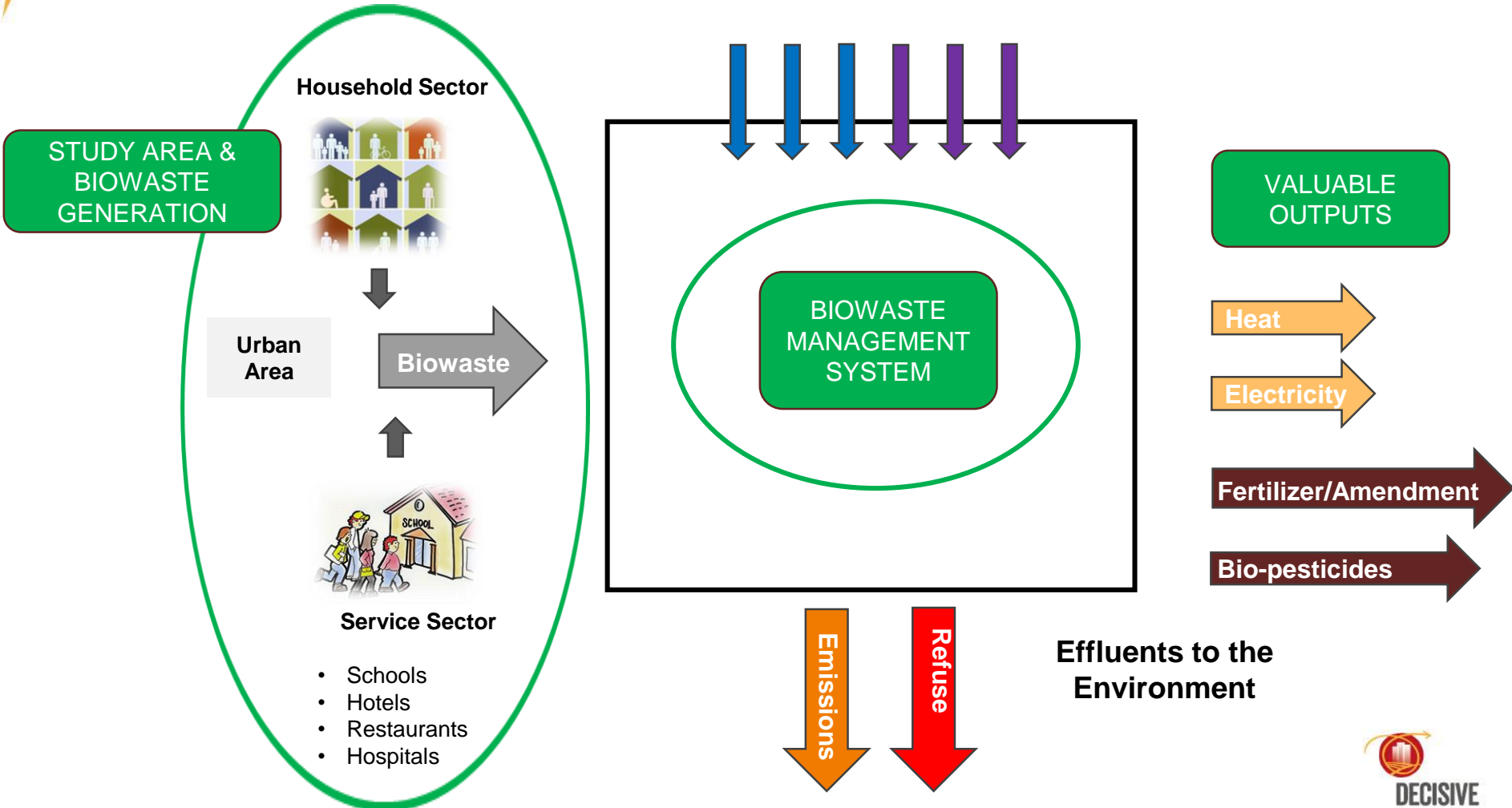
- Aims:
 - Providing a **first assessment**, based on the data available, of **decentralised systems of valorisation of municipal biowaste in comparison with other treatment options** in a specific study zone in urban areas.
 - estimating the **possible location of the DECISIVE facilities** (micro-anaerobic digestion and solid state fermentation) in the specific study zone, if appropriate data is available.

