

Application of UNFC to anthropogenic resources

Ulrich Kral

Chair, EGRM Anthropogenic Resources Working Group



RESOURCE MANAGEMENT WEEK 2023

ASSURING SUSTAINABILITY IN
RESOURCE MANAGEMENT



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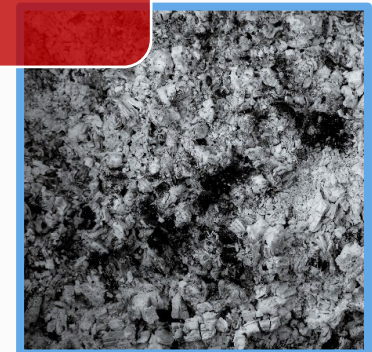
Anthropogenic resources



Mining & metallurgical residues

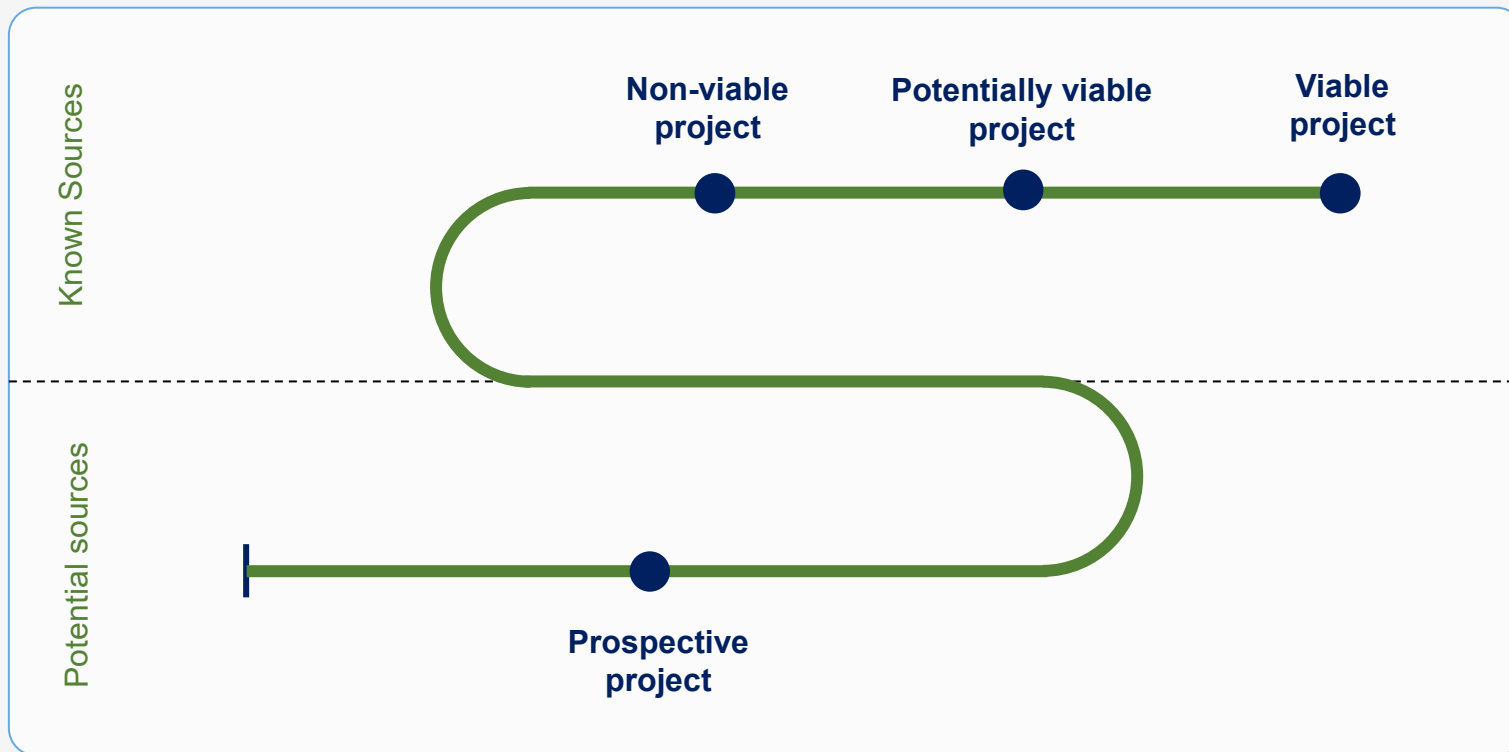


Post-consumer residues



Recycling projects are needed to convert residues into secondary raw materials.

