

Economic Commission for Europe

Committee on Sustainable Energy

Expert Group on Resource Management

Tenth session

Geneva, 26 April to 30 April 2021

Item 11 of the provisional agenda

Communications, promotion and outreach

Communications, promotion and outreach and activities of the Communications Working Group in 2020–2021

1. The Expert Group on Resource Management agreed to establish a Communications Sub-Committee at its first session, April 2010. The Sub-Committee is a subgroup of the Expert Group. It was further agreed that the Sub-Committee would be established by and report to the Bureau of the Expert Group between meetings of the Expert Group.
2. The terms of reference of the Communications Sub-Committee as approved by the Expert Group at its fifth session in 2014 are contained in Annex I to ECE/ENERGY/GE.3/2014/6. Communications Sub-Committee was renamed as Communications Working Group (CWG) by the Expert Group Bureau in 2017.
3. The membership of the Communications Working Group is provided in Annex I.
4. This document provides an update on the education and outreach activities undertaken since the 12th session of the Expert Group.

I. Communications and education strategy

5. The revised Communications and Education Strategy developed by the Communications Working Group has the following key elements:

- Objectives
 - Spread the word on United Nations Framework Classification for Resources (UNFC) and United Nations Resource Management System (UNRMS)
 - Attract experts to the various Working Groups and other activities of the Expert Group
- Stakeholder groups and target audiences
 - Policymakers and experts in
 - National Governmental institutions
 - Regional inter-governmental bodies
 - International organizations
 - Professional associations
 - Financial organizations

- Industry
 - Accademia
 - Scientific community
 - Individual experts and researchers
 - Students
 - Media and influencers
 - Local communities
 - General public
- Communication architecture
 - Vision Statement
 - Mission statement
 - Themes
 - A new narrative for resource management
 - Promote innovation in resource management
 - Leverage smart financing
 - Develop a diverse and inclusive human talent pool
 - Empower communities
- Key messages
 - UNFC and UNRMS are the unique systems for sustainable management of all resources
 - Assuring People-Planet-Prosperity hinged development
 - Connecting to Food-Water-Energy priorities
- Partners
 - European Commission
 - African Union Commission
 - Member States
- Channels and activities
 - Promotion at conferences and workshops
 - Webinars
 - Publications and papers
 - Websites
 - Brochures
 - Social media

II. Current activities

6. Since issuing its report to the tenth session of the Expert Group on Resource Classification, the Communications Working Group has continued to conduct its work remotely due to COVID-19 restrictions through regular e-mail correspondence and quarterly teleconferences. There has been no face to face meeting since April 2019. The communication strategy has changed from face to face workshops to the development of online webinars to promote the different activities of the expert group of the EGRM. Annex II has the list of conferences and other events in 2019-2021 where UNFC and UNRMS was or will be presented or promoted.

7. The critical education and outreach activities undertaken by the Communications Working Group include promotion of activities related to updates to the engagements with the expert group and broader public on updates of the UNFC and UNRMS specifications. During 2019-2021, the CWG focused on increasing the outreach with the development of webinars and through active engagement with organizations and different stakeholders interested in the application of UNRMS and UNFC.

8. The communications working group promoted the creation of the Resource Management Young Member Group (RMYMG), a subgroup of EGRM, established to utilize the perspectives and skills of young professionals to develop and apply UNFC and UNRMS and to provide a platform to educate young students and professionals on the importance of sustainable resource management and how to apply UNFC and UNRMS to develop energy and mineral resource endowments to meet the SDGs. A proposal on the RMYMG was submitted to the EGRM Bureau in March 2021 and obtained approval. There was full support for including young professionals in the various Working Groups.

9. Another initiative of the communication working group was to contact communities impacted by the Environmental and Social aspects of extractive resources. The objective was to enrich the Expert group discussions on the E- axis with the insight of these communities on resource management and sustainable development issues. Engagements with the First Nations Major Projects Coalition (FNMPC) were initiated in 2020 and have resulted in the interest of the FNMPC to participate in EGRM activities.

10. The CWG has developed a stakeholder survey for the UNRMS. At the EGRM meeting in April 2019, the Expert Group recommended engaging with new stakeholders, including developing countries, the renewable energy sector and statistics users. A pilot survey has been developed to survey the attendees to the EGRM meeting on 26-30 April 2021.

