Executive Summary:

Dual Reporting GWP* and GWP100 in Corporate Greenhouse Gas Reporting

Why Dual Report GWP* and GWP100?

Globally, methane (CH_4) accounts for over 55% of cattle greenhouse gas (GHG) emissions (Rotz et al., 2019). With CH_4 constituting a significant portion of cattle GHG, properly representing CH_4's warming impacts on climate is critical for accurate corporate GHG reporting and for the judicious allocation of climate mitigation resources. The current GHG reporting metric, GWP100, presents limitations particularly when it comes to evaluating short-term climate pollutants like CH_4. One limitation has been the potential for GWP100 to either underestimate or overestimate CH_4's warming potential (Figure 1). The new metric, GWP*, developed by Allen et al. (2019), addresses these shortcomings and can better capture CH_4's shorter-lived impacts on warming compared to GWP100. Therefore, using both GWP* and GWP100 in corporate GHG reporting can more accurately represent companies' impact on climate than using one metric alone.

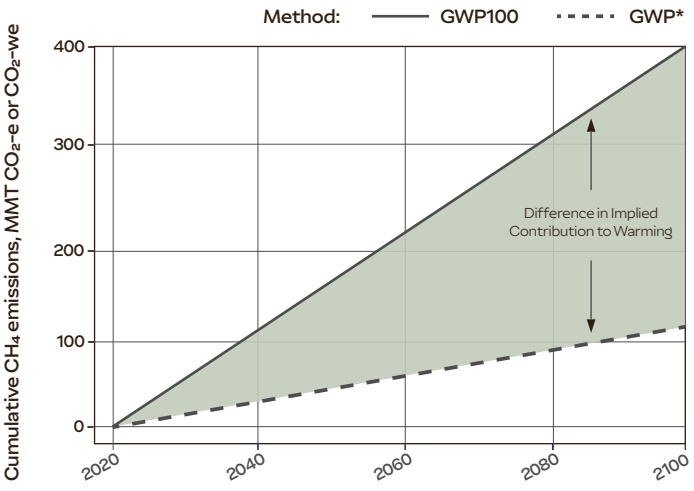

Figure 1

Long-term warming impact of CH_4 using GWP100 and GWP* when CH_4 emissions are constant.

Key Takeaways

- GWP* can better capture CH_4's shorter-lived impacts on warming compared to the standard metric GWP100.
- With the new methodology publication by Klopatek et al. (2026; published in Frontiers in Climate), companies can now dual report CH_4 emissions using GWP100 and GWP*.
- Dual reporting with GWP* can aid agrifood companies in comprehensively assessing their impacts on climate, and enable them to make informed decisions on the most judicious use of resources to mitigate climate warming impacts.

How to Use GWP* in Corporate Reporting

The methodology developed by Klopatek et al., (2026) provides a step-by-step guide for how companies with livestock in their GHG inventories can use GWP* in corporate reporting. The methodology advocates for a split gas dual reporting approach using both GWP* and GWP100. Emissions can be reported on both an absolute and intensity basis. Utilizing both GWP* and GWP100 can enable companies to inclusively evaluate long and short-term impacts of their respective GHG emissions from livestock and provide companies with a means to report in a manner that aligns more closely with their stated climate goals. With GWP* integrated into corporate accounting, companies can bring important focus to what reductions should take place, what GHG reductions would make the greatest impact on climate, and where and how to dispense climate related financial resources.

Links to White Paper and Grey Literature

- White Paper: Meat Institute
- Peer Reviewed Publication: Frontiers in Climate

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