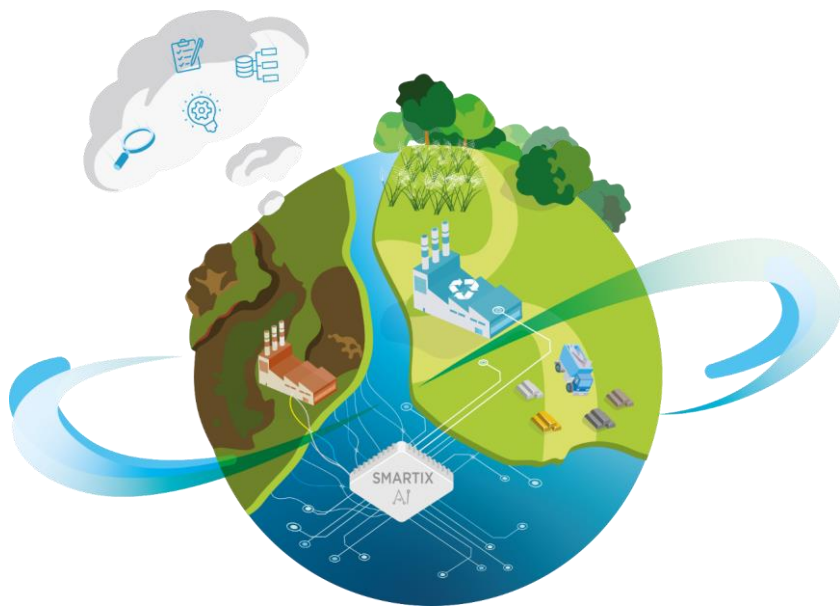


New economical model for the development of the projects on the former metallurgical sites

*INTERSOIL 2022 – 05 October 2022
Brussels-Belgium*

Eng. Iqra AZIZ
*NWE-REGENERATIS Project manager
SPAQUe*



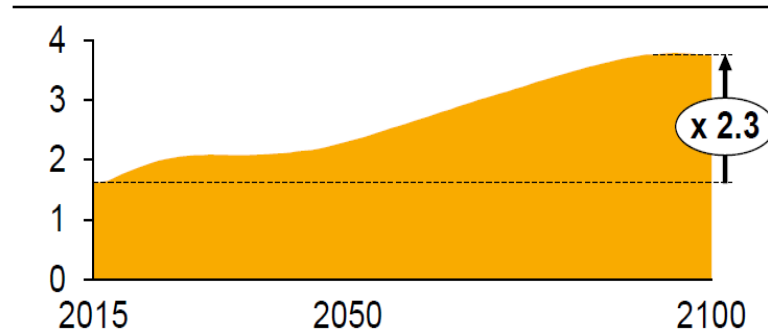
Content:

- 1. Need of new economical model (business model)**
- 2. Business model methodology**
 - 2.1 Objectives
 - 2.2 Strategy
- 3. NWE-REGENERATIS project and business model**
- 4. Business model structure**
- 5. Cost benefits analyses**