Comparison of scenarios

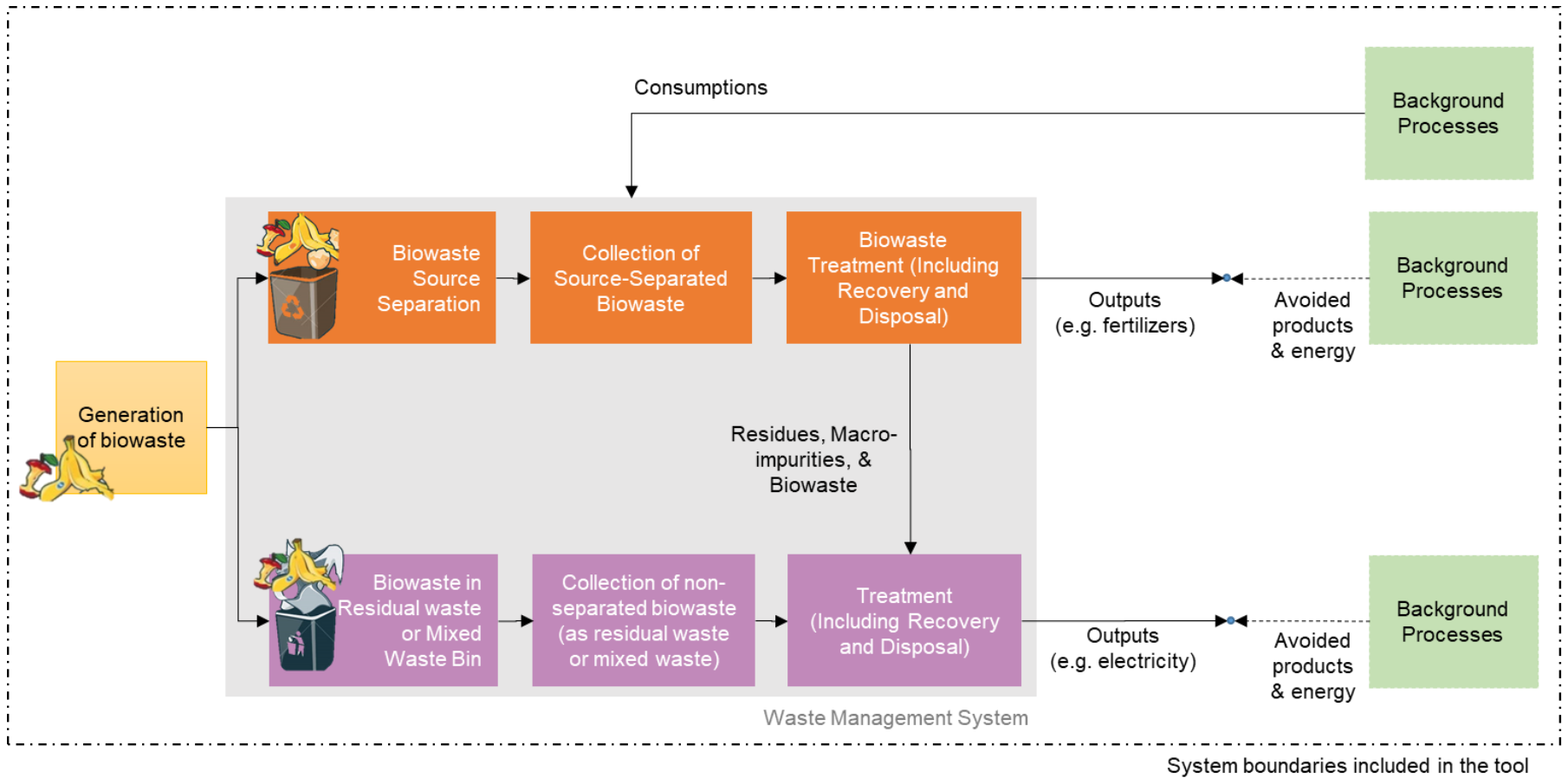
- To perform comparative assessments different biowaste management systems will be analyzed to compare Baseline scenario with Alternative scenario



