



clean air farming

Reducing Ammonia and Methane
Emissions from Agriculture

Roadmap for an EU Methane Strategy

Feedback from Deutsche Umwelthilfe e.V./ Environmental Action Germany

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Deutsche Umwelthilfe e.V. (DUH/ Environmental Action Germany) has been engaged to preserve the natural foundations of life for more than 40 years. We welcome the opportunity to comment on the European Commission's Roadmap for an EU Methane Strategy.

We strongly support the cross-sectoral approach and an integrated EU Methane Strategy covering the areas of energy, agriculture and waste. A strategy to tackle methane emissions is highly needed for a transition towards a climate neutral continent. It is also necessary to reduce damaging impacts on human health and the ecosystem caused by ground-level ozone. Total methane emissions in the EU are not decreasing fast enough, and since 2013, emissions from agriculture are even rising. This makes it obvious that policy and legislation in place are insufficient to provide necessary reduction. This reduction is necessary soon, as methane is 86 times more potent than carbon dioxide (CO₂) over a 20-year period, making it the second most important greenhouse gas that contributes to 25% of warming experienced today.

Methane emissions from agriculture – and thereof mainly from intensive livestock farming – account for more than half of the emissions in Europe. Aggregate emission estimates by the Commission's consultant IIASA give clear evidence for the urgency to implement reduction measures for methane in the agriculture sector.

We welcome improvements in emission monitoring and reporting on farm level - however, the Commission should implement powerful policy steps without further delay. A mix of technical measures, structural adjustments - available and cost efficient – combined with changes in consumption patterns have the potential to reduce methane emission in the agricultural sector. Therefore, the Commission should seize the chance to implement binding measures on farm level and support the transition towards extensive livestock production in the follow-up of the EU Methane Strategy.

Technically and economically viable measures need to become mandatory for big polluters - big-scale beef and dairy farms - following a set timeline. Solutions that reduce both methane and ammonia emissions include the gas-tight storages for digestates and manure as well as the acidification of slurry in the barn. Increased anaerobic digestion of manure in biogas plants can help to reduce local manure surpluses, however, they do not provide a solution to growing amounts of waste from intensive livestock farming.



Some measures will also contribute to animal welfare and should therefore be prioritized without further deferment, such as:

Improved slurry management in spacious pig barns, so that different activity areas are separated.

Improved manure management in cattle husbandry with a sloped ground, urine collection channels and elevated feeding spots.

Cattle breeding for traits that maximize animal health, longevity and high fertility, will lead to a higher number of lactations and thus reduce emission per production unit of milk.

Additionally, a change of **production and consumption behaviour** of animal products is essential to achieve climate and air quality targets and obligations. Transforming agricultural practices and a shift in diet away from meat and dairy products could reduce the sector's emissions by up to 50% by 2050 compared to a situation without mitigation efforts (IIASA). In addition to the promotion of behavioural changes in consumption, the European Commission should initiate resolute steps on the supply side to help farmers in the transformation of intensive livestock farming towards extensive systems for the production of meat and dairy products. Furthermore emissions can be reduced by cutting **food waste** by a minimum of 50% by 2030 (compared to 2014 levels). Therefore, EU guidelines that include binding reduction targets as well as a common EU methodology for measuring and preventing food waste must be established.

Please find a detailed description of solution pathways to reduce methane emissions from agriculture in our publication "Minus Methane - Methane reduction strategy for agriculture" (<https://www.clean-air-farming.eu/en/downloads-and-links>).

