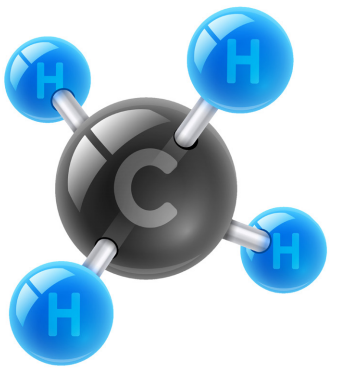
A Statement from the Scientific Community

The Angera Declaration for Methane Action



Two hundred and fifty years after Alessandro Volta discovered methane in the marshes of Angera, the science is now clear: action on methane represents one of the best opportunities to slow global warming.

Methane is the second most significant contributor to warming, after carbon dioxide. Methane is responsible for 30% of current warming and its atmospheric concentration continues to rise. Absent rapid and sustained reductions, methane emissions will drive faster warming in the coming decades, intensifying climate risks such as more frequent and severe droughts and heatwaves; more rapid ice-sheet loss; sea-level rise; and risks of triggering destabilizing climate tipping points.

Reducing methane emissions not only reduces climate risks, it also almost immediately improves air quality by decreasing ground-level ozone, which improves public health by reducing respiratory illness and premature mortality while preventing crop losses from ozone exposure thus strengthening food security.

In recent years, meaningful progress has been made on methane action. We commend the efforts of high-ambition nations, organisations, coalitions, donors, and businesses that have advanced methane mitigation. Initiatives such as the Global Methane Pledge—launched in 2021 and now endorsed by 159 countries and the European Commission—have helped catalyse this momentum by setting a goal of reducing global anthropogenic methane emissions by at least 30% below 2020 levels by 2030.

The 2025 Global Methane Status Report shows that while these efforts are slowing the growth of methane emissions, atmospheric concentrations continue to rise. Even greater ambition is needed to match the urgency of the challenge and the scale of the opportunity.

As scientists representing a range of perspectives, we issue this joint call to action and present a 10-point plan for seizing the methane opportunity.

1. Rapidly Accelerate Deployment of Proven Solutions
Proven methane mitigation measures should be rapidly deployed across the energy, waste, and agriculture sectors. We have the knowledge and the tools to make major and sustained emissions reductions today. In many cases, especially where methane gas can be captured and used, the direct economic benefits of these measures often exceed the cost of implementation—even without accounting for avoided environmental damages.

2. Strengthen Measurement, Monitoring, Reporting, and Verification
Effective methane mitigation depends on timely, accurate, and transparent measurements across different spatial scales, from local to global. Satellite, airborne, and ground-based monitoring should be expanded to fill gaps in key regions; atmospheric data need to be integrated within national inventories; capacity strengthened in under-resourced regions; and the number of isotopic and flux measurements increased to distinguish anthropogenic from natural sources.

3. Increase Ambition
We encourage policy frameworks to continue to raise ambition and to translate methane commitments into action. This includes setting clear, science-based standards, embedding quantified methane goals in Nationally Determined Contributions (NDCs) to the Paris Agreement and other key climate policies, and strengthening implementation. Given its significant health and food security benefits, methane action should be integrated across air quality, public health, agriculture, and other policy frameworks. Subnational and local policies and actions also play an important role in mitigating methane.

4. Strengthen Financing and Economic Incentives
Public, private, and development finance should be strengthened to accelerate mitigation efforts. Well-designed market mechanisms may further strengthen incentives for methane emission reductions and mobilise capital for methane mitigation opportunities, provided evidence-based standards for measurement, additionality, and verification are upheld.

5. Integrate Methane Within a Holistic Climate Strategy
Methane action must be embedded within a comprehensive multi-gas framework that includes aggressive reductions in carbon dioxide as well as short-lived climate pollutants. We should move beyond simplified metrics and assess emissions of different gases based on their temperature impacts over time.

6. Advance Mitigation Solutions for Hard-to-Abate Sources
While rapid deployment of existing solutions is paramount, sustained investment in research, incentives, and technological innovation is essential to address hard-to-abate methane sources. This includes advancing solutions for livestock enteric fermentation, legacy waste in landfills, abandoned coal mines, and other technically challenging sources. Strategic investment today can strengthen national and corporate competitiveness in the next generation of methane mitigation technologies.

7. Strengthen Understanding of Climate Feedbacks
Rising methane emissions from natural systems, including wetlands, inland waters, and permafrost, represent a major climate risk. Improved observing systems are needed to detect changes in natural methane emissions and distinguish between different emissions sources. This includes expanding satellite coverage, in situ observation networks, and isotopic analysis—particularly in tropical and boreal systems where natural emissions show signs of increasing and where major observation gaps remain. Improved Earth system modelling is also needed to better inform long-term climate risk management.

8. Strengthen Understanding of Methane Sinks and the Overall Methane Budget
Ongoing scientific efforts to understand and quantify the global methane budget–including methane sinks–should be sustained and strengthened. This includes efforts to better detect and understand any changes to methane sinks, including the complex atmospheric chemistry that influences methane's lifetime and warming impact. Continued research is also needed to understand how changes in emissions of other gases, including hydrogen, may affect methane's atmospheric lifetime.

9. Advance the Scientific Frontier
Accelerated assessment of potential innovative climate strategies, including research into novel solutions such as methane removal, is also important to reduce risk. These strategies should be scientifically sound, technologically feasible, economically viable, environmentally responsible, and socially acceptable.

10. Ensure Sustained International Cooperation
Methane knows no borders. Durable methane reductions will require continued long-term international scientific coordination and policy cooperation. Measurement standards, data systems, and modelling frameworks must be harmonised and interoperable to ensure consistency, transparency, minimal latency, and comparability across countries.

In conclusion, we call on decision-makers to move beyond incrementalism and accelerate methane action at the pace needed to protect our climate, health, and food security.