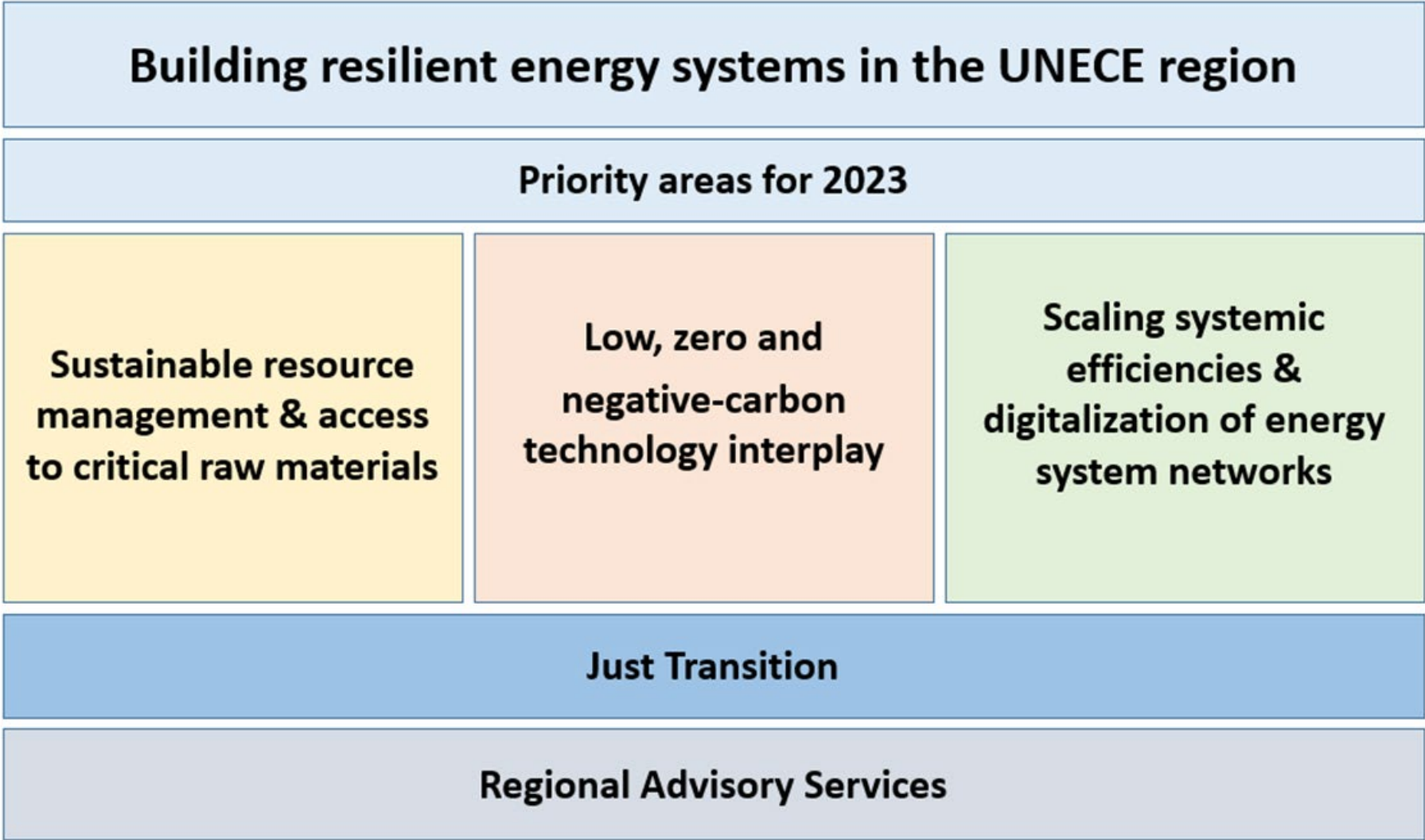




UNECE Resilient Energy Systems Platform Concept

From CSE-31 to CSE-32

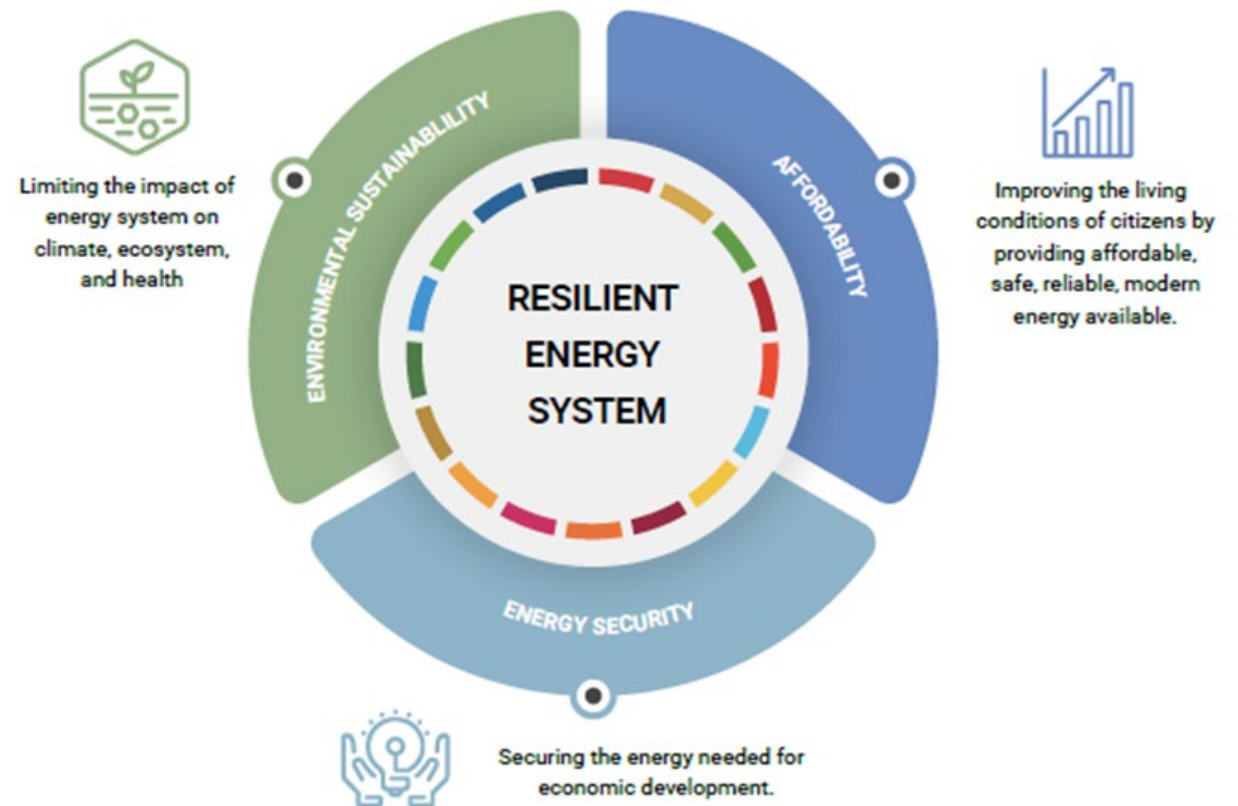


What is a Resilient Energy System?

One which is able to withstand and recover quickly from any shocks and reflects potential impacts of climate change on energy resources



- A **resilient energy system** ensures that energy makes an optimal contribution to a country's **social, economic, and environmental** development.
- **Energy security** strengthens energy independence through interconnectivity and trade.
- **Affordability** reduces costs of electricity, heating, cooling, and transport.
- **Environmental sustainability** lowers the carbon footprint and enhances efficiency across the energy supply chain.



Problem:

- Complexity of „resiliency” concept for energy systems
- Increasing uncertainties related to the future of the energy system
- Lack of systemic view in many sources
- Overflow of unstructured information and data on the topic
- Need to consider trade offs between energy security, energy affordability, environmental sustainability, and different technology options
- Untapped potential of artificial intelligence and machine learning for facilitating data-driven policy making

Solution:

- An advanced tailored IT-tool that allows to navigate through a secure and authoritative knowledge base built by UNECE and partnering organizations, producing user-friendly inputs and insights for targeted informed decisions on how to reach more resilient energy systems.



