The United Nations Resource Management System (UNRMS).

An overview.

Background and Structure.

The United Nations Resource Management System (UNRMS) is a global framework developed by the United Nation European Commission for Europe (**UNECE)** to guide the **sustainable and equitable use of natural resources**. It uses **12 key principles** for managing resources after classification using the **UN Framework Classification (UNFC).** It is developed and directed by the UNECE **Expert Group on Resource Management (EGRM),** is **voluntary** in its application and is **not a legal requirement.**

EGRM	**UNECE Expert Group on Resource Management**	*"…subsidiary body of the **UNECE Committee on Sustainable Energy** responsible for **promoting and further developing the United Nations Framework Classification for Resources (UNFC)** and the **United Nations Resource Management System (UNRMS)**"*
UNFC	**United Nations Framework Classification**	*"…**globally applicable standard for classifying resource projects** based on their **environmental, social, and economic viability, technical feasibility, and confidence in estimates.** UNFC **covers various activities** such as minerals, petroleum, renewable energy sources, nuclear resources, anthropogenic resources, geological storage, and groundwater.*
UNRMS	**United Nations Resource Management System**	*"… **comprehensive resource management system** that **builds on UNFC** and provides a **framework for integrated and sustainable resource management**. UNRMS aims to help countries, organisations, and companies **address sustainability challenges and advance the Sustainable Development Goals (SDGs)**."*

Why is it useful?

Today's resource challenges—**climate change, overconsumption, policy fragmentation**—can't be solved in isolation.

The **UNRMS** offers a **systems-based approach** that:

- Integrates **social, environmental, and economic** dimensions of resource use.
- Applies **circular thinking** — from discovery and use to reuse and regeneration.
- Supports **coherent, cross-sectoral decision-making.**

It's designed for **all resource types**:

- **Natural (minerals, energy, water, bioeconomy)** and **anthropogenic (e-waste, construction materials, etc.)**
- **Not prescriptive** — it's a **voluntary, flexible framework** for countries, companies, and communities.

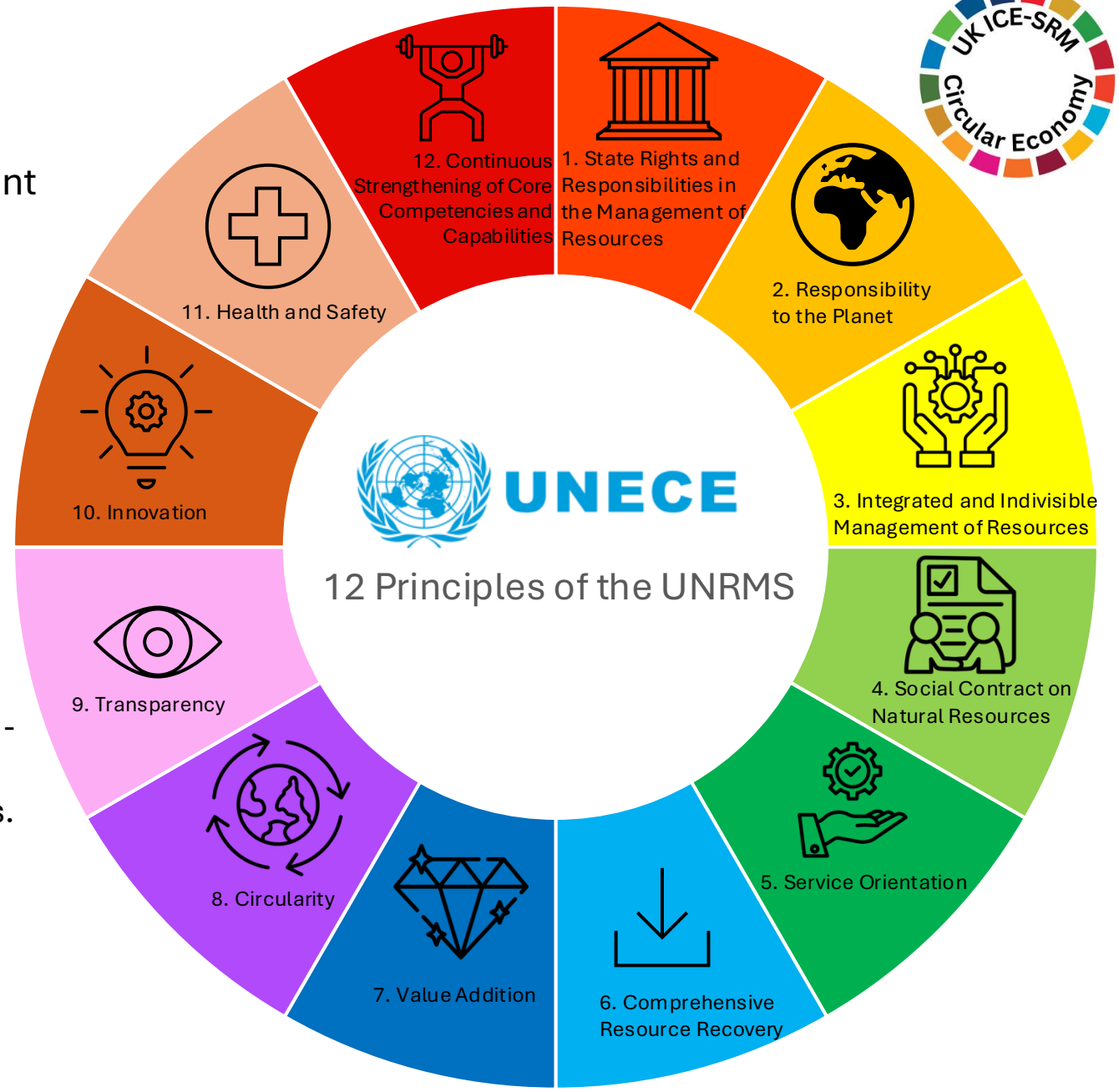
The 12 key principles.