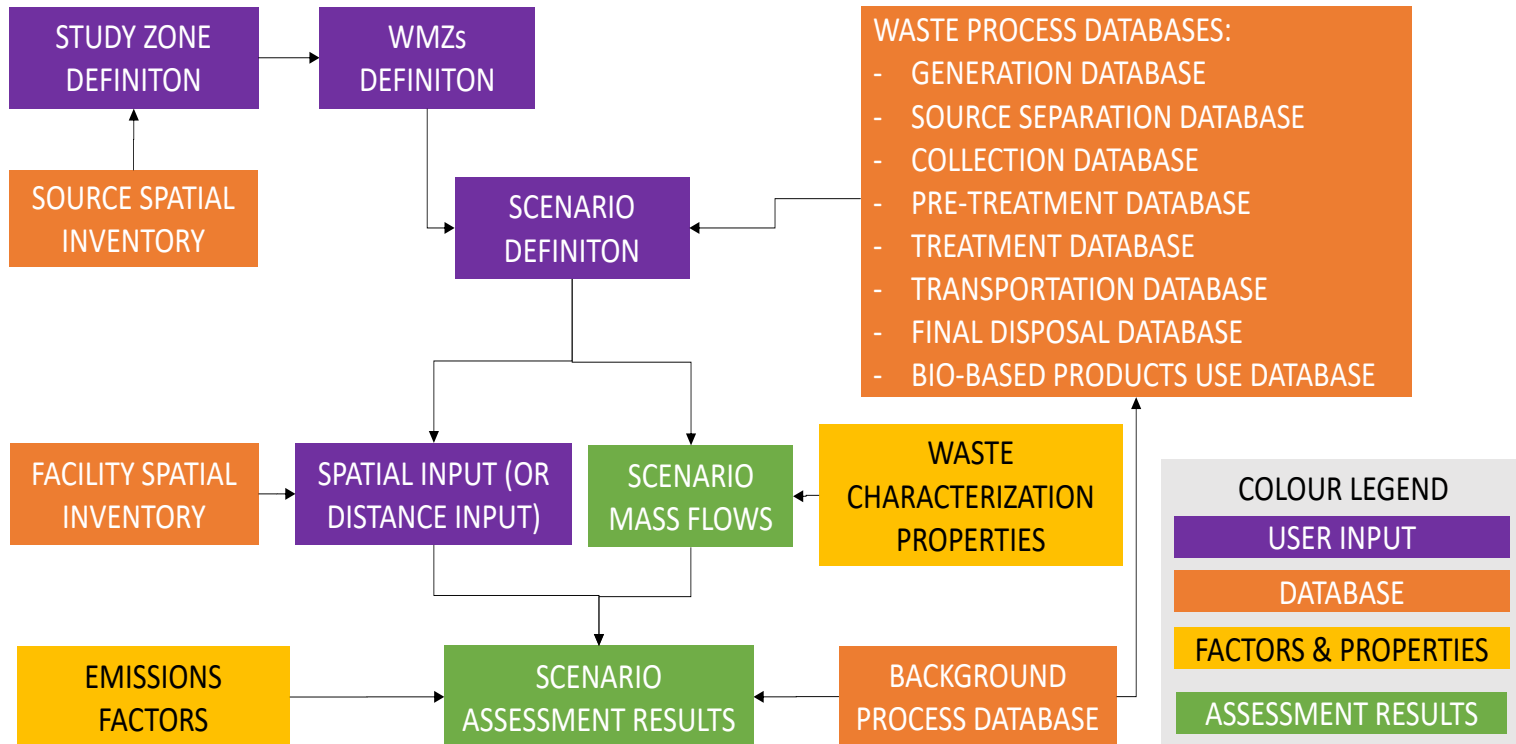
Overview of biowaste management system



GOAL & SCOPE



Structure of the tool



First steps to deal with the DST

The image shows two overlapping screenshots of the DECISIVE web application. The left screenshot displays a 'Sign up' form with the following fields and elements:

- Username:** A text input field containing 'Rosaria'.
- Email:** An empty text input field.
- Password:** A text input field with masked characters (dots).
- Navigation links:** A vertical list of links: 'Projects list', 'Emission Factors', 'Glossary', and 'Waste Characterization ...'.
- Sign in link:** A link labeled 'Sign in' at the bottom left.

