Methane Misinformation:

The New Frontiers of Climate Denial

Changing Markets © 2026 all rights reserved

The information presented in this report has been prepared using best practices and due diligence, using information available at the date of publication believed to be reliable. All information is subject to change. All data, unless otherwise specified, is obtained from public sources including but not limited to company websites, annual reports or includes company information provided directly to Changing Markets. If you represent a company that appears in this report that you believe is not correctly represented, supplemental information can be sent to contact@changingmarkets.org. The authors accept no liability whatsoever for any direct or consequential loss arising from the use of this document or its contents.

This report was researched and written by the Changing Markets Foundation.

www.changingmarkets.org
published in November 2026.

Design: Pietro Bruni - www. toshi.ltd

Changing Markets FOUNDATION

Contents

1. **Introduction** 8

1.1 What the science says 8

1.2 *Methodology* 10

2. **Rewriting the rules: The misuse of methane metrics to weaken climate policy** 11

2.1 *Growing concern over the misuse of methane metrics* 11

2.2 *New Zealand: A precedent for weaker methane targets* 12

2.3 *The Split Gas Coalition* 12

2.4 *How 'agrodemia' is shaping methane policy in Ireland* 13

2.5 *EU Livestock Strategy: Industry narratives enter European policymaking* 14

2.6 *The UK as a Global Methane Pledge Champion: Industry pressure to rewrite the rules* 15

3. **Discredit the solutions: How Bovaer misinformation crossed borders** 18

3.1 *One additive, two backlashes* 18

3.2 *The scale of the backlashes* 20

3.3 *Misinformation timeline* 21

3.4 *Shared misinformation narratives across both backlashes* 24

3.5 *Ten actors amplifying Bovaer misinformation across borders* 25

Changing Markets © 2026 all rights reserved

3.6 *The impact of the backlashes* 30

4. Rebranding livestock as a climate solution: The rise of the regenerative grazing offsetting projects in the Americas 32

4.1 *Livestock presented as a solution* 32

4.2 *Allan Savory and the rise of regenerative grazing* 33

4.3 *How Big Ag, Big Oil and Big Tech are selling cattle ranching as a false climate solution* 34

Case study 1: SARA project: Selling soil carbon while cattle keep emitting methane 37

Case study 2: Microsoft: More cattle, more carbon credits 38

Case study 3: Boomitra project: Cashing in on carbon credits without cutting methane 40

Case study 4: Vista Energy: Using cattle ranching to offset fossil-fuel pollution 41

Conclusions 42

References 45

Timeline References 52

Changing Markets © 2026 all rights reserved

'Science Corner'

GWP100: The standard metric used in international greenhouse-gas reporting, comparing the warming impact of a gas with CO_2 over 100 years.[1] The metric underestimates methane's powerful short-term impact, while overstating the long-term warming from stable methane emissions. Critically, it also understates the rapid climate benefits of cutting methane, which offers a vital 'emergency brake' on global warming.

GWP*: A metric designed to better represent the temperature effects of short-lived pollutants such as methane by focusing on changes in their rate of emissions over time rather than treating them like cumulative CO_2 emissions.[2] It was developed by a group of climate scientists led by Professor Myles Allen at the University of Oxford, alongside researchers including Keith Shine, Jan Fuglestvedt, Richard Millar, Michelle Cain, David Frame and Adrian Macey.

GWP* can help show how changes in methane emissions affect global warming, but its use by livestock industry groups has distorted the debate. By focusing on changes in emissions rather than their continued climate impact, major polluters can claim 'no additional warming' while maintaining high emissions, downplaying the need for the deep methane cuts demanded by climate science.

Biogenic methane: Methane from livestock is part of the natural carbon cycle, but industry groups have used this fact to portray it as harmless or climate neutral, downplaying the need for emissions cuts. As the Changing Markets Foundation documented in *The New Merchants of Doubt*, this argument ignores methane's powerful warming effect while it remains in the atmosphere.

No additional warming and temperature neutrality: Used in New Zealand[3] and Ireland,[4] these seemingly positive terms focus on preventing additional warming relative to a recent baseline, rather than addressing the full warming impact of existing methane emissions. By effectively 'grandfathering' historical emissions, they risk allowing major livestock emitters to maintain high emissions while claiming climate progress.[5]

This obscures the fact that atmospheric methane concentrations have reached 266% of pre-industrial levels.[6] Both approaches draw on GWP* accounting applied at national or sectoral level rather than globally, despite scientific warnings about its fairness. Yet the connection to GWP* is not always made explicit, making the implications for climate targets harder to scrutinise, as highlighted in Changing Markets' 2025 report *The New Faces of GWP**.[7]

Split-gas accounting: A split-gas approach distinguishes short-lived greenhouse gases such as methane from long-lived gases such as carbon dioxide, allowing separate emissions-reduction targets to be set for each rather than relying solely on a single combined target.[8]

Split-gas accounting is not in itself the problem. Separating short-lived methane from long-lived gases can help make methane targets clearer, and separate agricultural methane targets can be an important tool for driving reductions. However, the approach is being deployed by parts of the livestock sector to redefine what constitutes sufficient climate action and support arguments for maintaining relatively high levels of methane emissions.

Changing Markets © 2026 all rights reserved



Executive Summary

Methane is a critical emergency brake to slow climate change. Agriculture is the largest source of human-caused methane, accounting for 42% of emissions, and is projected to continue to increase by 2030.[9] Scientists have warned that emissions from the global food system alone, primarily methane, could push warming beyond 1.5°C even if all other emissions were eliminated.[10] [11]

Yet misinformation around both the science of livestock methane and solutions available to reduce it is increasingly undermining progress.

Building on the Changing Markets Foundation's earlier reports *Seeing Stars,*[12] *The New Merchants of Doubt*[13] and *The New Faces of GWP*,*[14] this report broadens the lens and exposes how efforts to undermine agricultural methane action now extend far beyond debates over emissions accounting.

Changing Markets © 2026 all rights reserved

Our core findings

Rewriting the rules: The misuse of methane metrics to weaken climate policy

At the end of 2025, New Zealand weakened its methane target, due to strong industry lobbying around erroneous accounting. Similar arguments around 'temperature neutrality' are now being pushed in other high meat and dairy producing countries, including Ireland and the UK, by farming and food industry lobby groups. Even the European Commission has recently suggested that biogenic methane should be treated differently.

We expose the lobbying gaining ground in Ireland, where **climate advisers have proposed 'temperature neutrality'**, and in the UK, where lobby groups are **pushing alternative methane accounting** to resist deeper emission cuts.

Discrediting the solutions - How misinformation on Bovaer crossed borders

Industry often highlights technical measures, such as methane-suppressing feed additives, as solutions that they support. However, our research revealed that the only approved feed additive, Bovaer, became the target of two major misinformation backlashes in the UK and Denmark in a short time period.

The first backlash took place in the UK, where Arla announced a pilot project for Bovaer in November 2024, in partnership with Tesco's, Morrisons and Aldi. Misinfluencers seized this moment to push conspiracy theories and fearmongering about the health impacts of this feed additive. Our monitoring recorded nearly **2 million mentions and 9.8 million engagements on X**, alongside **19 million video views** across TikTok and YouTube, in just over a month.

The UK backlash took place at a time when it was already known that Denmark would make feed additives mandatory for larger farms. A year later, a remarkably similar backlash in Denmark was followed by **weakened implementation of their mandatory Bovaer requirements** and companies in Scandinavia, including Norway's largest company, TINE, pledged not to use milk from cows that were fed **the additive** amid growing distrust.

Our investigation reveals similarities across both backlashes, as well as some of the accounts driving the misinformation including **James Meville** (founder of climate deniers, No Farmers No Food), **Gareth Wyn Jones** and **Peter Immanuelsen** (known online as Peter Sweden). Narratives included fearmongering about health, attacks on net-zero and methane accounting and conspiracy theories. **Kent Nielsen,** whose name appeared in **leaked documents linked to Russian state-funded operations,** was one of the administrators of the **Bovaer.dk Facebook group,**[15] which mobilised opposition to the feed additive, promoted boycotts of Arla products and amplified claims about its alleged dangers to cattle.

Rebranding livestock as a climate solution: The rise of the regenerative grazing offsetting projects in the Americas.

In South America, our investigation reveals troublesome regenerative grazing projects, which frame cattle farming as a climate solution, which generates carbon offsets, even though it acknowledges that this will lead to higher livestock numbers with more methane emissions.

Drawing on the controversial teachings of Zimbabwean ecologist Allan Savory,[16,17] **who presents the misformation narrative that more cattle can help reverse climate change**,[18] these regenerative grazing schemes are selling carbon credits from claimed soil-carbon gains, despite the lack of scientific evidence to support these

Changing Markets © 2026 all rights reserved

claims. Savory has described his approach as a “vital discovery for humanity that continues to be treated as heresy by most institutions”, comparing its rejection to the treatment of Galileo and Copernicus.[19]

Powerful institutions are helping create a lucrative market for regenerative grazing credits, offering farmers a new revenue stream. Buyers of the credits include the **International Monetary Fund (IMF)** and even the **national government of Singapore**. Besides soil carbon capture not being permanent, projects also raise concerns about additionality and perverse incentives, as it leads to making cattle farming more profitable and increasing methane emissions.

Rather than incentivising methane reductions, this market risks financially rewarding the maintenance or even expansion of cattle herds, while reinforcing industry claims that livestock farming is part of the climate solution. Besides being one of the largest sources of methane, cattle farming is also a huge user of land and driver of deforestation. These projects also ignore the opportunity costs of removing cattle and freeing the land for ecosystem restoration, which would lead to much higher carbon benefits.



Changing Markets © 2026 all rights reserved



1. Introduction

1.1 **What the science says**

The world is expected to exceed 1.5°C of warming, with the UN warning that every additional fraction of a degree will bring greater risks and more severe climate impacts.[20] Methane mitigation efforts are essential to the effort of stabilising temperatures and reducing the speed of warming.

Methane is a short-lived climate pollutant, breaking down after around 12 years, but over the short-term it is also much more powerful at trapping heat than carbon dioxide, causing around 80 times more warming over 20 years.[21] This means that rapid cuts are the climate emergency brake that can slow near-term warming, reduce peak temperatures and help avoid tipping points.

The Intergovernmental Panel on Climate Change (IPCC) estimates that methane emissions have contributed around 0.5°C of warming since 1850-1900, second only to carbon dioxide (CO_2),[22] while the latest assessment from the

Changing Markets © 2026 all rights reserved

United Nations Environment Programme (UNEP) says human-caused methane is responsible for roughly a third of current warming.[23] Methane also drives the formation of ground-level ozone, a harmful air pollutant linked to around half a million premature deaths globally each year, while also damaging eco-systems and reducing crop growth and yields.[24]

Scientists have been clear that cutting methane is not optional if the world is to limit peak warming. UNEP and the Climate and Clean Air Coalition (CCAC) estimate that cutting human-caused methane by 45% this decade could avoid nearly 0.3°C of warming by the 2040s.[25] UNEP also estimates that a package of climate and clean air measures could deliver benefits worth around 15 times the cost of implementation, with annual gains equivalent to 2.8% of global GDP by 2035, a $15 return on every $1 invested in solutions.[26]

Yet, five years after the launch of the Global Methane Pledge, now endorsed by more than 150 countries, the world remains off track to deliver its promised 30% emissions cut by 2030.

Feed additives and better manure management can reduce emissions from existing livestock, but research shows that deeper cuts depend on reducing livestock numbers and shifting towards diets with less meat and dairy.

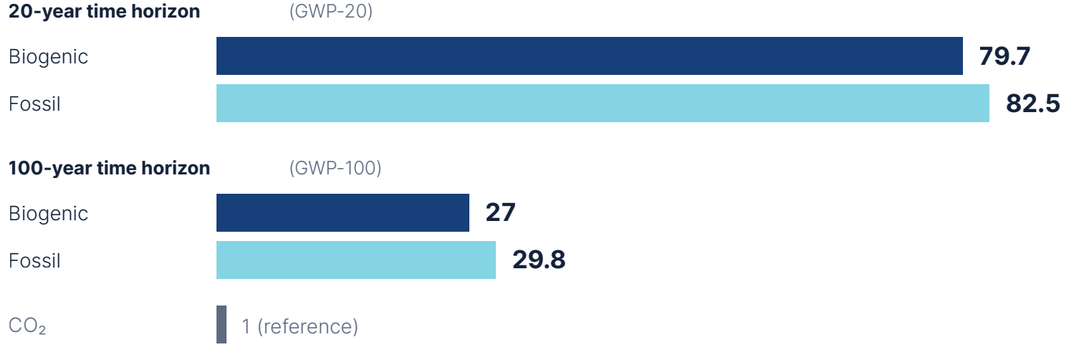
A meta-analysis of 430 studies found that effective feed interventions could cut daily methane emissions from livestock by 21% per animal on average. Yet even universal adoption of the most effective technical measures studied would not deliver the reductions needed by 2050 to align with the 1.5°C target, as rising demand for meat and dairy would offset these gains.[27]

Biogenic or fossil, methane warms the planet almost equally

Warming power per tonne, and the share of today's warming from each source

Global warming potential

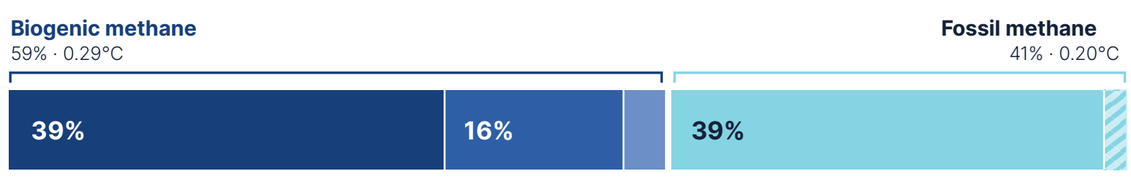
How much more heat one tonne traps than one tonne of CO_2



Present-day warming from methane*

Total warming caused by methane

0.49°C



	Share	Warming
Biogenic methane	**59%**	**0.29°C**
Agriculture	39%	0.19°C
Waste	16%	0.08°C
Other biogenic sources	4%	0.02°C
Fossil methane	**41%**	**0.20°C**
of which fossil CO_2 from methane decay	2%	0.01°C

*Present-day warming: increase in global average surface temperature in 2010–2019 relative to 1850–1900.

Source: IPCC (2021) Climate Change 2021: The Physical Science Basis – Chapter 7: The Earth's Energy Budget, Climate Feedbacks, and Climate Sensitivity. [ONLINE] Available at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter07.pdf

Changing Markets © 2026 all rights reserved

This is especially the case for countries and regions that overconsume meat and dairy. Research by CE Delft for Changing Markets shows that the EU cannot meet its 2030 methane reduction targets without tackling livestock emissions. The research also found that a shift towards healthier diets containing less meat and dairy alone is capable of cutting EU methane emissions by 15-19%.[28]

Yet action on agricultural methane faces growing resistance from multiple directions, with **misinformation increasingly at the heart of efforts to delay and disrupt progress**. The scientific basis for cutting livestock methane is being challenged through misleading interpretations of methane accounting, solutions such as feed additives are being targeted by online misinformation campaigns, and regenerative grazing schemes are promoting the idea that more cattle can actually be better for the climate, despite the additional methane emissions they produce.

Efforts to undermine agricultural methane science and policy have implications far beyond national borders. We focus on the UK and EU because of their influence over international climate policy, and on South America because of its vast livestock sector and emerging carbon-offset schemes. The UK and Brazil currently co-chair the Climate and Clean Air Coalition, the EU co-launched the Global Methane Pledge, and South America accounts for nearly a quarter of global cattle herds and beef production.[29]

1.2 Methodology

With support from consultant Amy Nguyen, our investigation draws on social media analysis, freedom of information requests, policy documents and industry lobbying records to trace how misinformation spreads and influences decision-making. Our social media research covering the Bovaer backlash in the UK also draws on analysis commissioned from Ripple Research, who examined online narratives, influential accounts and patterns of engagement to identify how misinformation spreads.

With support from investigative journalist Maximiliano Manzoni, we also examined scientific literature, company reports and carbon-credit project documentation, alongside interviews with ranchers in South America, to investigate the claims being made about regenerative grazing.

Together, this evidence reveals how misleading narratives are being used to challenge methane science, undermine practical solutions and promote approaches that risk delaying the emissions reductions urgently needed.

Changing Markets © 2026 all rights reserved



2. Rewriting the rules: The misuse of methane metrics to weaken climate policy

2.1 Growing concern over the misuse of methane metrics

Claims of ‘no additional warming’ and ‘temperature neutrality’, drawing on the science underpinning GWP*, are gaining traction in livestock industry lobbying (see ‘science corner’ for definitions). However, as climate researcher Paul Price has shown, ‘temperature neutrality’ fails to reverse existing warming from livestock methane, leaving temperatures above levels consistent with a fair share of the Paris Agreement’s 1.5°C goal.[30]

In May 2026, 42 climate scientists and academic experts, including 11 IPCC lead authors, warned that misuse of ‘temperature neutrality’ and ‘no addi-

Changing Markets © 2026 all rights reserved

tional warming' could weaken methane targets and allow high emitters to claim climate neutrality without delivering the deeper reductions needed to limit warming to 1.5°C.[31]

These warnings echoed earlier concerns from methane researchers Caspar Donnison and Donal Murphy-Bokern, who warned that '*business interests*' handling of GWP* has distracted from the key challenge of reducing '*all GHG emissions as quickly as possible*'.[32]

2.2 New Zealand: A precedent for weaker methane targets

The political stakes of these debates are already clear in New Zealand, where the government has weakened its agricultural methane target in 2025. The government reduced its 2050 biogenic methane target from a 24-47% reduction to 14-24% compared with 2017 levels,[33] potentially shifting the burden from animal agriculture onto other sectors, as the New Zealand government's own impact assessment warned.[34] Its weaker methane target was explicitly framed around maintaining productivity, food production and trade competitiveness.

Farming organisations in Ireland, New Zealand and the UK are now working through the Split Gas Coalition to press for different treatment of biogenic methane. The **Ireland-New Zealand Joint Research Initiative (JRI)** shows how this agenda is embedded institutionally. The partnership's research is intended to reduce agricultural emissions while maintaining productivity, profitability and competitiveness,[35] with New Zealand's agriculture minister publicly promising farmers options to cut emissions *"without reducing production"*.[36]

Internal documents released under FOI request, also reveal that one of the aims of the JRI was to facilitate both countries to 'p*lay a leading role in shaping how GHG emissions from livestock farming are understood and addressed'*.[37] The same document identified the intention of the JRI to strengthen its influence in international forums including the IPCC, Global Research Alliance and CODEX.[38] The timing is particularly significant: under a decision adopted at COP27, countries are due to consider whether to update the international metrics used to report greenhouse gas emissions by 2028, with discussions set to resume in 2027.[39]

A former Irish diplomat interviewed as part of this research said: "We've been in bed with New Zealand for quite some time on this issue. There is in a sense that we both enjoy very similar farming circumstances, and we were both screwed by an accounting glitch at the time of Kyoto because they didn't make a distinction between different (sources of) methane and how long they stayed (in the atmosphere)."

