

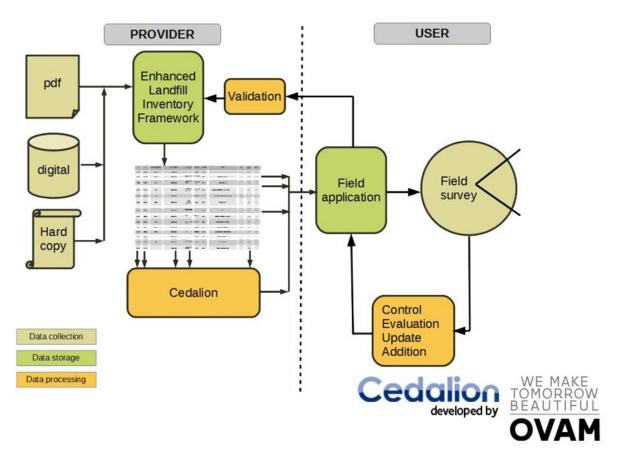
Applying the Brownfield Opportunity Matrix to landfills

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Presented at fifth symposium on Enhanced Landfill Mining (ELFM), February 6, 2020, Park Inn Hotel, Leuven, Belgium).



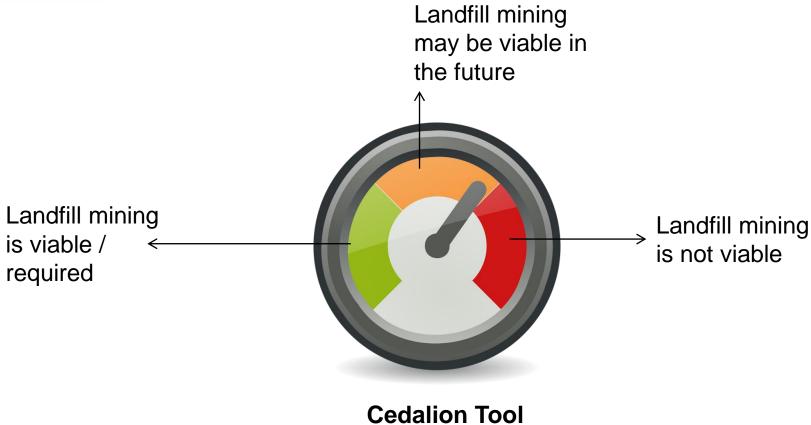
Rawfill: Cedalion and Orion DSTs – is landfill mining viable?



Screening objectives: first indications on opportunities & urgency and most of all ... inspiring users to get started

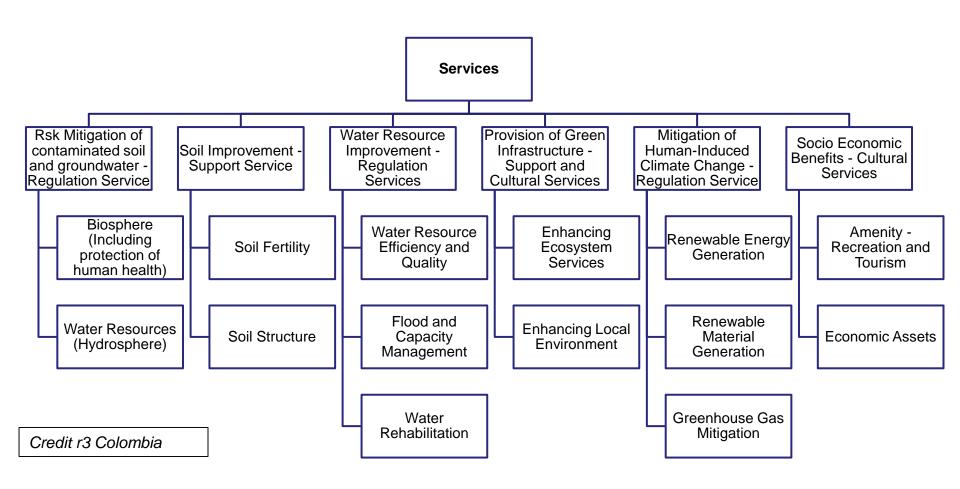


Decision Outcomes





Wider brownfields management opportunities



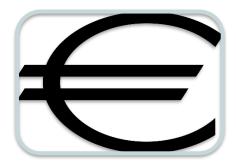


Additional value from wider services

Landfill mining proceeds	Wider services from the brownfield surface during and after mining
Landfill mining is delayed	Maximising restoration value deliverable during interim use
Landfill mining does not proceed	Optimising non landfill mining restoration



What Value can These Deliver?



