

A large, abstract blue graphic on the left side of the slide. It features a large, light blue circle with a darker blue, curved, arrow-like shape passing through it, creating a sense of motion or a stylized 'S' or 'C' shape.

Article 185 Impact Assessment

EMRP /EMPIR

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Impact Manager
18 May 2016**

Why does evaluation and impact assessment matter?



Together EMRP and EMPIR amount to

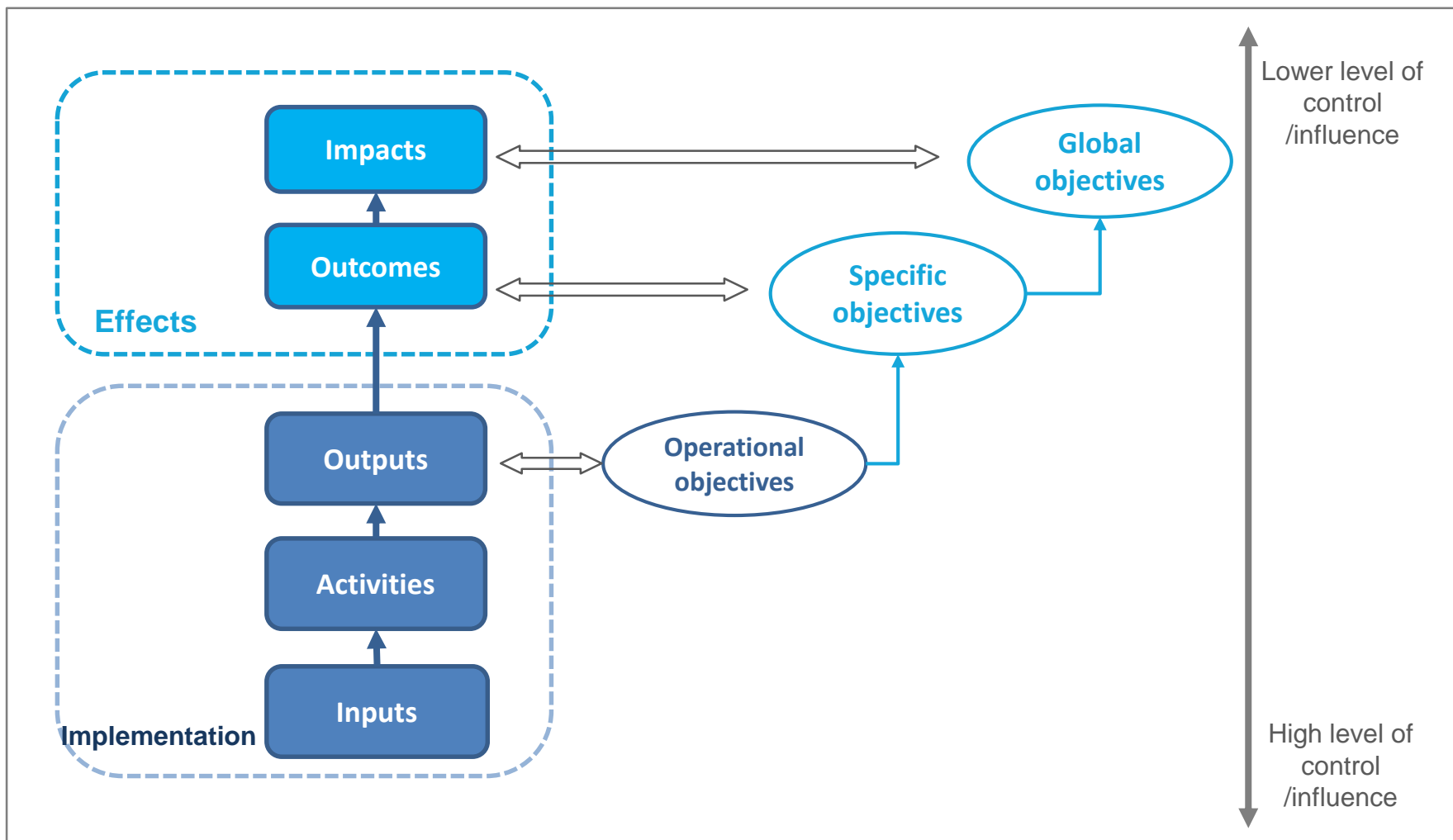
€1 billion

of public funding
for metrology research

- Final evaluation of EMRP: **Dec 2017**
- Interim evaluation of EMPIR: **June 2017**
- Final evaluation of EMPIR: Dec 2024

EURAMET is required by the Commission to provide evidence to support the external programme evaluations

Programme logic



Objectives hierarchy



**FP7 / H2020
Objectives**

European growth and jobs
Respond to societal challenges
Create an integrated European Research Area

