Data is a prerequisite for making evidence-based decisions and planning, monitoring trends, and tracking progress toward policy goals (e.g. SDG 7). It is also essential in guiding investments. There is a need to improve data systems that help addressing data gaps to serve underserved. At the same time, data needs to be sensitive and nuanced to capture the range of stakeholders involved in energy ecosystems as well as to ensure the impact on beneficiaries is achieved, especially those who might fall into vulnerable categories or live in remote or informal parts of cities and countries.

The need for reliable and up to date data is critical for better policy and technological solutions. While the need for new data is critical, we should also make use of existing data for planning and designing.

GIS data, real time google map and metrological data used to inform sectoral development plans, energy planning for smart cities and energy planning to improve energy access planning and monitoring.

Big Data, Artificial Intelligence and Internet of Things to improve energy analytics and drive more energy efficiency.

This section will provide a list of the sources of available data that can be used for better planning, design for low carbon energy development and improved energy efficiency.

The Policy regime governing the energy sector is outdated and often favors fossil fuels through provision of subsidies, that are often not available for renewable energy or energy efficiency. We need to work collectively to reform policies to support achieving the 2030 development goals and the long-term dimate goals for 2050. The challenges can be broadly pooled around conduciv

including governments are not equipped with the systems, infrastructure, financing or expertise to take advantage of them. There are therefore clear signals that we need to channel more resources into research and development to deliver the technologies needed to decarbonize sectors like shipping and heavy industry, drive down the costs of technologies and build consumer confidence in upcoming innovations. While countries with research capabilities will take the lead, how can the innovation ecosystem address the uneven access to technology and drive homegrown innovation. Resources are also required to support stakeholders to strengthen their governance systems and the skills of key actors to engage with the technology opportunities.

Innovations in technologies and data happen in socio-political contexts, and systems and institutions need to rapidly evolve to leverage the opportunities and address the challenges and be cognizant of the nuances and multi-layered dimensions of energy systems to ensure all key stakeholders are engaged in the solutions which reach the key target audience, including vulnerable groups. Therefore ensure that inter-sectoral linkages are adequately reflected in energy transition policy, as well as water, agriculture, and environment-related policies, in order to ensure integrated solutions that are sustainable in the long term and meet the needs of those who could benefit most from the innovation.

Consider the context at hand in order to develop a stable and supportive enabling environment, including supportive policies and plans (e.g. <u>Morocco's Plan Vert</u>), regulations (e.g. small power

Provide list of references

6.1. Proposed List of indicators A proposed

provided for 2025, 2030 and 2050.

. Where relevant, separate indicators should be