This points to an ambition to influence the international rules and scientific frameworks that will ultimately determine how much mitigation livestock-producing countries are expected to deliver.

2.3 The Split Gas Coalition

The Split Gas Coalition was launched in October 2025, spearheaded by New Zealand livestock industry group Beef + Lamb New Zealand, following more than four years of efforts to build international support for alternative methane accounting.[40] Initially backed by over 30 agricultural organisations across 14 countries, the coalition has expanded to 41 organisations across 17 countries by May 2026 (at the

Changing Markets © 2026 all rights reserved

time of writing). The coalition is lobbying governments and the UN Framework Convention on Climate Change (UNFCCC) to adopt separate reporting and targets for short-lived methane and long-lived greenhouse gases, raising concerns that this approach could weaken pressure for deeper cuts to livestock methane emissions.[41]

Separately measuring and setting targets for methane is not inherently problematic. In fact, dedicated methane reduction targets can strengthen climate action by making these emissions more visible and holding polluters accountable.[42] The concern is that the Split Gas Coalition is promoting an approach that emphasises methane's shorter atmospheric lifetime and argues that methane emissions need only decline gradually.[43] This risks allowing high livestock producers to argue that relatively stable methane emissions are compatible with climate goals, despite the urgent need for deeper cuts to reduce warming.[44] The distinction is therefore between using them to accelerate methane reductions and using them to justify weaker action.

As this briefing shows, the coalition is part of a wider push to reshape how livestock methane is understood and regulated, with similar narratives gaining traction in the UK and Ireland.

2.4 How 'agrodemia' is shaping methane policy in Ireland

Professor Myles Allen is an Oxford climate scientist and co-developer of GWP*, whose research group has received funding from livestock industry bodies.[45]

Frank Mitloehner is a UC Davis professor who directs the industry-funded CLEAR Center and has promoted GWP* to portray livestock production as compatible with 'climate neutrality'.[46]

In December 2024, the Irish Climate Change Advisory Council proposed carbon budgets based on 'temperature neutrality' linked to GWP*, and the government committed to pushing for the reclassification of biogenic methane under EU and global frameworks.[47]

The influence of 'agrodemia', where industry funded research lends credibility to livestock-friendly narratives,[48] was evident in Ireland in July 2022, when academic Frank Mitloehner told a parliamentary committee that "a constant source of methane or a near-constant source of methane does not add significant additional warming**."**[49]

The significance is that these academic arguments are increasingly being used to defend existing livestock production. Claims that stable methane emissions cause little or no additional warming, alongside warnings that reducing herds would simply shift production elsewhere, risk giving the livestock industry further justification to resist deeper methane reductions

Changing Markets © 2026 all rights reserved

A legal opinion commissioned by Changing Markets and Greenpeace International warned that adopting 'temperature neutrality' in Ireland's carbon budgets would violate domestic climate legislation and international obligations, potentially exposing the government to legal challenges.[50]

2.5 EU Livestock Strategy: Industry narratives enter European policymaking

The same arguments shaping methane policy in Ireland and New Zealand are now gaining ground at EU level. Published in July 2026, the EU Livestock Strategy states that "*discussions are on-going to explore the need to take account of the biogenic nature of methane emissions as part of a short-term carbon cycle,*" [51] echoing language used by livestock industry groups to downplay the need for deeper emissions cuts.

Yet methane must be urgently reduced and its warming impact is very similar regardless of whether it is of biogenic or fossil origin. According to Pippa Hackett, Ireland's former Green Minister of State for Land Use and Biodiversity (2020-2025), Ireland's government has "put pressure on Commissioner Hansen to host formal debates on reclassifying methane," a development she described as "dreadful".

Asked how this state of affairs had come about, she said: "There are links to Big Ag. In my last term, in the early 2020s, Fine Gael took on Eddie Downey as their agricultural advisor. He was previously the President of the Irish Farmers Association (IFA)[A] but he left around 2015 amid a scandal around payments. There's definitely a connection there. He's in the IFA's circle, and they are big contributors to Copa Cogeca, who are also lobbying for changes to methane accounting. That might have changed [Fine Gael's] direction."[B]

Although the Commission has since backtracked claiming that this reference relates to methodologies only, e.g. ensuring more accurate methane measurement in different farming models, the language could nonetheless be used to weaken methane reduction policies.

While recognising livestock's climate impact, the strategy prioritises refining emissions methodologies and promoting on-farm improvements, without setting binding methane reduction targets or a clear pathway for reducing livestock production.[52] This contrasts with advice from the European Scientific Advisory Board on Climate Change, which warned in March 2026 that technological improvements alone would be insufficient and called for changes across both production and consumption, including healthier diets.[53] The strategy only focuses on emissions intensity reductions and fails to address the absolute emission cuts needed to meet its net-zero targets.

A The IFA is a member of Copa Cogeca, part of the European farming lobby Copa-Cogeca.In its 2020 response to the EU Methane Strategy, Copa-Cogeca argued that agricultural methane was not adding further warming and called on the EU to reconsider the use of GWP100 to measure methane's climate impact. Source: Irish Farmers' Association (n.d.) IFA Levy. [ONLINE] Available at: https://www.ifa.ie/levy/ and Copa-Cogeca (2020) Response to the EU Methane Strategy. [ONLINE] Available at: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12504-EU-methane-strategy/F541151_en

B Mr Downey stood down from his role as IFA President after it emerged he had agreed to pay a substantial severance package of €2million to the former General Secretary Pat Smith. Source: Burke-Kennedy, E. (2015) *IFA president Downey quits after €2m deal disclosure.* The Irish Times. 25 November. [ONLINE] Available at: https://www.irishtimes.com/news/ireland/irish-news/ifa-president-downey-quits-after-2m-deal-disclosure-1.2444070

Changing Markets © 2026 all rights reserved

2.6 The UK as a Global Methane Pledge Champion: Industry pressure to rewrite the rules

Echoing developments in New Zealand and Ireland, UK industry groups are promoting GWP* and claims of 'no additional warming' to challenge the need for deeper livestock emissions cuts.

The stakes are high with agriculture being the UK's largest source of methane, accounting for 48% of emissions in 2023. The UK government has stated that the Carbon Budget Delivery Plan will deliver 38% of the UK's methane reductions between 2023 and 2030.[54] The UK also published its first Methane Action Plan in October 2025, co-chairs the CCAC with Brazil and became a Global Methane Pledge Champion in June 2025.

Our analysis of parliamentary evidence reveals a concerted push from livestock industry groups and academics for alternative methane accounting, including GWP*. As the table below shows, organisations including the National Farmers' Union (NFU), Agriculture and Horticulture Development Board (AHDB) and Dairy UK have challenged conventional methane metrics, with several pointing to New Zealand as a model for UK policy.

These arguments are repeatedly tied to food security, nutrition and the 'diversity' of livestock systems - a framing also prominent in the EU Livestock Strategy, which stresses that Europe's livestock systems are *'as diverse as its territories'*.[55] This risks turning the diversity of farming into a justification for weaker regulation, shielding even the most polluting livestock operations from deeper emissions cuts.

While separate methane accounting is not inherently problematic, these examples show how arguments about methane's biological origins, alternative metrics and food security can be used to justify weaker reductions from livestock.

While GWP100 underestimates methane's short-term warming, it can overstate the long-term impact of stable emissions. Yet GWP*-based claims of 'no additional warming' risk portraying stabilisation as sufficient to meet 1.5°C goals. This matters in the UK, where agriculture accounted for 48% of methane emissions in 2023, with cattle responsible for 78% of agricultural methane, making deeper cuts essential.[56]

According to new data by Oxford University, **the UK is Europe's third-largest livestock methane emitter** (**983.9 kt CH_4**), behind only France and Germany. The UK ranks fourth in Europe for methane emissions from enteric fermentation (methane produced during livestock digestion) and third for emissions from manure management.[57] This makes the need for deeper cuts to UK livestock methane emissions all the more urgent, with the misuse of alternative metrics risking becoming a distraction from meaningful action.

Table: Key players spreading methane science misinformation

Key players - shifting the goalposts

YES Signatory
NO Not a signatory

01 ORGANISATION	02 SIGNATORY OF SPLIT GAS COALITION?	03 STANCE ON SPLIT-GAS ACCOUNTING AND GWP*	04 DOMINANT NARRATIVES
ORGANISATIONS			
NFU National Farmers' Union	YES	Backed dual reporting and argued that GWP100 **"misrepresents"** methane.[1]	Stated that under GWP* there is no contribution to warming from livestock,[2] while warning that the **"diversity of UK ruminant farming should not be lost through use of a single metric"**.[3]
NFU Cymru	YES	Supports split-gas accounting	Explicitly pointed to New Zealand's separate biogenic methane target and exclusion of agriculture from net zero as an example for UK policy discussions.[4]
National Sheep Association	YES	Has promoted split-gas since at least 2020	Emphasised sheep methane as biogenic and pointed to New Zealand as a relevant model for livestock methane policy.[5] *This risks downplaying the need for deeper methane reductions.*
Quality Meat Scotland	YES	Supports alternative methane accounting	Argued that methane policy should **"not rely on a shrinking ruminant sector"**,[6] while also raising concerns about health, food safety and quality around methane-suppressing feed products. *This prioritises maintaining livestock production over reducing absolute methane emissions.*
British Meat Processors Association	YES	Calls for **"fairer"** methane accounting	Warned that inappropriate methane accounting could damage Britain's meat and livestock industry and weaken food security.[7] *This uses food security as a justification for protecting livestock production, potentially at the expense of deeper methane reductions.*
Agriculture and Horticulture Development Board	NO	Supported dual reporting and claimed that **"no additional warming has arisen from UK methane emissions for at least 20 years under GWP*"**[8]	Pointed to New Zealand's separate biogenic methane target as a positive example for having a separate biogenic methane target.[9] Argue that methane emissions need to be reviewed and aligned to global nutritional needs – a misinformation claim employed by industry that falsely claims nutrition is dependent on animal-based food products.
Dairy UK	NO	Argued that GWP* better predicts temperature response	Called for biogenic methane to be distinguished from fossil methane in emissions reporting.[10] *This risks using methane's biological origins to justify less demanding emissions reductions for livestock.*
INDIVIDUALS			
 Professor Myles Allen	NO	He has lobbied the UK Government to take up GWP*, which has been taken up by industry lobby groups to suggest methane from livestock is not an issue.	Allen separately declared to the Lords inquiry that his Oxford research group had received funding from Hilton Food Group, Beef + Lamb New Zealand and the NFU.[11]
 Professor John Gilliland	NO	Supported dual reporting using GWP100 and GWP*, arguing that both metrics should inform agricultural emissions assessments.	Professor John Gilliland, then a special adviser to AHDB, told the Lords methane inquiry that policymakers should consider the **"totality of the biogenic cycle"** and support dual reporting.[12] Gilliland also claimed that the science underpinning methane accounting **"has not been put to bed"**.[13]
 George Holmes	NO	Advocated greater recognition of livestock methane's biogenic cycle and the use of GWP* to assess its warming impact.	A Dorset dairy farmer, submitted evidence to the House of Lords methane inquiry shortly before joining Arla Foods' Board of Directors in May 2024.[14] He described ruminant methane as part of a biogenic cycle distinct from fossil methane and cited research from Frank Mitloehner's UC Davis CLEAR Center, warning that poorly designed methane policy could reduce domestic beef and dairy production and increase reliance on imports – a common industry-supported narrative, which spreads fear about 'emissions leakage'.

NOTES

1 House of Lords (2024) *Environment and Climate Change Committee – Uncorrected oral evidence: Methane, 24 April 2024.* [ONLINE] Available at: https://committees.parliament.uk/oralevidence/14723/pdf/

2 House of Lords (2024) *Environment and Climate Change Committee – Uncorrected oral evidence: Methane, 24 April 2024.* [ONLINE] Available at: https://committees.parliament.uk/oralevidence/14723/pdf/

3 Parliament UK (2024) Written evidence from The National Farmers' Union of England and Wales (MET0011). [ONLINE] Available at: https://committees.parliament.uk/writtenevidence/129664/html/

4 NFU Cymru (2025) Key information on methane accounting and a split-gas approach. [ONLINE] Available at: https://www.nfu-cymru.org.uk/en/news-and-information/everything-you-need-to-know-about-gwp-methane-accounting

5 National Sheep Association (2020) NSA highlights UK's potential for carbon neutral sheep farming. [ONLINE] Available at: https://nationalsheep.org.uk/our-work/news/30061/nsa-highlights-uk-s-potential-for-carbon-neutral-sheep-farming/

6 Parliament UK (2024) Written evidence from Quality Meat Scotland (MET0042). [ONLINE] Available at: https://committees.parliament.uk/writtenevidence/129764/pdf/

7 British Meat Processors Association (2024) Lords climate committee weighs into methane debate. [ONLINE] Available at: https://britishmeatindustry.org/update/lords-climate-committee-weighs-into-methane-debate/

8 Parliament UK (2024) Written evidence from the Agriculture and Horticulture Development Board (MET0008). [ONLINE] Available at: https://committees.parliament.uk/writtenevidence/129656/html/

9 Parliament UK (2024) Written evidence from the Agriculture and Horticulture Development Board (MET0008). [ONLINE] Available at: https://committees.parliament.uk/writtenevidence/129656/html/

10 Parliament UK (2024) Written evidence from Dairy UK (MET 0035). [ONLINE] Available at: https://committees.parliament.uk/writtenevidence/129708/pdf/

11 House of Lords Environment and Climate Change Committee (2024) Methane: Oral evidence, 13 March 2024. [ONLINE] Available at: https://committees.parliament.uk/oralevidence/14503/html/

12 House of Lords (2024) *Environment and Climate Change Committee – Uncorrected oral evidence: Methane, 17 April 2024.* [ONLINE] Available at: https://committees.parliament.uk/oralevidence/14608/pdf/

13 House of Lords (2024) *Environment and Climate Change Committee – Uncorrected oral evidence: Methane, 17 April 2024.* [ONLINE] Available at: https://committees.parliament.uk/oralevidence/14608/pdf/

14 Parliament UK (2024) Written evidence from George Holmes (MET0005). [ONLINE] Available at: https://committees.parliament.uk/writtenevidence/129608/pdf/

Changing Markets © 2026 all rights reserved

UK industry push back on Environmental Permitting Regulations

The same narratives have surfaced when the government has considered more direct regulation of intensive livestock. Defra's proposed extension of Environmental Permitting Regulations to dairy and intensive beef farming would bring these farms under a framework already applied to large intensive pig and poultry operations.[58] The regulations require environmental permits and minimum standards to reduce air and water pollution, including ammonia emissions and pollution from slurry.

The NFU called for an '*industry-led solution*', and opposed a '*one-size-fits-all*' approach, citing costs, investment uncertainty, market volatility and geopolitical uncertainty.[59] The arguments echo those emphasising food security and external economic pressures when stronger regulation is proposed.

These tactics are well documented in the *The New Merchants of Doubt*, which exposed how livestock industry groups used arguments around food security, economic threats and regulatory burdens to oppose environmental legislation.[60] The investigation found that lobbying by major meat and dairy companies helped derail ten environmental policies promised under the EU Green Deal during the 2019-2024 European Commission, with measures delayed, weakened or abandoned altogether. These included efforts to reduce agricultural emissions, pesticide use and other environmental impacts of intensive farming.[61]

So far, the UK government has not adopted arguments around 'temperature neutrality' or 'no additional warming' as a justification for weaker methane reductions. In September 2026, Defra explicitly warned that claims of 'no additional warming' risk portraying continued methane emissions as environmentally neutral and weakening incentives to reduce them.[62]

However, holding the line nationally does not remove the risk of alternative metrics becoming embedded elsewhere. The government has said additional metrics could be used at sector and business level.[63] Farm Carbon Toolkit, a farmer-led organisation whose UK Farm Carbon Calculator is used by over 10,000 farms, stated last year that GWP* reporting could be used alongside GWP100.[64] Farm Carbon Toolkit introduced GWP* reporting in response to user requests, opening up another route for alternative methane accounting to gain traction in farm-level reporting.[65]

Yet the challenges to UK and international methane action go beyond accounting. Progress on feed additives has been slow and growing misinformation online threatens to undermine their deployment, as explored in the next chapter.

Changing Markets © 2026 all rights reserved



3. Discredit the solutions: How Bovaer misinformation crossed borders

3.1 One additive, two backlashes

While efforts to rewrite methane accounting rules threaten the ambition of climate policy, misinformation targeting methane-reducing technologies threatens its delivery.

Feed additives are often promoted by big corporations and their industry groups as a key technological fix for livestock emissions, but due to their cost they are often not taken up at scale.[66] Research shows that Bovaer can reduce methane emissions from cattle, particularly in intensive dairy systems where feed can be closely controlled.[67] However, its effectiveness depends on how it is used, and the science shows that technical measures alone

Changing Markets © 2026 all rights reserved

won't be enough to cut methane and other agricultural emissions. While some technical measures can play a role, they need to be supported by wider reforms, including reduction in the number of farmed animals and dietary shifts.[68] [69] However, this investigation reveals how the backlash against Bovaer, the EU's first approved methane-reducing feed additive, became entangled with wider climate denial and conspiracy theories.

What is Bovaer?

Bovaer is a methane-reducing cattle feed additive containing 3-NOP (3-nitrooxypropanol) a compound that reduces methane production by blocking an enzyme used by microbes in cows' stomachs to produce methane during digestion. In 2022, Bovaer became the first feed additive formally authorised by the EU specifically to reduce methane emissions from dairy cows.

On 26 November 2024, dairy giant Arla announced a UK trial of Bovaer involving around 30 dairy farms, in partnership with supermarkets Aldi, Morrisons and Tesco.[70] Previous investigations by Changing Markets found that Arla had no dedicated methane reduction target and did not separately disclose its methane emissions, despite collecting extensive environmental data from its supplying farms.[71]

While the trial represented a potential step towards reducing emissions, it focused on a single technological solution rather than forming part of a comprehensive commitment to measurable, absolute methane reductions.[72]

By the time Arla's announcement triggered the UK backlash in November 2024, Denmark had already adopted its mandatory methane-reducing feed policy as part of its comprehensive efforts to cut agricultural emissions. This set the stage for further controversy as the requirements came into effect in 2025.

Denmark began requiring larger conventional dairy farms to use Bovaer for part of the year from 2025 as part of its agricultural emissions policy.[73] About 1,400 out of 2,000 dairy farms in Denmark are currently using the product. Under the policy, farmers could either use Bovaer for 80 days a year or increase the fat content of cattle feed, as part of Denmark's wider efforts to cut agricultural emissions.[74]

The Bovaer backlashes came on top of pre-existing narratives portraying climate measures as a threat to farmers' livelihoods, fueling distrust of government and promoting conspiracy theories involving Bill Gates and the World Economic Forum. These provided fertile ground for misinformation about Boaver to spread.