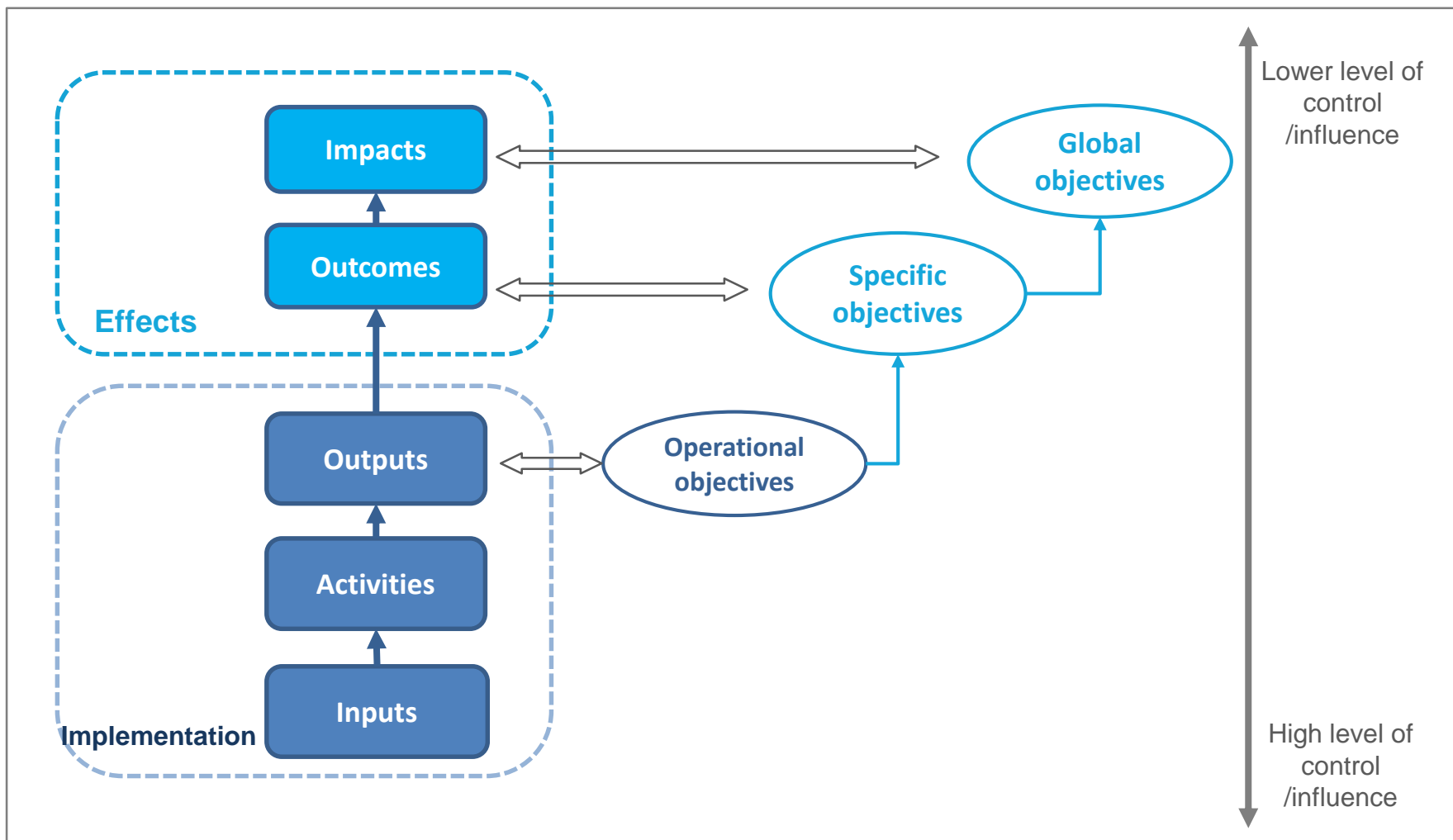
**EMRP/ EMPIR
Specific
Objectives**

- **Boost industrial uptake of metrology research** supporting development of **new & improved products and services**
- **Improve standardisation / regulation**
- Underpin a coherent, sustainable and **integrated European metrology landscape**

**EMRP/ EMPIR
Operational
Objectives**

- Develop common research agenda
- Support European collaboration
- Fund projects that support innovation, regulation, ability to address grand challenges
- Capacity building across Europe
- Efficient & effective programme management

Programme logic



Example: programme logic



EMPR /EMPIR LOGFRAME				
INPUTS	ACTIVITIES	OUTPUTS	EARLY IMPACTS (OUTCOMES)	IMPACT (TARGETS)
<ul style="list-style-type: none"> National funding EC funding Cooperation at national level to develop EMRP/EMPIR Establishment of EURAMET e.v. Design of governance of EMRP/EMPIR 	<p>RESEARCH</p> <ul style="list-style-type: none"> Implementation of collaborative research projects (called Joint Research Projects - JRPs) Implementation of collaborative research projects (JRPs) focused on capacity building Implementation of coordination and Support Actions (e.g. SIPs) I <p>COLLABORATION/ COOPERATION</p> <ul style="list-style-type: none"> Implementation of governance: e.g. cooperative working at senior level among NMIs/DIs Implementation of research programme processes: development of research strategy; research themes; research selection processes Collaboration among researchers at project level (meeting all operational objectives) 	<p>TECHNICAL</p> <ul style="list-style-type: none"> New / improved measurement capabilities / facilities, reference artefacts, etc. New / improved knowledge, methods, protocols, techniques, Intellectual property <p>DISSEMINATION</p> <ul style="list-style-type: none"> Peer-reviewed publications Scientific reports Presentations at conferences / events Good practice guides Contributions to standards (ISO, CEN, BSI etc.) Training courses Newsletters, websites, media engagement Engagement with stakeholders <p>COLLABORATION/ COOPERATION</p> <ul style="list-style-type: none"> New relationships and networks 	<p>Uptake of project outputs by private & public sector:</p> <ul style="list-style-type: none"> Calibrations & consultancy based on new capabilities Industrial R&D, commercialisation of new tools / techniques Deployment of methods / procedures developed New accreditations in the traceability chain IP exploitation <p>Tangible influence standards & regulation</p> <ul style="list-style-type: none"> Draft standards New relevant working groups/ studies Widened engagement <p>Integration of European metrology</p> <ul style="list-style-type: none"> New and deepened networks and collaborations amongst NMI/DIs – further collaborations <p>Scientific</p> <ul style="list-style-type: none"> Citations / collaborations with research community 	<p>ECONOMIC</p> <ul style="list-style-type: none"> Development of new & improved products and services in industry as result to uptake of metrology research (€400 turnover target) <p>RESPOND TO GLOBAL CHALLENGES</p> <ul style="list-style-type: none"> Improve standards / regulation <p>INTEGRATION OF EUROPEAN METROLOGY</p> <ul style="list-style-type: none"> A coherent, sustainable and integrated European metrology landscape

