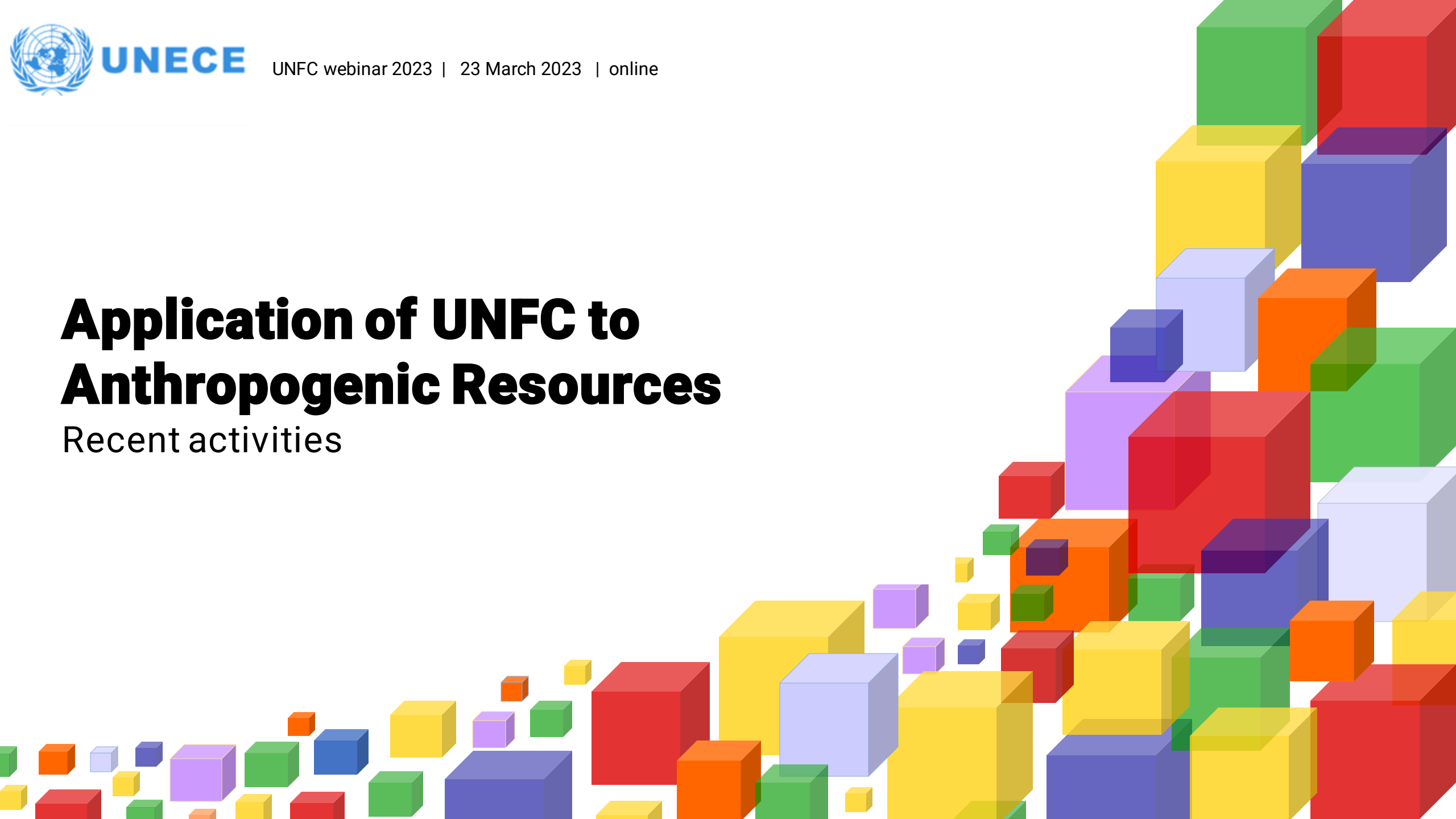
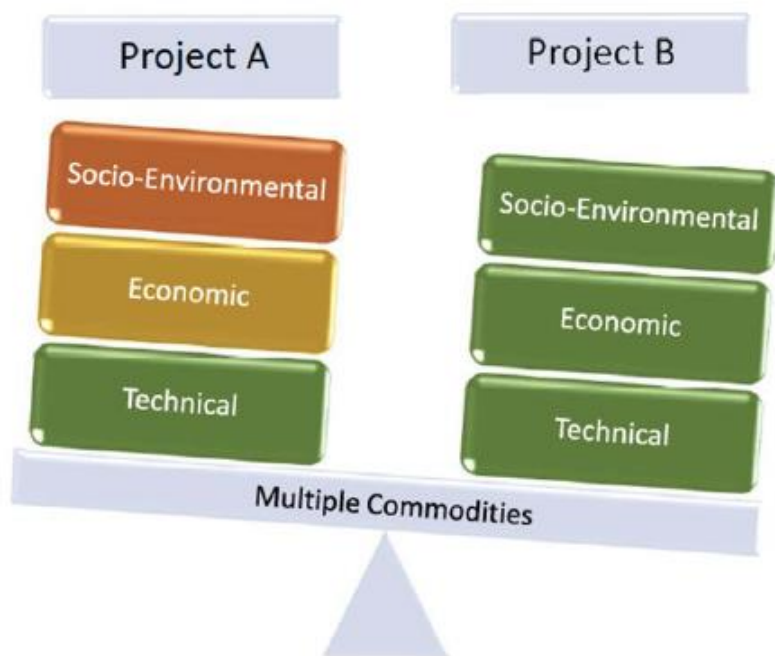


