

UNFC-UNRMS HYDROGEN FRAMEWORK

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Chair

Expert Group on Resource Management

Group of Experts on Gas, tenth session
Geneva, 23 March 2023



SUSTAINABLE RESOURCE MANAGEMENT
ASSURING SUSTAINABILITY IN RESOURCE MANAGEMENT



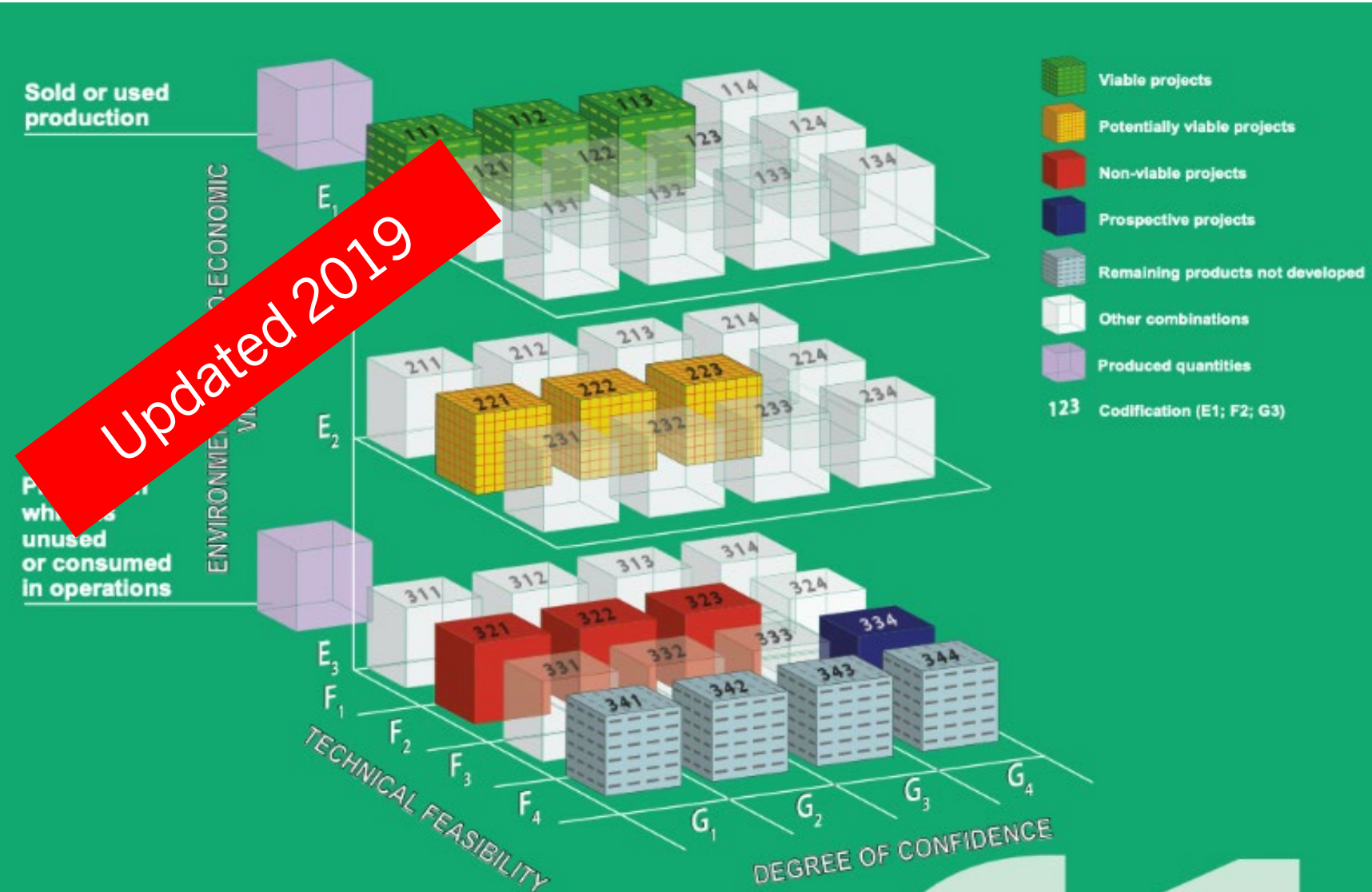
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INTRODUCTION