Revenue Generation Opportunity

• eg: Renewable Energy



Natural Capital/ Ecological services

• eg: Cleaner water



Cultural Capital

• eg: Public amenity



Economic Capital - Tangibles

 eg: uplift in surrounding property values, local taxation revenues



Economic Capital - Intangibles

 eg: improvement of public health / social cohesion; reputational benefits



Function of the Brownfield Opportunity Matrix

 To identify what sorts of interventions (e.g. risk management., soil management etc) can deliver what services, and identify opportunities for value creation across scenarios with or without landfill mining or over an interim period

Categories of intervention

- Gentle Remediation Options
- Conventional Remediation Options
- Soil Management Activities
- Water Management Activities
- Implementing Green Infrastructure
- Renewables
- Sustainable Land Planning and Development



	Services
Interventions	Value (coluor code)



Contributes strongly and directly
It provides some benefits directly and / or indirectly
Can contribute or be detrimental (site-specific circumstances, management / design)
Without influence (complementary intervention)
May be antagonistic (without proper management / design and mitigation)

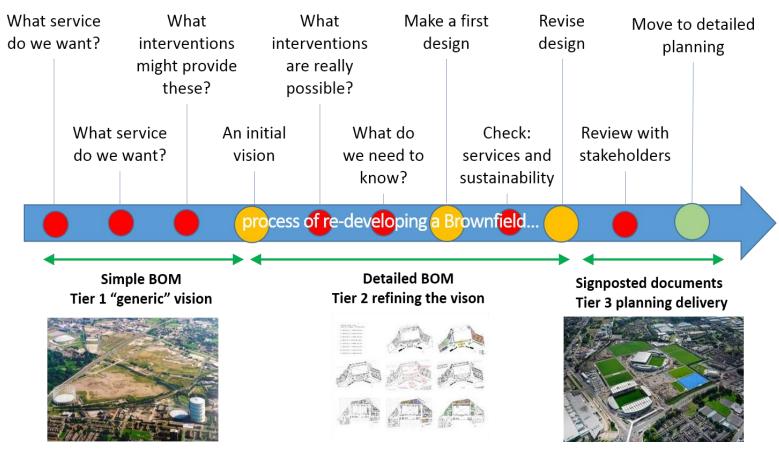
Credit r3 Colombia

BOM Description





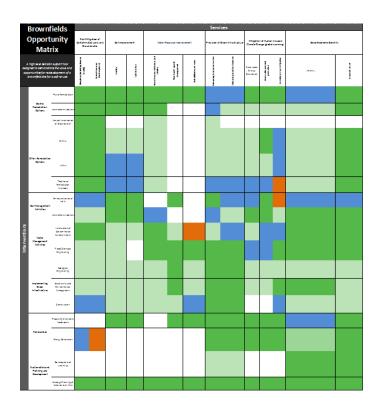
When to use it



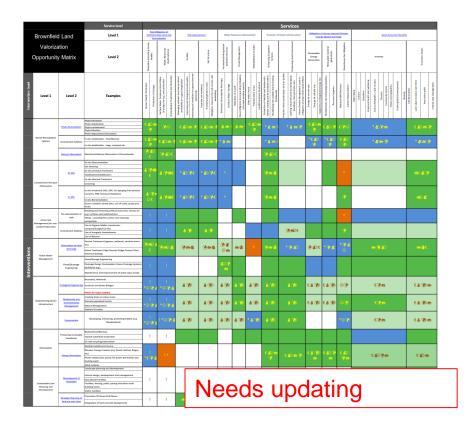


Simpler and detailed versions

Simple



Detailed





Origin

• The BOM is originally an output of FP7 Project no.: 265097, HOMBRE, "Holistic Management of Brownfield Regeneration"

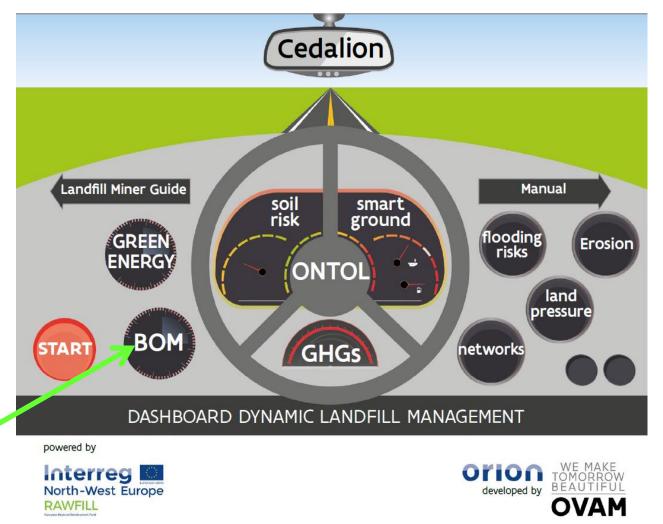


www.zerobrownfields.eu

 A range of other brownfields regeneration tools can be found on this platform, although long term hosting is called into question



How you find BOM





Concluding points

- Not all landfills are immediate landfill mining prospects
- Whether or not landfill mining takes place the value creation from the landfill as a brownfield site should be maximised, considering not just built re-uses
- Rawfill recognises this
- The Cedalion and Orion dashboard points its users to supporting tools such as the BOM to assist users in maximising opportunities for value from landfill sites.