

# Futu

Future availability  
of secondary  
raw materials



# FutuRaM

22.04.2024

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Swiss Confederation

Federal Department of Economic Affairs,  
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State Secretariat for Education,  
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EU Framework Programmes

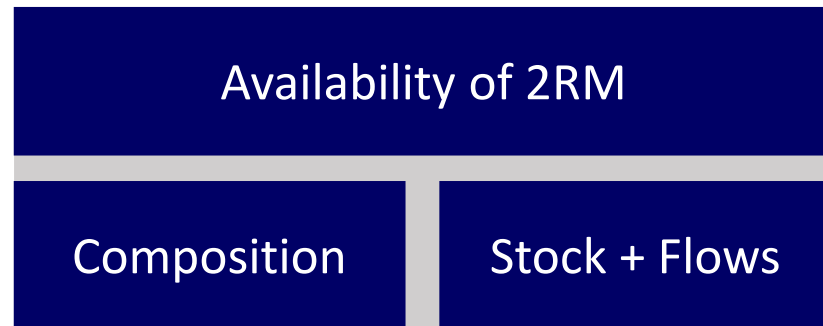


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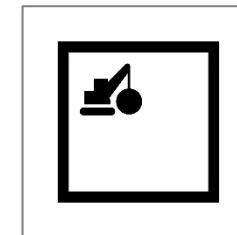
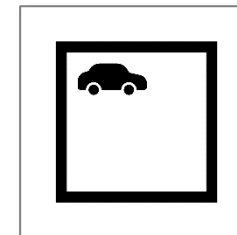
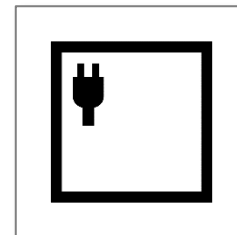
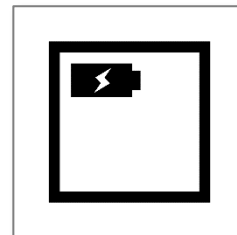
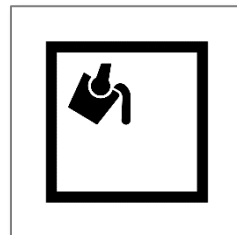
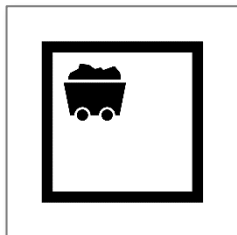
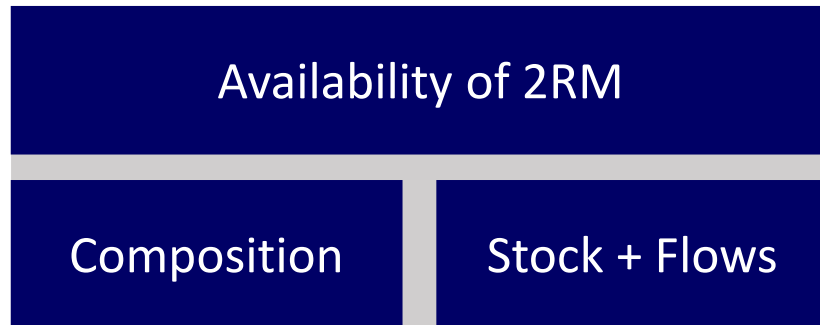
# Methodology Developed in ProSUM

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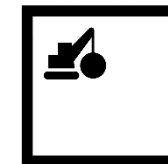
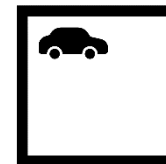
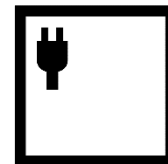
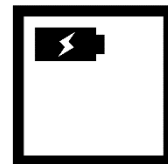
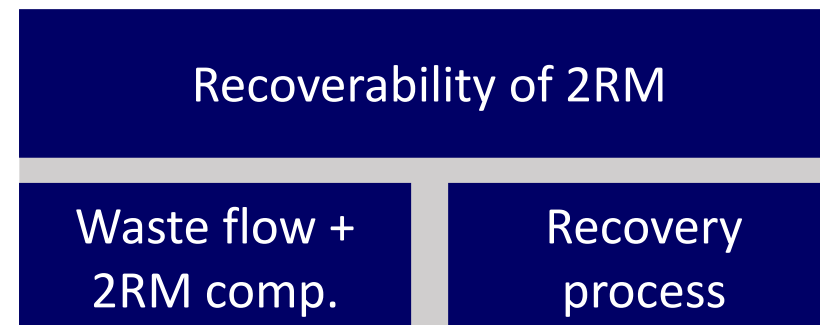
# FutuRaM : Applied to 6 Waste Streams

