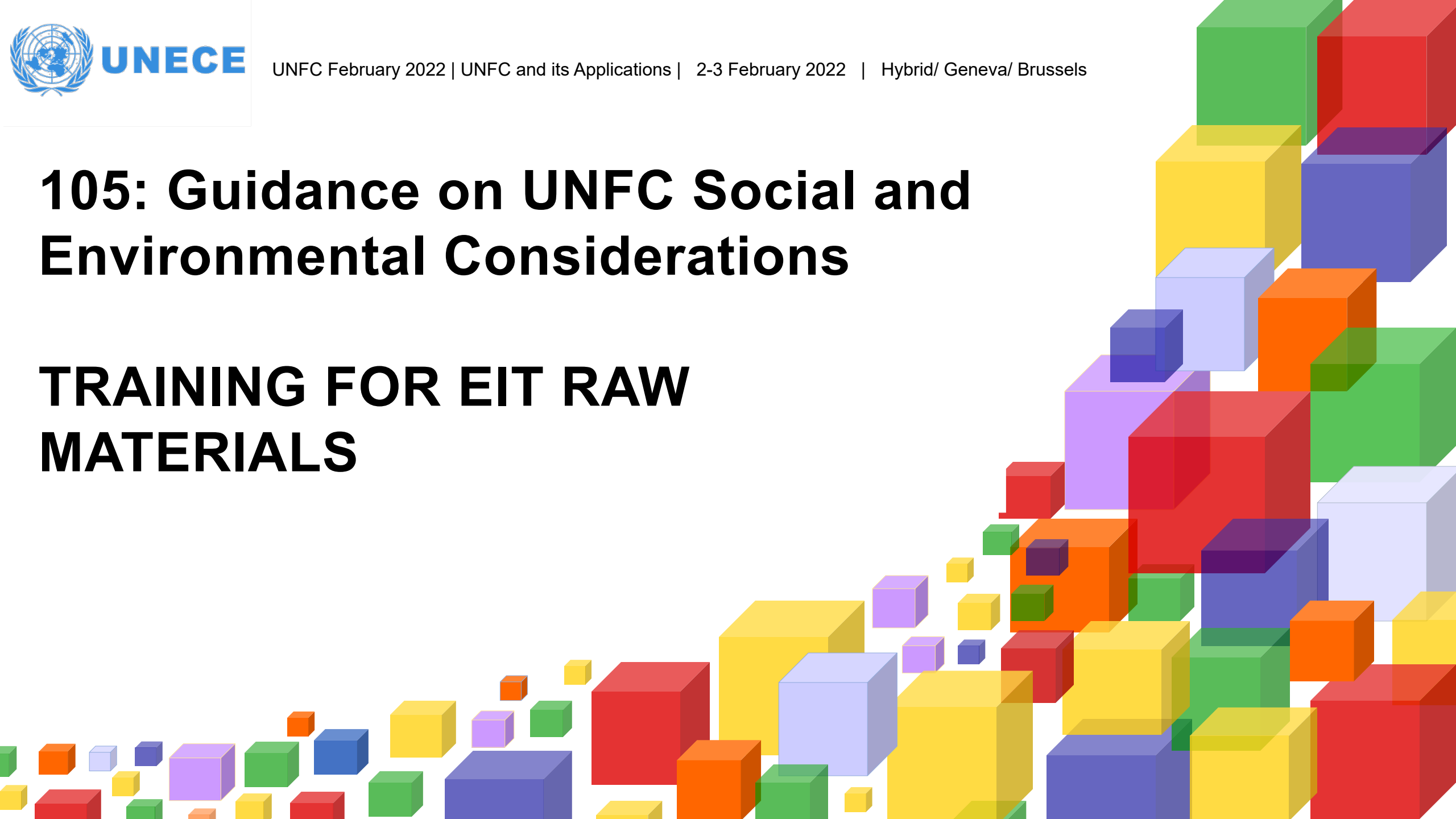


105: Guidance on UNFC Social and Environmental Considerations

TRAINING FOR EIT RAW MATERIALS



Why is the Social Licence to Operate again at no.1 in the 2021 list of Business Risks for the Resources Industries, where it has been for several years? How can this risk and liability be converted into a sustainable, tangible and intangible benefit using UNFC and UNRMS?



The Extractives Model is Broken

Fixing it – climate action and the circular economy transition

- **Extractive industries have immense potential to drive growth, support sustainable development, and reduce poverty in developing countries.** Yet, the actual contribution of extractive industries to sustainable development in countries rich in raw materials has often been mired by financial, economic, governance, social and environmental concerns, leading to the so-called resource curse or paradox of plenty.
- In effect, the abundance of raw materials has often locked many developing countries into patterns of primary product export specialization, constituting a barrier to long-term economic development.