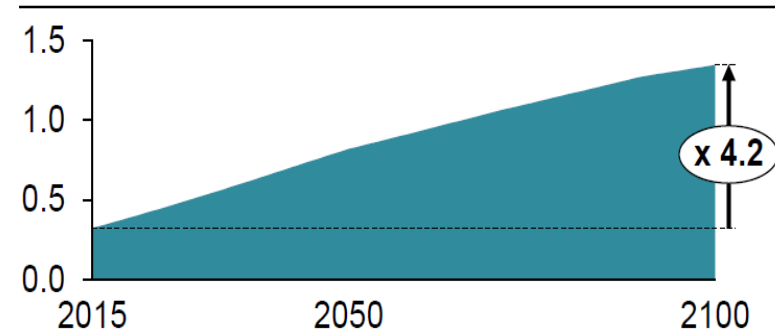


1. Need of new economical model/business model

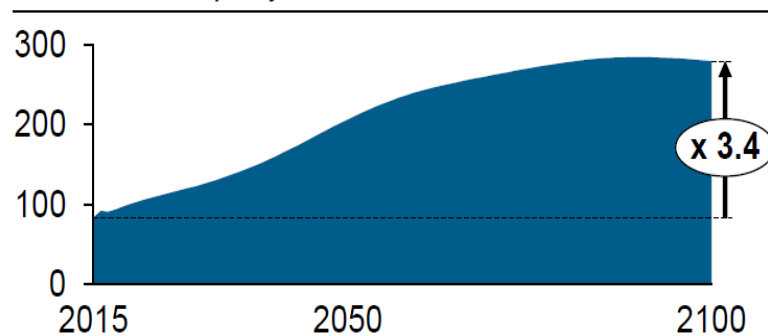
STEEL Gt per year



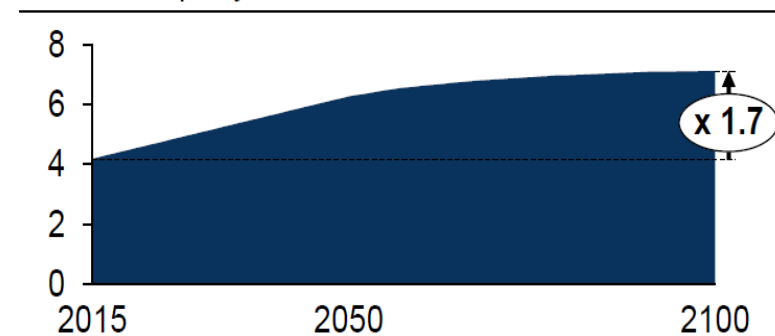
PLASTICS Gt per year



ALUMINIUM Mt per year



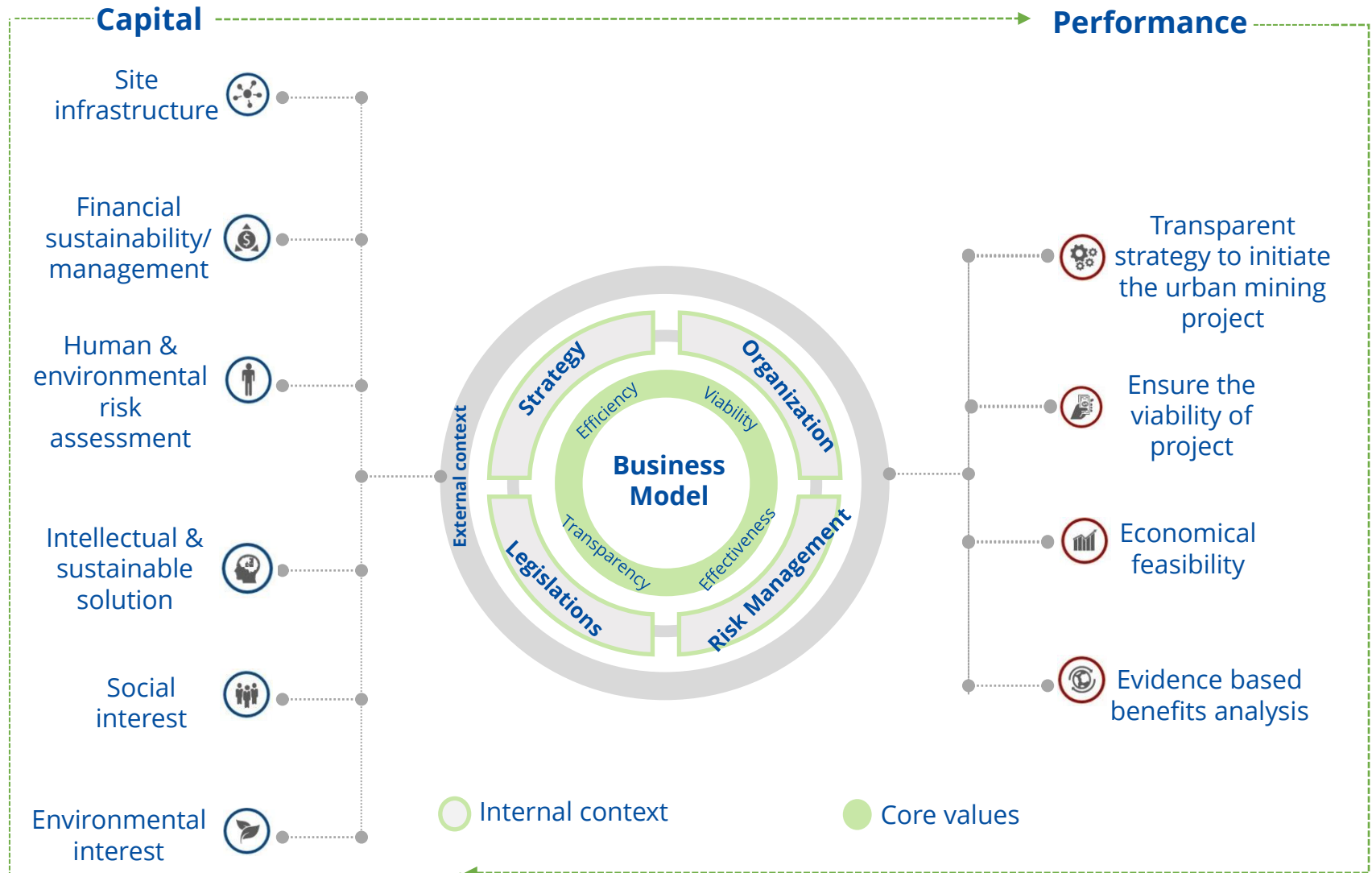
CEMENT Gt per year



MATERIAL
ECONOMICS

Forecasts of steel, plastics, aluminum, and cement needs by 2100 (source: Materials Economics)