- Hydrogen as a resource and its importance in low-carbon transitions
- Complex nature of H₂ production, storage, transport and use
- UNFC and UNRMS are well designed to deal with the complex landscape



UNITED NATIONS FRAMEWORK CLASSIFICATION FOR RESOURCES (UNFC)



- Applicable across resources and countries
- Includes environmental, social, and economic dimensions

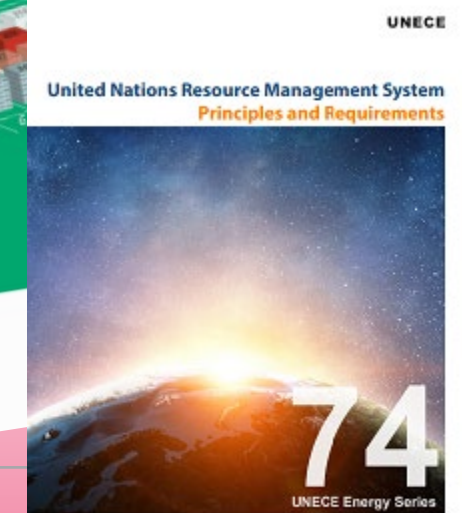
UNFC & UNRMS

NATURAL RESOURCE MANAGEMENT.

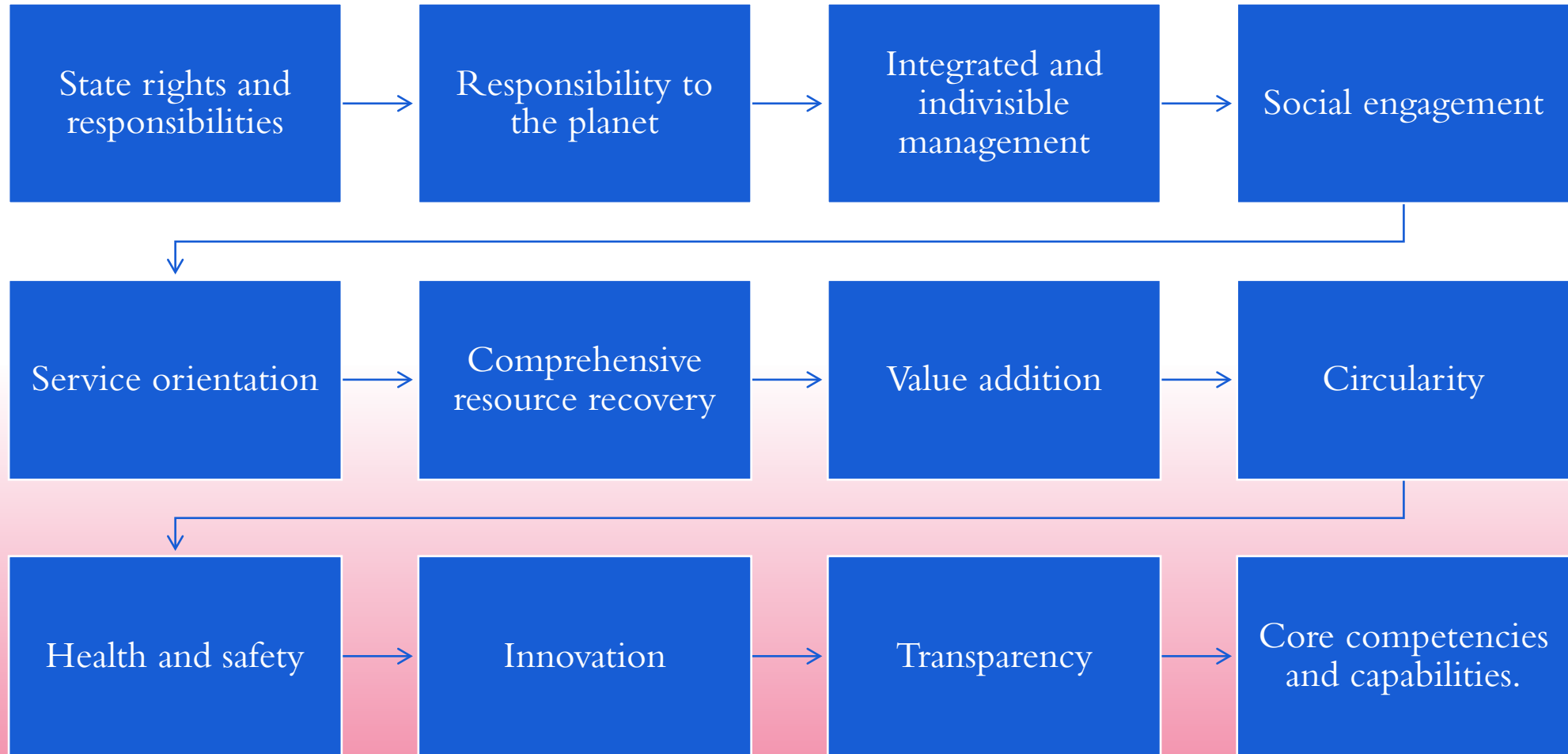
Integrated and sustainable management of natural resources is critical to meeting universal needs.