Application of UNFC to Anthropogenic Resources

Recent activities





Why?

- Sustainable, secure and affordable raw material supply.
- Primary raw materials dominate the market, but secondary raw materials (SRM) become more important.

How?

- The production of SRM requires the development of recycling projects.
- De-risk recycling projects from costly failures and thus protect the investments.

What?

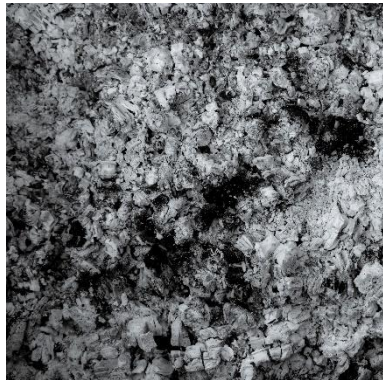
- Monitor the maturity of recycling projects over time.
- Use the UNFC, because it has a 360° view on project maturity.

Anthropogenic resources

Mining & metallurgical residues



Material stocks-in-use & post-consumer residues



Project classification

feedstock: mining & metallurgical residues

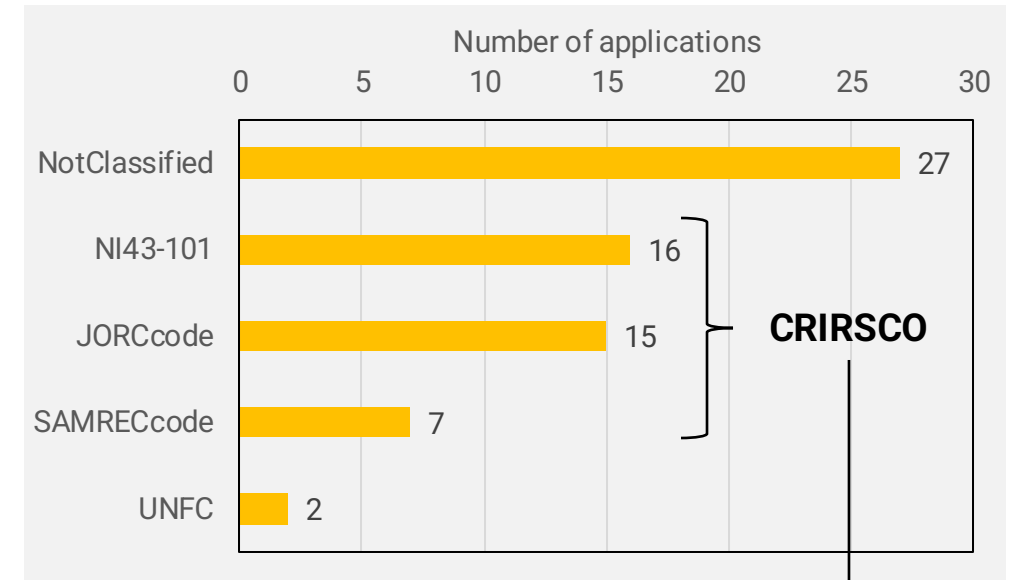
Manuscript in preparation

Storage sites for mining and metallurgical residues



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-ABBichler, S., Guglietta, D.S., Szabo, K., Zibret, G., Carvalho, T., Kral, U., Werner, T., Lemiere, B.