11. The CWG has started a new initiative called "Digital UNFC: Uberization" to promote the development of digital applications for UNFC to facilitate the use of UNFC amongst practitioners. Different software providers have expressed their interest in the development of a digital application for UNFC. Developing a digital application for UNFC is entirely voluntary for software vendors with the technology and capability to do so. UNFC documentation is open to the public. Therefore, any company can develop an application and offer it to interested stakeholders. UNFC cannot provide any economic support for these developments. The CWG has continued to actively engage with interested companies to encourage the development of such a tool. This development includes tests in existing UNFC projects such as in Mexico.

12. Initiatives for the development of pilot studies on the application of the UNFC has continued through the CWG membership with potential pilot projects, one in mining with the National Mining Agency (ANM), Colombia.

13. The CWG has continued its support to the initiative launched by the Expert Group on Resource Management (EGRM) discussed and agreed at its meeting in April 2019 to promote the participation of women in resource management. The CWG will continue to support the activities of Woman in Resource Management as required.

A. Conferences and workshops

14. The critical focus of the Working Group continues to be the promotion of UNFC and UNRMS, including an understanding of how the system works for all energy and raw material sectors, including renewable energy. During 2019-2020 due to the Covid-19 restrictions, the CWG focused on identifying opportunities for webinars and online workshops to promote UNFC and UNRMS. A list of the conferences at which a presentation on UNFC and/or the Expert Group's work was delivered in 2019–2021 is provided in Annex II.

15. Several webinars were organized in 2019-2021

- Application of UNFC to Petroleum Total Resource Management: Status and outlook, July 2020
- Application of UNFC to Minerals and Anthropogenic Resources: Sustainable management of raw material resources, August 2020;
- Sustainable and integrated natural resource management, September 2020;
- The role of nuclear energy resources in sustainable development, September 2020;
- Overcoming barriers to scaling up Renewable Energy, September 2020;
- Women in Mining: Global Perspective, October 2020
- How the United Nations Framework Classification for Resources (UNFC) can help channel investments into energy and resource projects for sustainable development, March 2021.

16. A copy of all the presentations delivered at the workshops is posted on the UNECE website. Where appropriate, UNECE press releases are issued immediately before or immediately following the close of the event.

B. Presentations, articles and other promotional and educational material

17. The following press releases, which are available to view on the UNECE website, were issued by UNECE in 2019–2020:

2019

- As Europe races ahead with electric vehicles, UN Framework helps manage critical raw materials for batteries <https://www.unece.org/?id=51657>
- Mexico tests use of UNFC for the assessment of petroleum projects <https://www.unece.org/info/media/news/sustainable-energy/2019/mexico-tests-use-of-unfc-for-the-assessment-of-petroleum-projects/doc.html>
- Africa: world leader in implementing a UNFC-based continental system for sustainable resource management <https://www.unece.org/info/media/news/sustainable-energy/2019/africa-world->

leader-in-implementing-a-unfc-based-continental-system-for-sustainable-resource-management/doc.html

- UNFC wind energy standards released for public comment until 21 July 2019 <https://www.unece.org/info/media/presscurrent-press-h/sustainable-energy/2019/unfc-wind-energy-standards-released-for-public-comment-until-21-july-2019/doc.html>
- UNECE helps improve data integration for sustainable energy and water resource management in South-East Europe and Central Asia <https://www.unece.org/info/media/news/sustainable-energy/2019/unece-helps-improve-data-integration-for-sustainable-energy-and-water-resource-management-in-south-east-europe-and-central-asia/doc.html>
- UNFC solar energy specifications open for public comment 12 July 2019 <https://www.unece.org/info/media/presscurrent-press-h/sustainable-energy/2019/unfc-solar-energy-specifications-open-for-public-comment/doc.html>
- The growth we want is sustainable: harnessing innovation for a circular economy for all <https://www.unece.org/info/media/news/trade/2019/the-growth-we-want-is-sustainable-harnessing-innovation-for-a-circular-economy-for-all/doc.html>
- New UN standards for assessment of solar and wind energy resources could spur investment in renewables <https://www.unece.org/info/media/presscurrent-press-h/sustainable-energy/2019/new-un-standards-for-assessment-of-solar-and-wind-energy-resources-could-spur-investment-in-renewables/doc.html>
- UN Framework Classification helps EU to manage raw materials for batteries and shift to circular economy <https://www.unece.org/info/media/news/sustainable-energy/2019/un-framework-classification-helps-eu-to-manage-raw-materials-for-batteries-and-shift-to-circular-economy/doc.html>