2. Business model methodology



2.1 Business model objectives

1

Transparent strategy to initiate the urban mining project

2

Ensure the viability of an urban mining project

3

Economical feasibility

4

Evidence-based cost benefits analysis

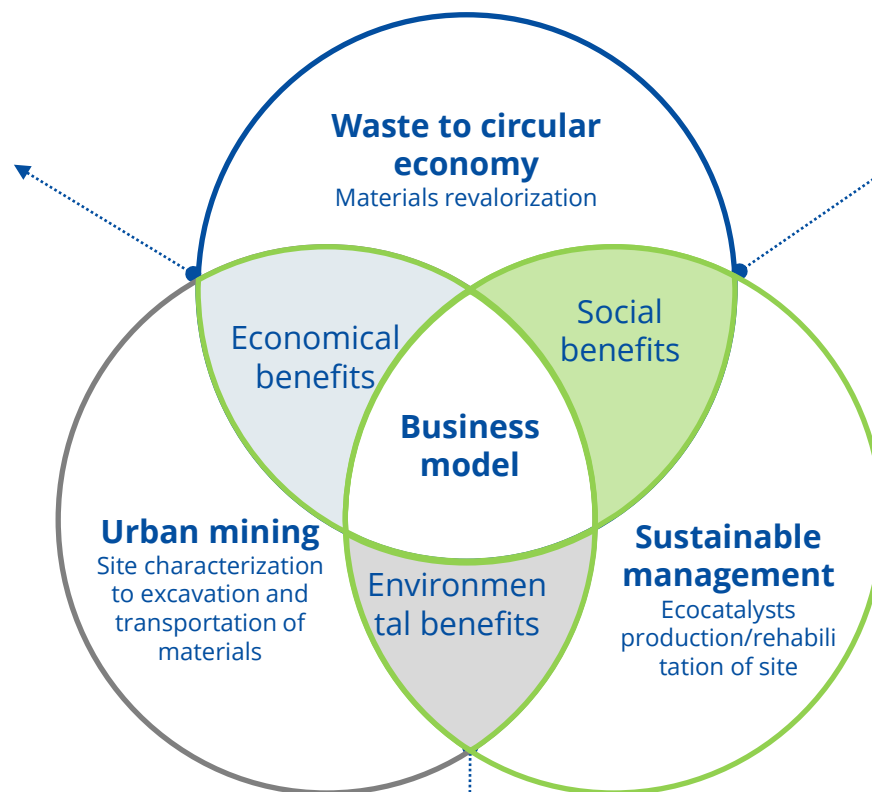
Beneficiaries

Organizations, polluted soils, and civil engineering experts, contractors, metallurgists, mineral processing operators, etc.



