

Update on Anthropogenic Resource WG activities



RESOURCE MANAGEMENT WEEK 2021

ENABLING SUSTAINABILITY PRINCIPLES IN RESOURCE MANAGEMENT



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Today's topics



- **Appointment of WG Chair and Members**
- **WG engagements**
 - European expert network “Mining the European Anthroposphere”
 - Updating the “Specifications to apply UNFC to Anthropogenic Resources”
→ *TAG Report*
 - Consulting a consortium for EIT Raw Materials KAVA project proposal
→ *Separate presentation*
- **UNFC related dissemination activities**
 - 3 Research papers → *Separate presentations*
 - 2 Conference presentations
 - 2 Webinar presentations

Appointment of WG Chair and Members

Procedure



Appointments with respect to [Terms of Reference](#)

- **WG Chair, 2021/23**
 - Nomination phase: April 2021.
 - Acceptance by nominated candidate: Ongoing.
- **WG Members, 2021/22**
 - Confirmation of WG Membership
 - New member: Helmut Rechberger, Professor for Resource Management, TU Wien

WG Members



Name (alphabet. order)	Affiliation	Country
Heiberg, Sigurd	Petronavit	Norway
Heuss-Abbichler, Soraya	Ludwig-Maximilians-Universität München	Germany
Hilton, Julian	Alleff Group	United Kingdom
Horváth, Zoltán	Mining and Geological Survey of Hungary	Hungary
Kral, Ulrich (Chair) *	Environment Agency Austria	Austria
Krook, Joakim	Linköping University	Sweden
Laner, David	University Kassel	Germany
Müller, Sandra	Fachhochschule Nordwestschweiz	Switzerland
Osmani, Mohamed	Loughborough University	United Kingdom
Rechberger, Helmut	Technische Universität Wien	Austria
Stegemann, Julia	University College London (UCL)	United Kingdom
Szabó, Katalin	Mining and Geological Survey of Hungary	Hungary
Wäger, Patrick	Swiss Federal Laboratories for Materials Science and Technology (EMPA)	Switzerland
Winterstetter, Andrea	Flemish Institute for Technological Research (VITO)	Belgium
Wittmer, Dominik	EC Joint Research Center Ispra	Italy

* Pending, because engagement for 2021/22 is subject of employer approval.

“Mining the European Anthroposphere”

Pan-European Expert Network



2015	2016	2017	2018	2019	2020	2021
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1st UNFC case studies

on anthropogenic resources

◆ **EGRM Working Group
on Anthropogenic Resources**

◆ **Specifications to apply UNFC
to Anthropogenic Resources**



MINEA – a pan-European expert network



180 experts from 30 countries

Assessment and Classification of Anthropogenic Resources

[Summary](#)

Anthropogenic Resource Assessment

Knowledge base



Key objectives:

1. Relating current knowledge levels, gaps and future needs to assessments of viability of anthropogenic resource recovery.
2. Reviewing case studies that demonstrate anthropogenic resource assessment and classification.