2020

- Securing critical raw materials supply is key to the response to COVID-19 <https://www.unece.org/info/media/presscurrent-press-h/sustainable-energy/2020/securing-critical-raw-materials-supply-is-key-to-the-response-to-covid-19/doc.html>
- UNECE issues guidelines and best practices for small businesses in critical raw material supply to assure post-COVID-19 resilience <https://www.unece.org/info/media/presscurrent-press-h/sustainable-energy/2020/unece-issues-guidelines-and-best-practices-for-small-businesses-in-critical-raw-material-supply-to-assure-post-covid-19-resilience/doc.html>
- UNECE tools and resources help countries reap the benefits of trade for their sustainable development strategies <https://www.unece.org/info/media/news/trade/2020/unece-tools-and-resources-help-countries-reap-the-benefits-of-trade-for-their-sustainable-development-strategies/doc.html>
- Finland issues guidelines for the application of UNFC for harmonized natural resource management <https://www.unece.org/?id=55450>
- Sustainable raw material management to support the European Green Deal <https://www.unece.org/info/media/news/sustainable-energy/2020/sustainable-raw-material-management-to-support-the-european-green-deal/doc>

- UNECE suggests policy initiatives to foster Women Entrepreneurship in Natural Resource Management <https://unece.org/environment-and-gender/press/unece-suggests-policy-initiatives-foster-women-entrepreneurship>

18. UNFC was referenced in many books, book chapters, journal papers and articles in 2019–2021. A partial list is provided in Annex III.

D. Website and other promotional material

19. Changes continue to be made to update and improve the Expert Group and UNFC web pages on the UNECE website¹, notably about accessibility, re-organization of existing information and the addition of new material as regularly as possible.

III. Future work plans

20. The Communications Working Group will work according to its Terms of Reference. It will continue its efforts to implement the agreed Communications and Education Strategy, focusing on the roll-out of the update on UNRMS.

21. Regular and/or annual meetings of relevant societies and professional associations will be identified to ensure that a presentation on UNFC is included.

22. Efforts will continue to prioritize webinars and events to attend in 2021-2021, provided Covid-19 restrictions allow it.

23. The Communications Working Group will facilitate various Expert Group sub-groups in reaching out to appropriate stakeholders. The Communications Working Group will continue attracting new experts to Expert Group annual meetings in crucial areas. Some of the new efforts will be related to contacting associations that could contribute to the environmental and social aspects of UNFC and UNRMS.

24. Update promotional materials consistent with requirements of the Expert Group on Resource Management.

25. The CWG will continue to promote the use of UNFC for digital applications.

26. **Work to be undertaken:**

- (i) Support the development of the vision and mission statements of the Expert Group.
- (ii) Develop and implement a strategy to attract experts to voluntarily work in the various Working Groups of the Expert Group.
- (iii) Develop, maintain, and update standard presentations on UNFC and UNRMS.
- (iv) Conduct webinars on UNFC and UNRMS.
- (v) Contribute to workshops, seminars, and other outreach events on UNFC and UNRMS, e.g., developing programmes and agendas. Participation in events would be subject to the availability of extrabudgetary resources and travel restrictions due to Covid-19.
- (vi) Identify events at which papers on UNFC and UNRMS could be presented and contribute to the writing of the papers and presentations.
- (vii) Support the development of news stories and other material for ECE's web pages on sustainable resource management.

¹ <https://unece.org/sustainable-energy/unfc-and-sustainable-resource-management>

(viii) Develop promotional materials such as brochures and leaflets.

27. **Deliverables:**

- (i) Annual report on the education and outreach activities.
- (ii) Updated standard presentations on UNFC and UNRMS.
- (iii) Regular webinars.
- (iv) Develop programmes/agendas for workshops, seminars and other outreach events on UNFC and UNRMS. Participate in events subject to the availability of extrabudgetary resources.
- (v) Identify events to promote UNFC and UNRMS and prepare or contribute to papers and presentations.
- (vi) New stories and other material for the ECE website and promotional material such as brochures and leaflets.

28. **Timeline:**

- (i) Annual reports of the Communications Working Group presented to the Expert Group: April 2020 and April 2021.
 - (ii) Updated standard presentations on UNFC and UNRMS posted to the ECE website: April 2020 and ongoing.
 - (iii) Webinars organized: April 2021 to ongoing.
 - (iv) Contributed to conferences, workshops and seminars: April 2021 to ongoing.
 - (v) News stories and promotional materials on UNFC and UNRMS: April 2021 and ongoing.
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Annex I

Communications Working Group Members

Chair

Carolina COLL, CGG

Members

Benoit CHARPENTIER, Total

Cristina ROBINSON, SPE Chair of Swiss Section, Chair of the UNFC Woman Group

David MACDONALD, Chair, Expert Group on Resource Management

Hua YANG, Petrochina, China

Jennifer McCOY, Ernst & Young LLP

Anita STEIN, Communications Manager, European Federation of Geologists

Maria Isabel FERNANDEZ, Independent

Per BLYSTAD, Petronavit a.s.