UN Extractive Policy Brief, May 2021

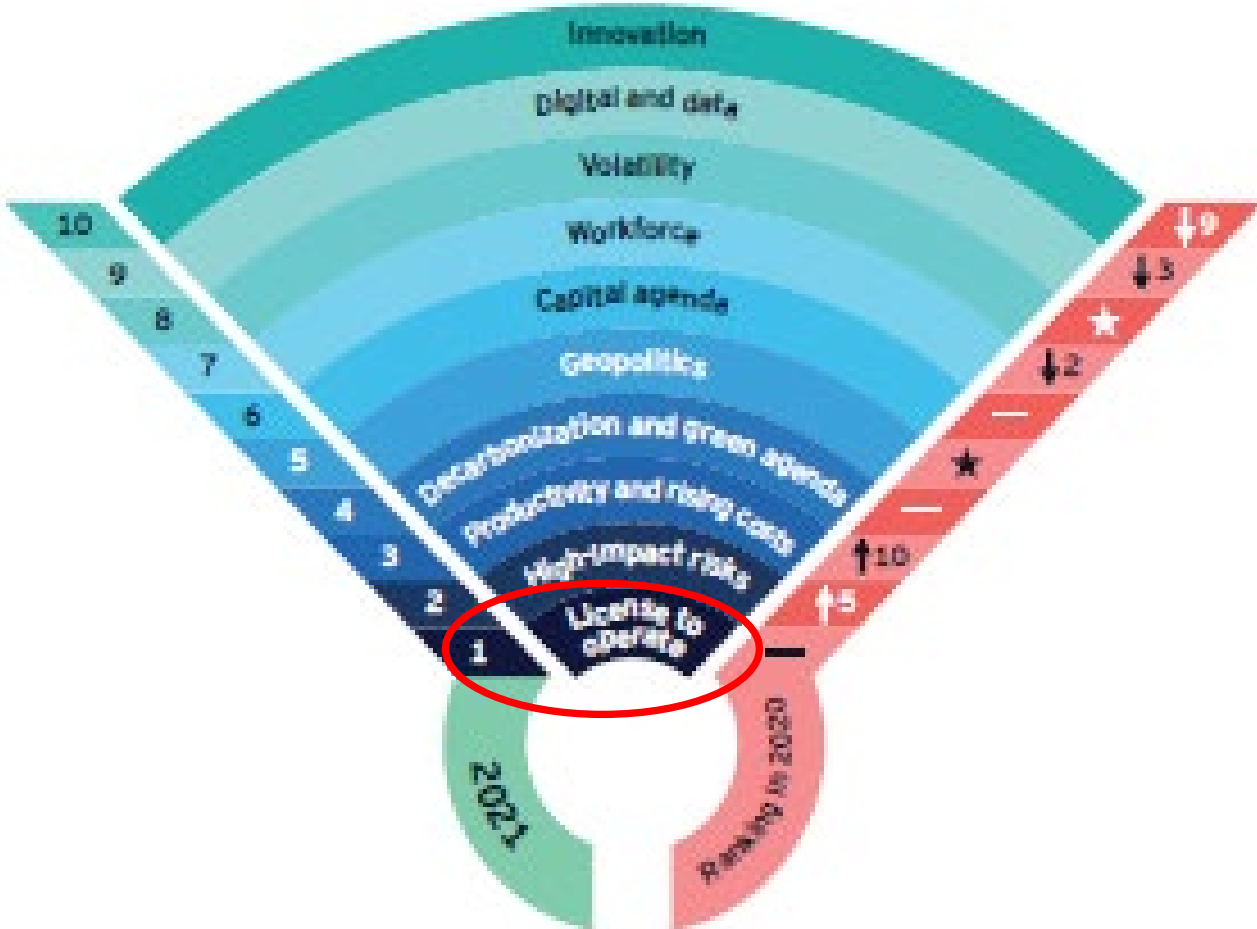


The Top Business Risk for Mining and Metals

Losing the Licence to Operate



EY



↑ Up from 2020 ↓ Down from 2020 — Same as 2020 ★ New to the radar

https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/mining-metals/ey-business-risks-and-opportunities.pdf

Social and Environmental Considerations in Resource Management

Tipping Point: From the right thing to do, to the smart thing to do



UN Extractives Policy Brief 2021

The COVID crisis [has] resulted in a moment of reckoning, with many stakeholders calling for a more sustainable, resilient, and inclusive future.

With fragilities in the global economy and across societies thrown into stark relief, crisis response and recovery efforts to address the impacts of the pandemic provide a window of opportunity to overcome the obstacles historically associated with the extractive sector. ...