Download

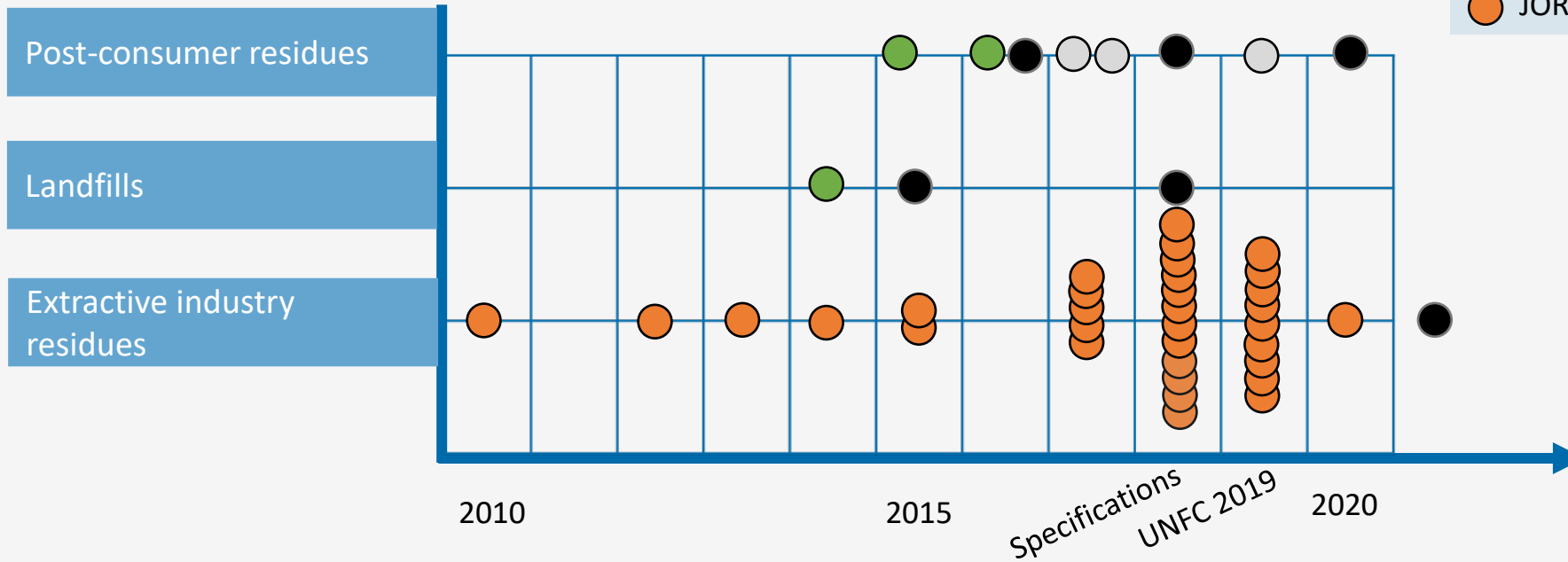


<https://doi.org/10.5281/zenodo.3739164>

Case study review



50 case studies in total



Classification (code):

- UNFC
- McKelvey
- Not standardized
- JORC / NI 43-101 / SAMREC, -VAL

Data taken from: Blasenbauer, D., A. Bogush, T. Carvalho, P. Cleall, C. Cormio, D. Guglietta, J. Fellner, M. Fernández-Alonso, S. Heuss-Aßbichler, F. Huber, U. Kral, M. Kriipsalu, J. Krook, D. Laner, J. Lederer, B. Lemièrre, G. Liu, R. Mao, S. Mueller, M. Quina, D. Sinnett, J. Stegemann, M. Syc, K. Szabó, T.T. Werner, E. Wille, A. Winterstetter, and G. Žibret (2020). Knowledge base to facilitate anthropogenic resource assessment (MINEA Deliverable). COST Action Mining the European Anthroposphere (MINEA). DOI: <https://doi.org/10.5281/zenodo.3739164>

Management of Anthropogenic Resources

Strategic roadmap



5 action areas

1. Developing case studies
2. Harmonizing and developing anthropogenic resource assessment, classification and reporting
3. Providing information systems
4. Implementing quality assurance systems
5. Establishing supporting networks & structures

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<https://doi.org/10.5281/zenodo.3739269>

UNFC related dissemination activities



- **MINEA Final Conference**, 20-21 Feb 2020, Italy.
<http://conference.minea-network.eu/>
- **UNECE Webinar**: Application of UNFC to minerals and anthropogenic resources: Sustainable management of raw material resources, 26 August 2020.
- **International Conference on Management of Naturally Occurring Radioactive Material (NORM) in Industry**, 19-30 Oct 2020.
Workshop on Phosphates for sustainable development: Fertilizers and phosphogypsum in the circular economy.

Next talks

Wed, 28. April 2021



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N°	Title	Facilitator
1	Resource classification in the context of circular economy: Case study review	Winterstetter
2	Minerals and materials recovery from mining and metallurgical residues: Evidence review	Cormio
3	UNFC application on tailings mining project: Conventional and sustainable perspectives	Suppes
4	Screening and assessment of tailing mining projects in compliance with UNFC	Heuss-Aßbichler
5	Project proposal: Advanced Resource Exploration & Assessment Solutions (AREAS)	Cormio

Thank you!

Ulrich Kral
Chair of EGRM Anthropogenic Resource Working Group

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Date 28 | 04 | 2021, Geneva



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