

Scientific facts cannot be denied

IN a recent article I came across, the writer argued that methane emissions from livestock are not 'comparable' to methane emitted from the fossil fuel industry. This is certainly true, because the amount of methane originating from fossil fuel production and use, which is calculated in the global carbon budget (<https://www.globalcarbonproject.org/carbonbudget/>) as between 111 and 128 TgCH₄/year, is only approximately half of that originating from agriculture and waste at 206-217 TgCH₄/year.

Since the industrial revolution, methane concentrations in the atmosphere have increased by ca. 2.5 times due exclusively to human activities of which agriculture and waste has made, and continues to make, the largest contribution. In fact, domesticated ruminants are the largest source of anthropogenic methane, contributing an estimated 28% of annual global production.

In the UK, government statistics for 2019 (<https://www.gov.uk/government/statistics/agri-climate-report-2021/agri-climate-report-2021>) reveal agriculture accounts for 47% of all CH₄ emissions and of this 84% originates from enteric fermentation in livestock.

The argument that emissions of methane from cows is somehow 'natural' and involved in a 'short-term' cycle which is not adding to global warming is frankly scientifically bogus.

Molecules of CH₄ emitted from cows, from fossil fuel use or from any other source survive in the atmosphere for approximately nine years and have the same warming potential on the earth's atmosphere.

CH₄ is the second most important non-condensing greenhouse gas affecting the Earth's climate, and the contribution of domesticated ruminants to CH₄ emissions is highly significant.

Unfortunately, these facts based on scientific study cannot be gainsaid, however much the writer wishes they were not true.

Professor Bruce Webb
Exeter, Devon