Even before the UK backlash, accounts including Wide Awake Media, End Wokeness and Peter Imanuelsen (also known as Peter Sweden), all of which repeatedly promote conspiracy theories, had already been linking methane action to anti-Bill Gates narratives, and James Melville (founder of No Farmers No Food, see box) was repeatedly downplaying the climate impact of livestock emissions online. A DeSmog investigation revealed that Melville's campaign was backed by the Together Declaration, a group associated with climate denial and conspiracy theories.[75]

Arla's UK announcement acted as the pin that popped an already overinflated balloon, with reactionary forces springing into action almost instantaneously. By the time Bovaer was widely rolled out in Denmark, these narratives had gained momentum, fuelling an even bigger wave of opposition.

We identify individuals who amplified the message online across both backlashes, including **Gareth Wyn Jones** and **Peter Imanuelsen**. We also identify actors such as **Peter Neilsen** and **James Melville**, who amplified misinformation about Bovaer's

Changing Markets © 2026 all rights reserved

alleged risks to cattle and human and health, reaching significant online audiences. Their messaging targeted farming communities and reinforced wider narratives defending livestock production against efforts to reduce emissions.

3.2 The scale of the backlashes

From November 2024 to June 2026, there were a total of **7,882 posts** on Bovaer, with two major peaks in November 2024 and November 2025.

In just over a month, the 2024 UK Bovaer backlash generated 9.8 million engagements on X and nearly 1,000 UK media stories.

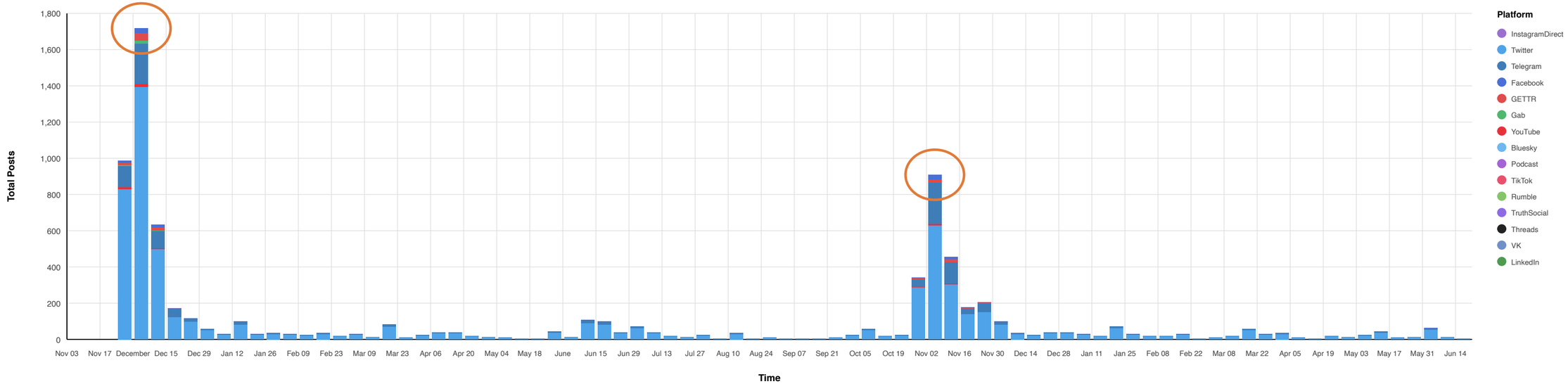
The scale of the backlash in the UK was extraordinary.

In just over a month, posts relating to Arla and Bovaer generated almost **2 million mentions** and **9.8 million engagements on X alone**. Videos spreading Bovaer-related misinformation received a further **17.9 million views on TikTok and 1.1 million on YouTube**.[C] Traditional media helped propel the controversy further.

Volume trend of posts on Bovaer on Junkipedia platform

1st November 2024 – 17th June 2026

7,882 Posts



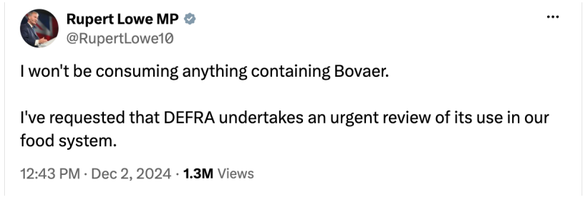
Source: Amy Nguyen, Volume trend of posts on Bovaer, 1 November 2024–17 June 2026. [Unpublished analysis using Junkipedia]. Research commissioned by Changing Markets Foundation Platform available at: https://www.junkipedia.org/

C Ripple Research (2025) Social media analysis of UK Bovaer misinformation. Research commissioned by Changing Markets Foundation. [Unpublished research]

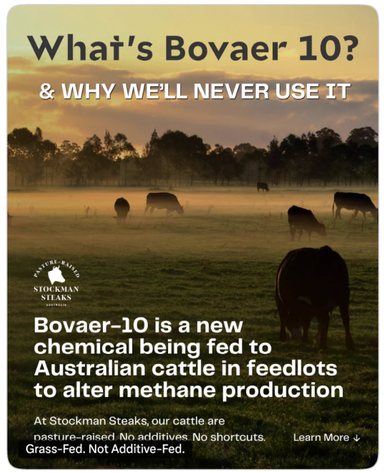
Changing Markets © 2026 all rights reserved

Nearly **1,000 UK media stories referenced the Arla trial** between its announcement and the end of December 2024. Some journalists repeated or amplified conspiracy theories claiming that Bill Gates was investing in Bovaer, contamination and health risks, such as suggestions that NOP-3 could lead to male infertility, and helping claims born on social media reach much wider audiences.

By December 2024, the misinformation had generated political attention through MP letters, parliamentary questions and social media posts from MPs Alison Hume (Labour), Caroline Nokes (Conservative) and Rupert Lowe (Restore Britain, formerly Reform UK).



The controversy subsequently spread across borders, with Danish farmer protests against Bovaer and wider agricultural policies attracting UK attention in January 2025. A renewed and more sustained backlash emerged in Denmark following the widespread rollout of Bovaer in October 2025, as reports of suspected cattle health problems circulated internationally.

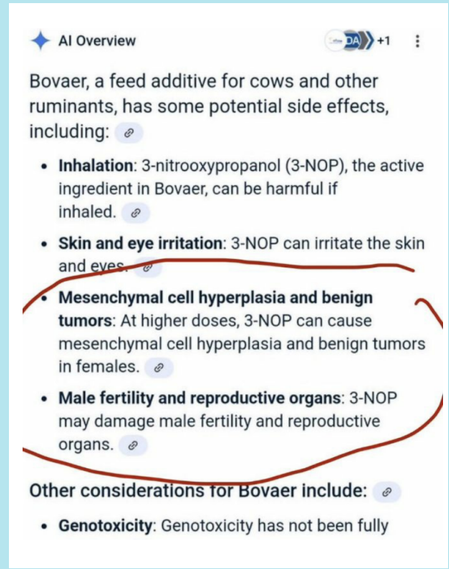


From June 2025 to June 2026, several posts about Bovaer attracted over a million views on X, including posts by Australian meat company Stockman Steaks[76] that explicitly denounced the product. **Danish activist Kent Nielsen**, whose content was amplified by a Telegram channel that had received Russian state-linked funding, attracted 362,000 views for an Arla boycott video[77] and 322,000 views for a post alleging cattle health problems.[78]

Google AI summary used in the backlash

The rise of AI since 2023 has led to a surge in online disinformation. AI has made it easier to produce large volumes of increasingly convincing fake content, including deepfakes and fabricated news.

AI-driven algorithms also shape what users see online, limiting independent discovery and often reinforcing existing beliefs. These systems enable highly targeted messaging tailored to specific communities, making disinformation more effective at influencing public opinion.



A Google AI-generated summary that appeared during the Bovaer backlash appeared to **reinforce misinformation about Bovaer and male fertility and reproductive organs**, presenting health risks associated with the product. The summary was subsequently shared by accounts spreading misinformation about Bovaer, which presented it as credible evidence to support their claims.[79]

3.3 Misinformation timeline

The timeline highlights the key actors and moments that fuelled the Bovaer backlashes in the UK and Denmark, with more detailed profiles of the individuals involved provided in **Chapter 3.5.**

Key actors and moments that fuelled the Bovaer backlashes

2021–2024
TIMELINE 1 OF 2

- Political / regulatory moment
- Social media response
- Notable social media post

2021–2024: Pre-backlash | **2024: Preparing for implementation**

Oct 2021 | Apr 2023 | Pre-Nov 2024 | Oct 2024 | 26 Nov | 28 Nov | 2 Dec | 3 Dec | 5 Dec | 6 Dec

UK backlash

April 2023
Conservative government announces ambition to mandate methane-suppressing feed additives.

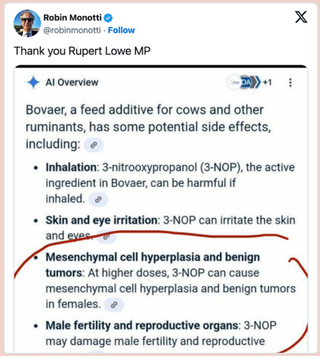
Pre-November 2024
James Melville[i] and **Wide Awake Media**[ii] tweet about the 'methane myth' and downplay livestock emissions.

26 November 2024
Arla announces its UK Bovaer trial, triggering an immediate online backlash.

28 November 2024
Social media criticism begins, including from **Gareth Wyn Jones**,[vi] **McQueens Dairies**[vii] and **James Melville**.[viii]

2 December 2024
MP Rupert Lowe calls for a Government review and says he will boycott Bovaer.[ix]

2 December 2024
Robin Monotti raises human health concerns.[x]



3 December 2024
Online conspiracy theorist **Peter Imanuelsen** spreads misinformation about Bovaer.[xii]

5 December 2024
FSA publishes its Bovaer explainer in response to misinformation circulating online.

6 December 2024
The Bovaer trial is used to create **opposition to the Labour Government: God Save Britain**,[xiv] **Andrew Essex PR**.[xv]

Denmark backlash

October 2021
Denmark establishes a **55–65% emissions reduction target** for agriculture and forestry.

October 2024
Denmark publishes **final regulations mandating methane-reducing feed** for dairy cows from January 2025.[v]

3 December 2024
Danish commentator **Jonatan Palleson** criticises Bovaer amid the UK backlash.[xi]

International attention

Pre-November 2024
Peter Imanuelsen[iii] and **'End Wokeness'**[iv] account stokes anti-Bill Gates sentiment and mocks proposals to tackle methane.

5 December 2024
US-based carnivore advocate **Shawn Baker** questions Bovaer's safety, its effects on human health and the need to reduce livestock methane.[xiii]



Source: Changing Markets Foundation analysis of social media posts, government and industry announcements. Screenshots: X, Facebook and Farmers Weekly, captured 28 October 2026.

Key actors and moments that fuelled the Bovaer backlashes

2025–2026
TIMELINE 2 OF 2

- Political / regulatory moment
- Social media response
- Notable social media post

Jan–Jun 2025: The backlash becomes truly cross-border
October 2025: Second wave of backlash
November 2025: Danish stories spread to UK audiences
Dec 2025–May 2026: Regulatory consequences

Jan 2025 | 31 Jan | 3–6 Apr | Jun 2025 | 1 Oct | 8 Oct | 23–29 Oct | 30 Oct–8 Nov | 1–4 Nov | 8 Nov | Nov 2025 | Nov–Dec | Dec 2025–Feb 2026 | 1 May 2026

UK backlash

21 June 2025
Welsh farmer **Gareth Wyn Jones** criticises 'unelected politicians' over methane-reducing feed additive policies.[xxi]

29 October 2025
UK publishes its Methane Action Plan, retaining an ambition to mandate safe and effective methane-suppressing feed additives in England by 2030.
GOV·UK

UK · DENMARK

8 October 2025
UK-based **Dr Jennine Morgan** amplifies Kent Nielsen's content about the continued use of Bovaer in Denmark.[xxiii]

UK · DENMARK · BEYOND

1–4 November 2025
Influencers across the UK, Denmark and beyond spread the Danish Bovaer controversy, including **Jonatan Palleson**,[xxix] **Victor Andreas Bach Boran**[xxx] and **Kent Nielsen**.[xxxi]

1 November 2025
More actors with backgrounds in spreading conspiracy theories about vaccines, public health and climate policies amplify the backlash, including **Camus**,[xxxii] **Concerned Citizen**,[xxxiii] **Peter Sweden**[xxxiv] and **Andrew Bridgen** (former UK MP and anti-vax campaigner).[xxxv]

3 November 2025
Welsh farmer **Gareth Wyn Jones** shares Danish farmers Rianne and Jan Blom's account, amplifying their story to his **2.61m YouTube subscribers**.[xxxvi,xxxvii]

8 November 2025
Arla's UK Bovaer trials end.
Arla

Oct–Nov 2025
UK voices including **James Melville**[xxxviii] and **Radmore Farm**[xxxix] celebrate UK Arla's Bovaer trial ending.

UK · DENMARK

November 2025
Gareth Wyn Jones and **Joanna Blythman** reshare Danish farmers' accounts of alleged adverse effects, helping carry them to UK audiences.[xl,xli]

22 November 2025
Danish Veterinary and Food Administration confirms that farmers can stop administering Bovaer to cows showing signs of illness or reduced milk production.
FØDEVARESTYRELSEN

Nov–Dec 2025
Danish authorities **consider exemptions** for Bovaer and commission further analysis from Aarhus University.
AARHUS UNIVERSITY

DENMARK · INTERNATIONAL

Dec 2025 – Feb 2026
Concerns for Bovaer transcends international borders:
- The **European Food Safety Authority (EFSA)** launches a call for evidence on 3-NOP
- **Danish Parliament** opens a parliamentary hearing

efsa
FOLKETINGET

1 May 2026
Aarhus University publishes an analysis covering 73 dairy herds and approximately 27,650 cows, finding **no demonstrable overall negative effect** on key herd-health and production outcomes.
AARHUS UNIVERSITY

Denmark backlash

January 2025
Requirement to use **fat-rich feed or 3-NOP** begins for dairy farms.
FØDEVARESTYRELSEN

January 2025
Farmers protest against Bovaer in Aalborg and other Danish locations.

31 January 2025
Torsten Gejl of Denmark's Alternative Party calls for **labelling of dairy products** produced using Bovaer.[xviii]

3–6 April 2025
Activist **Kent Nielsen**, a misinformation figure tied to Russian state money, shares claims of cattle illness associated with Bovaer and promotes a **petition** opposing its use.[xix,xx]

2025
Kent Nielsen creates a Facebook group with the aim of boycotting Bovaer — **13.3K members**.[xxii]
NOPA-NoFFF.com

1 October 2025
Widespread Bovaer rollout begins across Danish dairy farms, as farmers start the mandatory 80-day feeding period.

23 October 2025
SEGES Innovation informs Danish authorities that three veterinary practices have raised suspicions about links between Bovaer and cattle illness.
SEGES INNOVATION

30 Oct – 8 Nov 2025
Kent Nielsen publishes a five-part series of Danish farmers reporting problems they associate with Bovaer: Huibert Van Dorp,[xxiv] **Rianne and Jan Blom**,[xxv] Victor Andreas Bach Boran,[xxvi] Wesley Van Ruitenbeek,[xxvii] Kent Davidsen.[xxviii]

International attention

19 January 2025
No Farmers No Food No Future EU shares TikTok videos of Danish farmer protests.[xvi,xvii]

Source: Changing Markets Foundation analysis of social media posts, government and industry announcements. Screenshots: X, Facebook and Farmers Weekly, captured 28 October 2026.

Changing Markets © 2026 all rights reserved

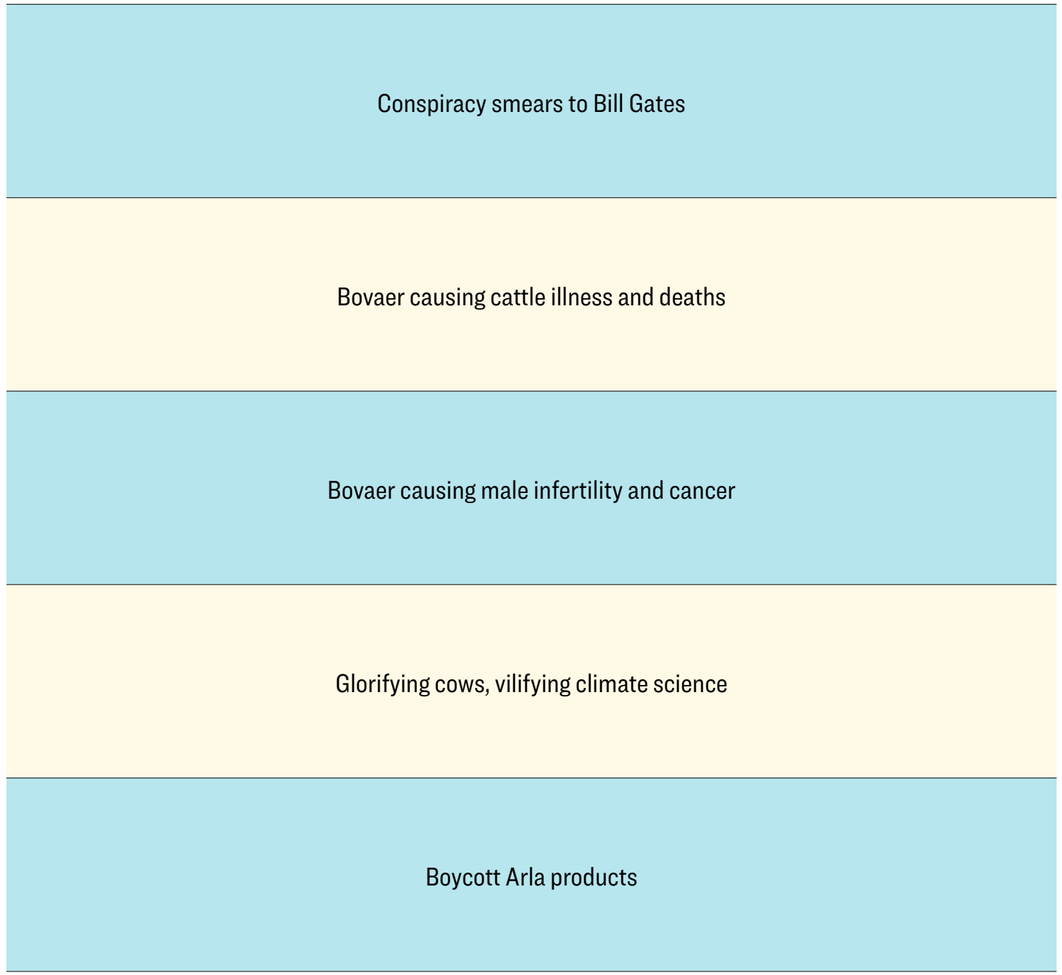
3.4 Shared misinformation narratives across both backlashes

While each backlash was significant in its own right, we examine a broader timeline where shared narratives and patterns fueled opposition to Bovaer in both countries. It was clear that the discussion of Bovaer had moved far beyond legitimate questions about its effectiveness, cost or suitability for different farming systems.