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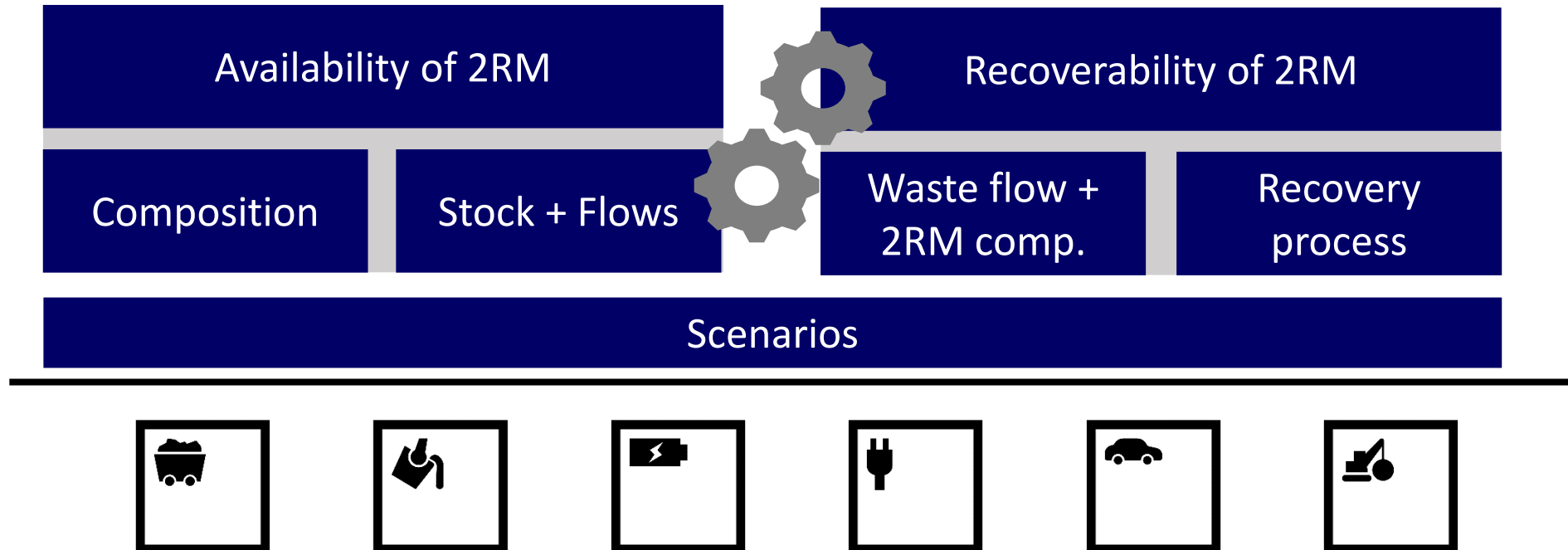