There is an increased appetite for sustainable and environmental, social and corporate governance (ESG) investments. A net-zero emissions global economy presents vast commercial opportunities ahead. Those who capitalize on these trends the fastest, will benefit the most.



Circularity:

The fusion of currencies: molecules and monies

Delivering the Social Resource Contract to mirror the accelerating trend to Environmental, Social and Governance (ESG) related financial and investment instruments in delivering the Sustainable Development Goals



1 License to operate (1): Remains the number one issue for miners, with 63% of our survey respondents flagging it as a top three risk. We expect the issue to become even more important as stakeholders broaden and develop a stronger voice. As effective engagement becomes even more critical, we believe miners should consider three tiers of community:

- Local communities will have greater expectations around how miners respect Indigenous rights and native title.
- National communities may push for a return to resource nationalism, with increased debate around who miners sell to and for what purpose.
- Broader community commitment will come into focus as socioeconomic issues are highlighted post-COVID-19. We may see pressure build to provide ownership of assets to communities.

●● Firms with the best ESG rankings financially outperform peers by 40%+.⁸

Nordea Equity Research



wbcscd ESG Reporting Requirements by Region

Region	Countries included	Provisions	Reporting requirements
Asia-Pacific (14)	Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, New Zealand, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam	396	213
Europe (24)	Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, Ukraine, UK	411	293
North America (8)	Canada, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Panama, USA	387	236
South America (8)	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Peru, Uruguay	199	126

https://www.cdsb.net/sites/default/files/cdsb_report_1_esg.pdf

Step by Step to Win Win Win

Reconnection by the Triple Bottom Line

- John Nash, 1950a. The Bargaining Problem. *Econometrica* 18:155–62.
 - 1950b. **Equilibrium Points in n-Person Games**. *Proceedings of the National Academy of Sciences* 36:48–49.
 - 1951. Non-cooperative Games. *Annals of Mathematics* 54:286–95.
- Gro Harlem Brundtland, **Our Common Future**, 1987
- John Elkington, Towards the Sustainable Corporation: **Win Win Win Business Strategies for Sustainable Development**, *California Management Review*, 36/2 (Winter 1994): 90-100 – The “Triple Bottom Line”
- The **UN Sustainable Development Goals**, and **Paris Agreement** 2015
- Business Roundtable, **Statement on the Purpose of a Corporation**, August 19, 2019, <https://s3.amazonaws.com/brt.org/BRT-StatementonthePurposeofaCorporationJuly2021.pdf>
- Klaus Schwab, Peter Vanham, **Stakeholder Capitalism: A Global Economy that Works for Progress, People and Planet**, January 6, 2021
- United Nations, Policy Brief: **Transforming Extractive Industries for Sustainable Development**, New York, May 25, 2021, https://www.un.org/sites/un2.un.org/files/sg_policy_brief_extractives.pdf

Sustainable Development and the New Point of Equilibrium

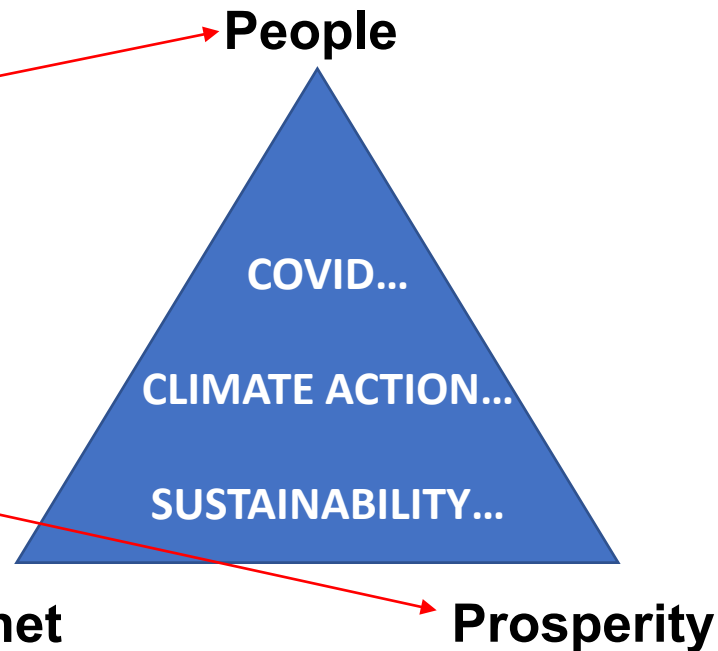
1994... 2021

1951... 1994

1987... 2015

The Triple Bottom Line

- Financial
- Social
- Environmental



Environmental-Economic Accounting Meets John Nash Meets ESG



UNECE



The UNFC/RMS Mission: Securing the Supply Chain for Critical Raw Materials

The linear, win/lose point of equilibrium in resource management is irrecoverably out of balance.

