



UNECE's Air Convention Gothenburg Protocol Review

April 2022

*Working Group on Strategies and Review
Gothenburg Protocol Review Group
Potential Options for Addressing Methane*



Methane in ozone formation

- **Scientific evidence** from the 2016 Scientific Assessment Report and its Policy Response (2017/3), and results from the **Global Methane Assessment (UNEP 2021)** establishes a strong link between methane emissions and ground-level ozone formation and its impact on health and the environment.
- **Draft 2:** increases in global methane are expected to offset projected NO_x and NMVOC emission reductions expected under the Gothenburg Protocol
- **Synergies Document:** given slow rate of methane oxidation in the atmosphere, decrease in surface ozone from methane anywhere globally would provide benefits in the UNECE

Potential menu of options for addressing methane

- Purpose of document: provide information, gather feedback and begin dialogue on potential ways forward in addressing methane as an ozone precursor
- Initial considerations provided for listed potential options
 - Menu of options is non-exhaustive
- Methane as an ozone precursor is currently addressed under the Convention
 - TFHTAP: hemispheric transport of ozone
 - TFTEI: mitigation technologies
 - TFRN: co-mitigation of methane and ammonia
 - TFIAM/CIAM: emission scenarios
 - ICP-Vegetation: ozone flux-based risk assessment for vegetation
- Create synergies and avoid duplication

Overarching Themes

- **Timing**
 - Short-term, medium-term, long-term actions
 - A menu of options/possibilities to choose from and/or package together
- **Type of Instrument**
 - Mandatory vs non-mandatory
 - Technical guidance and best practices
 - Sector-specific approaches
 - Potential to revise current Gothenburg Protocol or new separate instrument
 - Incremental ratification of a separate methane amendment
 - Individual or overall/region-wide target setting
- **Geographical Scale and Ambition**
 - Larger scale/lower ambition vs narrow geographical scope/higher ambition
 - Co-benefits for addressing ammonia emissions
 - International cooperation (other initiatives, Forum for International Cooperation of Air Pollution)
 - Voluntary commitment approach (e.g. BACA)
 - Outreach to compliment Convention work with actions in non-UNECE regions

Potential menu of options for addressing methane

- ***Option 1:*** Compiling, reviewing and improving methane emission information
- ***Option 2:*** Minimum requirements for monitoring and reporting data
- ***Option 3:*** Adoption of emission targets/optimized national/regional methane reduction commitments
- ***Option 4:*** Methane ELVs for certain activities
- ***Option 5:*** Voluntary programs (such as BACA) such as agricultural best practices (could include guidance documents from option 4)
- ***Option 6:*** Capacity-building programs, especially in EECCA

Background information

- Include information on related efforts and/or gaps
- Coordination with national climate/agriculture/energy colleagues and institutions
- Emissions reporting synergies with UNFCCC & Arctic Council Expert Group on Black Carbon and Methane