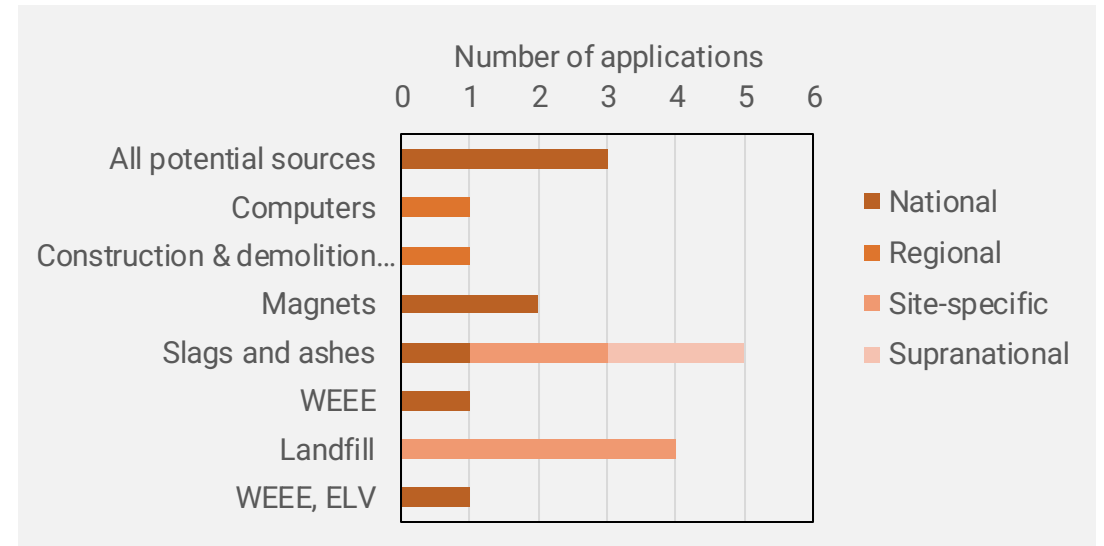
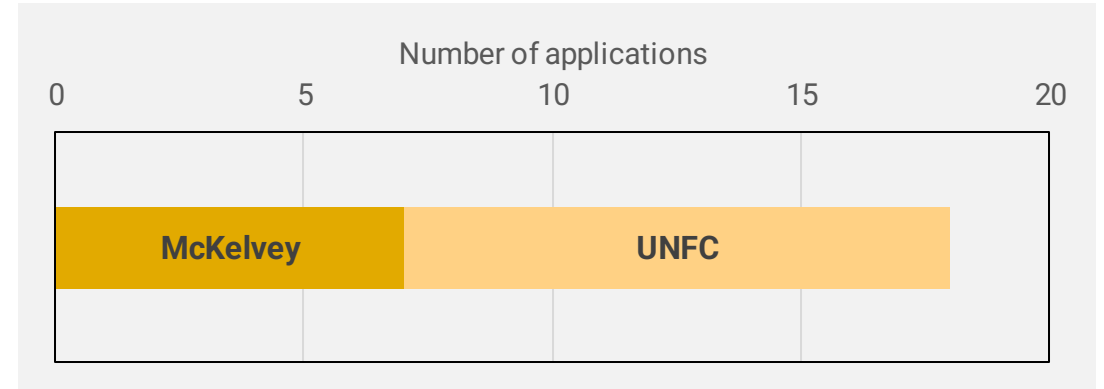