Example: draft programme logic

Impact category

Method / data sources

Evidence

ECONOMIC

Survey: Annual survey of industrial participants
Analysis of project input & output data

SOCIAL (Standards)

Analysis of project input & output data
Survey: Stakeholders in standards community

INTEGRATION

Analysis of project input & output data
Survey: NMI/ DI/ EURAMET staff
Social Network Analysis

SCIENTIFIC

Bibliometrics: citation, co-author analysis

CAPACITY BUILDING

Analysis of project input & output data
Analysis of European and international committee membership
Survey: NMI/DI staff in developing NMI/DIs

DATA

CASE STUDIES

- For each method we have defined:
 - Purpose
 - Indicator(s)
 - Method /process
 - Inputs to the method
 - Timescales
 - Risks
- Plus: timeframe for the overall assessment process aligned with the Commission's planned evaluations

Current status



To date

Comprehensive output data

~30 economic and social impact case studies published

~25 economic and social impact case studies in development

Surveys of industrial participants in three calls completed – yielding impact data

Next steps

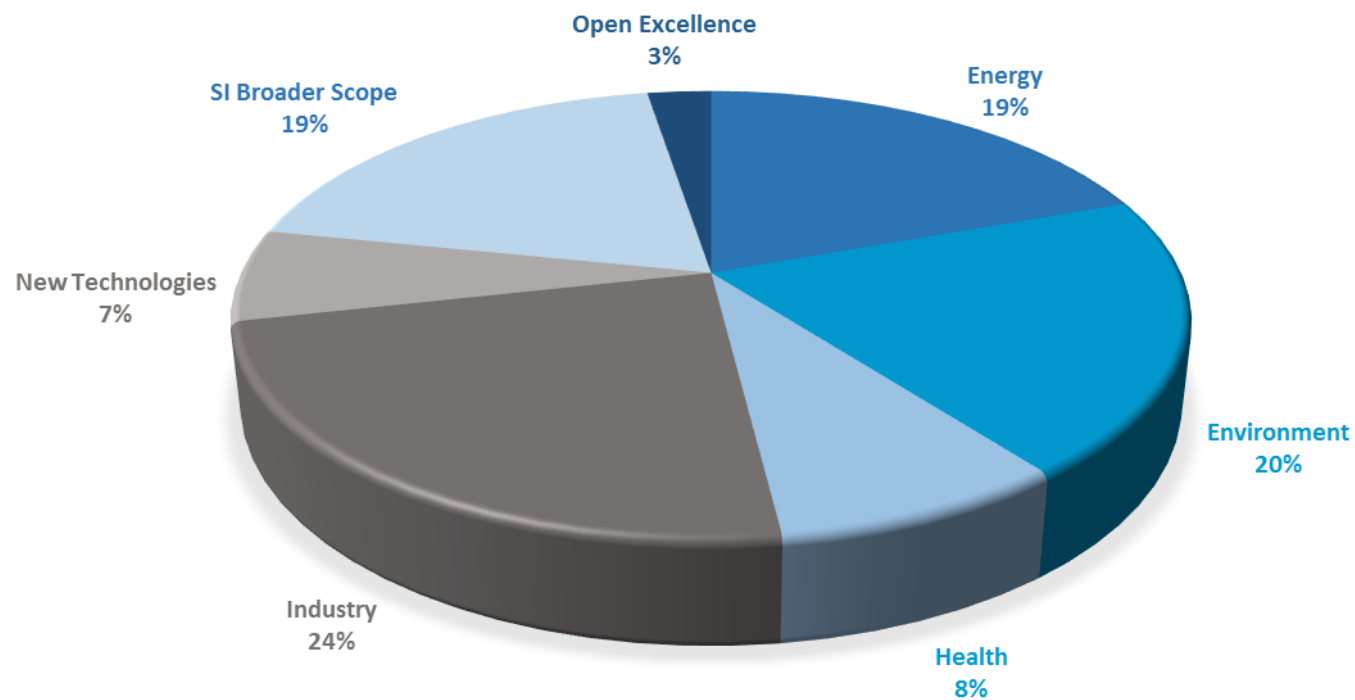
On-going – case study development & surveys