Rui ZHENHUA, Massachusetts Institute of Technology (MIT)

Thomas SCHNEIDER, Ryerson University

George AJDANLIJSKY, University of Mining and Geology "St. Ivan Rilski"

Ulises NERI, Ministry of Economy of Mexico

Secretary, Expert Group on Resource Management

Annex II

Conferences and other events in 2019-2021 at which UNFC and UNRMS was or will be presented or promoted

2019

1. 33rd Geological Society of Norway Winter Meeting, Bergen, Norway, 7–9 January 2019
2. IAEA Interregional Workshop on Life Management and Governance of Uranium Production and Other Activities Involving Naturally Occurring Radioactive Materials, Bangkok, Thailand, 12-19 January 2019
3. IAEA Technical Meeting on Uranium Production Feasibility Studies: Processing, Economic, Social and Environmental Aspects, Vienna, Austria, 21-25 January 2019
4. Presentation to the Chairman and Upper Management, King Abdullah City for Atomic and Renewable Energy (KACARE), Riyadh, Kingdom of Saudi Arabia, 26 January 2019.
5. Workshop on Case Studies on Chinese UNFC Bridging Documents, Beijing, China, 29 January 2019
6. IGA, World Bank and IRENA UNFC Geothermal Workshop, Addis Ababa, Ethiopia, 4–7 February 2019
7. SPE ATW Petroleum Resources – Latest and Best Practices, Abu Dhabi, United Arab Emirates, 18–19 February 2019
8. PDAC 2019, Toronto, Canada, 3–6 March 2019
9. IAEA Regional Training Course on Uranium Exploration and Mining – Aligning to Sustainable Development Goals Agenda, Addis Ababa, Ethiopia, 4–8 March 2019
10. CCOP-DGM-ASOMM Workshop for ASEAN Mineral Resource Evaluation, Vientiane, Lao PDR; 11–14 March 2019
11. UNEP General Assembly: UNFC-AMREC Side Event, Nairobi, Kenya, 11–15 March 2019
12. Petrad Training Course on National Management of Petroleum Resources, Application of UNFC for Resource Management, Stavanger, Norway, 11–22 March 2019
13. Political and Technical Dialogue on Geothermal, Tegucigalpa, Honduras, 22 March 2019
14. Presentation to St Petersburg University, Russian Federation. 30 March 2019
15. International Electrotechnical Commission (IEC) Technical Committee 114 Plenary Meeting, Delft, Netherlands, 8–12 April 2019
16. European Federation of Geologists (EFG) and Petrad Training Course on Application of UNFC for Resource Management, Geneva, Switzerland, 27–28 April 2019
17. UNECE Resource Management Week 2019 including Expert Group on Resource Classification, Tenth session, Geneva, Switzerland, 29 April–3 May 2019
18. MINLAND Project Meeting, Vienna, Austria, 9–10 May 2019