2.2 Business model strategy

- Management of site operations
- Proper organization
- Innovative and effective technology/solution
- Market analysis



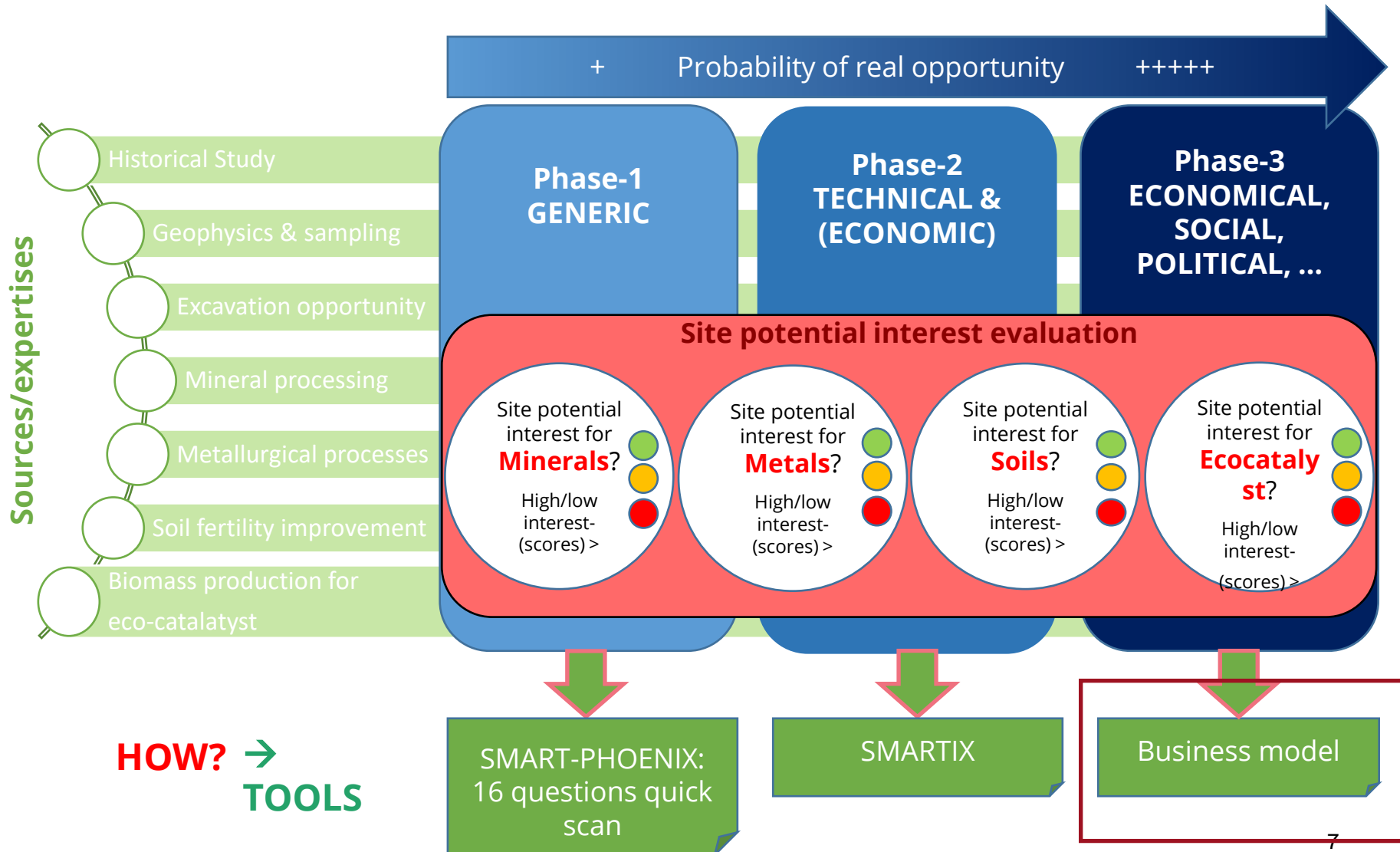
- Jobs creation
- Tourism
- Health benefits
- Leisure activities
- Property value