Recycling project development



UNFC is a tool for classifying recycling projects by maturity level.

UNFC discloses the enablers & barriers to develop the recycling project.

UNFC facilitates project pipeline management and decision making.

Adopted from Kral, U., Heuss-Aßbichler, S., Simoni, M., Rechberger, H. (2018). Managing anthropogenic resources on their pathway to market participation. 7th AEARU Environmental Workshop, 24th March 2018, Beijing, China. Retrieved from <https://doi.org/10.5281/zenodo.7636241> at 13 Feb 2023.

Mining & metallurgical residues

Project classification



Manuscript in preparation

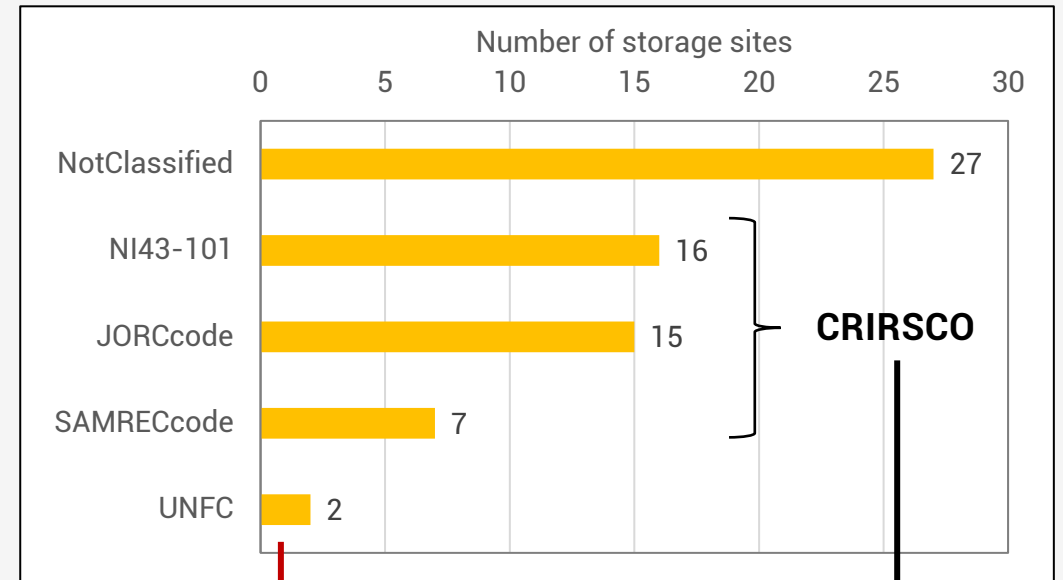
Storage sites for mining and metallurgical residues

67



Storage sites
● Data

Data sources: Data: Data repository for the storage sites [currently not public available]
Administrative boundaries: © EuroGeographics
Continents: Made with Natural Earth. Free vector and raster map data @ naturalearthdata.com
Editors: Cormio, C., Alosno, M., Cleall, P., Heuss-Aßbichler, S., Guglietta, D.S., Szabo, K., Zibret, G., Carvalho, T., Kral, U., Werner, T., Lemiére, B.