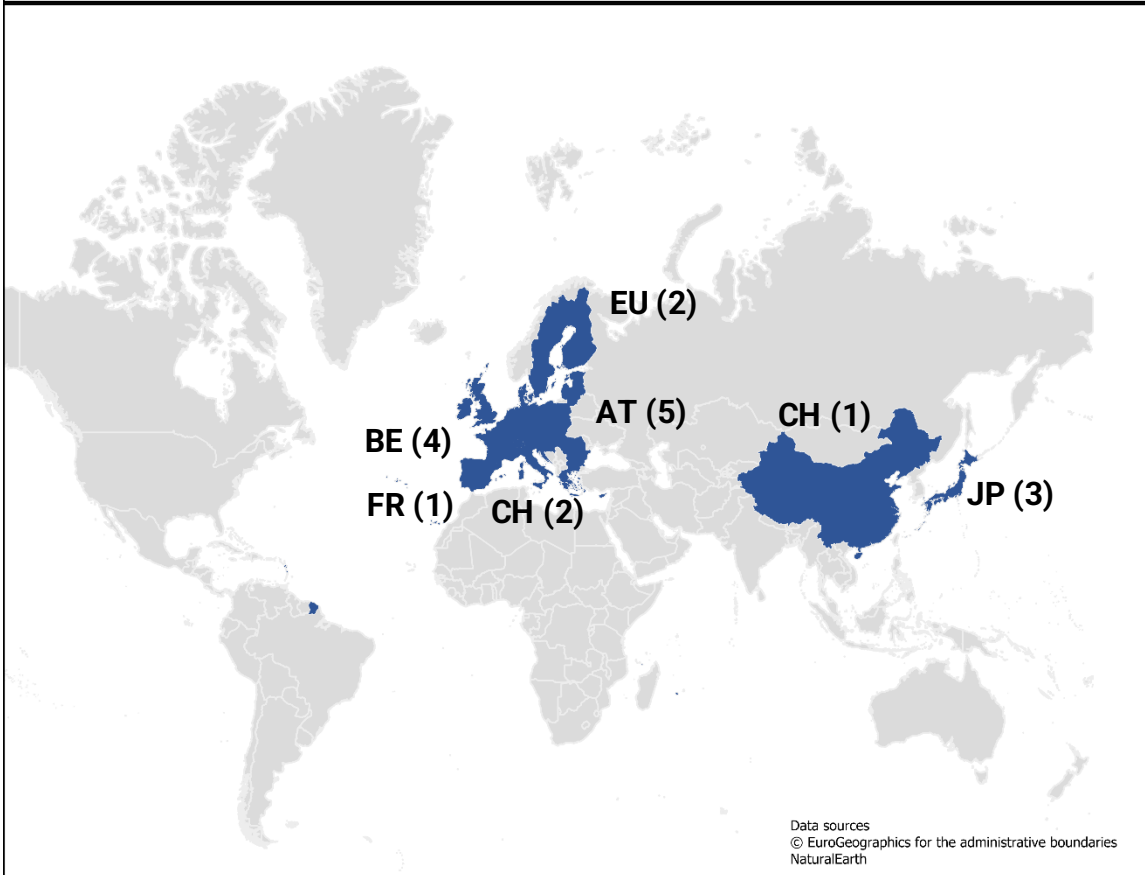
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UNFC

