G7 Climate, Energy and Environment WORKSHOP: Sustainable and Circular Bioeconomy for reducing emissions and restoring ecosystems: success stories and indicators and best practices for monitoring their sustainability October 31, 2024 (12.00-16.30) Web meeting, Presidency of Council of Ministers, Rome

Italian Presidency G7 *Climate, Energy and Environment* and the *National Bioeconomy Coordination Board* (CNBBSV), Italian Presidency of Council of Ministers, and OECD

## Round table on monitoring tools and indicators: good practices at national and territorial level

### **Ben Durham**

Department Science, Technology and Innovation South Africa 1.

Taking into account the national context, which economic indicators are used in your country or would be most appropriate to monitor the progress of the bioeconomy towards the objectives?

# SA Bioeconomy Strategy: A focus on innovation interventions into the bioeconomy, rather than broader bioeconomy development.

- Input measures (GERD; Research Staff; Publications; Citations; Patents)
- Output measures (SIC codes; companies; employment; bioeconomy as a proportion of GDP; trade sophistication; etc)

What indicators would be most effective to describe the sustainability of the implementation of bioeconomy in your country?

- SIC codes reliable, stable, but not designed for bioeconomy monitoring (cross sectoral), not useful for SMMEs, lacking some dimensions for SA govt interests (transformation/ownership; nature-intensive bioeconomy).
- SMME data unreliable, difficult to compile, changes rapidly, not necessarily useful for bioeconomy sustainability, <u>but critically important to a bioeconomy</u>.

#### => Environmental dimension not (yet) included in Bioeconomy metrics

Which national institutions or organizations have the mandate to select indicators and monitoring methods?

• National Advisory Committee on Innovation is tasked with monitoring the Bioeconomy Strategy of SA.

What national, regional or international statistics and databases are used to assess the progress and sustainability of your national bioeconomy?

• Statistics South Africa (general, labour force, standard industry dataset; SARS (tax); Reserve Bank (National accounts); Agricultural Data from DoA; DPME (energy balances) IMF; WB etc.

If we are to include an environmental dimension:

• DFFE + SANBI + NBSAPs reports (biodiversity; broad environment); DWS (water quality); DoH (air pollution) etc.

Fragmented & difficult; excluding certain critical aspects of (African) bioeconomies – eg. IK/Nature intensive bioeconomies; valuing nature/biodiversity wealth.

2.

#### 3.

What kind of cooperation and international dialogue initiatives could foster the tailoring of robust and transparent criteria and methodologies for monitoring and evaluating the sustainability of bioeconomy policy and implementation?

- Metrics must be simple and clear, easy to gather from existing data-sets (at least initially). Sliding scales? Simplified certifications?
- Metrics must incentivize trade for particularly Global South, avoid becoming a technical barrier (global equity).

How could multilateral institutions support these processes while providing a neutral platform where all countries and stakeholders have a central role in shaping the future bioeconomy?

- Very difficult as each country has own (or doesn't have) collection processes / responsible institutions.
- Support participation of LMICs participation in the various processes discussing/developing standards.

#### Conclusions:

- Acknowledge the importance of developing bioeconomies in Global South as contribution towards CC, biodiversity loss, unsustainable dev.
- Must not be burdensome (at least to LMICs) and ensure trade incentives for participation of Global South.