# Extension: Recoverability

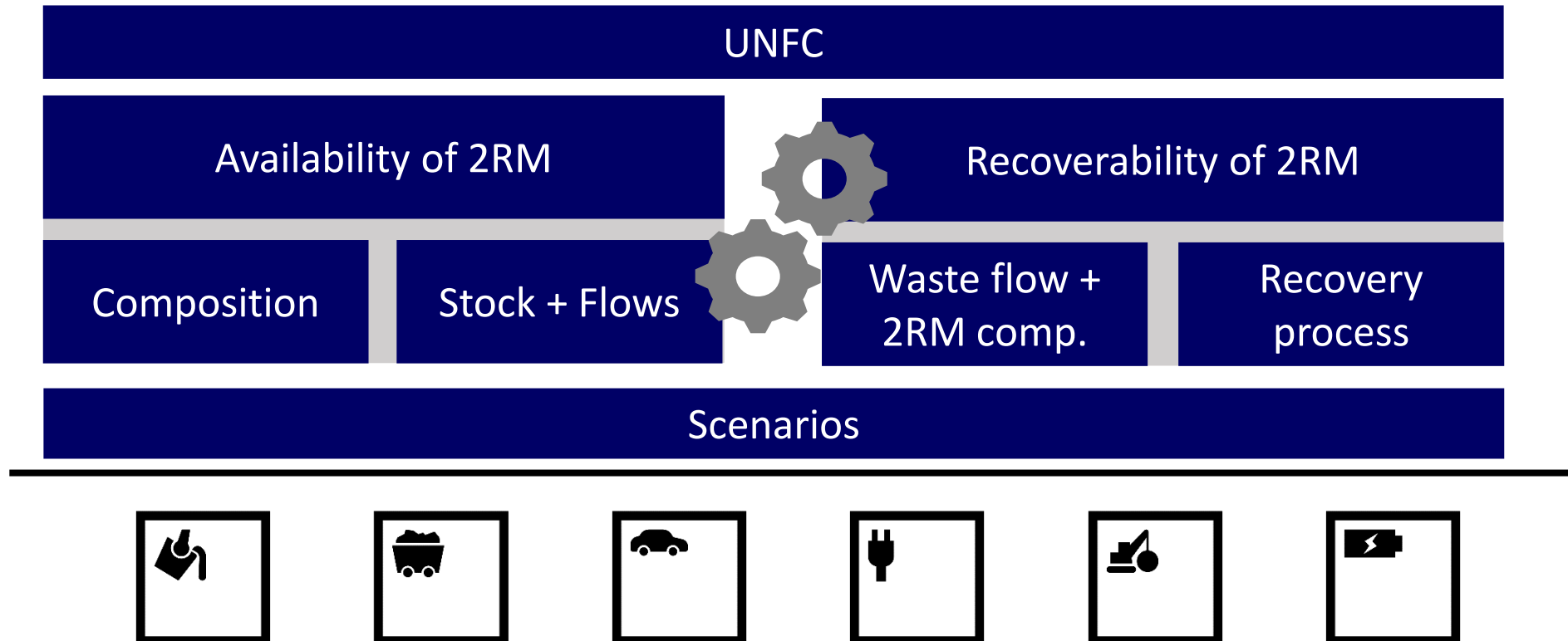
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# Considering Scenarios for the Future



# Using the Concept of UNFC



# Secondary Raw Materials Management



## Secondary Raw Materials & CRM Management in the EU

UNFC

Availability of 2RM

Recoverability of 2RM

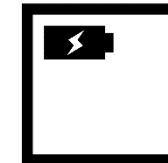
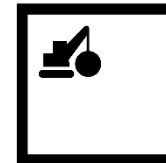
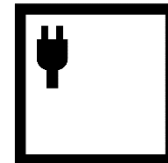
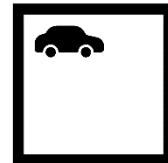
Composition

Stock + Flows

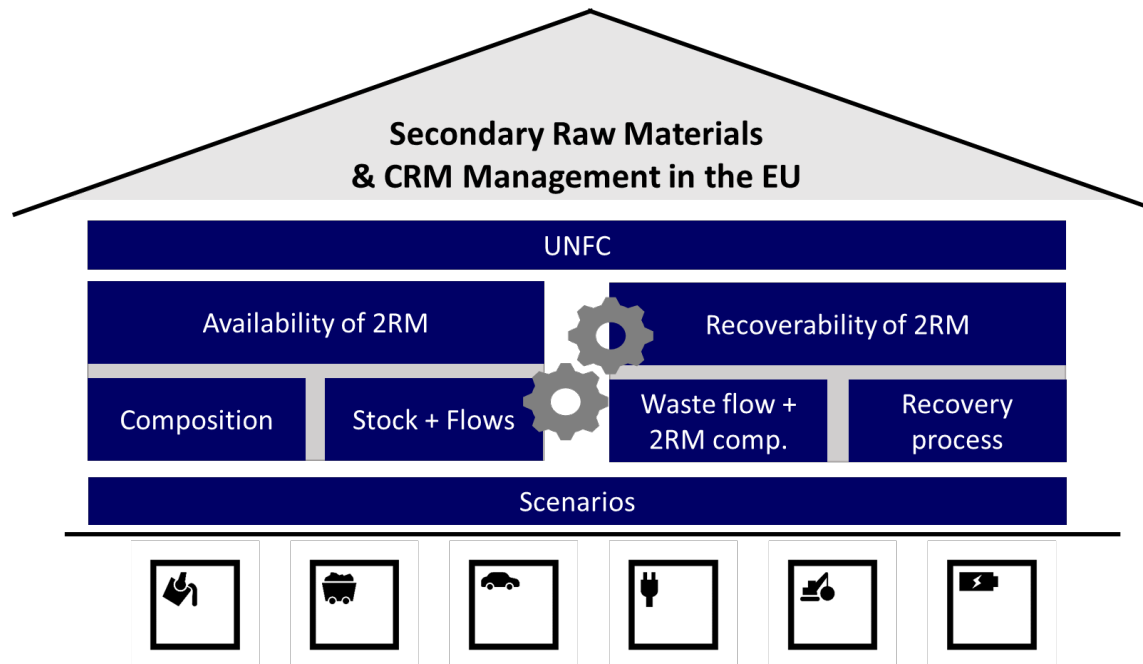
Waste flow +  
2RM comp.