Bridging document
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UNFC

Projects can be compared
on a common playing
field

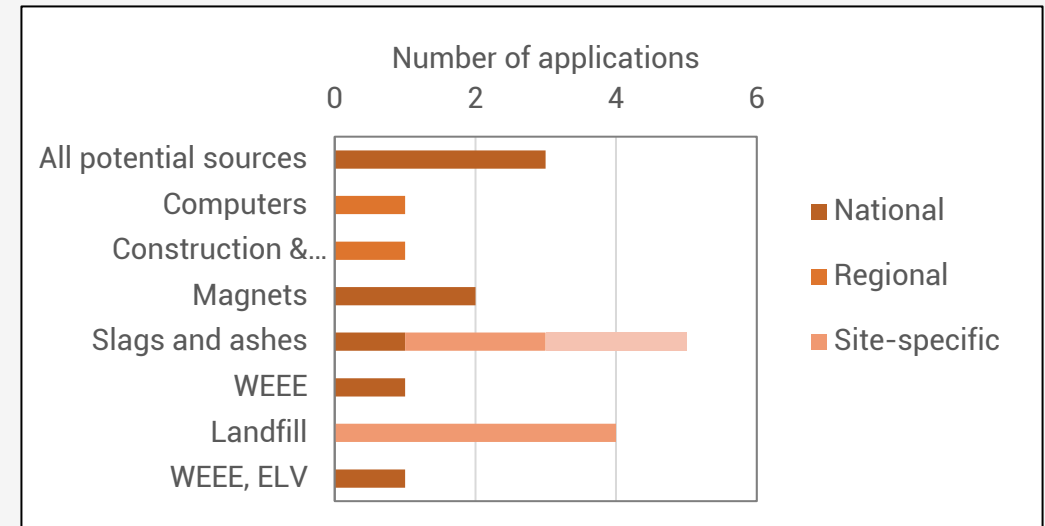
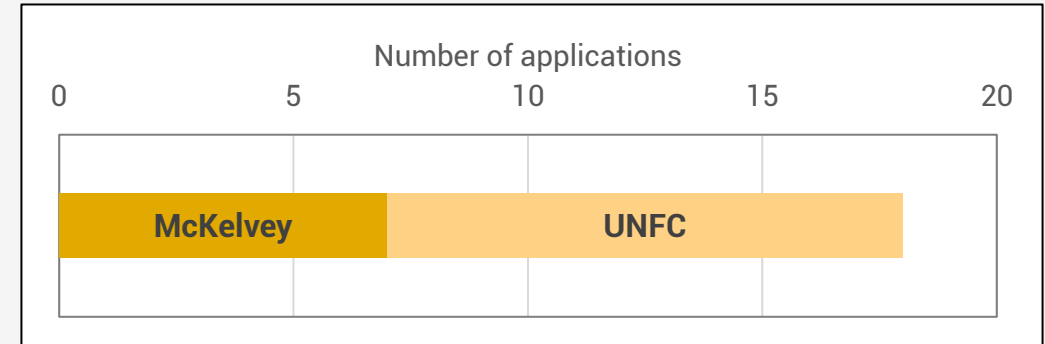
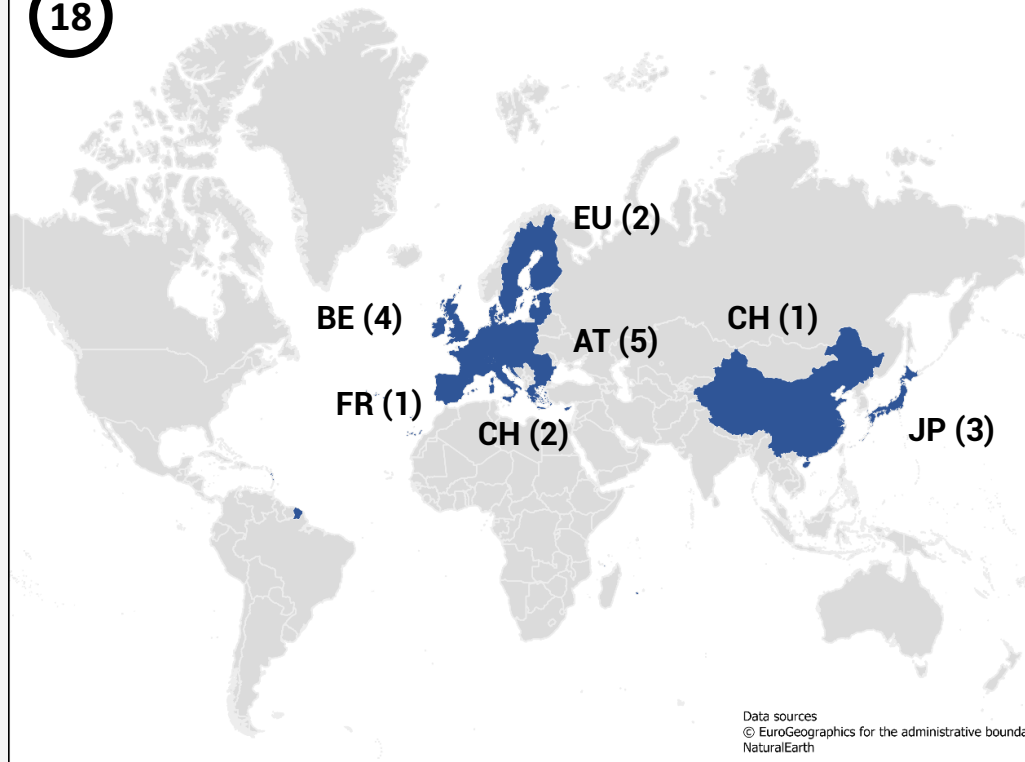
Post-consumer residues

