EURAMET's support for the EU Energy Transition

Measurement Solution for Energy Gases - EMN Energy Gases

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19 March 2023:

SYNTHESIS REPORT
OF THE IPCC SIXTH ASSESSMENT REPORT (AR6)

Summary for Policymakers

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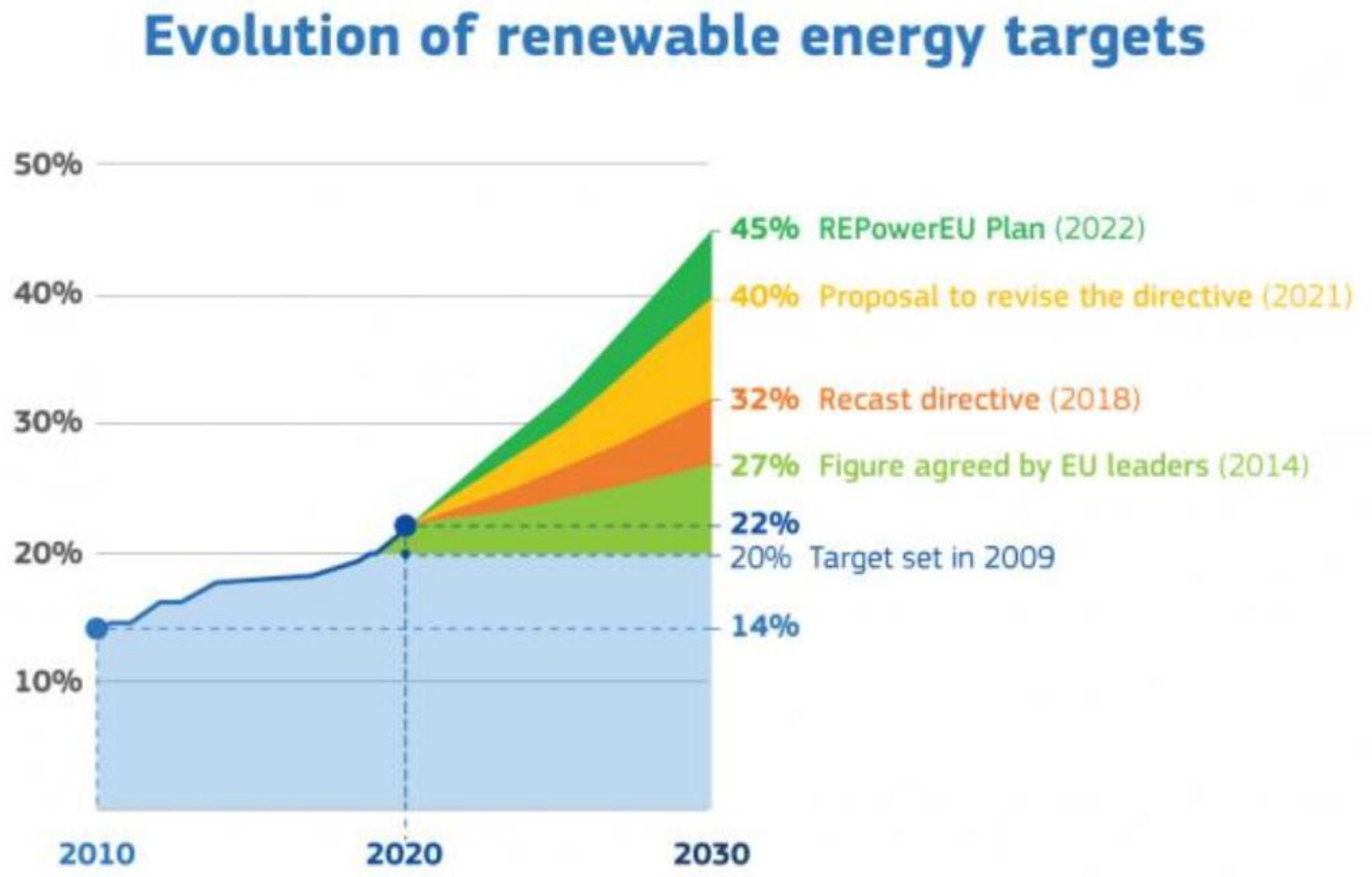
The European Green Deal

Climate change and environmental degradation are an existential threat to Europe and the world. To overcome these challenges, the European Green Deal will transform the EU into a modern, resource-efficient and competitive economy, ensuring:

- no net emissions of greenhouse gases by 2050
- economic growth decoupled from resource use
- no person and no place left behind

The European Green Deal is also our lifeline out of the COVID-19 pandemic. **One third of the €1.8 trillion** investments from the NextGenerationEU Recovery Plan, and the EU's seven-year budget will finance the European Green Deal.