Recovery  
process

Scenarios



# Contribution of FutuRaM to the CRM Act



## Article 6(1b)

- Recognition of strategic projects

## Article 20

- Information obligations for monitoring CRMs projects

## Article 25(7)

- Relevant CRM recovery potential

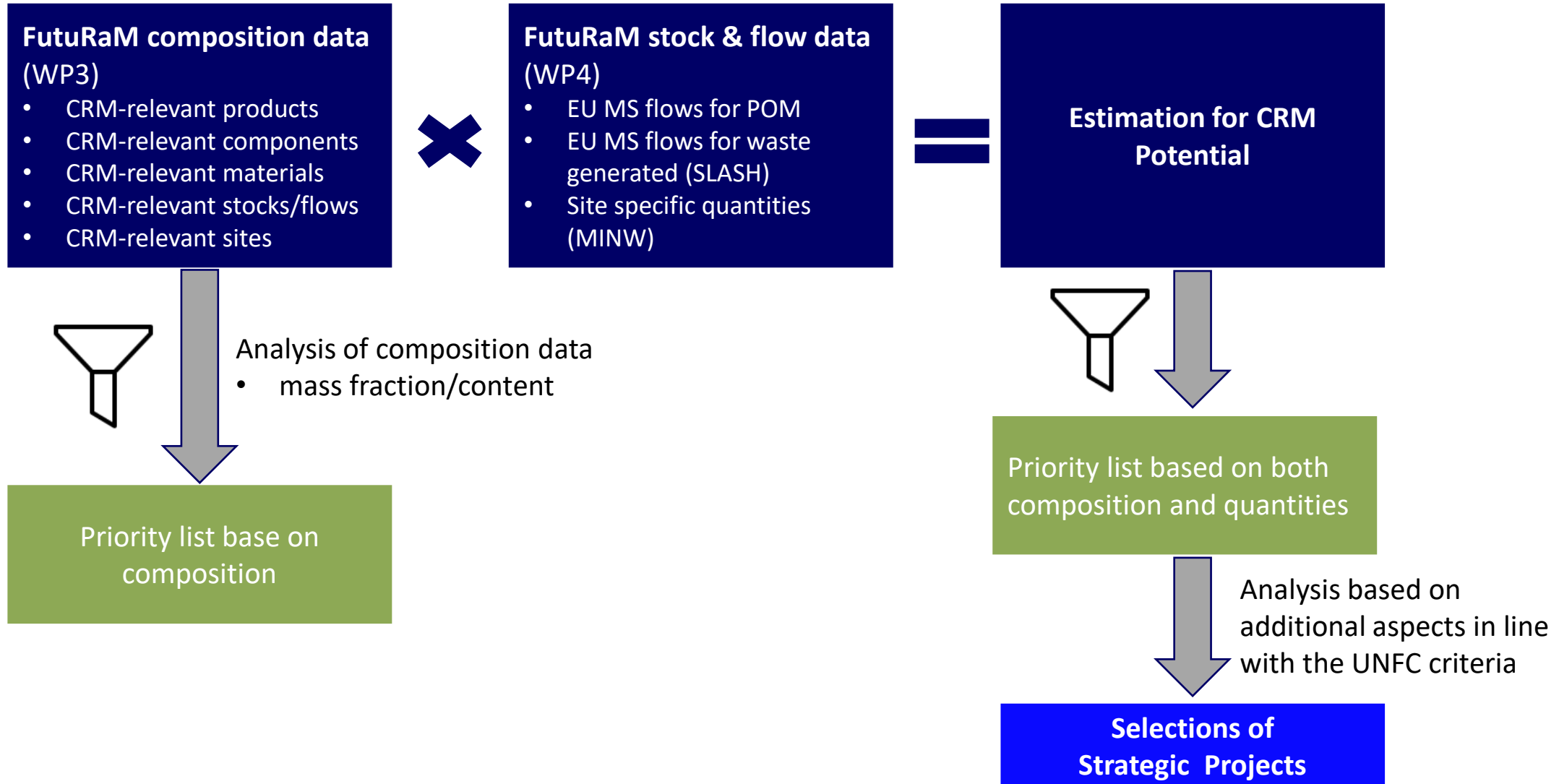
## Article 26

- Recovery of CRMs from extractive waste



# Identify CRM Recovery Potential in 2RMs

Article 25(7)



# UNFC for Anthropogenic Resource Projects

Article 6(1b)



- Classification of projects is not known in the recycling sector
- We are working on a systematic procedure to assess and classify projects

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## Structured Anthropogenic Resource Assessment

Secondary Raw Materials Availability Assessment in Line with the UNFC

Developed as part of the [FutuRaM](#) project