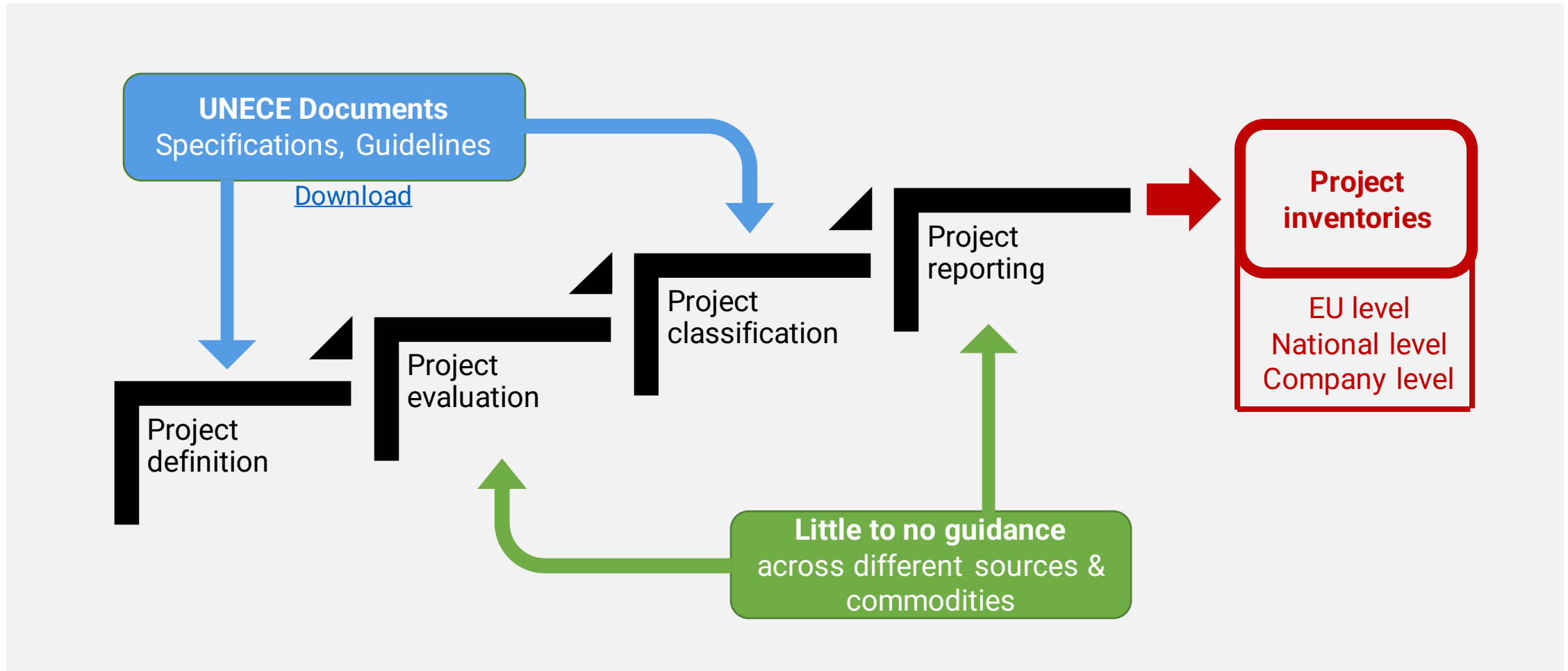
Project classification

feedstock: post-consumer residues

Application of classifications to post-consumer residues



Essentials for monitoring project maturity



Take-home-messages

(1) UNFC in support of project maturity monitoring

- (1) Project inventories on company, national and EU level**
- (2) Recycling projects can be compared on a common playing field**
- (3) A 360° view on project maturity**

(2) UNFC application

- (1) Successfully tested in various case studies**
- (2) Closing the resource data gap through further UNFC applications**

(3) A need for standardization & harmonization

- (1) Project evaluation**
- (2) Project reporting**



Thank you!

Ulrich Kral
Chair of UNECE EGRM Anthropogenic Resource WG

UNECE

Date 23 | 03 | 2023, Geneva

