



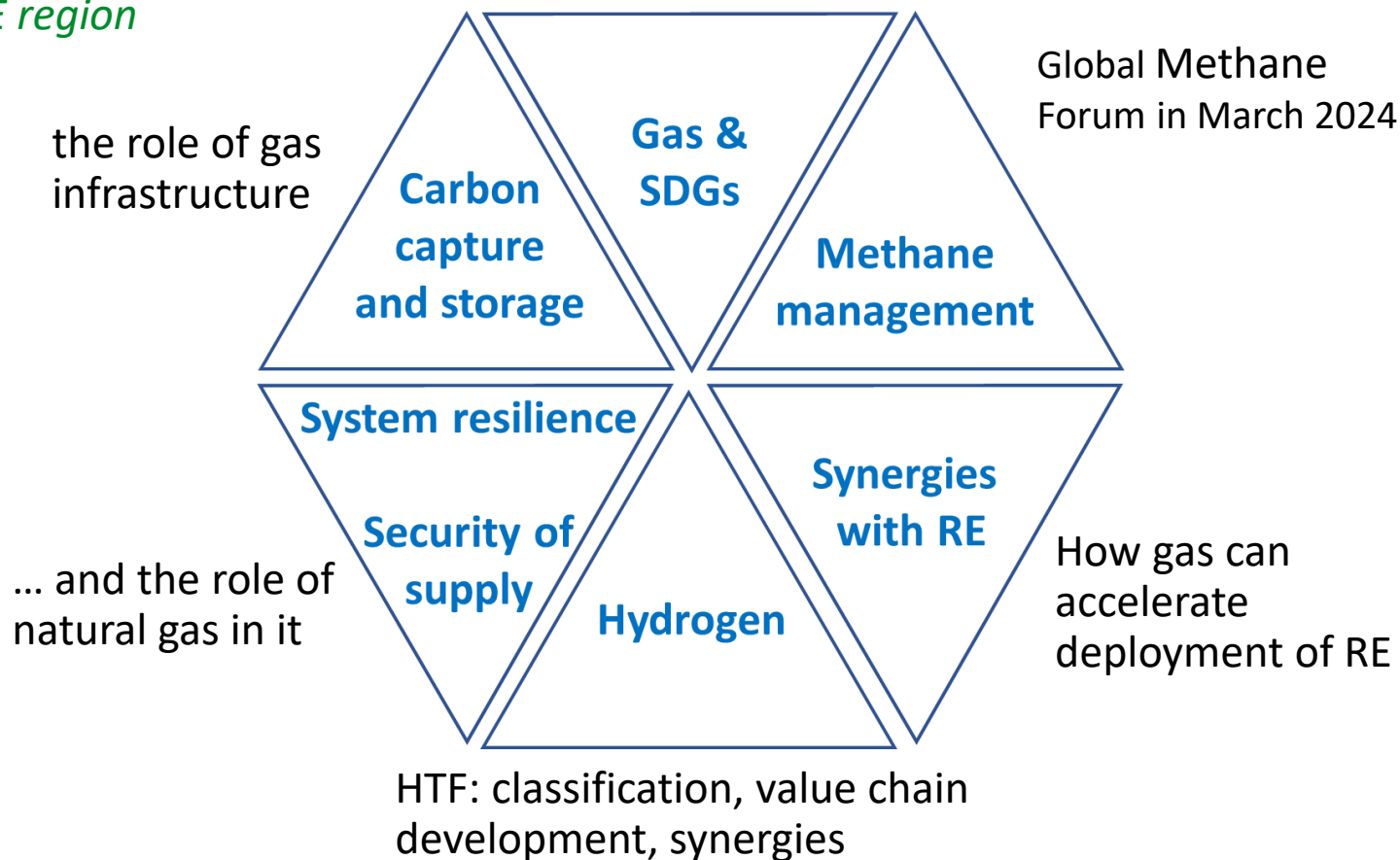
# Shaping the green energy transition: Carbon neutrality roadmap for Turkmenistan

Ashgabat, 25 October 2023

# UNECE work on natural gas

*Group of Experts on Gas: a forum for dialogue on sustainable and clean production & consumption of gas in the ECE region*

Focus on **SDG 7** (Access to energy for all) – deep dives into **SDG 13** (Climate), **SDG 9** (Resilient infrastructure), **SDG 11** (Cities), **SDG 5** (Gender)



# 3 corner stones of carbon neutrality in Turkmenistan

- **Methane abatement** – Global Methane Forum to be held in March 2024
- **Synergies** between RE and natural gas (and other gases – e.g., hydrogen)
- **New technologies** including CCUS, gas to liquids, power to X

# Methane abatement

- UNECE's [Best Practice Guidance for Effective Methane Management in the Oil and Gas Sector](#)
  - *A guidance for developing and implementing effective practices for monitoring, reporting and verifying methane emissions from the oil & gas sector*
- UNECE welcomes June 2023 decision by President Berdimuhamedov to approve the “Roadmap for the Development of International Cooperation for 2023-2024”
- We encourage Turkmenistan's accession to the Global Methane Pledge and stand ready to work with relevant ministries and departments to ensure the implementation
- The Global Methane Forum to be held the week of 18-22 March 2024 – Turkmenistan is invited

# Synergies between gas and RE

- Carbon neutrality through synergies between gas and renewable energy
  - *A UNECE publication, with 4 four case studies (Italy, Germany, Spain, and the US) of how natural gas could accelerate deployment of variable RE*
- Synergies could improve EE and reliability and decrease GHG emissions
- Cooperation in this field could benefit Caspian countries, through SPECA and other mechanisms

# New technologies

## Carbon capture, storage and use (CCUS)

- Today over 80 % of primary energy comes from fossil fuels.
- Achieving carbon neutrality will require a rapid deployment of CCS
- Gas infrastructure, including UGS, the use of depleted gas fields may accelerate the development of technologies

## Power to X

- Using RE (PV & wind) create something else
- New energy carrier – usually hydrogen, but could be liquids

## Gas to Liquids

- Converts methane to liquid transportation fuels via FT – a difficult proposition from UN perspective
- No ready answers - need to find a way to do it more sustainably



# Thank you for your attention

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