19. IASB Workshop for IFRS Project Teams and Board of Advisors, London, United Kingdom, 13 May 2019
20. EuroGeoSurveys MREG meeting, Trondheim, Norway, 13–14 May 2019
21. All Energy Conference, Glasgow, Scotland, 15–16 May 2019
22. UNECE Committee on Sustainable Energy Open-ended Consultations, Geneva, Switzerland, 16 May 2019
23. Geological Survey of Estonia and Estonian Mining Society Conference on "Best practice guidelines for mineral exploration and mining perspectives in Estonia", Tallin, Estonia, 16–17 May 2019
24. ALTA 2019 Metallurgical Conference, Perth, Australia, 18–25 May 2019
25. European Innovation Partnership on Raw Materials (EIP) Sherpas Meeting, Brussels, Belgium, 20 May 2019
26. Meeting of the Turkish National Resources and Reserves Reporting Committee (UMREK) Commission, Ankara, Turkey, 24 May 2019
27. MIT International Conference on Applied Energy (ICAE), MIT A+B Symposium, Boston, United States, 22–24 May 2019
28. 81st EAGE Conference & Exhibition 2019, London, UK, 3–6 June 2019
29. AMDC Business Plan Meeting, Conakry, Guinea, 3–7 June 2019
30. Association of Chambers of Mines and Other Mining Associations Meeting, Yaoundé Cameroon, 10 June 2019
31. Raw Materials Information System (RMIS) Workshop, Ispra, Italy, 11–12 June 2019
32. ORAMA & JRC RMIS Joint Workshop on Data Optimisation for Primary & Secondary Raw Materials, Ispra, Italy, 12–13 June 2019
33. Meeting with Ministry officials re UNFC, Mexico City, Mexico, 13 June 2019
34. Workshop on the Pilot Programme for Classification of Oil and Gas Resources and Reserves in Mexico using UNFC, Mexico City, Mexico, 14 June 2019
35. Informal meeting on Sustainable Infrastructure and Mineral Resource Governance and Follow up to Fourth UN Environment Assembly, Neuchâtel Switzerland, 17–18 June 2019
36. IAEA RAF 2012 Project Regional Mid-Term Coordination Meeting, Arusha, United Republic of Tanzania, 24–28 June 2019
37. Workshop on validation of unified methodology for assessing potential of wind and solar energy in the CIS countries, Nur-Sultan, Kazakhstan, 26–27 June 2019
38. High Level Political Forum on Sustainable Development UNECE Side Event on Circular Economy for All, New York, United States, 9 July 2019
39. World Economic Forum Global Battery Alliance Circular Economy Working Group
40. Workshop on Key Performance Indicators and principles for a sustainable battery value chain, Geneva, Switzerland, 17 July 2019
41. Technical Working Group Meeting on AMDC Transition, Douala, Cameroon, 5–7 August 2019
42. Argentina Energy 2019 including Workshop on UNFC for sustainable management of nuclear fuel resources, Mendoza, Argentina, 20–22 August 2019

43. World Water Week, Stockholm, Sweden, 25–30 August 2019
44. UNECE-Ministry of Natural Resources (MNR) National Workshop on Sustainable Resources Management, Beijing, China, 31 August 2019
45. 50th Anniversary Conference of the Geological Society of Namibia, Windhoek, Namibia, 1-4 September 2019
46. Sixth International Congress on Environment and Social Responsibility in Mining, Santiago, Chile, 4–6 September 2019
47. Multi-stakeholder dialogue "Governance for mining of the 21st Century in the Andean countries", Santiago, Chile, 5 September 2019
48. Association of Geological and Mining Surveys of Iberoamerica (ASGMI) Meeting, Rio de Janeiro, Brazil, 10–12 September 2019
49. AMREC Stakeholder Working Group Meeting, Windhoek, Namibia, 10–12 September 2019
50. SCRREEN CRM Validation Workshop, Brussels, Belgium, 10–12 September 2019
51. 5th Meggen Raw Material Days, Meggen, Germany, 11–13 September 2019
52. Oil and Gas Forum, Tyumen, Russian Federation, 17–19 September 2019
53. 46th International Association of Hydrogeologists (IAH) Congress, Malaga, Spain, 22–27 September 2019
54. WEF Sustainable Development Impact Summit including Workshop on Scaling Sustainable Battery Value Chains, New York, United States, 23–24 September 2019
55. Twenty-eighth session, UNECE Committee on Sustainable Energy, Geneva, Switzerland, 25–27 September 2019
56. SPE ATCE, Calgary, Alberta, Canada, 30 September–2 October 2019
57. Tenth International Forum on Energy for Sustainable Development, Bangkok, Thailand, 7–8 October 2019
58. IAEA International Conference on Climate Change and the Role of Nuclear Power, Vienna, Austria, 7–11 October 2019
59. Intergovernmental Forum on Mining, Metals, Minerals and Sustainable Development Annual General Meeting, Geneva, Switzerland, 8–11 October 2019
60. China Mining Conference and Exhibition 2019, Tianjin, China, 9–11 October 2019
61. National Data Repository 2019, Utrecht, the Netherlands, 14–17 October 2019
62. Sustainable management of PRIMARY raw materials through a better approach in Life Cycle Sustainability Assessment (SUPRIM) Conference "How better to account for your primary raw materials in your LCA", Brussels, Belgium, 22 October 2019
63. UNECE Working Group on Integrated Water Resources Management, Geneva, Switzerland, 22–24 October 2019
64. World Resources Forum, Geneva, Switzerland, 22–24 October 2019 (featuring EIT Raw Materials and INTRAW (supported by UNECE, WRF, EFG, ESM Foundation and EGS) Executive Short Course on Resources Management using UNFC, 22 October; and UNECE-ESM Foundation-EIT Raw Materials Workshop on "Towards an integrated sustainable resource management" 23 October 2019)

