NET ZERO
2040

FIND SOLUTIONS FOR PROCESS EMISSIONS

The wastewater industry is investing heavily in research and development of technologies to reduce nitrous oxide (N_2O) and methane (CH_4), which are potent greenhouse gases[13]. While the sector has research at its disposal to estimate these emissions, we need more monitoring and measuring to better understand the total amount of these emissions from our activities. The amount of process emissions is intensified where wastewater treatment works are overloaded.

There are currently no practical and affordable off-the-shelf ways to deal with the unreported process emissions. It may in future require the complete redesign of the treatment process and ultimately require us to cover the significant number of treatment tanks and recover the gases.

In the meantime, we will explore ways to optimally control the operation of the works to minimise greenhouse gas emissions. And for the foreseeable future, we will be reliant on offsetting measures from land and soil management to help to compensate for these emissions.

Ballykelly wastewater treatment works, County Derry/Londonderry.

[13]The emission of 1 kg of nitrous oxide (N_2O) equals 298 kg of CO_2 equivalents, and the emission of 1 kg of methane (CH_4) is equal to 25 kg CO_2 equivalents.