EU targets for energy



EURAMET e.V.

The European Association of National Metrology Institutes

- Securing **world-wide trust** and **acceptance** of European measurements, for all aspects of business and society
- Providing stakeholders with **world-leading measurement solutions and standards**
- Members are National Metrology Institutes of **39 European countries**
- Dedicated Implementation Structure for **Metrology Research Programmes**

Ukraine and Georgia joined EURAMET on 7 Nov 2022

https://www.euramet.org/

Metrology,
the science of measurement …

- … is a horizontal discipline that serves as the **backbone for industry and trade** and at the same time **underpins the EU's key policy initiatives** from climate change and the green deal to a secure and healthy society
- … **fosters European competitiveness** through coordinated European Metrology Research
- … is vital to implement regulation to provide the **link between policy and innovation**

Our Vision and Mission

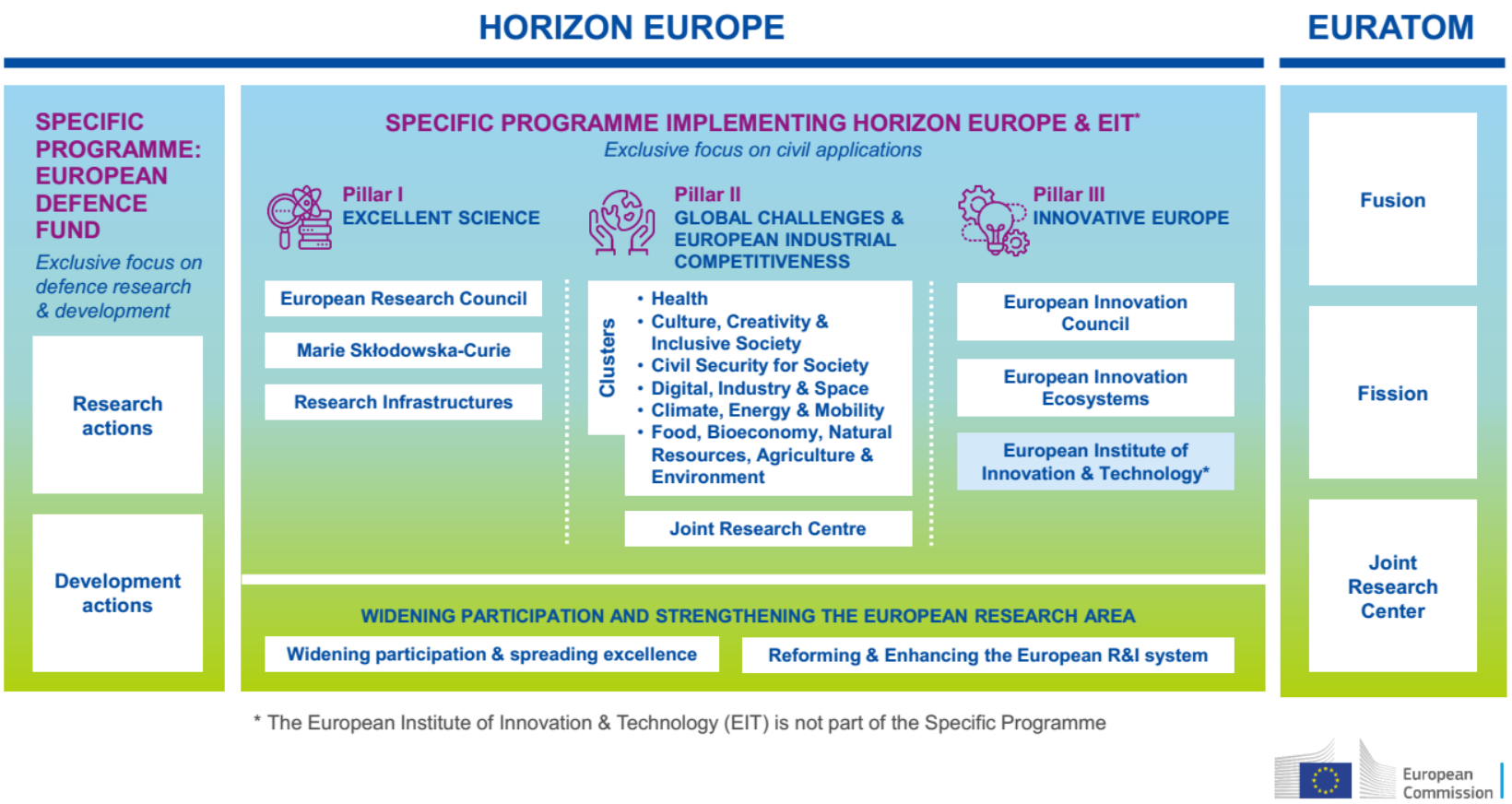
Vision:

Leading the development and application of measurement science enabling Europe to be competitive, healthy and sustainable through innovation

Mission:

- **Develop and maintain an appropriate, integrated and cost-effective measurement infrastructure for Europe aligned to the needs of society and industry**
- **Ensure that the European measurement infrastructure is internationally competitive and recognised, and is based on world-class R&D.**
- **Support policy and decision makers where metrology is key**
- **Support members in meeting their national requirements through collaboration and a balanced European measurement infrastructure**

Horizon Europe



* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

European Commission

Partnerships

Overview of 49 candidate European Partnerships

HORIZON EUROPE PILLAR II - Global challenges & European industrial competitiveness

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture, …
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3	Climate Neutral, Sustainable & Productive Blue Economy
Chemicals risk assessment	European Metrology (Art. 185)	Europe's Rail	Water4All
ERA for Health	AI-Data-Robotics	Connected and Automated Mobility (CCAM)	Animal Health & Welfare*
Rare diseases*	Photonics	Batteries	Accelerating Farming Systems Transitions*
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Agriculture of Data*
Personalised Medicine*	Clean steel – low-carbon steelmaking	Zero-emission road transport	Safe & Sustainable Food System*
Pandemic Preparedness* *Co-funded or co-programmed*	Processes4Planet	Built4People	
	Global competitive space systems**	Clean Energy Transition	
		Driving Urban Transitions	

PILLAR III - Innovative Europe

EIT (KNOWLEDGE & INNOVATION COMMUNITIES)	SUPPORT TO INNOVATION ECOSYSTEMS
InnoEnergy	Innovative SMEs
Climate	
Digital	
Food	
Health	
Raw Materials	
Manufacturing	
Urban Mobility	
Cultural and Creative Industries	

CROSS-PILLARS II & III

European Open Science Cloud

Institutionalised Partnerships (Art 185/7)
Institutionalised Partnerships / EIT KICs
Co-Programmed
Co-Funded

* *Calls with opening dates in 2023-24*
** *Calls with opening dates not before 2022*

European Commission

The European Partnership on Metrology
(Approved by EP & Council, November 2021)

Objective: To create, by 2030, a world-class sustainable and coordinated system for metrology at European level.

- A robust, **sustainable** European Metrology Infrastructure
- State-of-the-art metrology R&D taken up by **innovators**
- Address **European and global challenges**, including:
  - European Green Deal
  - UN Sustainable Development Goals
  - The Digital transition, and European Industry strategy
  - Better Health for All

Specific Objectives

a) to develop by 2030 new research capabilities which are built within the framework of new **European Metrology Networks** and which perform in terms of calibration and measurement capabilities at least equal to the leading metrology institutes outside the Participating States;

b) to support, by 2030, sales of **new innovative products and services** through the use and adoption of the new metrology capabilities in key emerging and enabling technologies;

c) to contribute to the creation and diffusion of **high-quality new knowledge, competences and skills** across the Union in the context of lifelong learning and for societal transformation, including through enhancing capability for innovation;

Specific objectives

d) to contribute fully and effectively, by 2030, to the design and implementation of **specific standards and regulations** that underpin public policies **addressing societal, economic and environmental challenges**;