Bill Gates was a recurring feature of conspiracy posts, consistently tied to methane blockers and framed as part of a larger agenda to control farming and food systems.[80] [D] Bovaer was framed as a toxic, unsafe chemical; misleading claims about health risks included alleged links to cancer and male infertility.[81] Once again, as we saw with efforts to undermine the science, cows were positioned as environmentally beneficial or 'carbon neutral', with claims their emissions were overstated or fabricated, leading to fresh attacks on climate and methane reduction policy.[82]

Prominent UK voices seized on Danish farmers' posts circulating at the time, helping carry the controversy back into British online debate. **These farmer stories thus became powerful ammunition in a wider campaign against Bovaer**, turning disputed claims about cattle health into fresh attacks on methane-reducing technologies and agricultural climate policy.

Dominant misinformation narratives over both backlashes



D Although Bill Gates has no direct connection to Bovaer, his investment in a separate methane-reducing feed additive, Rumin8, was often misrepresented or deliberately blurred. This conflation created confusion and amplified misinformation about his involvement.

Changing Markets © 2026 all rights reserved



Bill Gates - the villain of conspiracy theories

Bill Gates has become a recurring villain in conspiracy theories about everything from vaccines and population control to farming and food production. His investments in agricultural land, alternative proteins and climate technologies have been used to lend credibility to unfounded claims that he is orchestrating a global takeover of the food system.

A 2022 peer-reviewed study examining more than 38,000 YouTube comments found that conspiracy theories about Gates and COVID19 were dominated by conspiracy theories including secret agendas, microchipping and population control.[83] These narratives have increasingly spilled into agriculture, with fact-checkers debunking claims that Gates planned to replace farmers with artificial intelligence and engineer food shortages.[84]

During the Bovaer backlashes, these claims resurfaced alongside allegations that Gates was behind Bovaer, despite having no involvement or investments in this additive. In reality, Gates had invested in Rumin8, a separate company developing methane-reducing feed supplements.[85]

The significance is that Gates had become a recognisable symbol of supposed elite interference in farming, allowing a new methane-reduction measure to be presented as part of an existing conspiracy rather than assessed on its scientific merits.

3.5 Ten actors amplifying Bovaer misinformation across borders

Both Bovaer controversies were fuelled by a powerful online ecosystem of 'misinfluencers'. A network of influential voices, spanning farmer influencers, climate sceptics and conspiracy theorists, helped turn health concerns about Bovaer into a wider attack on climate action.

While we did not find signs of formal coordination, there is a clear pattern of people with pre-existing political agendas driving and fuelling the misinformation across both backlashes.

Some misinfluencers had an outsized impact on online engagement. Across both trials, ten accounts consistently drove and shaped conversations both before and after the Arla trial was announced. Their stories travelled across borders and online communities, with accounts presented as first-hand testimonies amplified by established misinformation networks. A previous investigation also **uncovered connections to Russian state-linked funding of a key misinfluencer, Kent Nielsen.**

The profiles below reveal more background into these actors who drove the misinformation online.

UK backlash

Denmark backlash

Changing Markets © 2026 all rights reserved

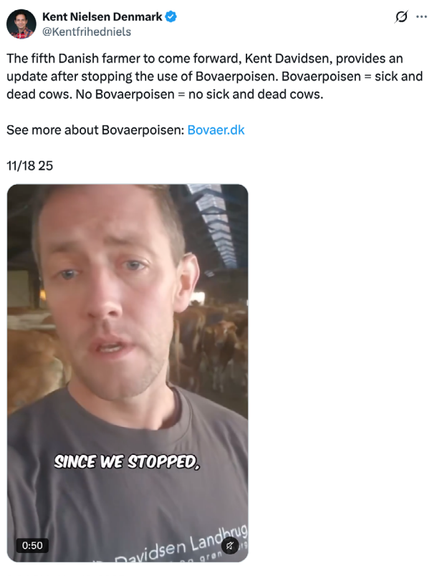
1. Kent Nielsen

Kent Nielsen has played a central role in amplifying opposition to Bovaer. He is an administrator of the private Bovaer.dk Facebook group, created in April 2025, which now has over 13,000 members, and has explicitly campaigned for a Bovaer boycott.[86] On 7 October 2025, a TikTok post in which he called for a boycott of Arla over the 'Bovaer scandal' reached around **362,000 views**, **43,000 likes** and **10,000 shares**, illustrating the substantial reach of his campaigning.[87]

Nielsen's wider network is worth noting. **Investigations by DR and Information found that the Danish language Telegram channel Velinformeret had received around DKK 200,000 from the Russian state-linked Pravfond. Leaked documents named Nielsen as an *'opinion leader in the Danish segment'* and proposed DKK 40,000 for work described as *'journalism, analysis and research'*.**[88] Nielsen denies working for Velinformeret, having contact with its operator or receiving any money, and the leaked documents do not establish that the proposed payment was ever made.

However, Velinformeret has extensively shared Nielsen's material,[89] while Nielsen has also shared and promoted the channel himself. The Norwegian fact-checking organisation independently examined the Telegram channel and found three Nielsen-associated channels among its ten most frequently referenced sources.[90] The **channel shared Kent Nielsen's anti-Bovaer posts, including claims of cattle illness and calls to boycott Arla.**[91]

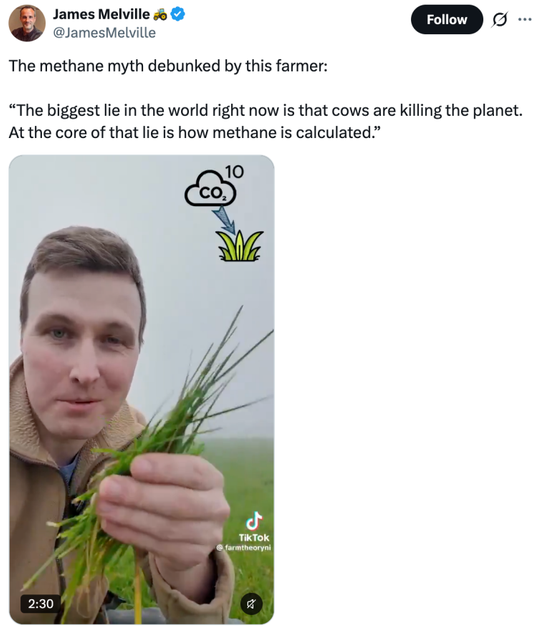
His posts have also been retweeted by **Joanna Blythman**, who was involved in amplifying the UK Bovaer backlash and is included in Changing Markets' *Meat vs EAT-Lancet* list of people, who were central in an attempt to discredit the first EAT-Lancet study.[92]



2. James Melville

Media commentator James Melville joined the discussion, amplifying concerns about the additive and giving greater visibility to farmers reporting problems. Melville echoed the wider narrative that biogenic methane is part of a natural, self-sustaining carbon cycle, framing livestock as inherently sustainable, while downplaying their contribution to global warming.

In the year before the UK trial, Melville was the most engaged-with misinfluencer on feed additives, with **497,642** people engaged and a total of **98 posts**. Once the trial had been announced he was responsible for **328,124 engagements** and **35 posts.**[E]



Melville is no stranger to misinformation controversies. Founder of the No Farmers, No Food campaign, previously investigated by DeSmog for its links to climate denial networks,[93] he also featured prominently in Changing Markets' earlier analysis of Dutch farmer protests against nitrogen regulations, where conspiracy theories about environmental regulations gained traction.[94]

In 2024, Melville sat on the board of Together, a campaign group that opposed COVID-19 lockdowns and London's Ultra Low Emission Zone (ULEZ).[95] The net-zero lead for this organisation is Ben Pile, a researcher and commentator who has made

E Ripple Research (2025) Social media analysis of UK Bovaer misinformation. Research commissioned by Changing Markets Foundation. [Unpublished research]

a career from challenging climate science. He has been praised by a contributor to the far-right media outlet Breitbart as being "*magnificent*" and worked for UKIP MEP Godfrey Bloom.[96]

The No Farmers, No Food campaign's X account has previously amplified conspiracy narratives linked to the 'Great Reset', including reposting claims that the World Economic Forum (WEF) sought to force people to eat insects as part of a wider agenda to control food supplies.[97]

Melville's involvement shows how farmers' concerns can be exploited and amplified, adding fuel to the Bovaer backlash while advancing a wider anti-climate policy agenda. By amplifying opposition to Bovaer, he helped recycle familiar anti-climate narratives and incite the backlash within and beyond farming circles.

3. Peter Imanuelsen

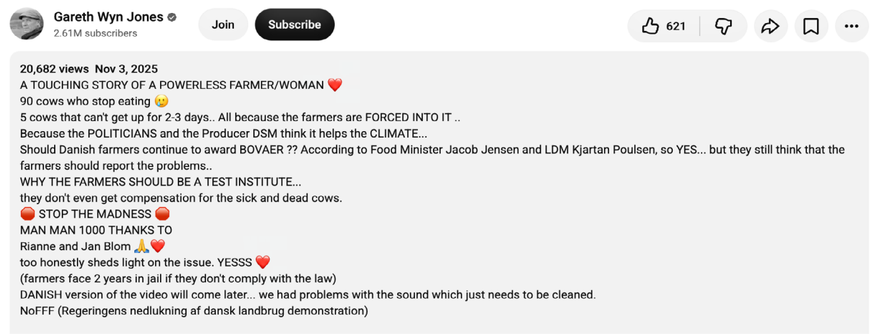


Peter Imanuelsen, known as 'Peter Sweden' online, played a role in amplifying misinformation across both the UK backlash in November 2024 and the Danish backlash a year later, helping spread the same narratives across borders.

Imanuelsen is a right-wing social media influencer, who has been identified in previous investigations by Climate Action Against Disinformation[98] and Science Feedback[99] as a prominent amplifier of climate misinformation, including conspiracy narratives about 'climate lockdowns' and elite control.

His involvement demonstrates how concerns about methane-suppressing products can be amplified by established climate misinformation networks, drawing new audiences into the controversy through familiar conspiracy narratives about corporate influence, public health and government intervention.

4. Gareth Wyn Jones



Other posts, including from UK based farmer Gareth Wyn Jones, dismissed feed additives as an **externally imposed Westminster intervention**, linking them to concerns over cost, farmer autonomy and human and animal health rather than their climate benefits.

With **over 2.6 million YouTube subscribers alone**, Gareth Wyn Jones has considerable influence beyond the farming community. The No Farmers, No Food campaign's X account regularly shares his videos, and he is a frequent guest on GB News.

He played a prominent role in amplifying both backlashes, criticising Arla's UK trial in November 2024 before sharing information about Danish farmer protests in January 2025 and amplifying testimonies of alleged cattle illness during the Danish backlash in November 2025.[100]

His opposition to Bovaer reflects his wider anti-net-zero stance. Having previously openly criticised net-zero policies and campaigned against Welsh government environmental reforms, Wyn Jones helped frame methane reduction as another threat to farmers' livelihoods and autonomy.[101]

No Farmers, No Food

The 'no farmers, no food' slogan within the UK is primarily tied to the campaign founded by James Melville. As farmer protests took place in early 2024 in the UK, James Melville set up the 'No Farmers No Food' X account (@NoFarmsNoFood) which, according to DeSmog, had 50,000 followers within the first two weeks of its launch.[102]



In its published manifesto, the group claims to exist to save farmers, including to *'push back against unrealistic net-zero policies where they prevent farmers from producing food sustainably'*. Melville's No Farmers, No Food campaign has been involved in directly organising protests as well as jumping on grassroots farmer movements to push an anti-climate agenda, and has claimed that *'Farming is being sacrificed on the altar of net zero.'*[103]

Elon Musk has also posted in support of No Farmers, No Food in the past, further entrenching climate-denial narratives around agriculture by stating *'Farming has no material effect on climate change.'*[104] Melville's longstanding position pushing conspiracy theories around COVID-19 and climate make it unsurprising that he cropped up as one of the key misinfluencers in our dataset.

Just as he worked to co-opt the 2024 protests against the UK government plans to levy inheritance tax on UK agricultural land,[105] No Farmers, No Food and Melville himself have jumped on the opportunity of the Arla Bovaer trial to further embed climate denial and conspiracy narratives.

However, the slogan's uptake across the UK spreads beyond just the X account set up by Melville and the group's explicit objectives. 'No Farmers, No Food' signs can be seen across the countryside, some with obvious ties to Melville's campaign's branding, others that appear more grassroots.

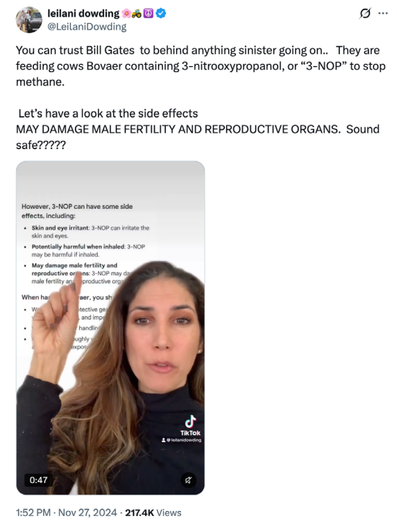
The slogan appears to have begun circulating in the Netherlands in 2023,[106] during protests against regulations on nitrogen pollution levels, a movement that itself was heavily tied to far-right interests and conspiracies.[107] It was also the title of a documentary directed by Roman Balakov of Epoch Times, a far-right media entity, which built on the Great Reset conspiracy to suggest a global elite was driving environmental regulation of farms, dispossessing farmers and ultimately forcing people to eat insects.[108]

5. Leilani Dowding

Former model, *Real Housewives of Cheshire* cast member and smallholder Leilani Dowding played a prominent role in amplifying misinformation surrounding Arla's Bovaer trial.[109] Dowding had previously been identified in a 2022 investigation into COVID-19 vaccine misinformation and presented programmes on Ickonic, a media platform associated with conspiracy theorist David Icke, who believes that the world is secretly controlled by shape-shifting reptilian humanoids.[110] [111] [112]

Our post-announcement analysis of X ranked her first among the accounts examined, generating 536,385 engagements across 132 posts.[F] Her content amplified unfounded claims about Bovaer's safety,[113] including alleged cancer risks, and conspiracy narratives linking the additive to Bill Gates.

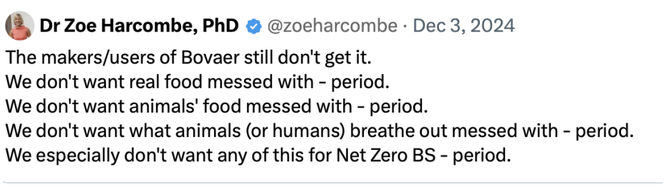
Dowding's involvement illustrates how the backlash extended beyond traditional farming circles. Her combination of celebrity status, rural lifestyle content and pro-



F Ripple Research (2025) Social media analysis of UK Bovaer misinformation. Research commissioned by Changing Markets Foundation. [Unpublished research]

motion of conspiracy narratives helped bring Bovaer misinformation to wider consumer audiences, turning a livestock methane-reduction measure into a broader controversy about food safety, and climate policy.

6. Dr Zoe Harcombe



Dr Zoe Harcombe is a British researcher and writer on diet and health who frequently challenges mainstream public health dietary guidelines. She holds a PhD in public health nutrition and has published several books questioning conventional dietary advice, and was also identified as one of the key people involved in the attack on the EAT-Lancet planetary health diet - she claimed that the diet was nutritionally deficient.[114]

Harcombe dismissed Bovaer as unnecessary interference with animals as well as the legitimacy of net zero as a justification for methane-reduction measures overall.

Rather than simply questioning the safety of Bovaer, Harcombe's intervention challenged the legitimacy of methane mitigation itself, illustrating how opposition to a single technology can become a vehicle for questioning the wider scientific and political case for climate action.

7. Rianne and Jan Blom

Farmers Rianne and Jan Blom became prominent voices in the Bovaer backlash, with interviews in which they described the additive as *"poison"* for cows circulating widely across social media. The testimony was amplified by conspiracy-focused accounts (such as Concerned Citizen, see image), Welsh farmer Gareth Wyn Jones and European political figures including Rob Roos, a Dutch MEP from the right-wing populist JA21 party.[115]

A post by Kent Nielsen from 3 January 2026 featuring Rianne attracted around 98,000 views, 3,370 likes and 1,820 shares. Rianne repeatedly featured 'No Farmers, No Food, No Future' banner in the background.



8. Kent Davidsen

Danish dairy farmer Kent Davidsen said his cows experienced diarrhoea, reduced feed intake and milk production, milk-fever-like symptoms and cases of paralysis, leading him to stop using Bovaer after 35 days, following discussions with his veterinarian.[116]While these concerns should be taken seriously and properly investigated, reports of adverse effects do not necessarily establish that Bovaer was the cause. The concern is how such testimonies can be amplified and taken out of context by misinformation networks to fuel wider opposition to methane-reduction measures.

His testimony gained substantial traction online. A Facebook update on 18 November 2025, in which he described his cows as having continued digestive problems, loss of appetite and other symptoms, recorded around 22,000 likes and 3,700 shares at the time of monitoring. His story had already been picked up by activist Kent Nielsen, whose 8 November post presented Davidsen as the fifth farmer to come forward over Bovaer and attracted around 322,000 views, 20,700 likes and 10,300 shares.[117]



Changing Markets © 2026 all rights reserved

9. Wesley Van Ruitenbeek

Dutch dairy farmer Wesley van Ruitenbeek, who farms in Denmark, had little established social-media presence before his account of alleged problems with Bovaer went viral. He said that after introducing the additive, dozens of cows became ill and two died, prompting him to stop using it. His testimony where he said using Bovaer "is animal abuse" was accompanied by striking images of sick and dead cattle that became central to its online circulation.[118]

Nine of the ten highest-engagement posts featuring Van Ruitenbeek used imagery of him with cattle in the background, while he was repeatedly shown wearing 'No Farmers, No Food, No Future' merchandise.

His individual experience became part of a wider narrative portraying Bovaer, and increasingly climate policy itself, as being imposed on farmers at the expense of animal welfare.

These testimonies broadened the backlash beyond online influencers, giving the controversy a more credible grassroots dimension as farmer voices were used to reinforce claims that Bovaer posed risks to animal welfare and farm viability.



10. Victor Andreas Bach Boran

Farmer Victor Andreas Bach Boran became one of the more widely shared producer voices in the Bovaer backlash after posting a Facebook video describing alleged health problems in his cattle. Despite having only around 1,600 followers, the video attracted nearly 4,000 likes and 5,000 shares, before being amplified by Kent Nielsen, the Bovaer.dk Facebook group and users on Telegram, X and TikTok.