The right screenshot displays the 'Projects list' page, which includes a '+ Create new Project' button and a table of projects. The table is filtered to show 'Private Projects'.

Code	Project Name	Project Type	Created	Actions
00214	Test	GIS mode	2018-08-20 18:21:01	
00213	Test - to see if there are population sources!	GIS mode	2018-08-20 17:10:25	
00212	180820 Test - GIS Mode (few sources)	GIS mode	2018-08-20 16:41:59	
00207	180815 Test - Basic Mode	Basic mode	2018-08-15 12:17:36	

Definition of Study Zone



Exercise GA · Sources list

1

Study Zone

2

WMZs

3

Scenarios

Study Zone

Please, add the Biowaste Generation Sources to be included in the assessment using the "Add Biowaste Generation Source" option.

+ Add new Biowaste Generation Source

Code	Source name	Type of Biowaste Generation Source	Actions
07490	Households&food services, Catalonia (ass. G_TUHH_1) (Project:285)	Household	

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Basic mode

Test · Study zone

1

Study Zone

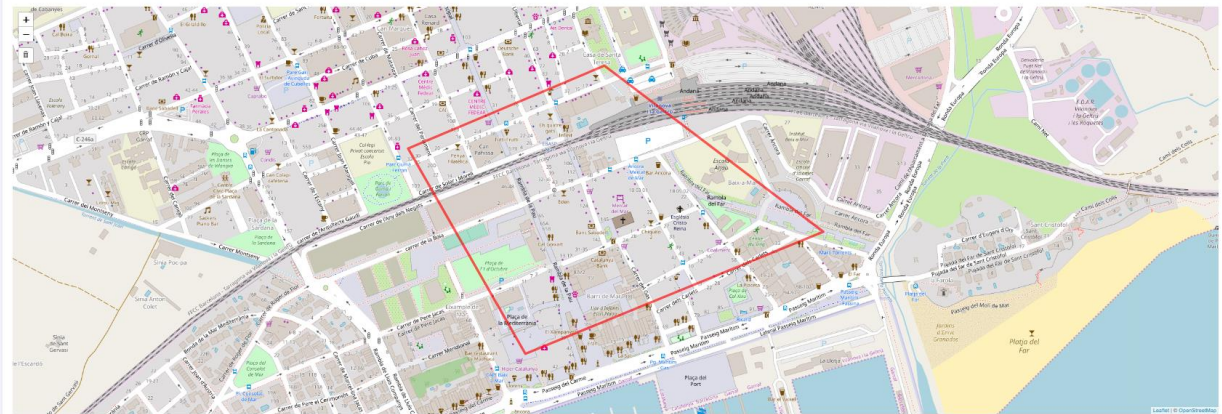
2

WMZs

3

Scenarios

Draw study zone



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Save and Next >

GIS mode

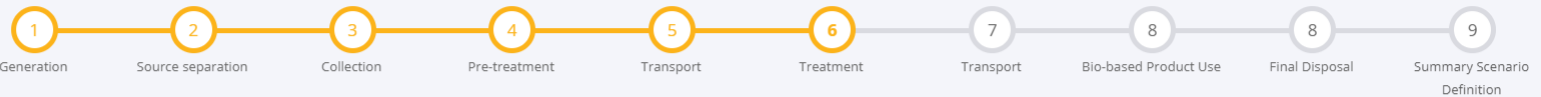
- Projects list
- Emission Factors
- Glossary
- Waste Characterization ...
- Waste Processes Docum...
- User Manual of the DECL...

Definition of Scenario

To define a scenario we need to define the waste processes



Baseline exercise



Treatment Process

Please, add Treatment Processes to the Scenario by selecting the option "Add Treatment Process" and then establish the link of this process with the corresponding waste output from the Collection, Pre-treatment and Transport processes defined previously using the option "View and Link inputs".