- Soil quality
- Biodiversity
- CO₂ sequestration
- Other ecosystem services



3. NWE-REGENERATIS project methodology (REMICRRAM) and business model



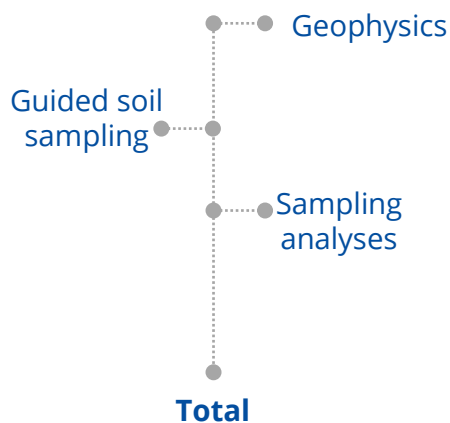
4. Business model structure



Business model

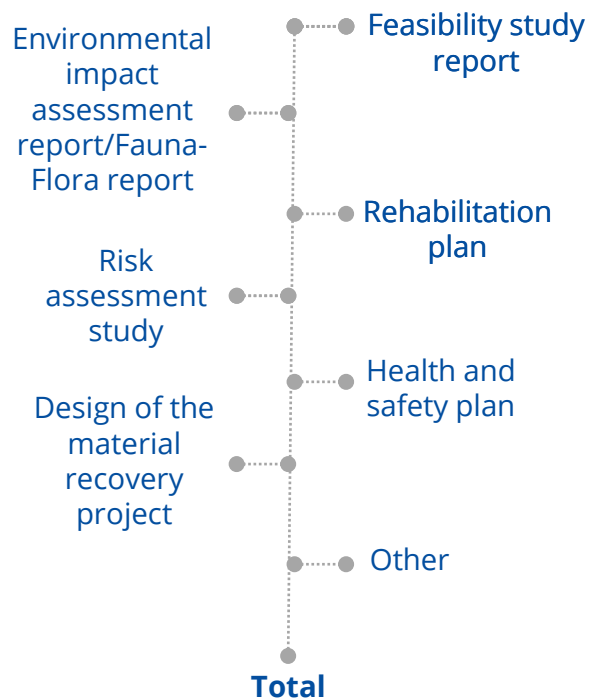
Section-1

PMSDs CONTENT CHARACTERIZATION



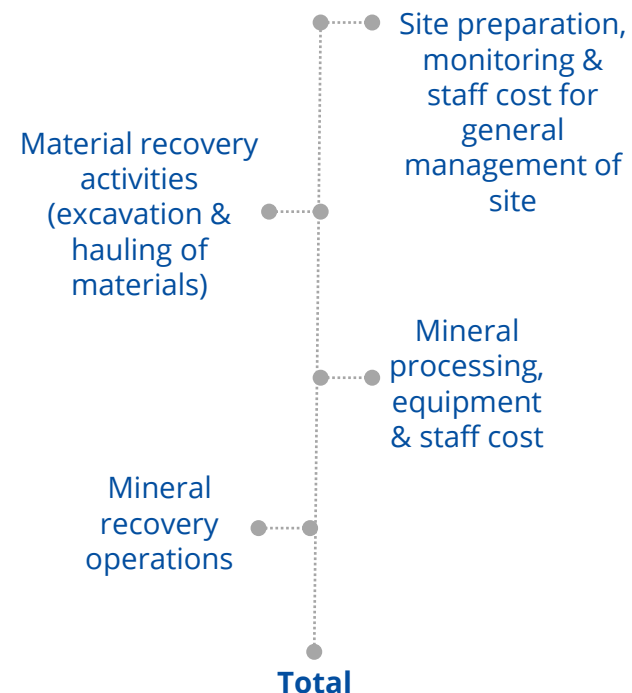
Section-2

MATERIAL RECOVERY PRE-OPERATIONS



Section-3

MATERIAL RECOVERY OPERATIONS

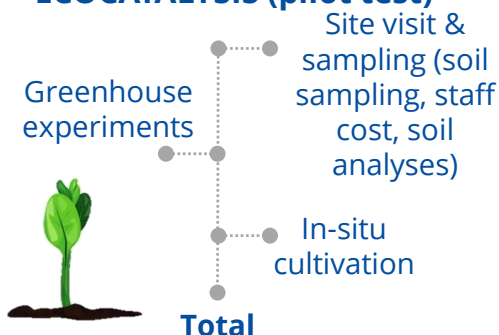


4.1 Business model structure

Business case

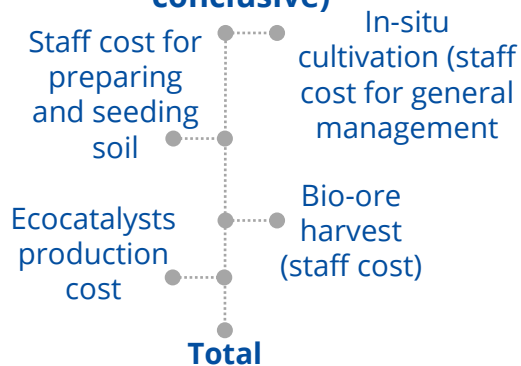
Section-4

ECOCATALYSIS (pilot test)