One Telegram post promoting Victor's story went further, coupling his anecdotal account with false claims that Bovaer could also affect human fertility.[119]

3.6 The impact of the backlashes

The concerns in Denmark prompted a major Aarhus University analysis of 73 herds and around 27,650 cows.[120] Despite negative experiences being reported in 47 herds**, researchers found no demonstrable overall negative effect on the main health and production outcomes examined**.[121] However, the narrative had already taken hold online, with misinformation spreading faster than the scientific evidence could counter it, leaving authorities struggling to regain control of the debate.

A policy brief, obtained for this investigation through a freedom of information request, on methane-suppressing technologies, prepared by Dr Sinead Walters at the University of Galway for the Irish Department of Agriculture, Food and the Marine, recommends the deployment of Bovaer but acknowledges that ***'recent publicity in the UK and Denmark has impacted the perception of such products and their safety.'122***

Changing Markets © 2026 all rights reserved

The backlash had tangible consequences for Denmark's implementation of its methane policy. In November 2025, Danish authorities clarified that farmers could stop using Bovaer where cattle experienced health problems - while explicitly stating that causation remained uncertain.[123] In September 2026, the government went further by **expanding exemptions** to allow farmers who experienced problems the previous year to avoid restarting Bovaer use if they reasonably expected illnesses to occur.[124] [125] While this could be an understandable response, this creates an avoidable complication on the rollout of the feed additive, and the question is whether these farmers would then need to use other measures to reduce emissions. The controversy ultimately reached Brussels, where Denmark supplied evidence to the European Commission, contributing to fresh EFSA scrutiny of Bovaer's safety.[126]

The fallout has also spread beyond Denmark, with public distrust translating into commercial withdrawal. In January 2026, **Norwegian dairy giant TINE stopped accepting milk from Bovaer-fed cows**, explicitly citing growing consumer and farmer scepticism, despite acknowledging that the additive had not been proven dangerous.[127] Other food companies across Europe have also turned away from Bovaer.[G] [H] These decisions show how distrust can spread across borders and derail the commercial adoption of methane reducing technologies, even where evidence of harm has not been established.



Screenshot of Norwegian dairy giant TINE's announcement, titled "TINE stops using milk from cows fed Bovaer" (22 January 2026)

Source: TINE (2026) TINE stanser bruk av melk fra kyr som er fôret med Bovaer. [ONLINE] Available at: https://www.tine.no/presserom/nyhetsarkiv/tine-stanser-bruk-av-melk-fra-kyr-som-er-foret-med-bovaer

The backlash resulted in the UK's Food Standards Agency (FSA) responding to media enquiries and publishing a public explainer around the safety of Bovaers.[128] The FSA confirmed to Changing Markets that the blog was published in response to misinformation circulating on social media, highlighting the additional work generated by unfounded health claims.

BBC Verify published an investigation examining the backlash, debunking misleading claims linking Bovaer to Bill Gates and a supposed depopulation plot, while citing experts who confirmed that the additive posed no food safety risk to consumers.[129]

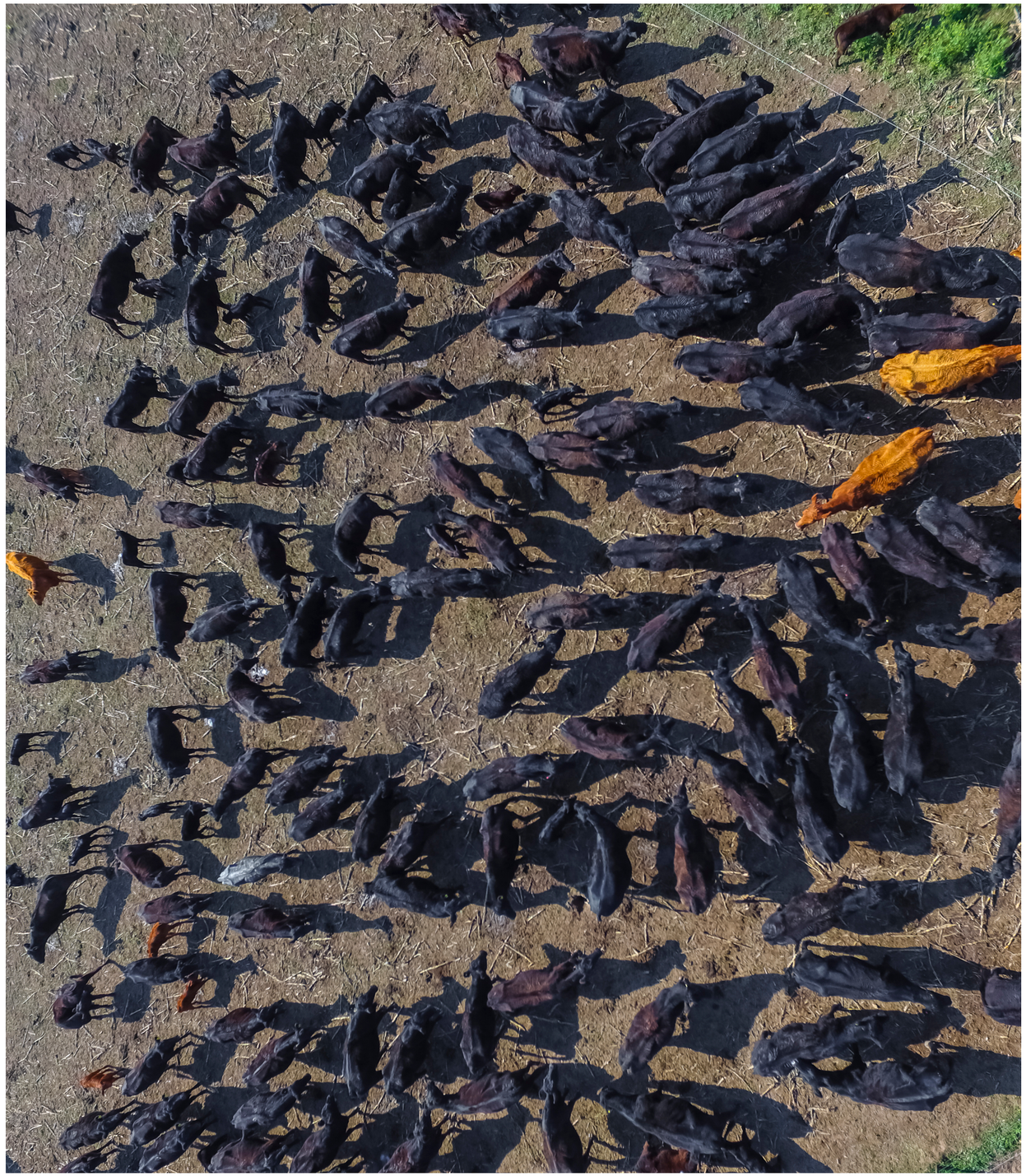
The backlash also raises questions about the future of methane-reducing feed additives in the UK. Arla's trials have ended and the FSA confirmed in September 2026 that feed additives were not among the government's priority areas for innovation and growth.[130]

In February 2026, Ulster Farmers' Union deputy leader John McLenaghan declared that the consumer backlash had left Bovaer *"dead in the water"* and without a *"social licence"* in the UK.[131]

G Valio (2025) Information about Bovaer® feed supplement. [ONLINE] Available at: https://www.valio.com/articles/information-about-bovaer-feed-supplement/

H Q-Meieriene (2025) Q-fansen har blitt hørt [Q fans have been heard]. [ONLINE] Available at: https://www.q-meieriene.no/nyheter/q-fansen-har-blitt-hort

Changing Markets © 2026 all rights reserved



4. Rebranding livestock as a climate solution: The rise of the regenerative grazing offsetting projects in the Americas

4.1 Livestock presented as a solution

Previous chapters expose how agricultural methane action is being undermined. Alternative accounting metrics are used to downplay livestock emissions, while misinformation discredits the solutions designed to cut them.

But a third misinformation strategy is **rebranding cattle farming as a climate solution in its own right.** Through misleading claims about regenerative grazing, which are now being translated into projects generating carbon credits, continued cattle production is increasingly being presented as part of the answer to climate change, rather than part of the problem.

Changing Markets © 2026 all rights reserved

Nowhere is this more visible than in South America. Over the past 20 years, 55 million hectares of the region's five main ecosystems[132] have been destroyed to make way for the cattle industry.[133] **Yet the same industry driving this destruction is increasingly being marketed as a solution to climate change through regenerative grazing projects that are generating carbon credits.**

Our investigation, including interviews with cattle ranchers, exposes a glaring contradiction. Major institutions are purchasing carbon credits from regenerative grazing projects **that can increase cattle methane emissions**. Instead of tackling this pollution at source, these schemes rely on soil carbon storage to compensate for it. Our investigation also points to similar concerns emerging from regenerative grazing carbon-credit schemes in the United States.

These carbon markets risk creating perverse incentives to maintain or expand cattle herds, while reinforcing the misleading narrative that regenerative grazing is a solution to climate change.

4.2 Allan Savory and the rise of regenerative grazing

A 2024 study analysed[134] the sustainability plans of 30 agribusiness giants and found that 80% of them, including Cargill, Nestlé, ADM and Coca-Cola, talked about 'regenerative' practices. However, only one-third had clear goals, and most did not explain how their plans would be implemented or whether they were simply small pilot projects.

Regenerative grazing is one part of the regenerative agricultural movement, promoting changes to livestock grazing practices as a means of restoring soil health, storing carbon and improving biodiversity. Its leading advocate, Allan Savory, has argued that **increasing cattle numbers can help reverse land degradation and tackle climate change**,[135] despite the fact that cattle are the leading source of methane and nitrous oxide emissions, as well as a key driver of deforestation. His approach, known as **'holistic planned grazing'**, has become influential in the wider regenerative grazing movement.[136]

During a visit to Paraguay in 2022, Savory falsely claimed that "***science recognises that climate change is not caused by livestock, oil or coal… but by the way we manage them***."[137]

The Savory Institute has helped expand regenerative livestock farming across South America through its regional partner Ovis 21, which is also involved in the South American Regenerative Agriculture (SARA) programme. Allan Savory has also personally promoted this approach in Paraguay in meetings with policymakers.[138]

While Ovis 21's wider activities focus on ecological restoration, biodiversity and regenerative wool production, its involvement in SARA extends this approach into the commercial carbon market. SARA claims to have removed more than 200,000 tonnes of CO_2 equivalent through soil carbon storage, generating carbon credits that can be sold internationally.

Livestock grazing is the largest form of human land use globally and a major driver of deforestation, with pasture expansion responsible for 42% of global forest loss in recent decades.[139] This raises serious questions about the opportunity cost of regenerative grazing schemes, which reward relatively modest increases in soil

carbon while keeping cattle on the land, when restoring forests and other native ecosystems on suitable pastures could store substantially more carbon.[140] One study estimated that restoring native ecosystems across global pastureland could initially absorb 13.4 billion tonnes of CO_2 annually, although this rate would decline over time.[141]

Further, a growing body of scientific literature highlights that soil carbon storage is finite and can be reversed.[142] [143] Even where grazing practices increase soil carbon, these gains slow as soils approach saturation over decades, while drought, fire or changes in land management can release previously stored carbon - raising serious questions about treating these potentially temporary gains as permanent carbon offsets.[I]

The evidence for such gains is also increasingly contested. A 2026 review of 70 studies found that only ten met all the scientific quality criteria needed to reliably assess whether different grazing practices increase the amount of carbon stored in soil. These ten studies found no overall increase in soil carbon storage, casting doubt on claims that regenerative grazing can reliably remove carbon from the atmosphere.[J]

For example, a 2023 *Nature Communications* study found that offsetting the world's ongoing ruminant livestock methane and nitrous oxide emissions would require storing an additional **135 billion tonnes of carbon in grassland soils**, nearly twice their existing carbon stocks.[144] The researchers concluded that relying on grassland carbon sequestration alone to offset these emissions is not feasible, highlighting the need to reduce livestock emissions at source. Despite these serious questions around its climate benefits, regenerative grazing is gaining traction in the Americas, where it underpins a growing market for livestock-based carbon credits.

4.3 How Big Ag, Big Oil and Big Tech are selling cattle ranching as a false climate solution

The SARA programme, which draws on Allan Savory's approach to regenerative grazing, has expanded to over 140 farms, issuing more than 200,000 carbon credits and generating $1.2 million in sales by August 2026, with ambitions to expand to 500,000 hectares.[145] [146] Even the International Monetary Fund (IMF) has purchased 3,700 carbon credits from SARA, despite SARA's internal documents **acknowledging that increasing cattle numbers will increase enteric methane emissions.**[147] [148]

Further to this, we explore the regenerative grazing projects linked with Boomitra, an AI based satellite soil measurement start up. The company, which has received funding from Chevron and Yara, is behind one of the first regenerative carbon credit projects under Article 6 of the Paris agreement, has been selected to supply 625,000 cattle ranching carbon credits from a regenerative grazing project in Paraguay to the **government of Singapore**.

Meanwhile, Argentinian oil and gas giant Vista Energy, backed by tech billionaire Peter Thiel's investment fund, plans to offset fossil-fuel emissions through regenerative cattle grazing, exposing how carbon credits can allow polluting industries to **claim climate progress with projects that rely on dubious accounting methodologies and ignore methane emissions.**

I Project Drawdown (2026) Reduce Grazing Intensity. [ONLINE] Available at: https://drawdown.org/explorer/reduce-grazing-intensity

J Sanderman, J., Partida, C., Xia, Y., Lavallee, J. M. and Bradford, M. A. (2026) Systematic Review Reveals Soil Organic Carbon Benefits of Alternative Grazing Depend on Study Quality. Communications Earth & Environment, 9 July 2026. [ONLINE] Available at: https://doi.org/10.1038/s43247-026-03790-8

Changing Markets © 2026 all rights reserved

How the cattle carbon credits system works[149] [150]

Livestock producers can generate credits by increasing carbon stored in grazing soils, while companies in other high-emitting industries purchase them to compensate for their own pollution. Large companies are helping to finance and expand this market, including through artificial intelligence, satellite monitoring and major carbon-credit purchases.

How the cattle carbon credits system works[151]

Farmers are rewarded for claimed increases in soil carbon compared with what would have happened without the project.
These gains are then measured or modelled and verified under carbon-credit standards such as Verra, with each credit representing one tonne of CO_2 equivalent emissions reduced or removed.
Companies can then purchase and retire these credits to offset pollution elsewhere.

A fundamental problem is that regenerative grazing carbon credits can be generated without reducing (or potentially even increasing) the methane emitted by cattle. For livestock producers this creates a perverse incentive for an extra revenue stream even where increasing cattle numbers could lead to higher emissions. For organisations purchasing these credits, it creates an opportunity to claim climate progress without tackling their emissions.

The credibility of the credits themselves is also in question. Soil carbon gains can be difficult to measure and may be reversed, while some improvements in grazing practices might have happened without carbon-credit payments at all. **Together, these risks create fertile ground for misleading narratives that rebrand cattle farming as a climate solution, even where livestock methane emissions remain unchanged or increase.**

In practice, the structure of carbon-credit payments creates several perverse incentives that risk undermining action on livestock methane.

First, these schemes can financially reward projects that maintain or even expand cattle production, without requiring methane reductions. As the SARA project demonstrates, carbon credits can finance regenerative grazing schemes that explicitly anticipate increasing cattle numbers and their associated enteric methane emissions. Studies also indicate that such grazing practices may require significantly more land.[152]

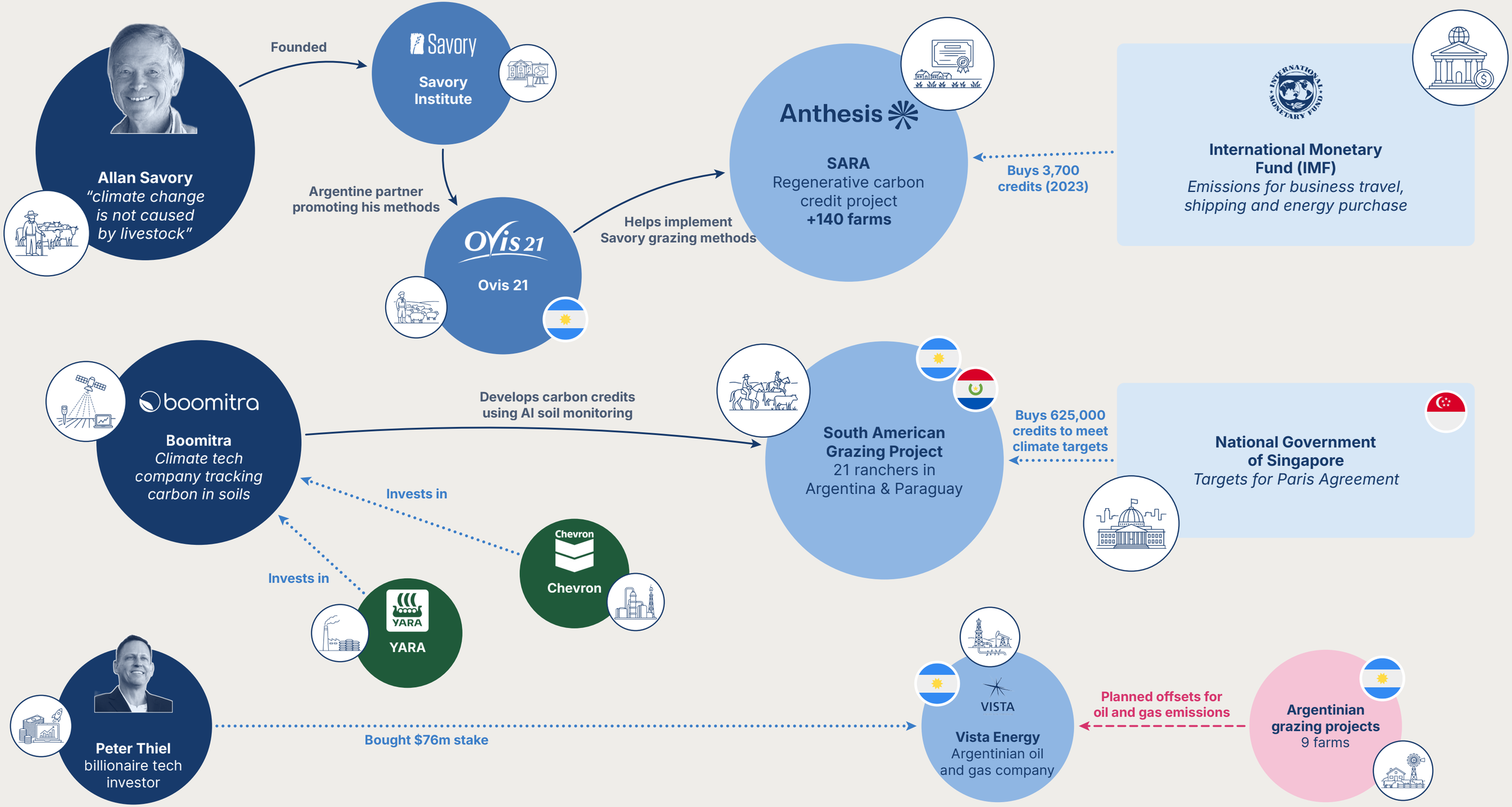
Secondly, these projects help legitimise the livestock industry's misleading narrative that cattle farming can be part of the solution to the climate crisis. Together, these incentives risk making continued livestock production both more profitable and more politically defensible, rather than encouraging methane emissions reductions at source. This also raises questions around additionality, as farmers may have adopted regenerative grazing practices anyway because of their financial benefits, meaning the credits may not represent genuine additional climate benefits.