65. African Union Specialized Technical Committee (STC) Meeting, Addis Ababa, Ethiopia, 25 October 2019
66. 55th CCOP Annual Session, Chiangmai, Thailand, 5–6 November 2019
67. UNFC Workshop, Chiangmai, Thailand, 7–8 November 2019
68. IAEA International Technical Cooperation Project Conference "Deploying Technology and Management for Sustainable Uranium Extraction Projects, Nanchung, China, 11–15 November 2019
69. British Hydropower Association Annual Conference, Glasgow, Scotland, 13–14 November 2019
70. African Forum on Mining, Accra, Ghana, 13–15 November 2019
71. Ministry of Energy Conference on Implementation of international standards for resource management in Kazakhstan, Aktau, Kazakhstan, 14–15 November 2019
72. Nordic-China Economic & Cultural Exchange Center Training by Petrad on "Oil and Gas Resources Management", Stavanger, Norway, 15 November 2019
73. European Commission Raw Materials Week 2019, Brussels, Belgium, 18–22 November 2019
74. 3rd EU Raw Materials Knowledge Base Event, Brussels, Belgium, 21 November 2019
75. ORAMA project final event with GeoERA: Improving European raw material data, Brussels, Belgium, 22 November 2019
76. 1st Angolan Mining Conference & Exhibition, Luanda, Republic of Angola, 20–21 November 2019
77. UNECE Sub-regional workshop on strengthening mine/tailings safety and preventing water pollution for Central Asian countries, Almaty, Kazakhstan, 20–21 November 2019
78. Geological Society of London (GSL) Environment Network Launch Event, London, United Kingdom, 21 November 2019
79. Seminar on Reserves and Resources, Bogota, Colombia, 27–29 November 2019
80. UN System Side Event for Sustainable Development Goal 9 "Driving innovation for low emission industrialization via digital technologies, partnerships and new business models" on 3 December during UN Climate Change Conference COP 25, Madrid, Spain, 2–13 December 2019

2020

1. Meeting with Nordic Mining re UNFC Mineral Case Studies, Oslo, 7 January 2020
2. 34th Nordic Geological Winter Meeting, Oslo, Norway, 8–10 January 2020
3. Application of UNFC to Geothermal and results of joint deployment project of UNECE, IGA, IRENA and World Bank to be presented at the Global Geothermal Alliance Meeting during Tenth Session of the IRENA General Assembly, Abu Dhabi, United Arab Emirates, 12 January 2020
4. United Nations Commission for Africa (UNECA) Expert Group Meeting (EGM) on the "Model for the Construction of an Africa Geological and Mineral Regional Geospatial Database and GIS infrastructure", Addis Ababa, Ethiopia, 22–24 January 2020

5. Application of UNFC to Geothermal Resources Training Course, Instituto Costarricense de Electricidad Headquarters, Guayabo de Bagaces, Costa Rica, 11–14 February 2020
6. Joint OECD/UNECE Seminar on System of Environmental Economic Accounting (SEEA) Implementation, Geneva, Switzerland, 13–14 February 2020
7. MINEA Scientific Conference, Bologna, Italy, 20–21 February 2020
8. Annual Conference of Aggregates Miners, Velence, Hungary, 5–6 March 2020
9. Second Informal meeting: Follow up UNEA4 / preparation UNEA5 on Sustainable Infrastructure and Mineral Resource Governance, Glion, Switzerland, 10–11 March 2020
10. Meeting of the Council on Foreign Relations of the Ministry of Natural Resources and Environment, Moscow, Russian Federation, 16 March 2020
11. GeoERA Mid-Term Review, 17 March 2020 (Virtual meeting)
12. Regional Forum on Sustainable Development for the UNECE Region, Geneva, Switzerland, 19–20 March 2020
13. First International Conference on Mineral Resources for Future Generations, Aachen, Germany, 2–3 April 2020
14. UNECE Carbon Neutrality Project Task Force Call, Virtual, 3 April 2020
15. EPFL Energy and Resources Forum 2020, Lausanne, Switzerland, 27 April 2020 (Virtual meeting)
16. World Geothermal Congress 2020, Reykjavik, Iceland, 26 April – 2 May 2020 (<https://pangea.stanford.edu/ERE/db/WGC/papers/WGC/2020/03035.pdf>)
17. UNECE Sustainable Energy Division briefing to EU Member States, Virtual, 6 May 2020
18. SPE OGRC Meeting, Virtual, 6 May 2020
19. UN Global Compact Academy "Perspectives from Europe on Leadership in a Global Crisis", Virtual, 12 May 2020
20. EuroGeoSurveys Mineral Resource Expert Group Meeting, Virtual, 16 May 2020
21. CNEA Webinars, "UNFC as a tool for the sustainable management of resources for nuclear fuel. Case study: Uranium resources in Argentina", 27 May 2020, 28 May 2020 and 2 June 2020
22. 82nd EAGE Annual Conference and Exhibition, Amsterdam, the Netherlands, 8–11 June 2020
23. OECD-Nuclear Energy Agency and World Nuclear Association Webinar Series "Building low-carbon resilient electricity infrastructures with nuclear power in the post-COVID era" 26 June
24. Mining and Geological Survey of Hungary meeting of officers in charge of national mineral resource inventory: Internal education on use of UNFC; bridging between national classification and reporting and international systems (UNFC, CRIRSCO family), Budapest, Hungary, 22 June 2020
25. World Resources Forum 2020, Accra, Ghana, 23–25 June 2020 (postponed to 2021)