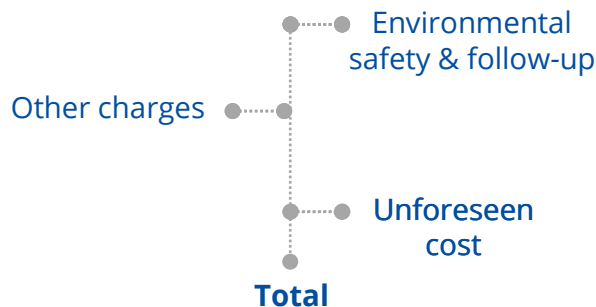
Section-7

ECOCATALYSIS (If pilot test conclusive)



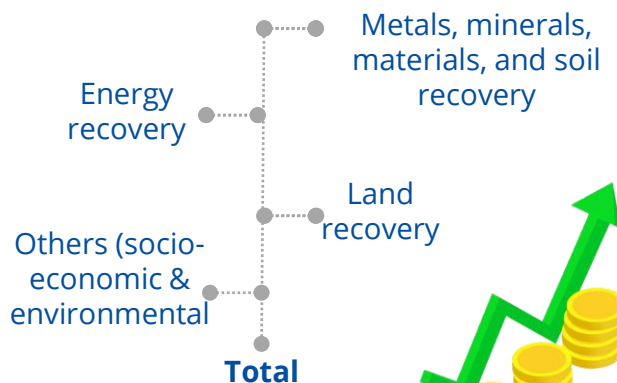
Section-5

OTHER EXPENDITURES



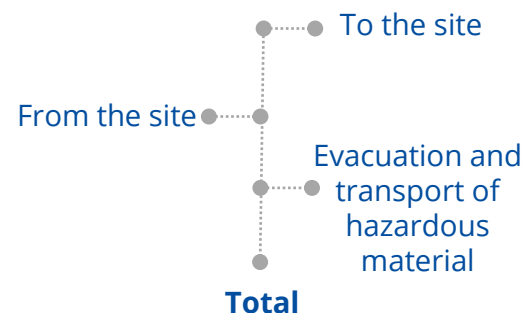
Section-8

REVENUES



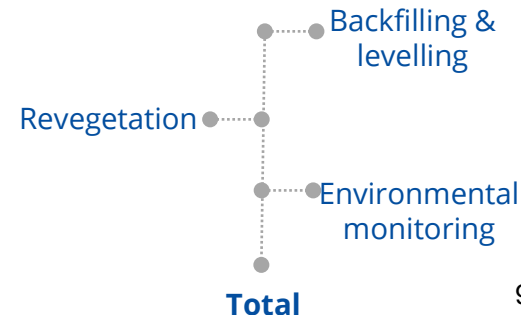
Section-6

MATERIAL TRANSPORT



Section-9

SITE RESTORATION AFTER URBAN MINING OPERATION



5. Cost benefits analysis

Cost

Total cost for PMSD content characterization
Total cost for material recovery pre-operations
Total cost for material recovery operations
Total cost for Ecocatalysts production (pilot test)
Total for other expenditures
Total cost for material transport
Total cost for site restoration after material recovery operations
Total cost for Ecocatalysts production (if pilot test is conclusive)
Unforeseen cost (10%)
Grand total for whole urban mining project (expenditures)



Revenues

Total revenue from metals, minerals, materials, and soil recovery
Total revenue from energy recovery
Total revenue from land recovery
Total for other revenues/benefits
Grand total for whole urban mining project (revenues)



PROJECT BENEFIT (REVENUES-EXPENDITURES)





EUROPEAN UNION

Avec le soutien de
la



Wallonie



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Thank you!

**Do you have any
questions?**

<https://www.nweurope.eu/REGENERATIS/>