Thirdly, the amount of carbon captured and stored in soil is difficult to measure accurately, and these gains are not guaranteed to be permanent.[153] Changes in land management, droughts or other environmental pressures can release stored carbon back into the atmosphere, raising questions about whether these credits can reliably compensate for ongoing fossil-fuel emissions.[154]

Three projects in South America expose how this model is developing, who benefits and the risks of extending it into national climate commitments.

Changing Markets © 2026 all rights reserved

KEY — Facilitators · Savory network · Investors · Regenerative grazing projects · Buyers · Founded, supports, implements · Buys credits / invests · Planned offsets



False solutions of Big Ag, Big Oil and Big Tech

Source: Changing Markets Foundation analysis.

Case study 1: SARA project: Selling soil carbon while cattle keep emitting methane

The SARA programme demonstrates how livestock carbon credits are becoming a growing commercial market. As explored earlier in this chapter, SARA is one of South America's leading regenerative grazing programmes, bringing together livestock producers and carbon-credit buyers to create a growing commercial market for claimed soil-carbon removals, while cattle continue to emit methane.

According to our research into carbon-credit registry Verra's records, one buyer of the credits is the **International Monetary Fund**,[155] which purchased 3,700 credits corresponding to 3,700 tonnes of CO_2e claimed to have been captured by SARA in 2023. In its 2023 Sustainability Report, the IMF claimed that most of its emissions were from business travel, shipping and energy purchase.[156]

The IMF's purchase of SARA carbon credits raises questions about the credibility of using regenerative grazing to offset emissions elsewhere. SARA's own project documents anticipate increased enteric methane emissions from higher cattle stocking rates, while its carbon credits rely on soil-carbon gains that are difficult to measure and may not be permanent.

More troublingly, SARA's own project documents acknowledge that "CH4 from enteric fermentation and manure disposition is expected to increase due to higher average stocking rates".[157] In other words, the scheme anticipates more cattle and higher methane emissions from enteric fermentation.

Martin Mongelos, a developer involved in the project, stated that these additional emissions would be deducted from the carbon captured in the soil.[K]

Under this system, farmers can generate carbon credits even as their cattle produce more methane, provided the soil-carbon gains outweigh the additional emissions. Yet, as we identified earlier in this chapter, soil carbon is finite and potentially reversible, raising questions on whether these soil carbon gains actually compensate for the higher methane emissions the project will bring.

Regenerative grazing practices often require larger herds to ensure productivity, as cows are needed to trample the ground with their hooves and fertilise it.[158] This is one of the attractions for farmers to engage with the SARA project.

According to Antithesis, the international developer of the SARA project, the programme aims to expand its coverage from nearly 100,000 hectares to 500,000 hectares, raising questions about the land requirements of scaling regenerative grazing and the potential pressure on land use.[159] This expansion therefore risks scaling up a carbon-credit model that can reward continued cattle production without requiring reductions in livestock methane emissions.

These concerns are compounded by regenerative grazing advocates, including the Savory Institute, promoting alternative methane accounting methods such as GWP* to downplay the warming impact of continued livestock production, as explored earlier in this report.

K Manzoni, M. (2026) Interview with cattle rancher in South America, conducted as part of an investigation for Changing Markets Foundation. [Unpublished interview]

Changing Markets © 2026 all rights reserved

Case study 2: Microsoft: More cattle, more carbon credits

The controversy extends beyond South America. In the United States, tech giant Microsoft is investing millions in regenerative agriculture carbon credits, even as its emissions continue to rise.

In January 2026, Microsoft agreed a record 2.8 million soil carbon credits linked to regenerative agriculture in the United States as a way to offset its growing AI-related emissions and maintain its commitment to becoming "carbon negative" by 2030. Its latest Environmental Sustainability Report,[160] which covered data from fiscal year 2024, shows a 23% increase in emissions compared to a 2020 baseline.

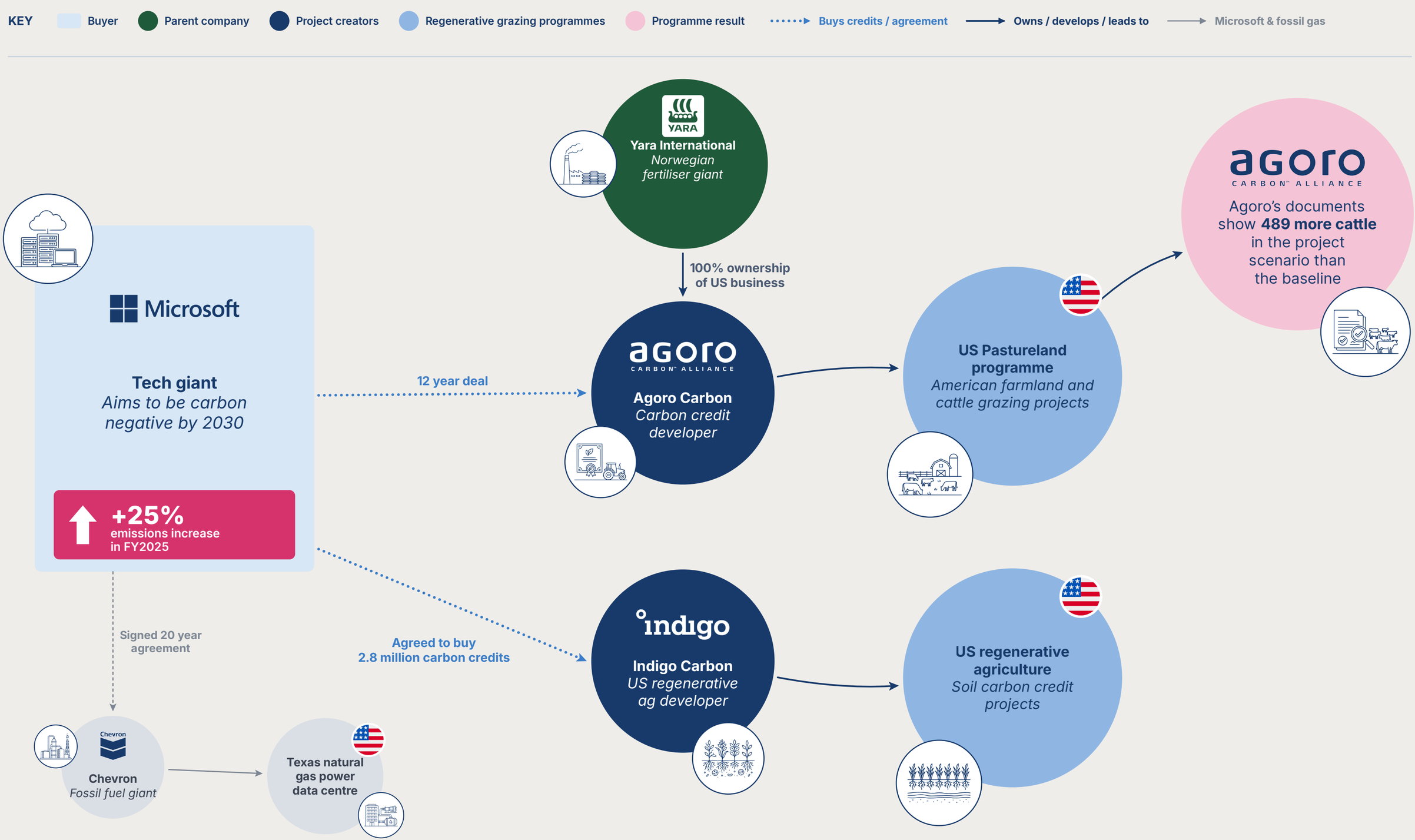
The credits will be purchased from US regenerative agriculture developer Indigo Carbon.[161] This followed a separate 12-year agreement with Agoro Carbon[162] to purchase **2.6 million carbon credits** from American farmland and cattle-grazing projects, supporting its ambition to become carbon negative by 2030. Agoro Carbon Alliance's US business is wholly owned by Norwegian fertiliser giant Yara International.[163]

But documents submitted to carbon-credit standard Verra reveal a troubling contradiction. Agoro's US Pastureland Programme promotes regenerative practices, including rotational grazing, with the expectation that cattle numbers would remain stable.[164] **Yet the same project documents show 489 more cattle in the project scenario than in the baseline across participating fields during the monitoring period** (the project initially reported a baseline of 18,445 cattle, but it was revised to 18,934 during the validation process).[165]

Meanwhile, Microsoft's 2026 Sustainability Report[166] revealed that its total reported emissions increased by **25% in the 2025 financial year**, driven partly by its expanding data-centre infrastructure. In June 2026, Microsoft also signed a 20-year agreement with fossil-fuel giant Chevron[167] to develop a natural-gas-powered data centre in Texas.

The case exposes the wider risk of this growing market: major technology companies can purchase claimed carbon removals from livestock operations while expanding energy-intensive infrastructure, potentially increasing emissions on all sides.

Changing Markets © 2026 all rights reserved



Microsoft: More emissions? Just get more cattle and more credits

Fig. X Microsoft more cattle, more carbon credits

Source: Changing Markets Foundation analysis.

Case study 3: Boomitra project: Cashing in on carbon credits without cutting methane

Boomitra is a California-based climate technology, and a leading developer of carbon credits linked to regenerative agriculture and livestock farming.

Unlike Ovis 21 and Ruuts, which rely more heavily on field measurements, Boomitra uses satellite imagery and artificial intelligence to estimate soil carbon levels. Its technology has been approved by carbon credit standard Verra,[168] although the company has not disclosed the greenhouse-gas emissions associated with running its AI systems. In 2021, Boomitra secured $4 million in seed funding by Yara Growth Ventures, with the promise to make carbon credits cheaper to measure and more accessible to small farmers.[169] As previously stated, Yara also owns Agoro Carbon Alliance's US business, which was involved in evaluating Boomitra, with its then-CEO expressing interest in potential collaboration.[170]

Its South America Grassland Restoration Project covers approximately 30,900 hectares across Argentina and Paraguay, working with 21 livestock farmers to increase soil carbon through regenerative grazing. The company uses satellite imagery, artificial intelligence and soil-carbon modelling to estimate carbon removals and generate credits.[171]

The project's own validation documents reveal that reducing methane emissions from cattle is not an objective of the scheme.[172] Methane emissions from cattle digestion were excluded from its emissions-change calculations because herd numbers were expected to remain broadly unchanged, an approach accepted by the validator. This exposes a fundamental problem - cattle farms can generate carbon credits and claim climate progress without cutting the methane they continue to emit. Worse still, livestock methane emissions could increase without being accounted for, provided the increases fall below the methodology's significance threshold.[173]

Boomitra's carbon credit business also extends beyond South America. Emirati logistics giant DP World and the Ethereum Climate Platform, launched at COP27 to address the environmental impact of blockchain technology, are among the organisations that have committed to purchasing from Boomitra's regenerative grazing project in northern Mexico.[174]

Further questions have been raised about the credibility of these credits. Verra initially questioned whether the project's claimed climate benefits were genuinely additional, meaning they would not have occurred without carbon credit funding. The project was eventually approved after Boomitra pointed to weak regulation on improving grazing practices in Paraguay. This exposes a troubling paradox. The lack of environmental regulation in the livestock sector can itself help carbon credit schemes justify their claimed carbon benefits, by arguing that improvements would not happen otherwise.

Interviews undertaken with participating ranchers reveal an uncomfortable tension. Rafaela Laino, a rancher participating in Boomitra's project in Paraguay, acknowledged that despite the conservation benefits, the financial burden on farmers was still high despite the promise of carbon-credit revenues, and that farmers "still had to cover a large part of the investment needed to implement the practices".[L]

L Manzoni, M. (2026) Interview with cattle rancher in South America, conducted as part of an investigation for Changing Markets Foundation. [Unpublished interview]

Changing Markets © 2026 all rights reserved

This exposes how misleading climate claims can arise. Generating carbon credits from grazing land can be portrayed as evidence that cattle farming is tackling climate change, even when the project is not targeting livestock methane reductions.

The methane blind spot in international carbon markets

The stakes have now moved beyond corporate greenwashing to the implementation of the Paris Agreement itself. In September 2025, Singapore selected Boomitra's Paraguayan cattle-ranching project to supply **625,000 soil-carbon credits** for potential use under Article 6.2 of the Paris agreement,[175] with deliveries scheduled from 2026 onwards. These credits are intended to help Singapore meet its national climate commitments.[176]

Article 6.2 allows countries to trade carbon credits internationally and count them towards their national climate targets, subject to accounting rules designed to prevent double-counting.

The announcement sparked a diplomatic controversy. Despite signing a bilateral carbon-credit agreement with Singapore in May 2025, Paraguay's Ministry of Environment said it had not been informed of Boomitra's selection beforehand, and had not approved their methodology.[177]

This raises serious questions. **A project relying on dubious soil carbon sequestration that ignores livestock methane or reductions in the number of grazing animals could now help another country meet its climate targets.** While the credits have not yet necessarily been transferred or counted, the agreement shows how claimed soil-carbon gains from methane-emitting cattle farms are moving into international climate accounting. Besides not leading to emissions reductions, this also risks giving official legitimacy to the misleading narrative that continued livestock production is itself a climate solution.

Case study 4: Vista Energy: Using cattle ranching to offset fossil-fuel pollution

Vista Energy, Argentina's largest hydrocarbon exporter, plans to use two regenerative livestock projects to offset part of the methane and other emissions from its oil and gas operations.[178]

Through its subsidiary Aike, Vista is developing regenerative livestock and mixed agricultural projects covering approximately 26,900 hectares across nine farms in Argentina. Both projects were still undergoing carbon credit validation by Verra at the time of the research. This forms part of Vista's wider strategy to generate enough carbon credits to match its entire residual carbon footprint by 2026.[179]

Vista exposes a fundamental contradiction. Questionable carbon gains from livestock systems are being used to compensate for fossil-fuel emissions, even as cattle continue emitting methane. The carbon stored in grazing soils does not eliminate emissions from oil and gas production, nor does it automatically compensate for the methane produced by the livestock themselves.

Worse still, **the market creates a perverse incentive for farmers:** instead of being rewarded for reducing methane emissions, they can generate revenue from carbon credits while maintaining or even expanding their herds. This risks making continued methane emitting livestock production more profitable, while presenting it as part of the solution to climate change.

Changing Markets © 2026 all rights reserved



Conclusion

This investigation reveals how misinformation around livestock methane is taking different forms, but repeatedly leads to the same desired outcome: weakening the case for reducing emissions from livestock.

Our findings reveal three distinct ways methane action is being undermined. Scientific metrics are being misused to justify weaker climate targets, technologies capable of reducing methane are being discredited, and regenerative grazing is being hailed as a climate solution.

These arguments reinforce the powerful message of 'agricultural exceptionalism', as identified in *The New Merchants of Doubt*. It's an argument that portrays livestock farming as sustainable, its methane emissions as fundamentally different from other sources of pollution, and the sector as deserving special treatment under climate policy.[180]

Changing Markets © 2026 all rights reserved

The enduring myth of the climate-friendly cow

One of the clearest threads connecting the three different strands is the persistent effort to portray livestock farming as inherently natural, sustainable or even beneficial to climate.

As we saw with debates on methane accounting, the biological origins of livestock methane are used to suggest emissions are part of a natural cycle, contributing to little or no additional warming. These arguments have been used to challenge the need for deeper reductions in livestock methane.

The same narrative resurfaced during the Bovaer backlash. Far right misinfluencers seized the opportunity to undermine climate and net zero policies by attacking this feed additive as an unnecessary interference with a natural farming system, fearmongering about its health impacts and promoting consumer boycotts of Arla products.

In South America, the argument is taken a step further through regenerative grazing schemes, some influenced by Allan Savory's controversial claims that promote the idea that cattle can help reverse climate change through carbon storage. These projects are now generating lucrative carbon credits, despite not addressing methane emissions, with some even explicitly anticipating increased methane emissions.

From misinformation to real world consequences

Our investigation shows that these narratives are no longer confined to online debate or academic disagreement. They are increasingly influencing decisions made by governments and businesses alike.

New Zealand has already weakened its long-term biogenic methane target, while similar arguments around 'temperature neutrality' and 'no additional warming' are gaining traction in Ireland, the UK and EU-level policymaking. The growing international Split Gas Coalition illustrates how these approaches are being promoted across borders.

The Bovaer backlash demonstrates a different route to influence. Misinformation claims spread rapidly online, reaching mainstream audiences and generating pressure on governments. In the UK and Denmark, this led to public, farmer and business distrust in the product, with the Danish government widening exemptions for its use and companies stepping away from the product.

In South America, regenerative grazing schemes are attracting investment from major corporations and financial institutions. This allows companies to claim climate progress, without reducing methane livestock emissions - and in some cases increasing them.

Changing Markets © 2026 all rights reserved

How to counter methane misinformation

Our investigation shows that misinformation must be treated as a barrier to delivering climate policy, not simply a communications problem. What begins as an online conspiracy theory or questions around climate science can ultimately influence government decisions.

This demands a more proactive response. Governments must work with farmers, scientists and civil society to challenge misleading narratives before they take hold, while ensuring that genuine concerns are heard rather than exploited by far-right and climate denying actors.

Ultimately, tackling misinformation is only part of the solution. Governments must also demonstrate that they are prepared to deliver meaningful reductions in agricultural methane, rather than allowing debates over accounting, technology or carbon credits to delay action.

Our findings point towards a clear need for governments to:

- **Set clear methane reduction targets and action plans**
  Establish measurable, time-bond targets for reducing livestock methane, backed by transparent monitoring and accountability.

- **Go beyond technical measures**
  A holistic approach to implementing methane reductions is important, including clearly estimating the potential that technical measures can deliver.

- **Put agricultural methane at the heart of international climate action**
  Governments should use COP31 to secure stronger commitments on agricultural methane, backed by practical support for farmers through just transition frameworks.

- **Hold digital platforms accountable**
  Strengthen regulation to improve transparency, tackle the amplification of harmful misinformation and ensure platforms face consequences for failing to address it.

The science is clear and the solutions are available. Governments must ensure that misinformation and misleading climate narratives do not become another reason for delaying the action urgently needed.

