

The “European Green Deal”, launched in December 2019, sets out the comprehensive, highest-priority objectives of the European Union to tackle climate and environment-related challenges¹. The Green Deal requires progress in:

- Increasing the EU’s Climate ambition for 2030 and 2050
- Supplying clean, affordable and secure energy
- Mobilising industry for a clean and circular economy
- Building and renovating in an energy and resource efficient way
- Accelerating the shift to sustainable and smart mobility
- From ‘Farm to Fork’: a fair, healthy and environmentally friendly food system
- Preserving and restoring ecosystems and biodiversity
- A zero-pollution ambition for a toxic-free environment

The Horizon Europe Clusters “5. Climate, Energy and Mobility” and “6. Food, Bioeconomy, Natural Resources, Agriculture and Environment” in Pillar 2 “Global challenges and European Industrial Competitiveness” are closely related to the Green Deal.

The Green Deal is also intended to be a key pillar of the post-Covid-19 economic recovery plan for Europe.

This policy framework sets the context for the call “Metrology support for the Green Deal” in 2021. The European Partnership on Metrology aims at comprehensive, sustainable contributions to this policy framework by mobilising, pooling and developing the European metrology capabilities.

Potential Research Topics (PRTs) submitted in response to this call should describe research and development needs for metrology solutions in support of the Green Deal objectives. They should include the scientific and technological approaches required of academic and industrial stakeholders, and metrological approaches to underpin regulation and support standardisation.

The scope of this call goes beyond the scopes of earlier calls related to environment and energy under EMRP and EMPIR. Stakeholders increasingly ask for efficiencies and environmental impacts of whole cycles and systems. PRTs should respond to this with research needs to support the challenges addressed in the Green Deal, and how the stakeholders would benefit if those needs were met. Research to address these needs will require cross-disciplinary approaches such as combining metrological support for the development of clean energy technologies including generation, conversion, transport, storage and use in combination with metrology for their environmental impact assessment. With respect to environmental monitoring and climate/ocean challenges, cycles of matter, cross-compartment interactions and holistic methods for the assessment of impacts on the environment must be considered.

EURAMET is developing a sustainable integrated and coordinated metrological infrastructure through the European Metrology Networks, EMNs. If appropriate, PRTs should include a description how their objectives fit under the scope of one or more EMNs.

The Green Deal requires regulation. If appropriate, PRTs should describe how they support the development and/or the implementation of regulation.

The EU intends that activities in support of the Green Deal should also contribute to post-Covid-19 economic recovery. PRTs should describe the economic benefits that could result from the work they outline.

¹ COM (2019) 640 final

The Green Deal requires cooperation not only in Europe, but worldwide. EURAMET wishes to strengthen liaisons with partners such as other Partnerships and other key European stakeholders. The NMIs and DIs in Europe are very active under the Metre Convention, which provides a framework for metrology institutes of more than 100 countries representing 98 % of the world's GDP. Metrology is an interdisciplinary methodology and has a fundamental role in the European quality infrastructure. Traditionally and very successfully, it brings together various stakeholders and know-how providers such as research institutes, instrument manufacturers, metrology service providers, standardisation organisations, monitoring networks, regulators and policy makers. PRTs should describe how European and international partners could be involved in meeting the needs described.

draft subject to amendment by EC