Core Principles for Sustainable Resource Management

The UNRMS is structured around **12 principles**, which- if applied - could guide the integrated and sustainable management of all natural resources. These principles are derived from the **UN Framework Classification for Resources (UNFC)** and reflect a shift towards **holistic, systems-based thinking**.

They promote:
- Full **lifecycle management** of resources.
- A **circular approach** that minimises waste.
- **Transparency**, **inclusivity**, and **accountability** in decision-making.
- Alignment with social, environmental, and economic goals.
- Continuous **innovation** and capacity building.

These principles form the core of the UNRMS toolkit, ensuring that resource use is responsible, equitable, and aligned with long-term sustainability goals.



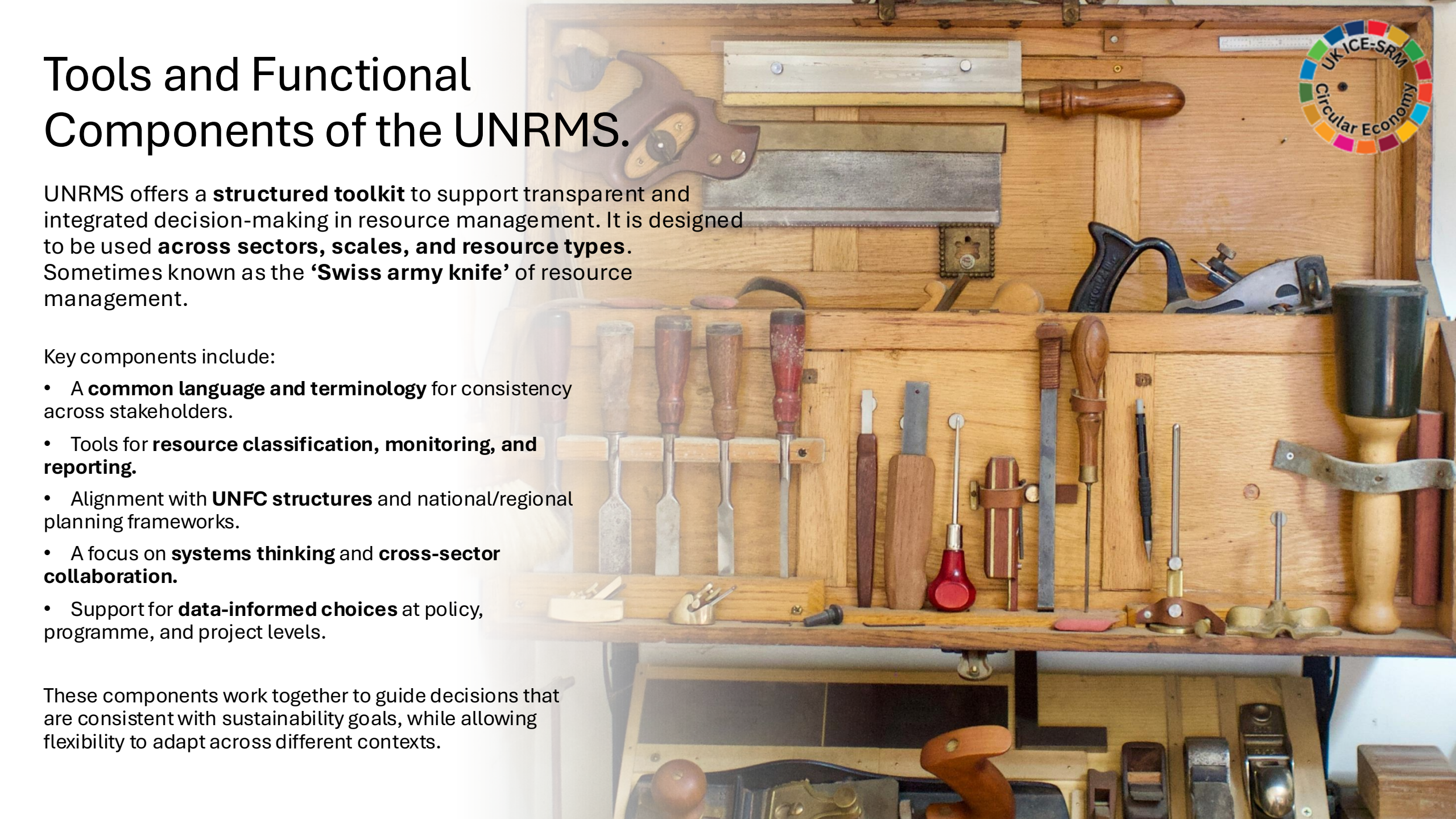
Tools and Functional Components of the UNRMS.

