



Dutch
Metrology
Institute



EMN for Energy Gases

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VSL EMN for Energy Gases

- In support to the societal challenges related to the energy transition, focusing on the metering of energy gases
- It will not only cover conventional and renewable/sustainable energy sources such as natural gas, liquid natural gas, biogas/biomethane and hydrogen, but also emerging new topics
- Cross-cutting character (gas analysis, flow, humidity, pressure, calorific value, density)



Activities to achieve Metrology at “Next Level”

- **Strengthen** link with **policy makers** and **regulatory bodies** at European and national level (from top-down to interactive approach)
- **Catalyse** the **STAIR** process, by actively introducing metrological concepts and practices in documentary standards, so that traceability, comparability and uncertainty are fully incorporated and implemented
- **Liaise** with other **networks/associations** active in energy gases (SFEM, EBA, ACEA, GERG, ERGAR etc.) to ensure accuracy in the field and to foster knowledge and technology transfer



Actors

Clear identification of stakeholders in the application areas: **MOBILITY** and **ENERGY PRODUCTION-DISTRIBUTION**

EoI NMIs/DIs	Stakeholders
VSL	Energy Gas associations (e.g., EBA)
NPL	Standardisation (e.g., ISO/TC193, CEN/TC408)
RISE	(Energy) Gas industry
CEM	Manufacturing industry
VTT	Research groups (e.g., GERG)
LNE	Policy makers
BAM	Regulatory bodies





Outputs



- Metrology to support innovation:
 - dedicated research together with, and focused on the direct needs, of industry & society
 - prompt solutions to new emerging requirements (ex. hydrogen purity – Euramet 1220)
 - strategic road-mapping of research, including coordination of developing new services
- Training & Knowledge Centre for metrology for energy gases:
 - EMN is the hot spot for energy gases' metrological questions & (public) information
- Coordination centre for PTs and scientific expertise:
 - in support of energy trade, conformity assessment and laboratory accreditation
- Metrology to the field:
 - creating a stronger bridge to research centres, testing laboratories and large end-users to ensure technology transfer



Long-term impact

- Guarantee of the **Quality** of energy gases
 - Diversification of energy sources and energy types leads to new requirements for quality of the gases
- Provide tools and evidence for **Safety**
 - Metrological infrastructure for new energy gases working at extreme conditions (high pressure and low temperature)
- Ensure **Custody transfer**
 - European harmonized approach to energy gas trade in and outside Europe

The EMN for Energy Gases will ensure that metrology in the field of energy gases will **directly meet the requirements** of policy makers, industry, networks, associations & standardisation committees, and thereby **society at large** during the energy transition.