[Get Started](#)

**ENVIRONMENTAL-SOCC-ECONOMIC VIABILITY**

**TECHNICAL FEASIBILITY**

**DEGREE OF CONFIDENCE**

- Viable projects
- Potentially viable projects
- Non-viable projects
- Prospective projects
- Remaining products not developed
- Other combinations
- Produced quantities

123 Codification (E1F2G3)

Presentation of  
Iman Dorri



Funded by  
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Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
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Swiss Confederation

Federal Department of Economic Affairs,  
Education and Research, EAER  
State Secretariat for Education,  
Research and Innovation SERI  
EU Framework Programmes



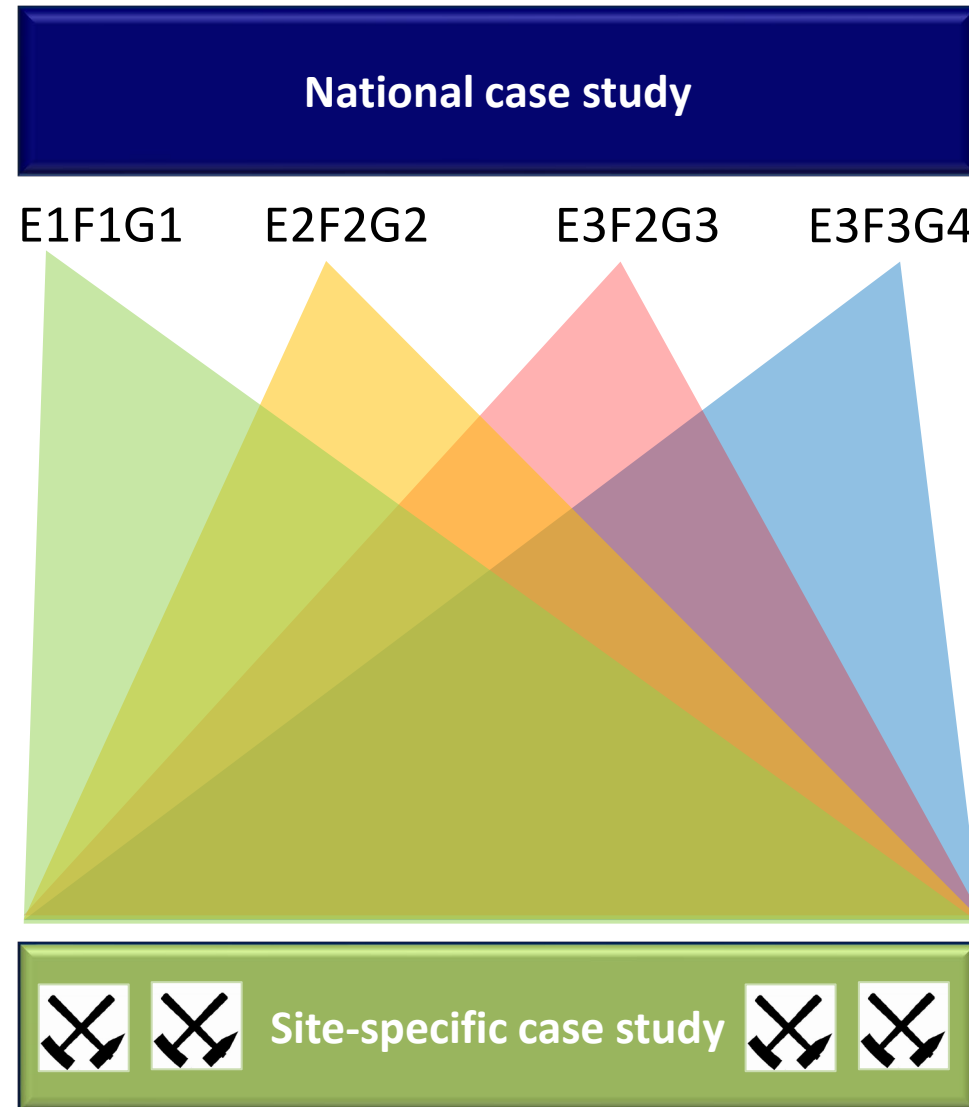
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# Recovery of CRMs from Extractive Waste