UNRMS offers a **structured toolkit** to support transparent and integrated decision-making in resource management. It is designed to be used **across sectors, scales, and resource types**. Sometimes known as the **‘Swiss army knife’** of resource management.

Key components include:

- A **common language and terminology** for consistency across stakeholders.
- Tools for **resource classification, monitoring, and reporting.**
- Alignment with **UNFC structures** and national/regional planning frameworks.
- A focus on **systems thinking** and **cross-sector collaboration.**
- Support for **data-informed choices** at policy, programme, and project levels.

These components work together to guide decisions that are consistent with sustainability goals, while allowing flexibility to adapt across different contexts.



Applications of the UNRMS

The UNRMS seeks to align resource-related decisions with sustainability goals - like the 2030 SDGs - through principles, keeping consistency through using classification outlined in the UNFC while utilising lifecycle and circular approaches.

It is intended for use across:

- **Governments:** Strategic policy, planning, legislation, resource inventories, and SDG integration.
- **Industry:** Lifecycle-based project development, ESG performance, and circular economy practices.
- **Investors/Finance:** Risk analysis, ESG disclosures, sustainable investment decisions.
- **Civil Society:** Transparency, accountability, stakeholder inclusion.
- **Academia:** Research, innovation, education, modelling, and capacity building.

This promotes collaboration through public, private and civil society partnerships. With increased use, the system becomes more dynamic and fit for purpose.

Institution	Area of Expertise	UNRMS Themes	Example Resources / Sectors
University of Exeter	Critical raw materials, mining, mapping circular resource flows.	Resource classification, lifecycle thinking, circular economy.	Lithium, copper, rare earth elements, mine tailings, products and materials.
British Geological Survey	Subsurface resource data, material flow analysis, long-term modelling.	Inventory building, forecasting, data-informed decision-making.	Groundwater, hydrocarbons, minerals, geothermal energy.
UCL	Construction materials, governance, public policy, socio-economic frameworks.	Principles-based policy design, stakeholder inclusion, just transition.	Construction products, land access, energy justice, water rights.
Brunel University London	Metallurgy, solidification science, recycling, lifecycle design for circular economy.	Circularity, materials innovation, lifecycle resource efficiency.	Light metals, recycled metals, casting by-products.
Swansea University Prifysgol Abertawe	Materials science, process engineering, renewable technologies.	Technology development, sustainable supply, clean energy transitions.	Solar PV materials, hydrogen, steel, smart composites.