26. OECD NEA Webinar "Unlocking financing for nuclear energy infrastructure", Virtual, 28 July 2020
27. UNECE EGRM Webinar "Application of UNFC to Petroleum Total Resource Management: Status and Outlook", Virtual, 29 July 2020
28. GeoUtrecht 2020 Virtual Conference "Knowledge Exchange for the Geoscience community in the heart of Europe", 24–26 August 2020 (UNFC presentation number 5 in Session 1.4-3 "Raw Materials and their societal relevance for Europe", 17:50 hrs - 19:05 hrs, 25 August)
29. UN Environment Programme (UNEP) Sub Regional Consultations on Mineral Resource Governance - Europe Region, Virtual, 25 August and 27 August 2020
30. Webinar on Application of UNFC to Minerals and Anthropogenic Resources: Sustainable management of raw material resources, Virtual, 26 August 2020
31. Congresso Luso-Moçambicano de Engenharia (CLME2020), Beira, Mozambique, 30 August–3 September 2020
32. Industrial R&D: Europe First?, Virtual, 8 September 2020
33. EGRM Webinar on Sustainable and integrated natural resource management, Virtual, 10 September 2020
34. Meggen Raw Material Days, Meggen, Germany, 16–18 September 2020 (Virtual Conference)
35. Eleventh International Forum on Energy for Sustainable Development, Georgia, September 2020 postponed to 2021
36. Rescheduled EGRM-11 hybrid in person and virtual session on UNFC and Renewable Energy in cooperation with UNECE, Group of Experts on Renewable Energy Seventh Session, Geneva, Switzerland, 22–25 September 2020
37. IAEA Scientific Forum on Nuclear Power and Clean Energy Transition, Virtual, 22–23 September 2020
38. IFEDC Efficient Development of Oil and Gas Driven by Digitalization, Technical Session on UNFC/PRMS: Sustainable Resources Management, Technology and Best Practice, Beijing, China, 28–29 September 2020
39. China Mining 2020, 22-24 October 2020
40. IAEA International Conference on the Management of Naturally Occurring Radioactive Materials (NORM) in Industry, Virtual, 19–30 October 2020
41. Central Mine Planning & Design Institute Ltd. (CMPDI) India Webinar on CBM Resource/Reserve Assessment, 29 September 2020
42. SPE Annual Technical Conference and Exhibition (ATCE), Denver, United States, 5–7 October 2020
43. Online Training Workshop on Guidelines and best practices for MSMEs to assure resiliency and progress towards a circular economy in sustainable resource management and critical raw material supply chain solutions, Virtual, 8 October 2020
44. Webinar on Women in Mining: Global Perspective, 15 October 2020
45. Virtual Workshop on Phosphates for Sustainable Development: Fertilizers and Phosphogypsum in the Circular Economy, 22 October 2020