Bibliometric study

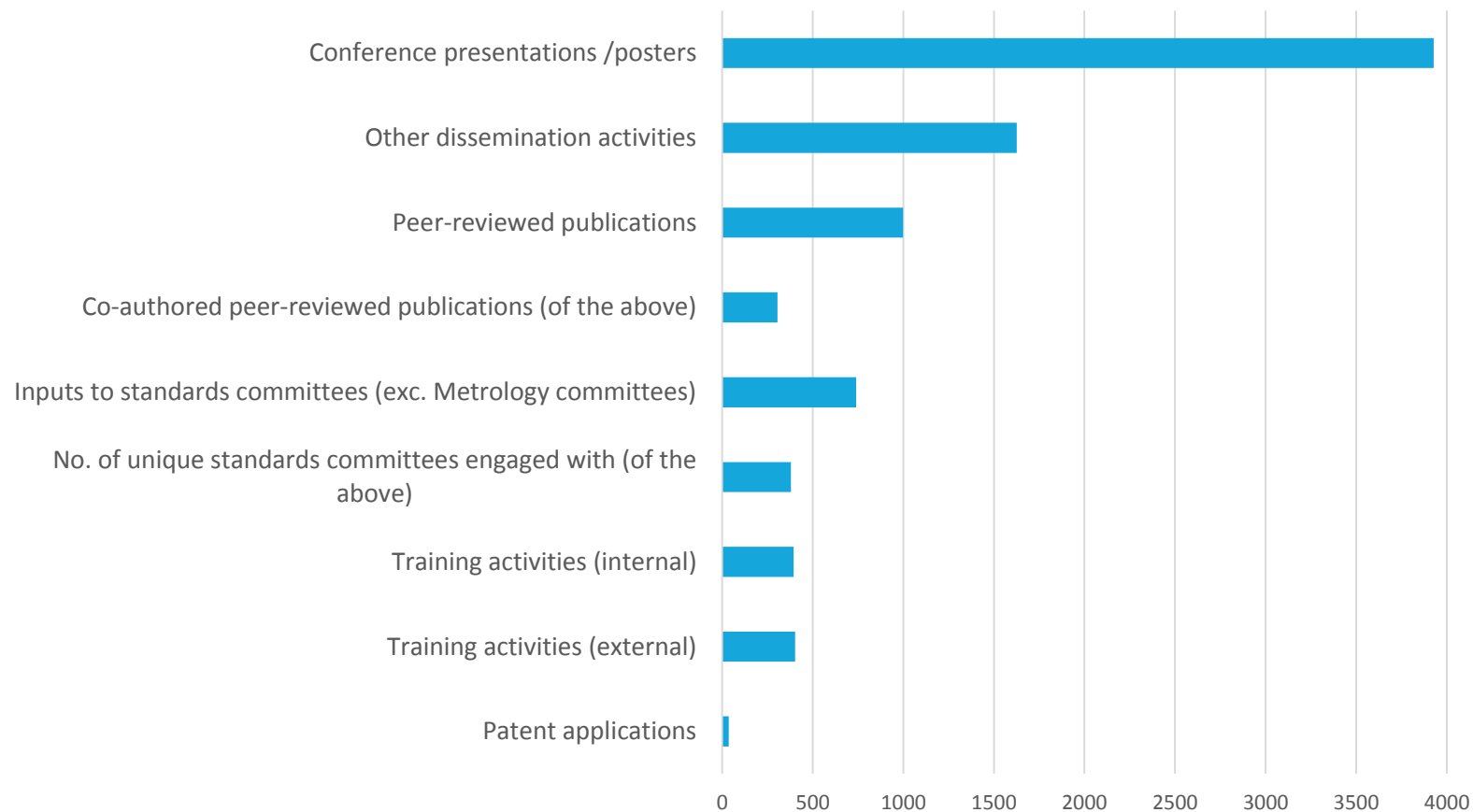
Case studies of capacity building and coordination