As the third largest source of methane emissions in Europe, **the energy sector**, too, needs to reduce its emissions swiftly and significantly. According to UNFCCC reporting, annual fugitive emissions from gas, oil and coal within the EU are approximately 80 million tonnes CO₂e or about 2% of the EU's total annual CO₂e emissions. Fossil Gas comprises about one-quarter of the EU energy mix, with the EU importing over half of globally traded gas. Recent studies show that actual **global anthropogenic fossil methane emissions are much higher than reported—up to 40%**—with the oil and gas sector identified as the main contributor to the rapid acceleration of atmospheric methane, further exacerbating its climate impact. Similarly, the Commission found that, above a leakage rate of only 3% along the supply chain, the climate impact of fossil gas is worse than that of coal in power generation and increased trade in and imports of liquefied natural gas to Europe might prove to have a much higher global warming impact than anticipated. Accordingly, scientists have shown that fossil gas can have no role in the EU energy system beyond 2035 to be compatible with the Paris Agreement.

Given this, the Commission should propose a package of policies that will immediately begin to cut methane emissions from the energy and petrochemical sectors across the supply chain, involving the following measures:

Fossil-Gas Phase-Out by 2035. By 2023, and linked to the review of National Energy and Climate Plans (NECP), Member States should be required to adopt fossil-gas phase-out plans with intermediate targets setting out an immediate and evenly paced pathway toward reducing fossil-gas consumption, outlining policies for eliminating reliance on fossil gas within twelve years (by 2035).

Ineligibility of Financial Assistance. Make existing and new fossil gas and fuel infrastructure projects ineligible for state aid, EU funding and loans, including pipelines, grids, LNG terminals, fossil-gas power plants and petrochemical facilities. Financial assistance should be redirected toward promoting non-fossil alternatives.

Immediate Ban on Venting and Flaring Fossil Gas. Prohibit gas suppliers from placing on the market fossil gas, including energy derived therefrom, where venting and flaring occurs during production and processing unless evidence is provided that the limited use of flaring is for a legitimate purpose, e.g. safety testing or safe disposal of harmful gases, and no technique exists that could in actual fact capture the methane.

Immediate Leakage Detection and Repair (LDAR). Prohibit gas suppliers from placing fossil gas on the EU market without undertaking mandatory and periodic (at least quarterly) leakage detection and repair (LDAR) supported by verified evidence of reductions. The Commission should establish minimum LDAR requirements, drawing upon industry-wide source-by-source best practices.

Monitoring, Reporting and Verification (MRV). Prohibit gas suppliers from placing fossil gas on the EU market without systematic and mandatory methane monitoring, reporting and verification (MRV), including documentation of LDAR compliance. Reporting should be based on a comprehensive equipment survey and application of the most up-to-date emission factors, with a directive to move to actual measurement data within two years. Data on methane emissions and LDAR should be publicly available as open source data files, in a mandated format to ensure straightforward comparison, and serve as the basis for prioritising the phase-out of the most polluting forms of fossil gas.

Methane Performance Standard. Adopt a mandatory methane performance standard that caps methane emissions at 0.2% along the entire supply chain for both domestic and imported gas sold and consumed in the EU by 2025.

Immediate Ban on Fracked Fossil Gas. Fracking is a particularly egregious form of fossil-gas extraction, which can be at least as bad as coal from a climate perspective due to significant methane emissions resulting from the process. To prevent further exploitation of fracked gas, the EU should immediately prohibit fracking within EU borders coupled with an import ban on gas produced through fracking

Methane Emissions from Abandoned Wells. A significant number of wells that have ceased production continue to emit methane into the atmosphere. Competent authorities should adopt policies to ensure those wells, where ownership can be documented, are capped or filled to stop methane leakage and ensure those responsible for the leaks are paying the costs. At wells where ownership is not known, a funding program paid by direct taxes on revenue from fossil-fuel companies should ensure these abandoned wells are properly capped and leaks are stopped.

At international level, parties to the UNECE Convention on Long-Range Transboundary Air Pollution have recently adopted their 2020-2030 Long-term strategy. The reduction of methane as an ozone precursor has been identified as a priority for this upcoming period. The ongoing review and expected revision of the Air Convention's Gothenburg Protocol should also support the international community in taking measures to reduce methane emissions to achieve air quality objectives.

During the next steps by the European Commission for an EU Methane Strategy, we welcome further public participation and safe-guarding of effective involvement of civil society organisation.