46. Norwegian Geological Survey Mintel4EU Workshop on UNFC, Virtual, 29 October 2020
47. ESM Foundation and EPFL Workshop on Circular Economy for Batteries in Switzerland, Virtual, 30 October
48. 56th Coordinating Committee for Geoscience Programmes in East and Southeast Asia CCOP Annual Session, Virtual, 3–4 November 2020
49. GeoERA Conference, Virtual, 9 November 2020
50. 36th Session of the International Geological Congress, Delhi, India, 9–14 November 2020
51. International Round Table on Materials Criticality (IRTC) Business virtual workshop and Round Table "Building resilient economies - the role of policy", 17 November 2020
52. Young Geoscientists Forum (YGF-2020), Ghana, Virtual, 18 November 2020
53. UN Environment Management Group (EMG) Mineral Resource Governance Nexus Dialogue, Virtual, 17 November 2020
54. UNECE, EC DG GROW and EuroGeoSurveys Joint Virtual Workshop "UNFC Europe: Ensuring sustainable raw material management to support the European Green Deal", 19 November 2020
55. 29th Session of the Committee on Sustainable Energy, Geneva, Switzerland, 25–27 November 2020
56. Thematic Session, 56th CCOP Annual Session: Geoscience Towards New Normal and Future Earth, Virtual, 15-16 December 2020
57. Online Training Workshop: Women Entrepreneurship in Natural Resource Management, 17 December 2020

2021

1. UN High-level Roundtable on Extractive Industries – UNECE Region, Virtual, 20 January 2021
2. UK Cabinet Office and UK Department of International Trade Wilton Park Dialogue on Critical minerals trade and regulation, Virtual, 1–4 February 2021
3. UNECE Webinar "How UNFC can help channel investments into energy and resource projects for sustainable development", 11 March 2021
4. 57th Nigerian Mining and Geosciences Society International Conference, 14–19 March 2021
5. Argentina Mining On Line, 17–18 March 2021
6. Side event "A framework for international cooperation on sustainable resource management" organized by UK and UNECE as part of UNECE Cyber Monday, 19 April 2021
7. 69th Session of the Economic Commission for Europe "Promoting circular economy and sustainable use of natural resources in the UNECE region", 20-21 April 2021
8. UNECE Resource Management Week 2021, including Twelfth Session EGRM, Geneva, Switzerland, 26–30 April 2021
9. UN Global Roundtable on Extractive Industries, Virtual, 10 May 2021
10. Mining Ministries of the Americas Conference (CAMMA), Brazil, June 2012 tbc

11. UN High-Level Political Dialogue on Energy, New York, United States, September 2021
12. SPE Annual Technical Conference and Exhibition (ATCE), Dubai, UAE, 21–23 September 2021
13. Tyumen Oil and Gas Forum, Tyumen, Russian Federation, 21–23 September 2021
14. 30th Session, UNECE Committee on Sustainable Energy, 22–24 September 2021
15. Society of Exploration Geophysicists 91st Annual Meeting, Denver, Colorado, United States, 26 September – 1 October 2021
16. 8th Session, UNECE Group of Experts on Renewable Energy, 5–6 October 2021
17. COP26, Glasgow, Scotland, 1–12 November 2021
18. 23rd World Petroleum Congress, Houston, United States, 5–9 December 2021

Annex III

Selected UNFC and UMRMS related publications

2019-2021

1. Suppes, Rudolf, and Soraya Heuss-Aßbichler. "How to Identify Potentials and Barriers of Raw Materials Recovery from Tailings? Part I: A UNFC-Compliant Screening Approach for Site Selection." *Resources* 10.3 (2021): 26.
2. Purewal, Satinder, et al. "Mexico Pilot Project to Classify Oil and Gas Projects Using United Nations Framework Classification UNFC." SPE Annual Technical Conference and Exhibition. Society of Petroleum Engineers, 2019.
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4. Conti, Paolo, Marco Pellegrini, and Gioia Falcone. "Application of the UNFC classification to open-loop ground source heat pump systems: a case study." Proceedings of European Geothermal Congress, The Hague, 11–14 June. 2019.
5. Coll, Carolina. "Marco de Clasificación de la Naciones Unidas", Explora Minería, Recursos y Reservas para la exploración Minera de Colombia, ANM. 28th of November 2019, Bogota.
6. Falcone, Gioia, and Paolo Conti. "Regional and country-level assessments of geothermal energy potential based on UNFC principles." Proceedings.
7. Toquero, Fidel Juárez, et al. "Pilot project for the classification of Mexico's petroleum resources and reserves based on UNFC." (2020): 52-73.
8. Suppes, Rudolf, and Soraya Heuss-Aßbichler. "Resource potential of mine wastes: A conventional and sustainable perspective on a case study tailings mining project." *Journal of Cleaner Production* 297 (2021): 126446.
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12. Kral, Ulrich, and Andrea Winterstetter. "AVAILABILITY ASSESSMENT OF ANTHROPOGENIC RESOURCES: FROM PROSPECTION TO PRODUCTION." *SCIENCE TO SUPPORT CIRCULAR ECONOMY* (2018).
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