Compile all data for Commission / evaluation panel

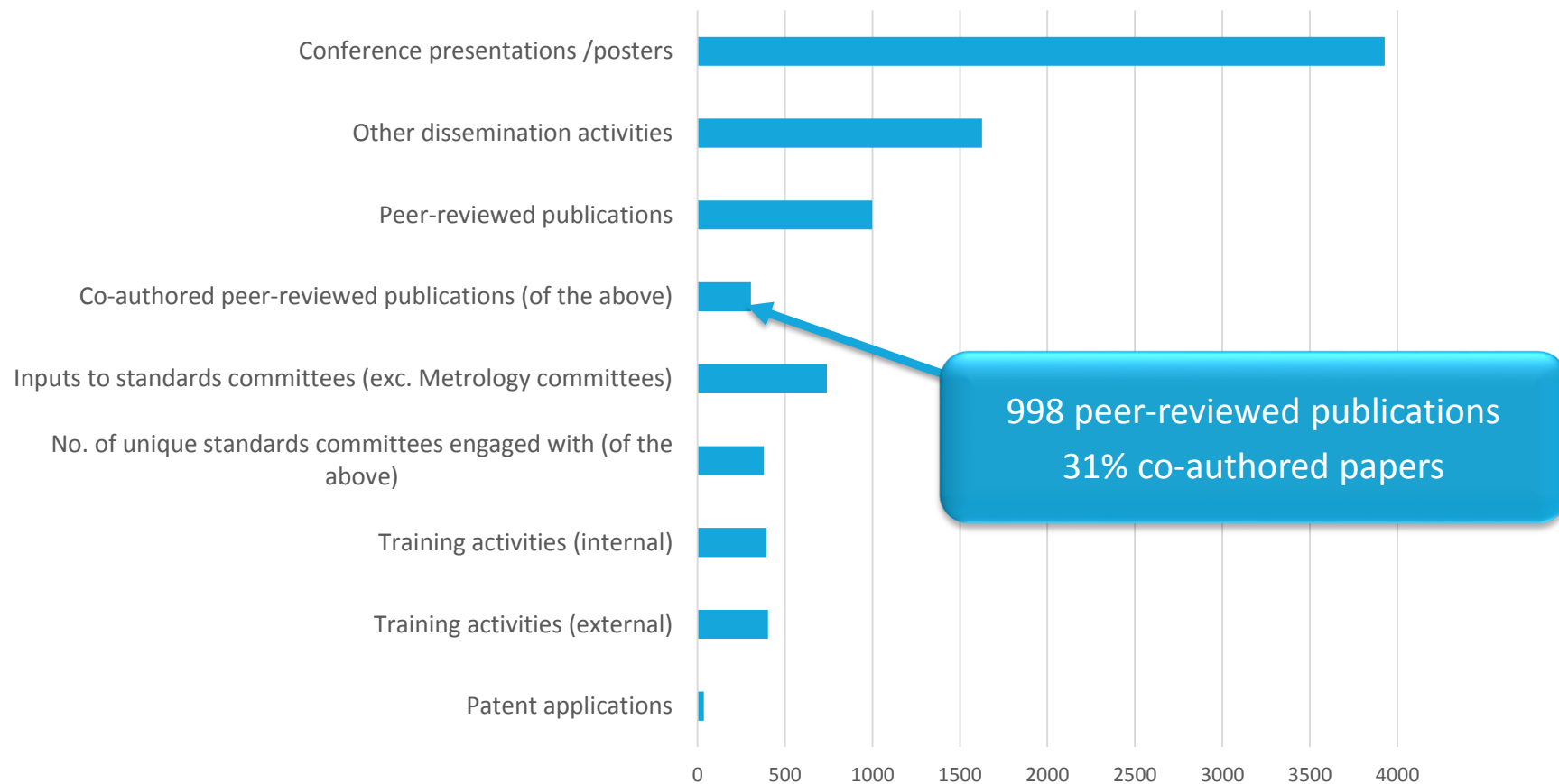
EMRP inputs



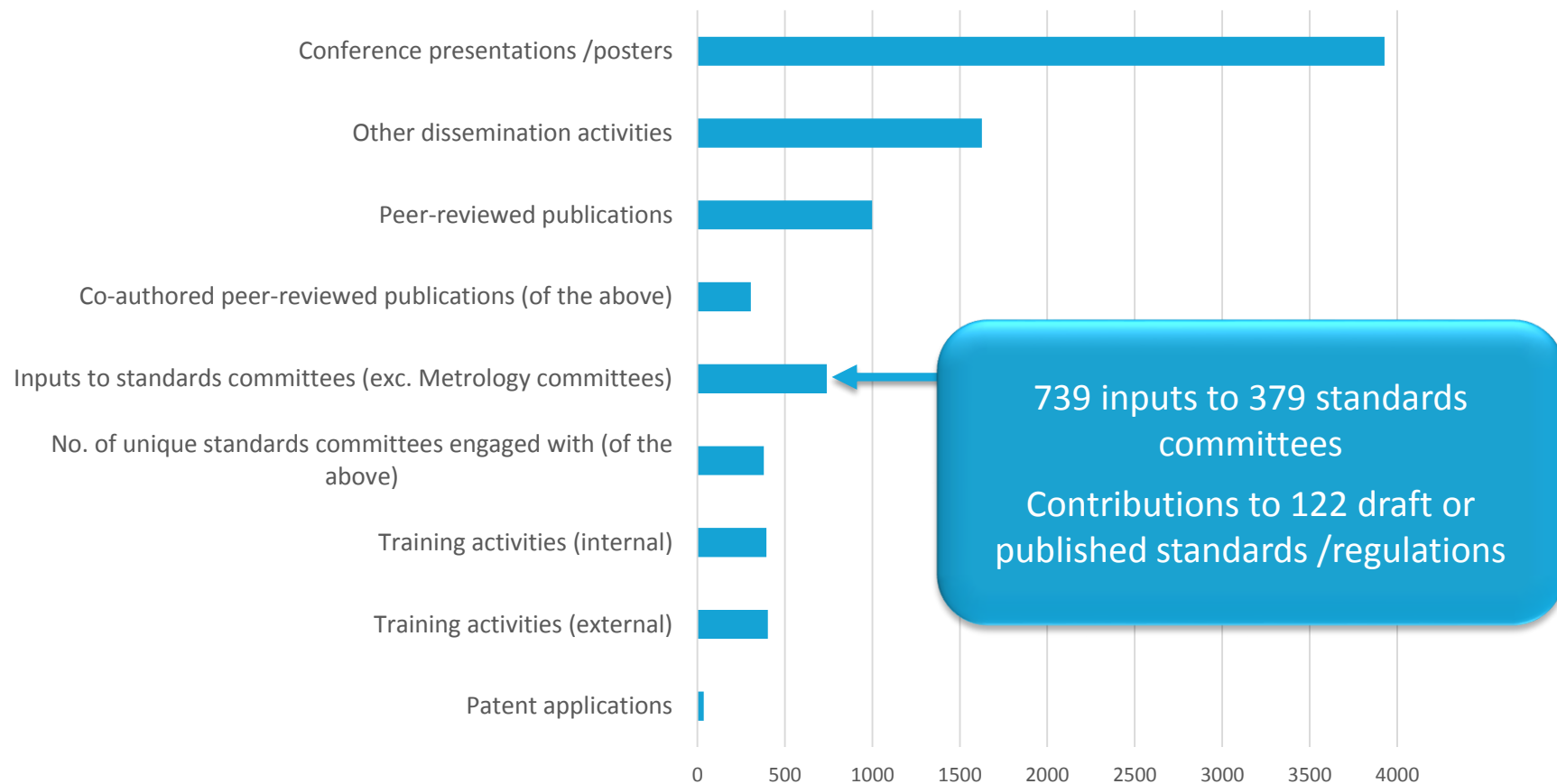
EMRP outputs



EMRP outputs



EMRP outputs



Output & impact reports



European Metrology
Research Programme



Energy impact report

A summary of the outputs and impact of the finished EMRP joint research projects in Energy.

The aim of this theme is to establish the measurement infrastructure necessary to support Europe's sustainable energy goals. The research is focused on technologies that support reduced greenhouse gas emissions and the security of Europe's energy supply.

EURAMET e.V. - the European Association of National Metrology Institutes

DRAFT

European Metrology
Research Programme



Environment impact report

A summary of the outputs and impact of the finished EMRP joint research projects in Environment.