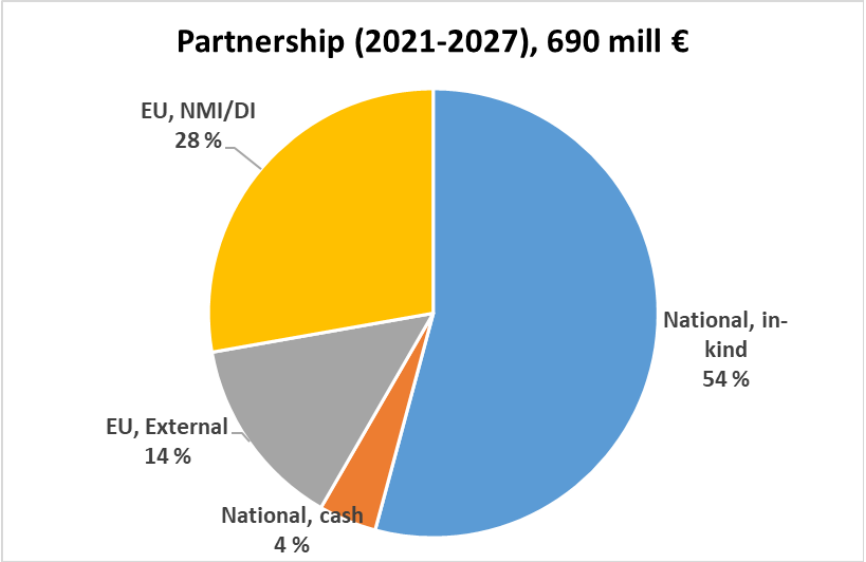
e) to **unleash the potential of metrology among end-users**, including SMEs and industrial stakeholders, as an instrument contributing to achieving the Union goals for the digital and green transitions.

Calls and financing

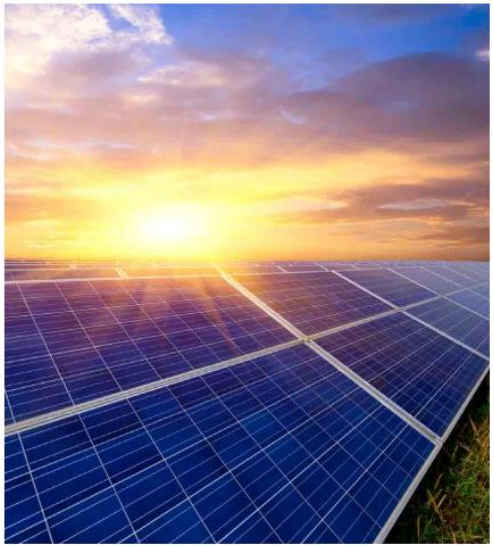
Call plan:

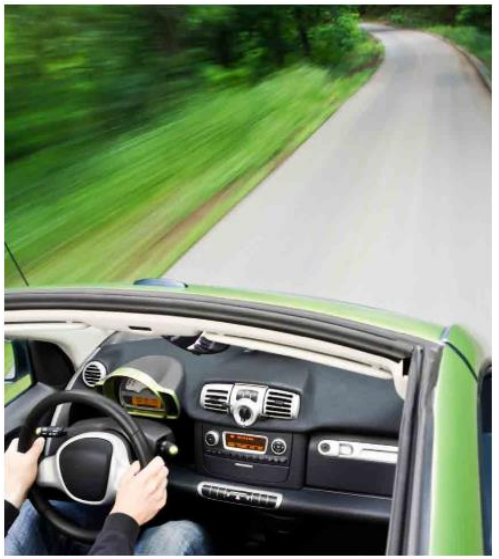
2021 *Green Deal* (EU-contribution: ca. 26 M€)
2022 *Health, Digital, Integrated European Metrology* (ca. 43 M€)
2023 *Fundamental, Industry* (ca. 51 M€)
2024 *Green Deal, Digital Transformation* (ca. 51 M€)
2025 *Health, Integrated European Metrology* (ca. 47 M€)
2026 *Fundamental, Industry* (ca. 43 M€)
2027 *Green Deal* (ca. 39 M€)
+ Normative, CSAs and Research Potential

Predecessors:
EMPR (2008 - 2013): 400 M€
EMPIR (2014 – 2020): 600 M€



A few examples of energy-projects





European Metrology Networks

Objective: To create sustainable structures in areas of strategic importance for the future of European metrology.

The Networks…

- cover an area of major strategic importance, with a **European dimension**;
- establish close links with a wider **stakeholder community**; including cooperation with other partnerships;
- strive for **scientific excellence**;
- develop and coordinate a **common metrology strategy & infrastructure**
- to support innovation, public policy, & regulation.

ENERGY GASES

EMN Liaisons with other European Partnerships & Initiatives