[← Back to Scenarios list](#)

[+ Add Treatment Process](#)

[🔗 View and link inputs](#)

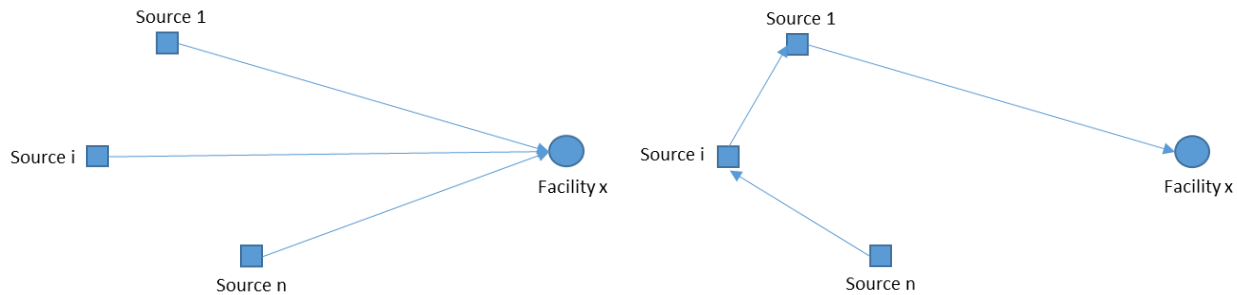
Centralized Anaerobic Digestion

Name of the Treatment Process Assigned	Name of the Collection or Pre-treatment (waste output)	Status	Actions
T_AU_1 Mechanical&wetAD&CHP	C_ENT_1 Truck18BW	●	👁️ ✎️
T_AU_2 Biostabilization	Trans_ENT_4 Truck 34 fast (PT_AU_2 RW Mechanical&Manual- BM_O& Ref (BM_O))	●	👁️ ✎️



Spatial inventory

Localization of waste management plants



1 Study Zone 2 WMZs 3 Scenarios

[Back to Scenarios list](#)

Manual Entry of Collection and Transportation Distances

Calculation 1

[Re-calculate or Change type of calculation](#)