The aim of this theme is to improve data quality for environmental policy making, underpin environmental research activities and stimulate technological innovation. The research is focused at both the local environmental level for air, water and soil quality and at the global level for challenges relating to climate change

EURAMET e.V. - the European Association of National Metrology Institutes

Impact case studies



European Metrology
Research Programme
Delivering Impact



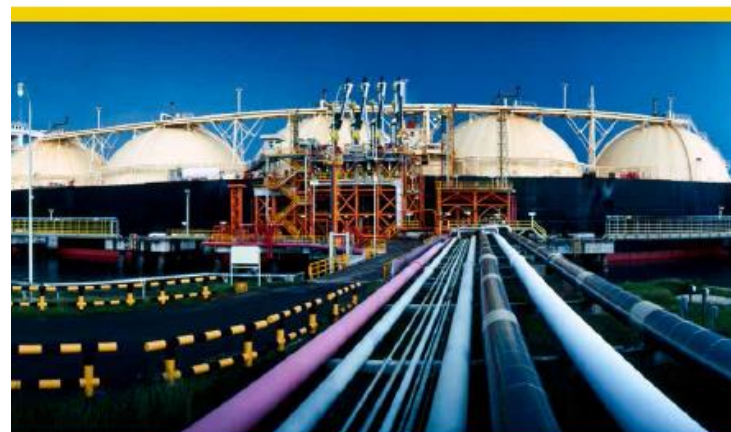
Future-proofing Europe's gas networks

Europe's renewable energy targets and diminishing natural gas resources require the diversification of energy sources to include non-conventional gases, such as biogas and methane. These gases have different chemical and physical properties to traditional natural gas and need to be well-characterised before entering the gas transmission networks and during 'custody transfer' between different commercial operators. This is crucial to ensuring safe operation and enabling fair trade and environmental decision-making.

Europe's National Measurement Institutes working together

The European Metrology Research Programme (EMRP) brings together National Measurement Institutes in 23 countries to address key measurement challenges at a European level. It supports collaborative research to ensure that measurement science meets the future needs of industry and wider society.

European Metrology
Research Programme
Delivering Impact



Diversifying Europe's energy supply

The recent increase in energy prices and instability of pipeline gas imports over the past few years have heightened concerns about the security, diversity, and competitiveness of Europe's natural gas supply. Coupled to this, alternative fuels are urgently needed to break the over-dependence of European transport on oil. Liquefied natural gas (LNG) could play a major role in diversifying Europe's energy supply and securing a stable, greener future.

Europe's National Measurement Institutes working together

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Thank you



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