Changing Markets © 2026 all rights reserved

Changing Markets © 2026 all rights reserved

Changing Markets © 2026 all rights reserved

Changing Markets © 2026 all rights reserved

References

1 *Intergovernmental Panel on Climate Change (IPCC) (2022) Climate Change 2022: Mitigation of Climate Change, Annex II. [ONLINE] Available at:* https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_Annex-II.pdf

2 Allen, M.R. et al. (2018) A solution to the misrepresentations of CO_2-equivalent emissions of short-lived climate pollutants under ambitious mitigation.
[ONLINE] Available at: https://www.nature.com/articles/s41612-018-0026-8

3 New Zealand Climate Change Commission (2024) Review of the 2050 Emissions Target.
[ONLINE] Available at: https://www.climatecommission.govt.nz/exploring-the-issues/the-role-of-methane/

4 Climate Change Advisory Council (2024) Carbon Budget Proposal Report
[ONLINE] Available at: https://www.climatecouncil.ie/media/

5 Rogelj, J. and Schleussner, C.F. (2019) Unintentional unfairness when applying new greenhouse gas emissions metrics at country level. Environmental Research Letters, 14(11), 114039.
[ONLINE] Available at: https://doi.org/10.1088/1748-9326/ab4928

6 World Meteorological Organization (2025) WMO Greenhouse Gas Bulletin No. 21: The State of Greenhouse Gases in the Atmosphere Based on Global Observations through 2024.
[ONLINE] Available at: https://wmo.int/resources/publication-series/greenhouse-gas-bulletin/wmo-greenhouse-gas-bulletin-no-21

7 Changing Markets Foundation (2025) Introducing the New Faces of GWP*.
[ONLINE] Available at: https://changingmarkets.org/wp-content/uploads/2025/11/The-New-Faces-of-GWP.pdf

8 Climate Change Commission (n.d.) FAQs: The 2050 target.
[ONLINE] Available at: https://www.climatecommission.govt.nz/exploring-the-issues/the-2050-target/

9 UNEP and CCAC (2025) Global Methane Status Report 2025.
[ONLINE] Available at: https://www.ccacoalition.org/content/global-methane-status-report-2025

10 Clark, M.A. et al. (2020) Global food system emissions could preclude achieving the 1.5° and 2°C climate change targets. Science, 370(6517), pp. 705–708.
[ONLINE] Available at: https://doi.org/10.1126/science.aba7357

11 Ivanovich, C.C. et al. (2023) Future warming from global food consumption. Nature Climate Change, 13, pp. 297–302.
[ONLINE] Available at: https://doi.org/10.1038/s41558-023-01605-8

12 Changing Markets Foundation (2023) *Seeing Stars: The new metric that could allow the meat and dairy industry to avoid climate action*.
[ONLINE] Available at: https://changingmarkets.org/wp-content/uploads/2023/11/Seeing-stars-report.pdf

13 Changing Markets Foundation (2024) *The New Merchants of Doubt: How Big Meat and Dairy Avoid Climate Action*.
[ONLINE] Available at: https://changingmarkets.org/report/the-new-merchants-of-doubt-how-big-meat-and-dairy-avoid-climate-action/

14 *Changing Markets Foundation (2025) The New Faces of GWP: Temperature neutrality and no additional warming. [ONLINE] Available at:** https://changingmarkets.org/report/the-new-faces-of-gwp-temperature-neutrality-and-no-additional-warming/ t

15 Bovaer.dk (n.d.) Bovaer.dk – Facebook Group.
[ONLINE] Available at: https://www.facebook.com/groups/1230586088624601/

16 Garnett, T. et al. (2017) Grazed and Confused? Ruminating on cattle, grazing systems, methane, nitrous oxide, the soil carbon sequestration question – and what it all means for greenhouse gas emissions. Food Climate Research Network, University of Oxford.
[ONLINE] Available at: https://www.oxfordmartin.ox.ac.uk/publications/grazed-and-confused

17 Ovis21 (n.d.) We validated our SARA carbon program at VERRA!
[ONLINE] Available at: https://ovis21.com/validamos-sara-verra/

18 Savory, A. (2013) How to fight desertification and reverse climate change. TED Talk.
[ONLINE] Available at: https://www.ted.com/talks/allan_savory_how_to_fight_desertification_and_reverse_climate_change

19 Manzoni, M. (2025) The Methane Wars: Part II – Regenerative Doubts. Climate Tracker.
[ONLINE] Available at: https://climatetrackerlatam.org/reportajes-ct/the-methane-wars-2/

20 United Nations Environment Programme (UNEP) (2026) *World set to cross 1.5°C global warming, but can still limit, adapt to and return from higher temperatures*.
[ONLINE] Available at: https://www.unep.org/news-and-stories/press-release/unep-world-set-cross-15degc-global-warming-can-still-limit-adapt-and

21 UNEP (n.d.) Facts about Methane.
[ONLINE] Available at: https://www.unep.org/explore-topics/energy/facts-about-methane

22 Intergovernmental Panel on Climate Change (IPCC) (2023) *Climate Change 2023: Synthesis Report*.
[ONLINE] Available at: https://www.ipcc.ch/report/ar6/syr/

23 United Nations Environment Programme (UNEP) (2025) *An Eye on Methane 2025: From Measurement to Momentum*.
[ONLINE] Available at: https://www.unep.org/resources/eye-methane-2025-measurement-momentum

24 UNEP & CCAC (2021) *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions*.
[ONLINE] Available at: https://www.unep.org/resources/report/global-methane-assessment-benefits-and-costs-mitigating-methane-emissions

25 United Nations Environment Programme (UNEP) and Climate and Clean Air Coalition (CCAC) (2021) *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions*.
[ONLINE] Available at: https://www.unep.org/resources/report/global-methane-assessment-benefits-and-costs-mitigating-methane-emissions

26 United Nations Environment Programme (UNEP) (2026) *UN: Every US1investedinclimateandclean-airactioncanreturnUS15*.
[ONLINE] Available at: https://www.unep.org/news-and-stories/press-release/un-every-us1-invested-climate-and-clean-air-action-can-return-us15

27 Arndt, C. et al. (2022) Full adoption of the most effective strategies to mitigate methane emissions by ruminants can help meet the 1.5°C target by 2030 but not 2050. Proceedings of the National Academy of Sciences.
[ONLINE] Available at: https://doi.org/10.1073/pnas.2111294119

28 E Delft (2022) Methane reduction potential in the EU: Between 2020 and 2030.
[ONLINE] Available at: https://cedelft.eu/publications/methane-reduction-potential-in-the-eu-between-2020-and-2030/

29 Food and Agriculture Organization of the United Nations (FAO) (n.d.) *South America: Livestock and enteric methane*.
[ONLINE] Available at: https://www.fao.org/in-action/enteric-methane/countries/latin-america/

Changing Markets © 2026 all rights reserved

30 Price, P.R. (2026) Consistent Paris Test assessment of the 2024 Proposal for Ireland's 2031–2040 carbon budgets. Environmental Justice Network Ireland.
[ONLINE] Available at: https://ejni.net/wp-content/uploads/2026/02/Carbon-Budget-Proposal-Report-19.02.26.pdf

31 Methane Science (2026) *Scientist statement on misuse of new approaches to methane: Global climate mitigation risks being undermined by misuse of new approaches to methane*.
[ONLINE] Available at: https://methanescience.org/

32 Donnison, C. and Murphy-Bokern, D. (2024) *Reflections on metrics for monitoring and mitigating methane emissions. Written evidence to the House of Lords Environment and Climate Change Committee inquiry into methane*.
[ONLINE] Available at: https://committees.parliament.uk/writtenevidence/129705/pdf/

33 New Zealand Government (2025) Government sets methane targets for 2050.
[ONLINE] Available at: https://www.beehive.govt.nz/release/government-sets-methane-targets-2050

34 Ministry for Primary Industries and Ministry for the Environment (2025) Regulatory Impact Statement: Updating the 2050 Domestic Climate Change Emissions Target.
[ONLINE] Available at: https://www.regulation.govt.nz/assets/RIS-Documents/Regulatory-Impact-Statement-Updating-the-2050-domestic-climate-change-emissions-target.pdf

35 FOI Document - Ireland Department of Agriculture, Food and the Marine (2026) *Climate Change and Bioenergy Policy Brief – March 2026.*

36 Department of Agriculture, Food and the Marine (2026) *Ireland and New Zealand commit to continuing collaboration to tackle agriculture emissions*.
[ONLINE] Available at: https://www.gov.ie/en/department-of-agriculture-food-and-the-marine/press-releases/ireland-and-new-zealand-commit-to-continuing-collaboration-to-tackle-agriculture-emissions/

37 FOI Document - Ireland Department of Agriculture, Food and the Marine (2026) *Visit of Minister of State Noel Grealish T.D. to New Zealand for St. Patrick's Day*

38 FOI Document - Ireland Department of Agriculture, Food and the Marine (2026) *Visit of Minister of State Noel Grealish T.D. to New Zealand for St. Patrick's Day*

39 UNFCCC (2022) Decision 7/CP.27: Common metrics to calculate the carbon dioxide equivalence of greenhouse gases.
[ONLINE] Available at: https://unfccc.int/sites/default/files/resource/Common_metrics_decision.pdf

40 Beef + Lamb New Zealand (2025) B+LNZ leads global agricultural organisations in united call for split-gas GHG emissions reporting.
[ONLINE] Available at: https://beeflambnz.com/news/ag-organisations-globally-call-split-gas-ndcs

41 Beef + Lamb New Zealand (2026) Global call for split-gas GHG emissions reporting.
[ONLINE] Available at: https://beeflambnz.com/advocacy/climate-change/global-call-split-gas-ghg-emissions-reporting

42 Changing Markets Foundation (2026) Dairy and Coffee Methane Action Tracker: May 2026 insights.
[ONLINE] Available at: https://changingmarkets.org/report/dairy-and-coffee-methane-action-tracker/

43 Split Gas Coalition (2025, updated 2026) Agricultural Organisations Across the World Call for 'Split Gas' Reporting of Greenhouse Gas Emissions.
[ONLINE] Available at: https://beeflambnz.com/sites/default/files/2026-06/Split-Gas-Coalition-Statement.pdf

44 Climate Scientists (2026) Scientific Statement on Methane – Temperature Neutrality and GWP*.
[ONLINE] Available at: https://methanescience.org/

45 House of Lords Environment and Climate Change Committee (2024) Methane: Oral evidence, 13 March 2024.
[ONLINE] Available at: https://committees.parliament.uk/oralevidence/14503/html/

46 Changing Markets Foundation (2024) The New Merchants of Doubt: Big Meat and Dairy's Corporate Playbook to Distract, Delay, and Derail Climate Action.
[ONLINE] Available at: https://changingmarkets.org/report/the-new-merchants-of-doubt-how-big-meat-and-dairy-avoid-climate-action/

47 *Changing Markets Foundation (2025) The New Faces of GWP: Temperature neutrality and no additional warming*

48 Changing Markets Foundation (2024) The New Merchants of Doubt: How Big Meat and Dairy Avoid Climate Action. Section 1.5: "Agrodemia – funding scientific research to help delay action".
[ONLINE] Available at: https://changingmarkets.org/report/the-new-merchants-of-doubt-how-big-meat-and-dairy-avoid-climate-action/

49 Oireachtas (2022) *Joint Committee on Agriculture, Food and the Marine debate* - 20 July.
[ONLINE] Available at: https://data.oireachtas.ie/ie/oireachtas/debateRecord/joint_committee_on_agriculture_food_and_the_marine/2022-07-20/debate/mul@/main.pdf

50 Greenpeace International (2026) Irish Climate Leadership Under Scrutiny Ahead of EU AGRIFISH Meeting in Dublin. Media Briefing, September 2026.
[ONLINE] Available at: https://www.greenpeace.org/static/planet4-international-stateless/2026/09/327d136c-methane-media-briefing_eu-agrifish-in-ireland.pdf

51 European Commission (2026) EU Strategy on Livestock. COM(2026) 576 final.
[ONLINE] Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52026DC0576

52 European Commission (2026) EU Strategy on Livestock. COM(2026) 576 final, 7 July 2026.
[ONLINE] Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52026DC0576

53 European Scientific Advisory Board on Climate Change (2026) Climate Adaptation and Mitigation in the Agri-food System: Recommendations for Coherent EU Policies.
[ONLINE] Available at: https://climate-advisory-board.europa.eu/reports-and-publications/climate-adaptation-and-mitigation-in-the-agri-food-system-recommendations-for-coherent-eu-policies

54 Department for Energy Security and Net Zero (2025) The UK's Methane Action Plan.
[ONLINE] Available at: https://www.gov.uk/government/publications/uk-methane-action-plan

55 European Commission (2026) *EU Livestock Strategy*.
[ONLINE] Available at: https://agriculture.ec.europa.eu/vision-overview/eu-livestock-strategy_en

56 Department for Energy Security and Net Zero (2025) *UK methane action plan*.
[ONLINE] Available at: https://www.gov.uk/government/publications/uk-methane-action-plan/uk-methane-action-plan-accessible-web-page

Changing Markets © 2026 all rights reserved

57 Changing Markets Foundation (2026) The Climate Emergency Brake Europe Needs: How Livestock Pollution Hotspots Put the EU's Climate and Clean-Air Targets at Risk.
[ONLINE] Available at: https://changingmarkets.org/report/the-climate-emergency-brake-europe-needs-how-livestock-pollution-hotspots-put-the-eus-climate-and-clean-air-targets-at-risk/

58 Defra (2026) Farming Roadmap 2050: Growing England's Future.
[ONLINE] Available at: https://www.gov.uk/government/publications/farming-roadmap-2050/farming-roadmap-2050-growing-englands-future-accessible-version

59 NFU (2026) NFU Deputy President urges dairy and beef producers to have their say on EPR.
[ONLINE] Available at: https://www.nfuonline.com/news/nfu-deputy-president-urges-members-to-respond-to-epr-survey/

60 Changing Markets Foundation (2024) The New Merchants of Doubt: How Big Meat and Dairy Avoid Climate Action.
[ONLINE] Available at: https://changingmarkets.org/report/the-new-merchants-of-doubt-how-big-meat-and-dairy-avoid-climate-action/

61 Changing Markets Foundation (2024) New Report Exposes Meat & Dairy Industry's Climate Obstruction Tactics.
[ONLINE] Available at: https://changingmarkets.org/press-releases/groundbreaking-report-reveals-how-meat-and-dairy-industries-have-derailed-climate-action-globally/

62 Department for Environment, Food and Rural Affairs (2026) Methane: Written question 29202, answered 18 September 2026.
[ONLINE] Available at: https://questions-statements.parliament.uk/written-questions/detail/2026-09-11/29202

63 UK Government (2025) *Government Response to the Environment and Climate Change Committee report 'Methane: keep up the momentum'*.
[ONLINE] Available at: https://committees.parliament.uk/publications/46661/documents/238663/default/

64 Farm Carbon Toolkit (2025) What's Changed? October Update 2025.
[ONLINE] Available at: https://calculator.farmcarbontoolkit.org.uk/sites/default/files/Farm.Carbon.Calculator_What%27s.changed_October.2025.pdf

65 Farm Carbon Toolkit (2025) What's Changed?

66 Elgin, B., Raimonde, O. and Peng, I. (2025) Global Food Companies Are Struggling to Deliver Methane Progress. Bloomberg.
[ONLINE] Available at: https://www.bloomberg.com/news/articles/2025-06-16/kraft-heinz-starbucks-struggle-to-deliver-methane-promises

67 Changing Markets Foundation (2024) The New Merchants of Doubt: How Big Meat and Dairy Avoid Climate Action.
[ONLINE] Available at: https://changingmarkets.org/wp-content/uploads/2024/07/Report-The-New-Merchants-of-Doubt_Final.pdf

68 Food and Agriculture Organization of the United Nations (2023) Methane Emissions in Livestock and Rice Systems: Sources, Quantification, Mitigation and Metrics.
[ONLINE] Available at: https://openknowledge.fao.org/3/cc7607en/cc7607en.pdf

69 Changing Markets Foundation (2024) The New Merchants of Doubt: How Big Meat and Dairy Avoid Climate Action.
[ONLINE] Available at: https://changingmarkets.org/report/the-new-merchants-of-doubt-how-big-meat-and-dairy-avoid-climate-action/

70 Arla Foods (2024) Major Retailers Join Forces With UK Dairy Farmers To Trial Methane-Reducing Feed Additives.
[ONLINE] Available at: https://www.dairynetwork.com/doc/major-retailers-join-uk-dairy-farmers-trial-methane-reducing-feed-additives-0001

71 Changing Markets Foundation (2025) Running Latte: Slow Progress on Methane in the Dairy and Coffee industry Sectors.
[ONLINE] Available at: https://changingmarkets.org/wp-content/uploads/2025/05/Running-Latte.pdf

72 Changing Markets Foundation and Greenpeace Nordic (2025) Dairytales: Arla's Smokescreen for Its Lack of Climate Action.
[ONLINE] Available at: https://changingmarkets.org/report/dairytales-arlas-smokescreen-for-its-lack-of-climate-action/

73 European Commission (2022) *Commission Implementing Regulation (EU) 2022/565 concerning the authorisation of a preparation of 3-nitrooxypropanol as a feed additive for dairy cows and cows for reproduction*.
[ONLINE] Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022R0565

74 BBC News – Prior, M. (2025) Methane-cutting cow feed trials brought to an end.
[ONLINE] Available at: https://www.bbc.co.uk/news/articles/cvgvkppx4kko

75 DeSmog (2024) Revealed: The Climate Denial Network Behind 'Classic Astroturf' Farmers' Campaign.
[ONLINE] Available at: https://www.desmog.com/2024/02/08/revealed-the-climate-denial-network-behind-classic-astroturf-farmers-campaign/

76 Stockman Steaks (n.d.) Post on X.
[ONLINE] Available at: https://x.com/StockmanSteaks/status/2051558513764188293

77 Kent Nielsen (2025) Video posted on TikTok.
[ONLINE] Available at: https://www.tiktok.com/@kent.nielsen.danmark/video/7558522783991368982

78 Kent Nielsen (2025) Post on X.
[ONLINE] Available at: https://twitter.com/Kentfrihedniels/status/1987102405045911801

79 Robin Monotti (2024) Post on X, 2 December 2024.
[ONLINE] Available at: https://x.com/robinmonotti/status/1863558456562593859/photo/1

80 Lewis Brackpool (2024) Post on X concerning Bill Gates and methane-reducing cattle feed additives, 26 November 2024.
[ONLINE] Available at: https://x.com/Lewis_Brackpool/status/1861541899066028428

81 DeepNewz (2024) Tesco, Morrisons, and Aldi Trial Bovaer Feed Additive (3-NOP, Silicon Dioxide, Propylene Glycol) to Reduce Methane Emissions from Dairy Cows.
[ONLINE] Available at: https://deepnewz.com/climate/tesco-morrisons-aldi-trial-bovaer-feed-additive-3-nop-silicon-dioxide-propylene-167fb075

82 The Express Tribune (2024) Boycott Calls Grow Over Arla's Bovaer Feed Trial for Dairy Cows.
[ONLINE] Available at: https://tribune.com.pk/story/2512549/boycott-calls-grow-over-arlas-bovaer-feed-trial-for-dairy-cows