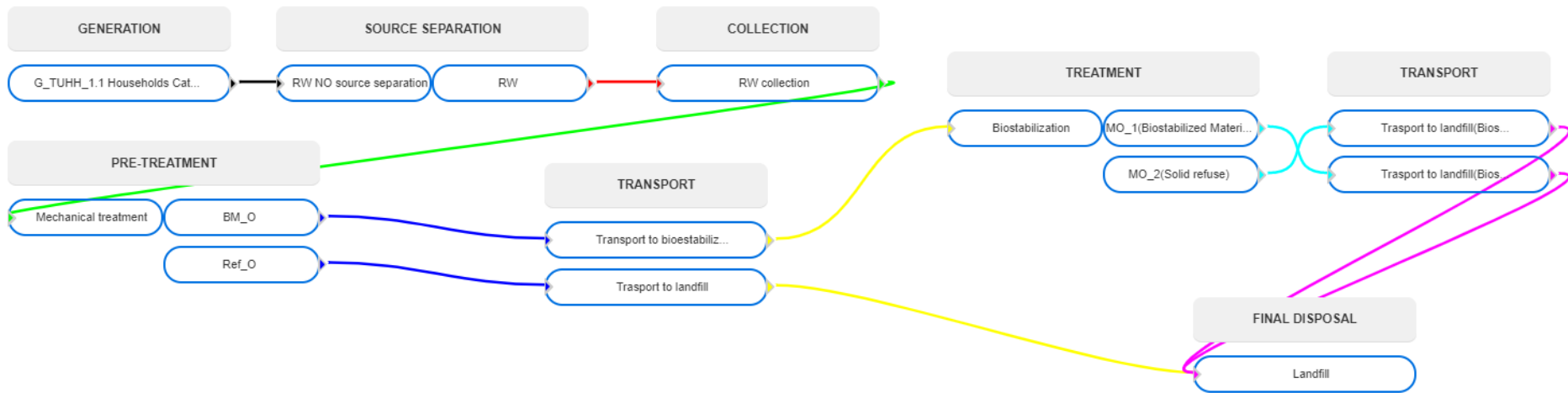
GIS - Calculation #1

Col. & Tran. Process	Process of Origin	Flow	Process of Dest.	Coordinate Origin (x)	Coordinate Origin (y)	Coordinate Dest. (x)	Coordinate Dest. (y)	Distance (km)
C_SSBW, VNG, 2018	Napoletani Doc	SS_Restaurant, VNG, 2018 (SS BW) fr...	PT_SSBW, VNG, 2018	1.72502	41.2238	1.58448	41.2389	<input type="text" value="13.816"/>
C_SSBW, VNG, 2018	Col-legi Privat Concertat Santa Teresa de Jesús	SS_School, VNG, 2018 (SS BW) from G...	PT_SSBW, VNG, 2018	1.72588	41.2225	1.58448	41.2389	<input type="text" value="13.828"/>
C_RW, VNG, 2018	Napoletani Doc	SS_Restaurant, VNG, 2018 (RW) from ...	T_RW, VNG	1.72502	41.2238	1.58448	41.2389	<input type="text" value="13.816"/>
C_RW, VNG, 2018	Col-legi Privat Concertat Santa Teresa de Jesús	SS_School, VNG, 2018 (RW) from G_Sc...	T_RW, VNG	1.72588	41.2225	1.58448	41.2389	<input type="text" value="13.828"/>

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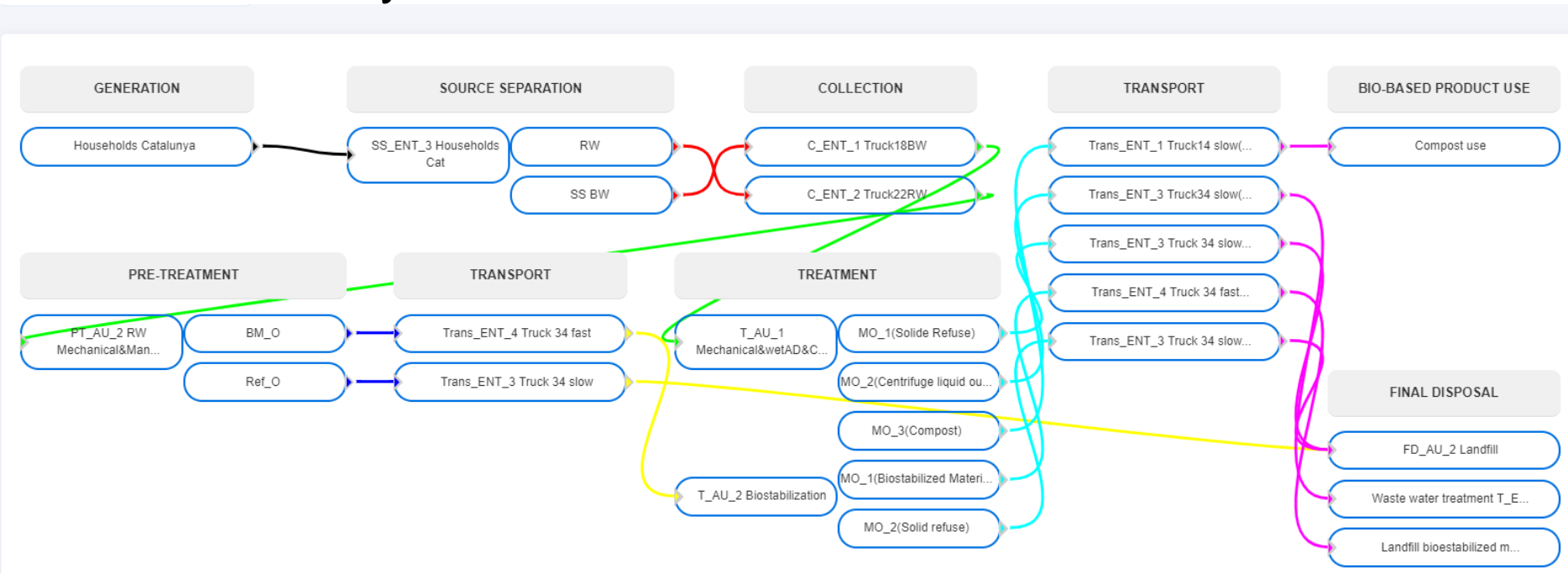
Study case A - Baseline

