

## EMN on Energy Gases

Metrology for BIOMETHANE,  
Workshop, Delft, 22-23 January 2019

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on behalf of the EMN members

# Outline



- Need for EMN on Energy Gases
- Who we are
- EMN Scope
- EMN objectives
- Launch event

# Need



- Drivers:
  - Regulation: European Directives on renewable energy
  - Climate change: Paris agreement (COP21)
- Situation:
  - Use of sustainable energy gas sources
  - Energy gas diversification. Foreseen complex energy mix in the next decades:  
natural gas, LNG, biogas, biomethane, hydrogen and any future renewable gas.
- Needs:
  - Meet the requirements of these drivers
  - Ensure the compliance with quality, efficiency, safety requirements
  - Guarantee energy gas exchange between countries and trade

- RED I (2009)
- RED II (2018)
- Alternative fuel Infrastructure (2014)
- Harmonised approach to energy trade and distribution (2015)

# How can metrology support the energy transition?



- Challenge:
  - Reliability and robustness of measurement results to address the energy transition beyond national boundaries and beyond a single technology
- Solution:
  - European coordinated effort to interface and collect stakeholder needs and to address these needs in the most efficient way at metrological, standardization, and policy level

## Creation of European Metrology Network on Energy Gases

# Who we are



## EMN Members:

16 European NMIs/DIs

VSL, NL  
BAM, DE  
BFKH, HU  
CEM, ES  
GUM, PL  
IMBiH, BA  
IPQ, PT  
LNE, FR  
LNE-LADG, FR  
NEL, GB  
NPL, GB  
PTB, DE  
RISE, SE  
TUBITAK, TR  
VTT, FI  
FORCE, DK



