

Process emissions - a call for climate action

As the world gathers for COP26 we recognise our duty as professionals working on process emissions in the water sector and our obligations to society served through the respective professional institutions we are members of and through our personal ethics and obligation to future generations.

We recognise the substantial impact on global warming of nitrous oxide, with a warming potential of over 270 times the warming potential of carbon dioxide¹ and that wastewater treatment contributes some 3% of global N₂O emissions².

We recognise methane emissions from wastewater collection and treatment processes contribute some 7%³ of anthropogenic methane emissions, and that it has even more significant short term heating impacts *in addition to* current, detrimental impacts on local air quality and respiratory health of citizens *in addition to* health and safety impacts at sites *in addition to* longer term climate impacts. We note our national governments' Paris climate commitments and decarbonisation legislation and we note the 100 countries, led by the EU and US who have, at COP26, signed up to the Global Methane Pledge to reduce emissions by 30%⁴ by 2030.

We agree that we can estimate and measure N₂O and CH₄ emissions from wastewater treatment with sufficient accuracy to take science-based actions to understand them and reduce them, starting today, *at each and every* centralised wastewater treatment plant.

To achieve the climate action required at the pace called for by the world's scientists, we call on:

1. Water utilities and professionals to assess the climate, societal and local air quality impacts of these emissions – considering social value, market and social costs of carbon and other quantification methods *which exist* to properly account for the real cost of these emissions for current and future generations;
2. Water professionals to *rise to the challenge* to discuss and act on these emissions with the world's most progressive water utilities and companies - planning the necessary monitoring and mitigation activities, recognising we have many solutions already; and we call on
3. Water sector stakeholders to guide the necessary investments, financial and policy support including carbon pricing for *reducing these* emissions which, if unmanaged, can *negate the benefit of biogas and biomethane*.

We recognise we are running out of time. We urge our collective group of professionals in water, our member-led organisations, our corporate and academic colleagues to bring process emissions to the table today and to deliver the action required. .

Signed – November 2021:

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¹ Reference to 100 year GWP.

² From centralised treatment – e.g. for US and UK as reported <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3306625/>.

³ https://www.globalmethane.org/documents/ww_fs_eng.pdf

⁴ From 2020 levels, see https://ec.europa.eu/commission/presscorner/detail/en/IP_21_4785