What will the Platform be?

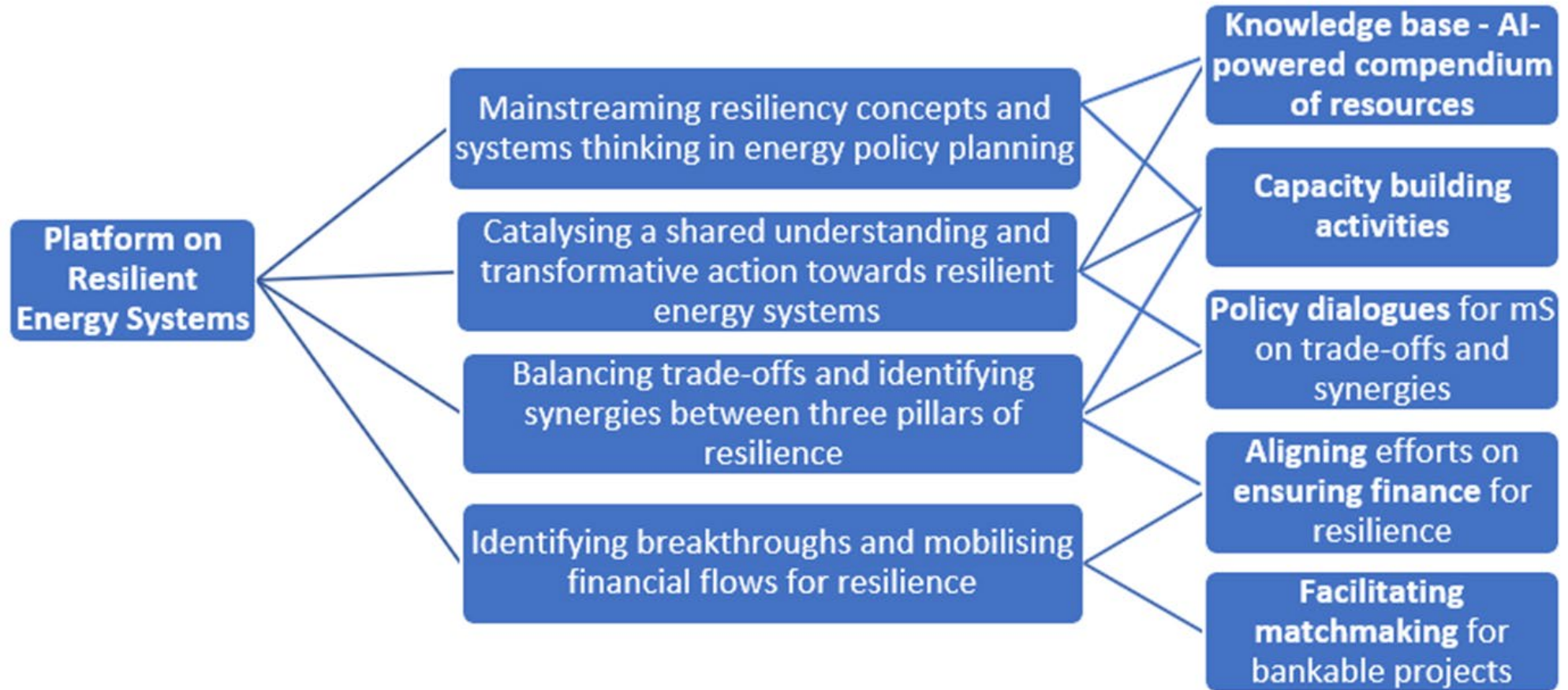


STEP 1 – a knowledge repository with a smart search engine, robust documents library of vetted sources to uncover hidden insights and summarize the information upon request, citing the original sources.

STEP 2 – a scenario building tool, allowing different options for decision-makers and making data understandable and actionable. The AI model will be specifically crafted with vetted data and tailored for the unique requests regarding energy systems resilience;

STEP 3 – an early warning/response system for advanced predictive data analytics on the functioning of energy systems (as soon as comprehensive data models are integrated).

Tasks of a Resilient Energy Systems Platform



Platform Governance Scheme (simplified)