Article 26



- Bottom-up approach



Detailed information  
of the projects  
 $\Sigma$  (projects)

# Monitoring CRMs in 2RM Projects

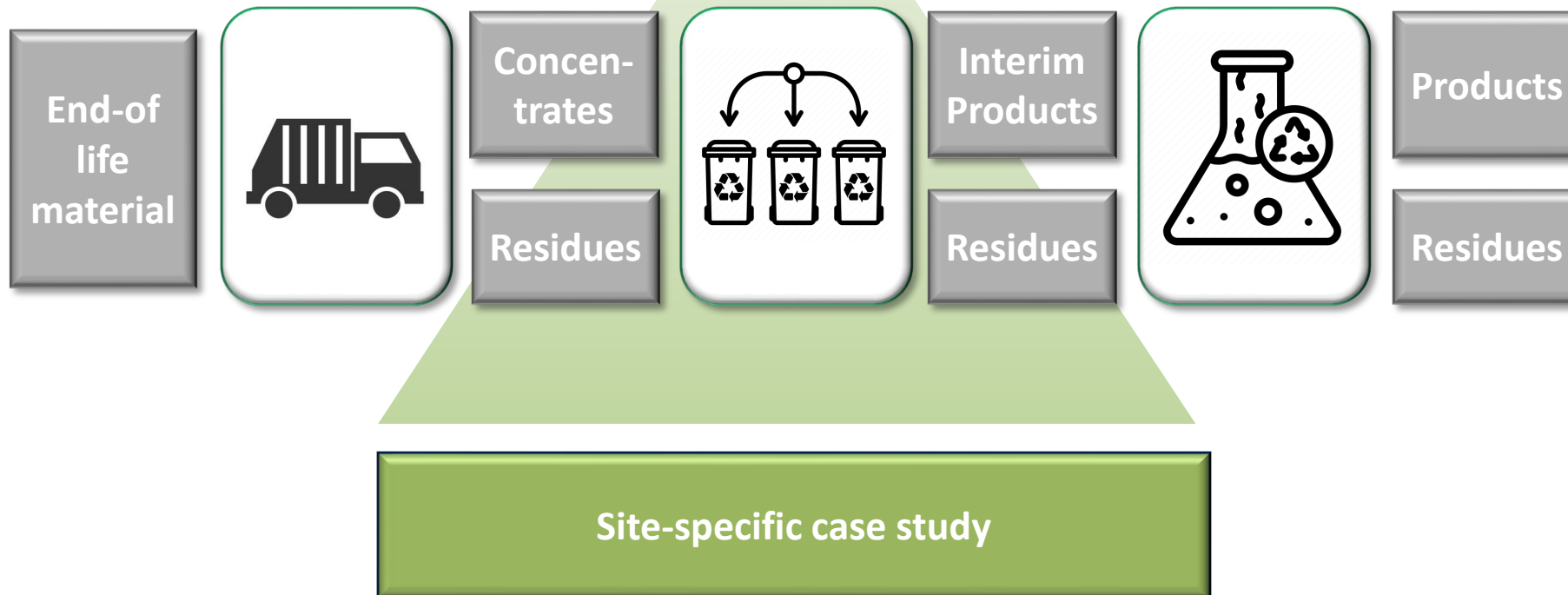
Article 20



National case study

- Recycling sector

- More complex

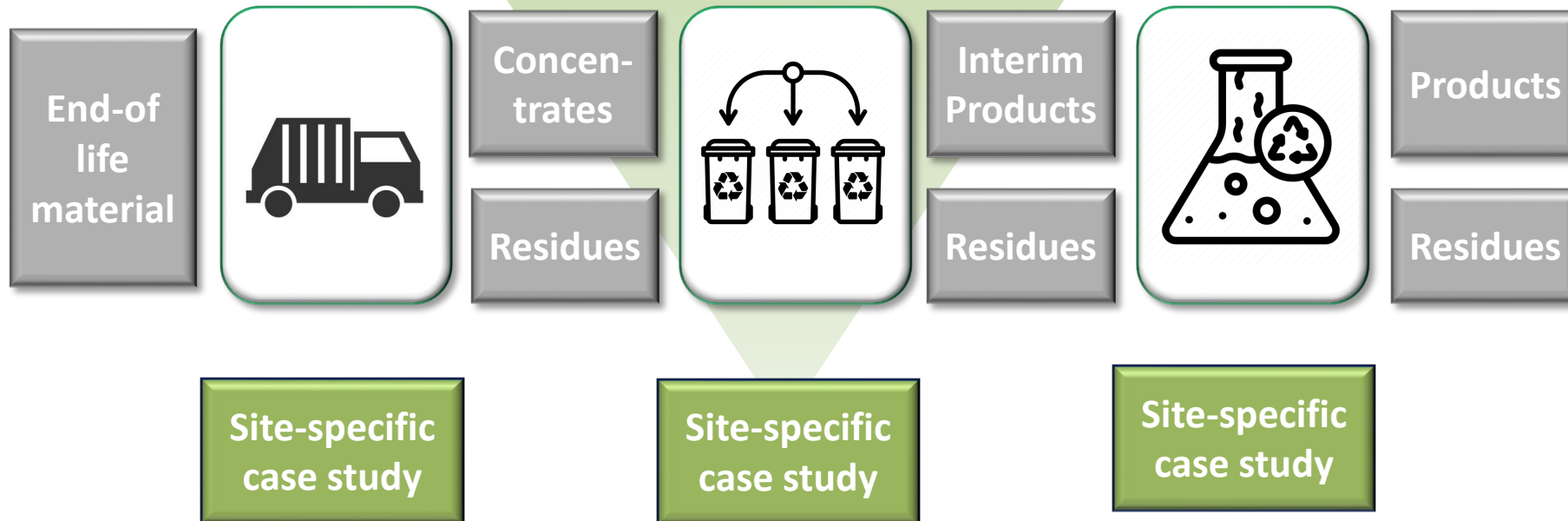


# Map the Potential Supply of CRMs

- Top-down approach



- Using MFA
- Map the recycling capacities of the plants



- Using specific recycling projects to estimate the real recovery potential

# Contribution of FutuRaM

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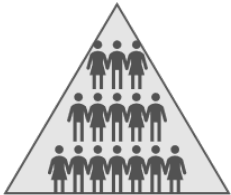
- Detection of hot spots with the potential to recover CRMs from waste streams

Article 25(7)



- Conceptual work on a systematic procedure to assess and classify specific projects in line with the UNFC

Article 6(1b)



- Testing the bottom-up approach to estimate the recoverability of 2RMson at national level

Article 26



- Conceptual work on a top-down approach to estimate the recoverability of 2RMs at national level

Article 20

# Thank you for your attention

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"THE VIEWS EXPRESSED ARE THOSE OF THE SPEAKER  
AND DO NOT NECESSARILY REFLECT THE VIEWS OF THE  
UNITED NATIONS."