Resources must be managed as a public good to achieve key SDGs.

UNFC and UMRMS provide the right information and tools to manage natural resources.



UNITED NATIONS RESOURCE MANAGEMENT SYSTEM



INTEGRATED RESOURCE MANAGEMENT

The average of the future will not be the average of the past. The extractive industries will have to respond to the demands of responsible production and align with climate objectives.

UNFC and UNRMS

- Financial resilience
- Environmental performance
- Social viability.



UNFC AND UNRMS IN PRACTICE

INCREASING GLOBAL UPTAKE



- **UNFC Europe – European Commission-** Proposed **CRMs Act** and initiatives to harmonize raw material resource management, including the establishment of a centre of excellence
- **UNFC and UNRMS Africa - African Union** adopted as the sustainable management the African Mineral and Energy Resource Classification and Management System (AMREC)
- Promoted by **UN Secretary-General’s Working Group** on Transforming Extractive Industries for Sustainable Development co-chaired by UNEP, UNDP and the Regional Economic Commissions.



ECOSOC recommends UNFC for global application

PROPOSED DEVELOPMENT OF SPECIFICATIONS FOR APPLYING UNFC AND UNRMS TO HYDROGEN PROJECTS

How UNFC and UNRMS can be applied to hydrogen projects

- Evaluate the degree of confidence in the source product
- Compare the technical feasibility and economic, social and environmental viability
- Description of proposed specifications
- Assess the risk profile of hydrogen projects

Intended users

- Governments: policy and regulations
- Industry: operations
- Financial sector: investments
- Civil society: social acceptance

TAXONOMY ON HYDROGEN BASED ON A LIFE CYCLE ANALYSIS APPROACH

- For evaluating product and process economic, social and environmental impacts
- Involves consistent, transparent and comprehensive evaluation
- Will consider the stages of the hydrogen life cycle, from the production of hydrogen to its end-use



PROPOSAL FOR A GUARANTEE OF ORIGIN FOR HYDROGEN

GOH is essential for ensuring that hydrogen production is developed sustainably and ethically

Includes information about the source of the hydrogen, governance practices of the producer, the production technology used, energy usage and the emissions associated with its production, transportation and storage



PILOT PROJECT TO TEST THE APPLICATION OF UNFC AND UNRMS TO HYDROGEN PROJECTS

Essential as H₂ ecosystem is new and complex

To evaluate the effectiveness of the tools in a real-world setting and to identify any challenges or limitations

Will involve evaluating, classifying, and sustainable management and governance considerations of a specific hydrogen project using UNFC and UNRMS

BENEFITS

Consistency and
evaluation rigour

Increased transparency
and accountability

Informed decision-
making





CONCLUSIONS

The work is ambitious and requires inputs from several experts, organizations and technical and administrative coordination

Significant extrabudgetary funding will be required

Engagement of all relevant stakeholders will be crucial

Thank you!

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Date 23 I March I 2023, Geneva

SAVE THE DATE:

UNECE Resource Management Week 2023

Palais des Nations, Geneva, Switzerland

25-28 April 2023

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<https://unece.org/info/Sustainable-Energy/UNFC-and-Resource-Management/events/374260>



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