Summary Baseline scenario definition



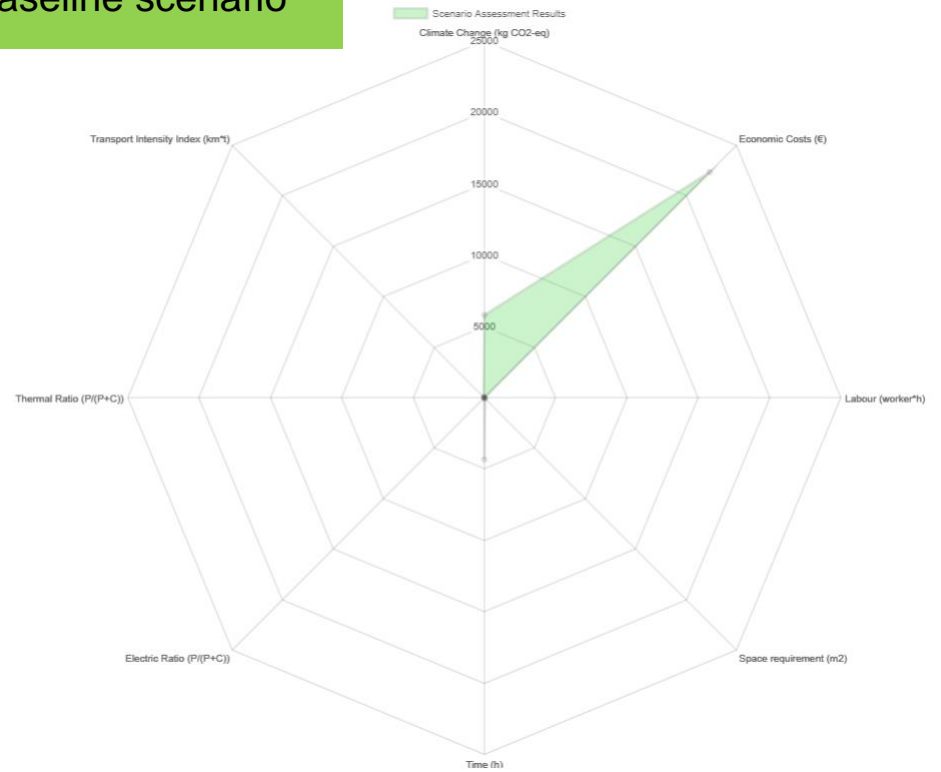
Study cases A - Alternative

Summary Alternative scenario definition

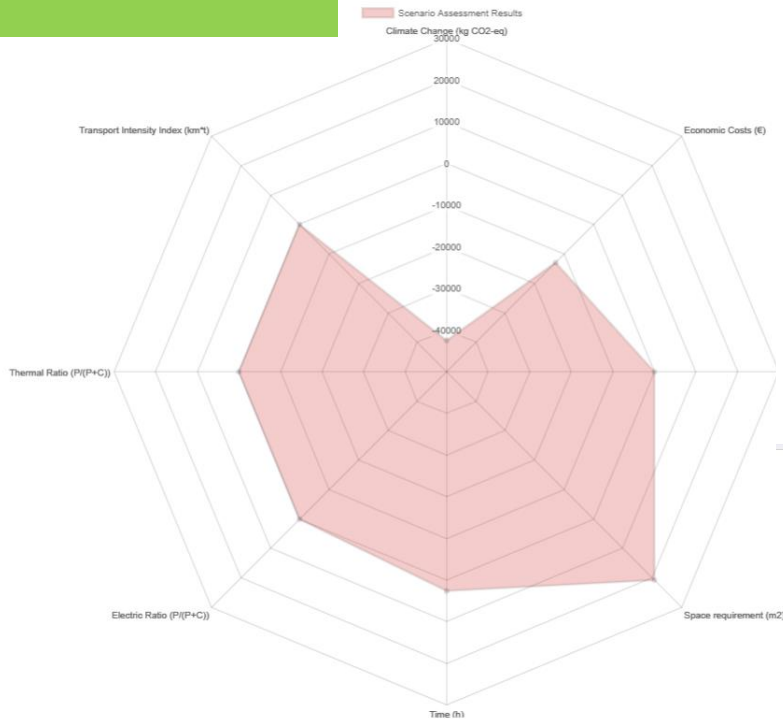


Scenario assessment results

Baseline scenario



Alternative scenario



Those results are not real since they are coming from testing waste processes

Grazie mille!

Contact

www.decisive2020.eu

✉ info@decisive2020.eu

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rchifari@ent.cat

www.ent.cat