- In process of signing the MoU -

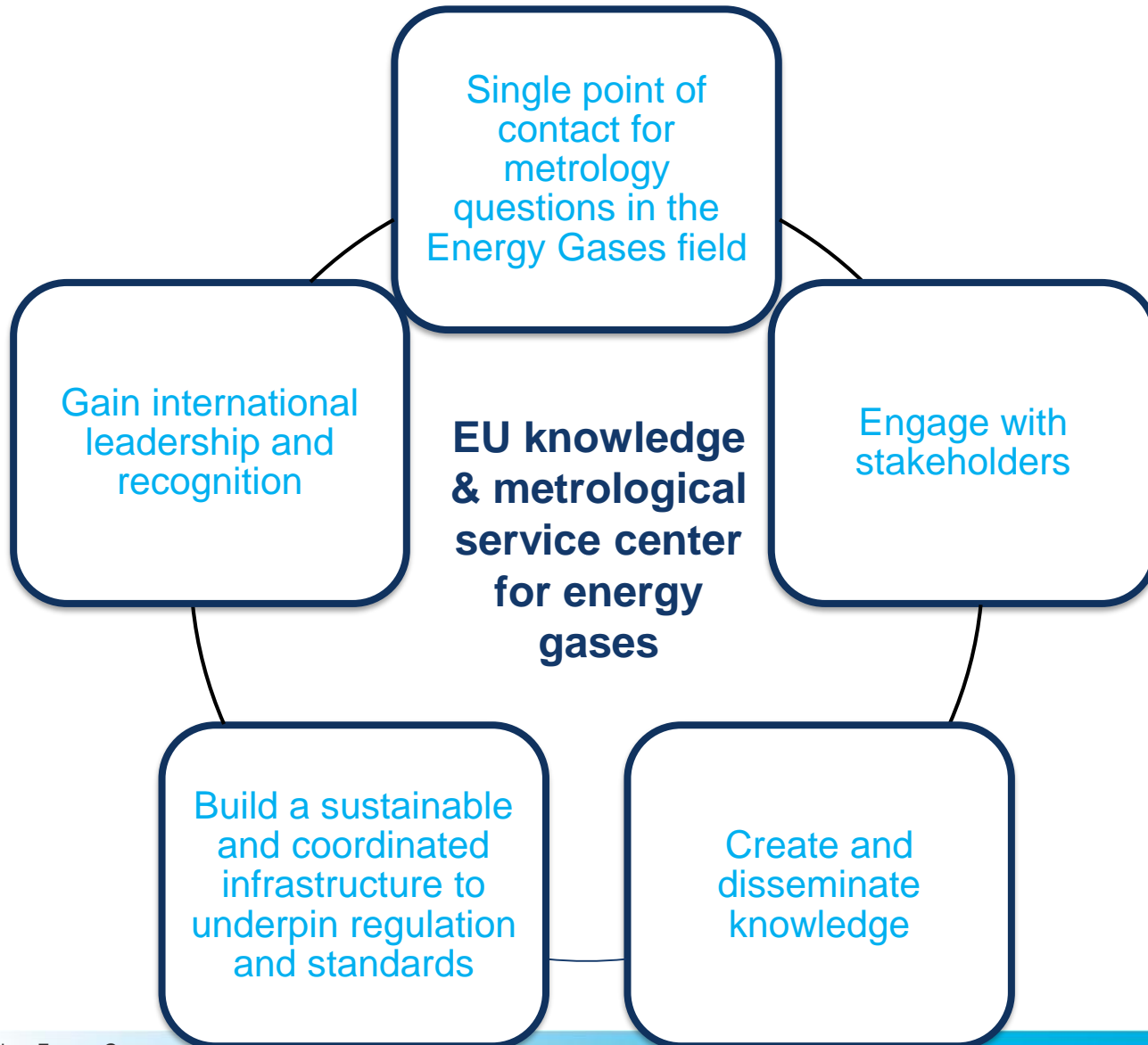
# EMN for Energy Gases FACT SHEET

- ❑ Under EURAMET
- ❑ Facilitate energy transition
- ❑ Focus on metering of energy gases
- ❑ Conventional fluids and fluids related to (emerging) renewable/ sustainable energy sources
- ❑ Cross-cutting character; Complementarity of measurement services for
  - gas composition
  - gas flow
  - temperature and humidity
  - pressure
  - density
  - material data
  - Particles
  - material testing



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# Scope of the EMN on Energy Gases





# Linked EU Research projects



GAS

HYDROGEN

MetroHyVe

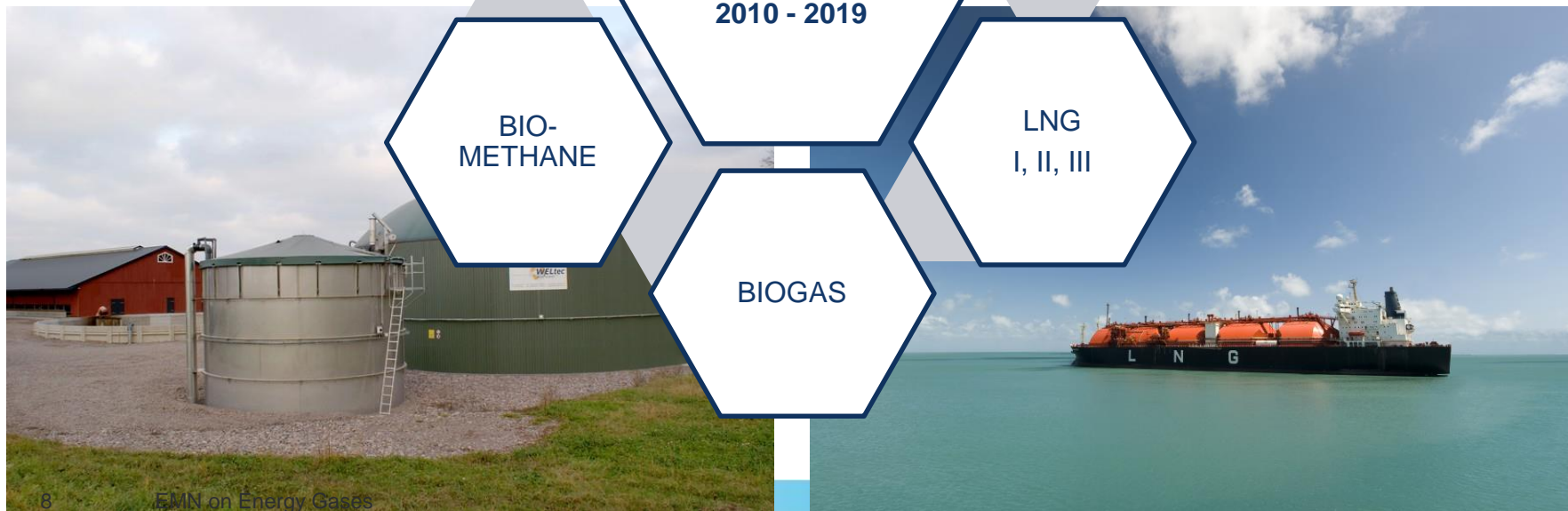
MultiFlowMet

EMRP/EMPIR  
2010 - 2019

BIO-  
METHANE

LNG  
I, II, III

BIOGAS





# EMN objectives (2019-2023)



- **Strategic Research Agenda (2020):** prioritisation of the measurement gaps and challenges by interaction with stakeholders
- **Maximise the impact of the research results of EMRP and EMPIR projects (2023)** by engaging with and feeding the project outputs to the relevant standardisation TCs and stakeholder associations responsible for the development of measurement methods and requirements in the field