If a balanced, integrated win/win point of equilibrium is not found, and fast, growing resource stress and risk of resource- and land-use conflict will have devastating consequences.



Social and Environmental Drivers

The right to equitable access to and use of resources

- The linear model with “baked in” assumptions that waste is a cost of doing business, that there are always and inevitably winners and losers is broken ... and with that comes a crisis in public confidence in the intentions and behaviour of extractives industries
- To restore credibility and trust the extractives sector must progressively eliminate negative externalities – the negative consequences of unjust or inequitable contracts, rectify the damage caused by exploitative labour practices, engage in a positive and supportive manner with artisanal and small mining businesses, mitigate the costs and damage to occupational, public and environmental health from pollution, contamination, emissions, imposed on future generations from past and current bad practices
- Through circularity and good science, transform these negatives into positive internalities – adopting value-additive resource management across the supply and value chains engaged in the complete life-cycle management to the benefit of employees, stakeholders, communities at national regional; and international levels
- Restoring public confidence in these industries can be led by stakeholder engagement, credible science, elimination of conflicts of interest and corruption, stem and stop illicit flows of funds and materials
- Deploy transformative digital technologies such as blockchain, AI, drones and satellite data to discover, inventory and manage resources for People: Planet: Prosperity

UN Policy Brief

Recommendation 15.

Implement a shared principles-based, integrated, sustainable resource management framework using tools such as the existing United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS) under development.



EU

Six environmental objectives of the EU taxonomy

- 1 Climate change mitigation
- 2 Climate change adaptation
- 3 Sustainable use and protection of water and marine resources
- 4 Transition to a circular economy, waste prevention and recycling
- 5 Pollution prevention and control
- 6 Protection of healthy ecosystems

Source: EU TEG on Sustainable Finance, Taxonomy Technical Report, June 2019



New Dependencies and Value Drivers: Equitable access to and distribution of benefits among all stakeholders + ESG Scores...

UNFC E Axis – Environmental-Socio-Economic Viability →

Category	Definition	Supporting Explanation
E1	Development and operation confirmed to be environmentally-socially-economically viable.	Development and operation are environmentally-socially-economically viable on the basis of current conditions and realistic assumptions of future conditions. All necessary conditions have been met (including relevant permitting and contracts) or there are reasonable expectations that all necessary conditions will be met within a reasonable timeframe and there are no impediments to the delivery of the product to the user or market. Environmental-socio-economic viability is not affected by short-term adverse conditions provided that longer-term forecasts remain positive.
	ESG Score ↑	
E2	Development and operation expected to become environmentally-socially-economically viable in the foreseeable future.	Development and operation are not yet confirmed to be environmentally-socially-economically viable but, on the basis of realistic assumptions of future conditions, there are reasonable prospects for environmental-socio-economic viability in the foreseeable future.
	ESG Score ↑	
E3	Development and operation not expected to become environmentally-socially-economically viable in the foreseeable future or evaluation is at too early a stage to determine viability.	On the basis of realistic assumptions of future conditions, it is currently considered that there are not reasonable prospects for environmental-socio-economic viability in the foreseeable future; or, environmental-socio-economic viability cannot yet be determined due to insufficient information. Also included are estimates associated with projects that are forecast to be developed, but which will be unused or consumed in operations.

UNFC/ UNRMS

Social Resource Contract (SLO+)

- **Governance, transparency, stakeholder engagement**
Balanced, integrated resource management (nexus/eco-system model)
Assured, safe, affordable access to “critical needs” resources
- **Mitigate / Eliminate Moral Hazard & Negative Externalities**
Zero waste – includes pre-approved End of Lifecycle management plan for issuance of operating permit
Zero harm
- **Reliability of Key Data**
Capability, credibility and Independence of Experts

Circularity

From commodity to resources as a service and Public Good
Continuous whole lifecycle resource management

Provenance, traceability and trackability of resources funds

Secure supply chains for critical materials and stressed resources
Innovation – transformative technologies and business models
Blockchain (all resources tokenized)
Smart Contracts
End avoidable wastes and leakages and prevent illicit fund flows

ESG Scores

SDG Compliance and Reporting
Climate Action – Carbon Tariffs
Energy and Source
Water Use Efficiency and Source
Resource Use Efficiency
Adaptability and Resilience of Operator



Thank you!

Julian Hilton, Aleff Group
Chair, EGRM Sustainable Development Goals Delivery Working
Group

UNECE

Date 2 | February | 2022 | Geneva