Classifications



Application of classifications to post-consumer residues

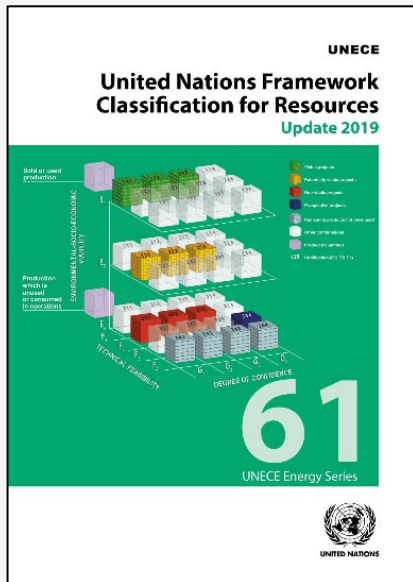
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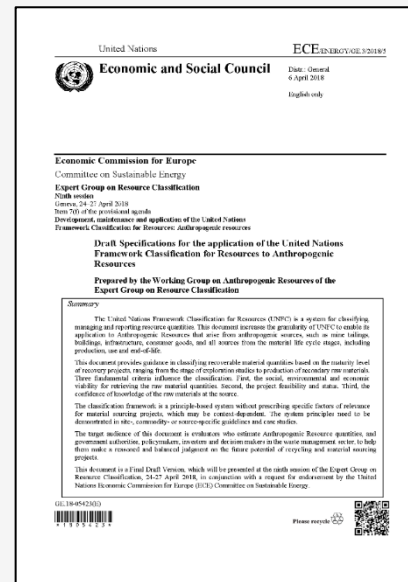
UNFC documents



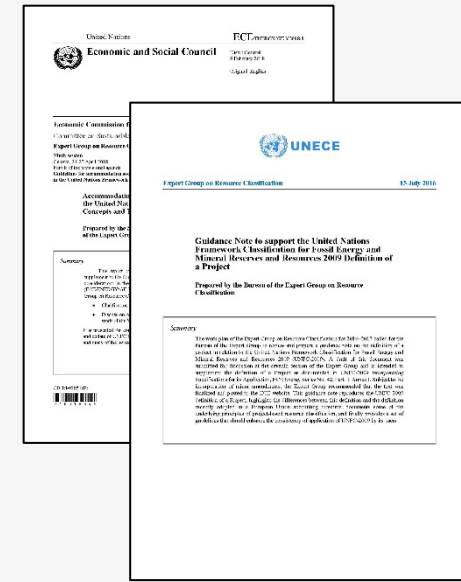
UNFC 2019 Generic principles



Specifications to apply UNFC to Anthropogenic Resources



Guidelines



Take-home-messages



- UNFC basics
 - UNFC is a tool for classifying recycling projects by maturity level.
 - UNFC discloses the enablers & barriers to develop the recycling project.
 - UNFC can be used for project pipeline management.

- Application of UNFC to anthropogenic resources
 - Successfully applied to mining and post-consumer residues.
 - UNFC is tailored for site-specific projects.
 - UNFC might be also attractive for resource estimates on national level.

Thank you!

Ulrich Kral
Chair of Anthropogenic Resource WG

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