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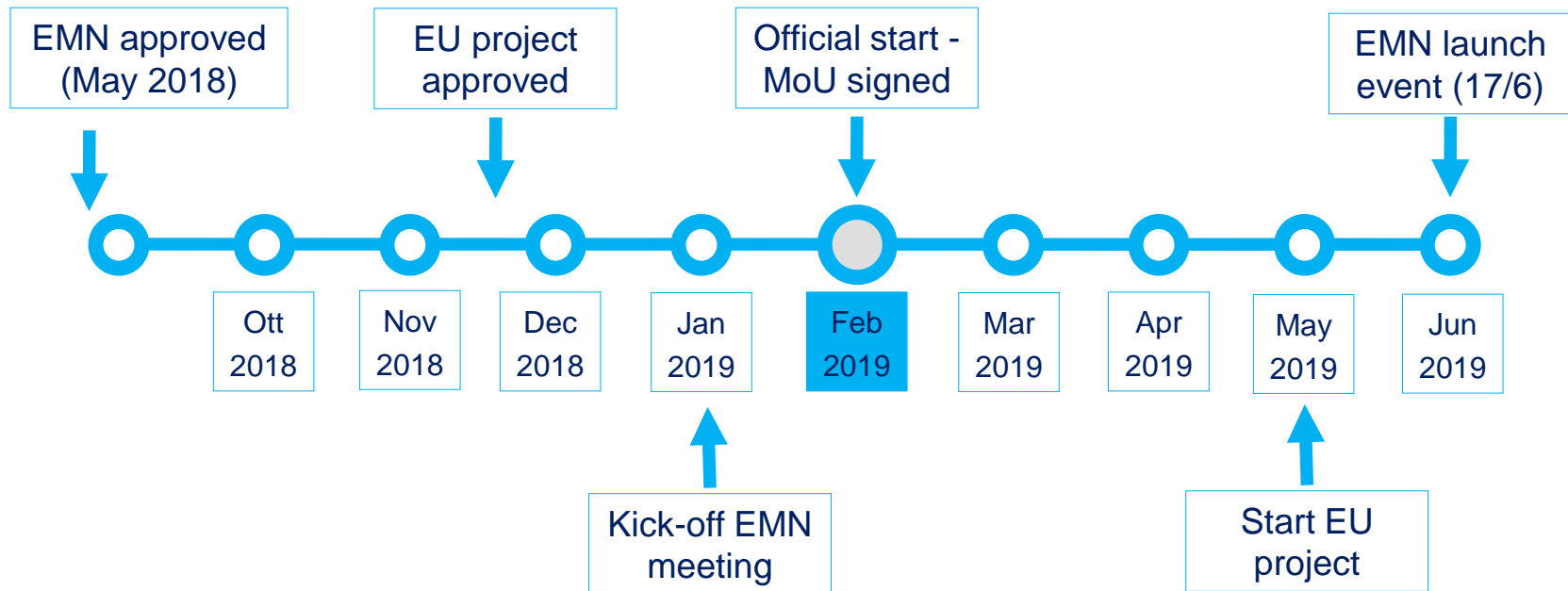
# EMN objectives (2019-2023)



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- **Online measurement services platform (2020):** one-point-of-contact for dissemination of the measurement capabilities to the stakeholders
- **Create synergies (2023)** between members of the EMN, stakeholders and other relevant parties so that complex or upcoming needs related to the energy gas transition can be easily addressed and prompt solutions found

# EMN short-term Timeline



# Launch of the EMN



- Launch event on 17 June 2019 (day before start of the Gas Analysis 2019) in Delft or the Hague.
- Half day event (start at 11h)
- Key elements:
  - Networking lunch
  - Presentation of the EMN concept (EURAMET)
  - Introduction to the EMN activities
  - Presentations given by stakeholders on (measurement) challenges in energy gases
  - Interaction with stakeholder: Discussion and feedback on needs and EMN activities

**SAVE THE DATE !**

# EMN Stakeholders



- National, European and international associations dealing with energy gases
- Energy gas producers
- Transport and distribution sector
- Industry manufacturing
- Research groups and academia
- Testing laboratories
- Standardisation TCs (CEN, ISO)
- Policy makers and regulatory bodies

INTERESTED?  
JOIN US !



Thank you for your attention!

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