83 Ha, L., Graham, T. and Gray, J. (2022) Where conspiracy theories flourish: A study of YouTube comments and Bill Gates conspiracy theories. Harvard Kennedy School Misinformation Review.
[ONLINE] Available at: https://misinforeview.hks.harvard.edu/article/where-conspiracy-theories-flourish-a-study-of-youtube-comments-and-bill-gates-conspiracy-theories/

84 AFP Fact Check (2024) Articles distort Bill Gates's comments on farming, technology.
[ONLINE] Available at: https://factcheck.afp.com/doc.afp.com.34MM7RA

85 Full Fact (2024) Is milk from cows fed Bovaer safe?
[ONLINE] Available at: https://fullfact.org/online/bovaer-bill-gates-cancer-claims/

Changing Markets © 2026 all rights reserved

86 Facebook (n.d.) Stop Bovær – for dyrenes og vores skyld [Facebook group].
[ONLINE] Available at: https://www.facebook.com/groups/1230586088624601/

87 Kent Nielsen Danmark (2025) Video posted on TikTok, 7 October 2025.
[ONLINE] Available at: https://www.tiktok.com/@kent.nielsen.danmark/video/7558522783991368982

88 Larsen, H. M. and Lønrusten, K. G. (2025) Bovaer-aktivist nevnes i russiske påvirkningsplaner [Bovaer activist named in Russian influence plans]. Faktisk.no, 24 November 2025.
[ONLINE] Available at: https://www.faktisk.no/artikkel/bovaer-aktivist-nevnes-i-russiske-pavirkningsplaner/127142

89 Gjerding, S., Andersen, L. S. and Elkjær, B. (2025) Russisk påvirkningskampagne i Danmark promoverer aktivist, der er dømt for chikane af minister [Russian influence campaign in Denmark promotes activist convicted of harassing a minister]. Information, 2 July 2025.
[ONLINE] Available at: https://www.information.dk/indland/2025/07/russisk-paavirkningskampagne-danmark-promoverer-aktivist-doemt-chikane-minister

90 Larsen, H. M. and Lønrusten, K. G. (2025) Bovaer-aktivist nevnes i russiske påvirkningsplaner. Faktisk.no, 24 November 2025.
[ONLINE] Available at: https://www.faktisk.no/artikkel/bovaer-aktivist-nevnes-i-russiske-pavirkningsplaner/127142

91 Telemetr (n.d.) Agenda 2030 fra DK – Telegram Channel Posts.
[ONLINE] Available at: https://telemetr.io/uk/channels/1435570835-agenda2030fradk/posts

92 Blythman, J. (2025) Post on X, 19 November 2025.
[ONLINE] Available at: https://x.com/JoannaBlythman/status/1991146583119790179

93 Carlile, C., Barnett, A. and Cooke, P. (2024) Revealed: The Climate Denial Network Behind 'Classic Astroturf' Farmers' Campaign. DeSmog, 8 February 2024.
[ONLINE] Available at: https://www.desmog.com/2024/02/08/revealed-the-climate-denial-network-behind-classic-astroturf-farmers-campaign/

94 Changing Markets Foundation (2023) Truth, Lies and Culture Wars: Social Listening Analysis of Meat and Dairy Persuasion Narratives.
[ONLINE] Available at: https://changingmarkets.org/report/truth-lies-and-culture-wars-social-listening-analysis-of-meat-and-dairy-persuasion-narratives/

95 Case, P. (2024) No Farmers, No Food Founder Tackles Concerns About Campaign. Farmers Weekly, 22 February 2024.
[ONLINE] Available at: https://www.fwi.co.uk/news/farm-policy/no-farmers-no-food-founder-tackles-concerns-about-campaign

96 DeSmog (n.d.) Ben Pile.
[ONLINE] Available at: https://www.desmog.com/ben-pile/

97 Carlile, C., Barnett, A. and Cooke, P. (2024) Revealed: The Climate Denial Network Behind 'Classic Astroturf' Farmers' Campaign. DeSmog, 8 February 2024.
[ONLINE] Available at: https://www.desmog.com/2024/02/08/revealed-the-climate-denial-network-behind-classic-astroturf-farmers-campaign/

98 Climate Action Against Disinformation (2023) CAAD Data Monitor Vol. 4: 'Conspirituality' and Climate: How Instagram Influencers Made Denialism New Age. 17 October 2023.
[ONLINE] Available at: https://caad.info/analysis/newsletters/caad-data-monitor-vol-4-wellness/

99 Science Feedback (2023) Authorities Undertaking Climate Action Targeted by Viral 'Climate Lockdowns' Narrative on Social Media. 19 July 2023.
[ONLINE] Available at: https://science.feedback.org/authorities-undertaking-climate-action-targeted-viral-climate-lockdowns-narrative-social-media

100 Gareth Wyn Jones (2025) Shocking to listen what's happening here in Denmark. YouTube, 3 November 2025.
[ONLINE] Available at: https://www.youtube.com/watch?v=wHw5UpMS3II

101 Carlile, C., Barnett, A. and Cooke, P. (2024) Revealed: The Climate Denial Network Behind 'Classic Astroturf' Farmers' Campaign. DeSmog, 8 February 2024.
[ONLINE] Available at: https://www.desmog.com/2024/02/08/revealed-the-climate-denial-network-behind-classic-astroturf-farmers-campaign/

102 Carlile, C., Barnett, A. and Cooke, P. (2024) Revealed: The Climate Denial Network Behind 'Classic Astroturf' Farmers' Campaign. DeSmog, 8 February 2024.
[ONLINE] Available at: https://www.desmog.com/2024/02/08/revealed-the-climate-denial-network-behind-classic-astroturf-farmers-campaign/

103 Carter-Brookes, T. (2024) Protesting Farmers Are Having to Fight Off the Radical Right, Conspiracy Theorists and Climate Sceptics. The Conversation, 13 December 2024.
[ONLINE] Available at: https://theconversation.com/protesting-farmers-are-having-to-fight-off-the-radical-right-conspiracy-theorists-and-climate-sceptics-245725

104 Carter-Brookes, T. (2024) Protesting Farmers Are Having to Fight Off the Radical Right, Conspiracy Theorists and Climate Sceptics. The Conversation, 13 December 2024.
[ONLINE] Available at: https://theconversation.com/protesting-farmers-are-having-to-fight-off-the-radical-right-conspiracy-theorists-and-climate-sceptics-245725

105 Carter-Brookes, T. (2024) Protesting Farmers Are Having to Fight Off the Radical Right, Conspiracy Theorists and Climate Sceptics. The Conversation, 13 December 2024.
[ONLINE] Available at: https://theconversation.com/protesting-farmers-are-having-to-fight-off-the-radical-right-conspiracy-theorists-and-climate-sceptics-245725

106 The Economist (2023) The Dutch Farmers' Revolt. 1843 Magazine, 16 November 2023.
[ONLINE] Available at: https://www.economist.com/1843/2023/11/16/the-dutch-farmers-revolt

107 Tullis, P. (2023) Nitrogen Wars: The Dutch Farmers' Revolt That Turned a Nation Upside-Down. The Guardian, 16 November 2023.
[ONLINE] Available at: https://www.theguardian.com/environment/2023/nov/16/nitrogen-wars-the-dutch-farmers-revolt-that-turned-a-nation-upside-down

108 Urbancic, N. (2024) Is Misinformation Derailing Climate Action in Agriculture? Changing Markets Foundation, 17 April 2024.
[ONLINE] Available at: https://changingmarkets.org/op-ed-is-misinformation-derailing-climate-action-in-agriculture/

109 Dowding, L. (n.d.) Leilani Dowding – TikTok Profile.
[ONLINE] Available at: https://www.tiktok.com/@leilanidowding

110 Powell, M. and Livingstone, N. (2022) Millions are following anti-vaxxer lies. Mail on Sunday.
[ONLINE] Available at: https://culteducation.com/group/1344-anti-vax-movement/36336-millions-are-following-anti-vaxxer-lies-probe-reveals-the-vast-influence-of-social-media-posts-that-chris-whitty-says-misled-many-of-those-now-fighting-covid-in-hospital.html

Changing Markets © 2026 all rights reserved

111 Ickonic (2022) Ickonic announce Leanne Brown as the latest addition to presenting team.
[ONLINE] Available at: https://davidicke.com/2022/01/26/ickonic-announce-leanne-brown-as-the-latest-addition-to-presenting-team/

112 Sky News (2020) Who is David Icke? The conspiracy theorist who claims he is the son of God.
[ONLINE] Available at: https://news.sky.com/story/who-is-david-icke-the-conspiracy-theorist-who-claims-he-is-the-son-of-god-11982406

113 Dowding, L. (n.d.) Leilani Dowding - X (Twitter) Threads. Thread Reader App.
[ONLINE] Available at: https://threadreaderapp.com/user/LeilaniDowding

114 Changing Markets Foundation (2025) Meat vs EAT-Lancet: The Dynamics of an Industry-Orchestrated Online Backlash.
[ONLINE] Available at: https://changingmarkets.org/wp-content/uploads/2025/09/Meat_vs_EAT_Lancet_Report_Full_English.pdf

115 Roos, R. (2025) Post on X, 4 November 2025.
[ONLINE] Available at: https://x.com/Rob_Roos/status/1985590871161733279

116 Nielsen, K. (2025) Post on X, 8 November 2025.
[ONLINE] Available at: https://twitter.com/Kentfrihedniels/status/1987102405045911801

117 Nielsen, K. (2025) Post on X, 8 November 2025.
[ONLINE] Available at: https://twitter.com/Kentfrihedniels/status/1987102405045911801

118 Facebook (n.d.) Post in Facebook group concerning Bovaer.
[ONLINE] Available at: https://www.facebook.com/groups/1230586088624601/permalink/1393941105622431/

119 DD Geopolitics (2025) Denmark's Forced Bovaer Program Threatens Farmers and the Economy. Telegram post.
[ONLINE] Available at: https://t.me/DDGeopolitics/166116

120 Folketinget (2026) *Environment and Food Committee – Answer to question 352.*
[ONLINE] Available at: https://www.ft.dk/samling/20251/almdel/mof/spm/352/svar/2196997/3126371.pdf

121 Aarhus University – National Centre for Food and Agriculture (2026) *New report on Bovaer: No overall increase in mortality or decrease in milk yield.*
[ONLINE] Available at: https://dca.au.dk/aktuelt/nyheder/vis/artikel/ny-rapport-om-bovaer-ingen-samlet-stigning-i-doedelighed-eller-fald-i-maelkeydelse

122 FOI Document - Ireland Department of Agriculture, Food and the Marine (2026) *Policy Brief – Feb 2026 Development and validation of novel technologies to reduce methane emissions from lush pasture-based system Written by: Dr Sinéad Waters, University of Galway*

123 Danish Veterinary and Food Administration (2025) Landmænd skal ikke give deres køer Bovaer, hvis dyrene bliver syge. 22 November.
[ONLINE] Available at: https://foedevarestyrelsen.dk/nyheder/webnyheder/2025/nov/landmaend-skal-ikke-give-deres-koeer-bovaer-hvis-dyrene-bliver-syge

124 Udvidede muligheder for at undtage køer fra fodring med metanreducerende foder fra oktober 2026. 30 September.
[ONLINE] https://mgtp.dk/nyheder/2026/sep/udvidede-muligheder-for-at-undtage-koeer-fra-fodring-med-metanreduce-rende-foder-fra-oktober-2026

125 Folketinget (2026) *Answer to question 366 – 29 January 2026.*
[ONLINE] Available at: https://www.ft.dk/samling/20251/almdel/mof/spm/366/index.htm

126 FOI Document – Danish Ministry of Agriculture, Food and Fisheries (2025) *Case number: 2025-201326 Doc. no. 2181407, minutes of FVST meeting with the Commission on the EFSA mandate, 11 December 2025.*

127 TINE (2026) TINE stanser bruk av melk fra kyr som er fôret med Bovaer. 22 January.
[ONLINE] https://www.tine.no/presserom/nyhetsarkiv/tine-stanser-bruk-av-melk-fra-kyr-som-er-foret-med-bovaer

128 UK Food Standards Agency (2024) *Bovaer cow feed additive explained.*
[ONLINE] Available at: https://food.blog.gov.uk/2024/12/05/bovaer-cow-feed-additive-explained/

129 Eardley, N., Murphy, M., Robinson, O. and Silva, M. (2024) Why are people pouring milk down the drain over a cow feed additive? BBC Verify, 3 December 2024.
[ONLINE] Available at: https://www.bbc.co.uk/news/articles/c8rjdgre3vpo

130 Food Standards Agency (2026) Animal Feed Report: FSA Business Committee. 18 September 2026.
[ONLINE] Available at: https://www.gov.uk/government/publications/food-standards-agency-business-committee-meeting-september-2026/animal-feed-report-fsa-business-committee

131 Ulster Farmers' Union (2026) Bovaer has lost its social licence – UFU. Irish Farmers Journal, 4 February.
[ONLINE] Available at: https://www.farmersjournal.ie/more/northern-ireland/bovaer-has-lost-its-social-licence-ufu-903140

132 Santos, G. (2023) América del Sur perdió 55 millones de hectáreas de bosques en dos décadas [South America lost 55 million hectares of forest in two decades]. Mongabay Latam, 17 February 2023.
[ONLINE] Available at: https://es.mongabay.com/2023/02/america-del-sur-perdio-millones-de-hectareas-de-bosques-en-dos-decadas-in-forme/

133 Union of Concerned Scientists (2016) Cattle, Cleared Forests, and Climate Change: Scoring Global Companies on Their Deforestation-Free Beef Commitments and Practices. 23 August 2016.
[ONLINE] Available at: https://www.ucs.org/resources/cattle-forests-climate

134 Fraser, E., Smit, S. and Kuramochi, T. (2024) Navigating Regenerative Agriculture in Corporate Climate Strategies: From Key Emission Reduction Measure to Greenwashing Strategy. NewClimate Institute, September 2024.
[ONLINE] Available at: https://newclimate.org/sites/default/files/2024-09/Navigating%20regenerative%20agriculture%20in%20corporate%20climate%20strategies_sep2024.pdf

135 Savory, A. (2020) Tony Coote AM Memorial Lecture. Savory Institute, 18 September 2020.
[ONLINE] Available at: https://savory.global/tony-coote-memorial-lecture/

136 Savory Institute (2015) Climate Change, Healthy Soils and Holistic Planned Grazing: A Restoration Story.
[ONLINE] Available at: https://savory.global/science_library/climate-change-healthy-soils-and-holistic-planned-grazing-a-restoration-story/

137 La Nación (2022) Primer Congreso Mundial de Brahman en Paraguay "es algo inédito", destacan [First World Brahman Congress in Paraguay described as unprecedented]. 13 June 2022.
[ONLINE] Available at: https://www.lanacion.com.py/negocios/2022/06/13/primer-congreso-mundial-de-brahman-en-paraguay-es-algo-inedito-destacan/

138 Savory Institute (n.d.) Ovis 21.
[ONLINE] Available at: https://savory.global/hubs/ovis-21/

139 Singh, C. and Persson, U. M. (2026) Global patterns of commodity-driven deforestation and associated carbon emissions. Nature Food.
[ONLINE] Available at: https://www.nature.com/articles/s43016-026-01305-4

140 Carter, N. (2026) Eight reasons regenerative grazing can't make beef climate-friendly. Project Drawdown.
[ONLINE] Available at: https://drawdown.org/insights/eight-reasons-regenerative-grazing-cant-make-beef-climate-friendly

Changing Markets © 2026 all rights reserved

141 Hayek et al. (2024) Opportunities for carbon sequestration from removing or intensifying pasture-based beef production.
[ONLINE] Available at: https://doi.org/10.1073/pnas.2405758121

142 Changing Markets Foundation (2024) The New Merchants of Doubt: How Big Meat and Dairy Avoid Climate Action, pp. 54–55, Section 1.4.2, on regenerative grazing and the limitations of soil carbon sequestration.
[ONLINE] Available at: https://changingmarkets.org/wp-content/uploads/2024/07/Report-The-New-Merchants-of-Doubt_Final.pdf

143 Jordon, M.W. et al. (2024) A Restatement of the Natural Science Evidence Base Concerning Grassland Management, Grazing Livestock and Soil Carbon Storage. Proceedings of the Royal Society B, 291, 20232669.
[ONLINE] Available at: https://doi.org/10.1098/rspb.2023.2669

144 Wang, Y. et al. (2023) Risk to Rely on Soil Carbon Sequestration to Offset Global Ruminant Emissions. Nature Communications, 14, 7625.
[ONLINE] Available at: https://doi.org/10.1038/s41467-023-43452-3

145 Anthesis Group (2026) SARA Becomes First Regenerative Grassland Programme in South America to Pay Farmers for Carbon Credits.
[ONLINE] Available at: https://www.anthesisgroup.com/news/sara-first-in-south-america-to-pay-farmers-for-carbon-credits/

146 Anthesis Group (2026) SARA: How Regenerative Grazing Is Transforming Communities, Nature and Climate. Activating Sustainability, Episode 69.
[ONLINE] Available at: https://www.anthesisgroup.com/podcast/activating-sustainability-ep-69-sara/

147 Anthesis Group (2026) SARA Becomes First Regenerative Grassland Programme in South America to Pay Farmers for Carbon Credits. 26 August 2026.
[ONLINE] Available at: https://www.anthesisgroup.com/news/sara-first-in-south-america-to-pay-farmers-for-carbon-credits/

148 SARA (n.d.) SARA [Project document].
[ONLINE] Available at: https://drive.google.com/file/d/1rilLhrTkVY-smLw6cKiZWWcBUZZo8D6N/view

149 Verra (2025) VM0042 Improved Agricultural Land Management, v2.2.
[ONLINE] Available at: https://verra.org/methodologies/vm0042-improved-agricultural-land-management-v2-2/

150 Verra (n.d.) Verified Carbon Standard (VCS) Quality Assurance Principles.
[ONLINE] Available at: https://verra.org/programs/verified-carbon-standard/vcs-quality-assurance-principles/

151 Verra (2025) VM0042 Improved Agricultural Land Management, v2.2.
[ONLINE] Available at: https://verra.org/methodologies/vm0042-improved-agricultural-land-management-v2-2/

152 Rowntree, J. E., Stanley, P. L., Maciel, I. C. F., Thorbecke, M., Rosenzweig, S. T., Hancock, D. W., Guzman, A. and Raven, M. R. (2020) Ecosystem Impacts and Productive Capacity of a Multi-Species Pastured Livestock System. Frontiers in Sustainable Food Systems, Vol. 4, 4 December 2020.
[ONLINE] Available at: https://www.frontiersin.org/journals/sustainable-food-systems/articles/10.3389/fsufs.2020.544984/full

153 Dupla, X. et al. (2024) Are soil carbon credits empty promises? Shortcomings of current soil carbon quantification methodologies and improvement avenues. Soil Use and Management.
[ONLINE] Available at: https://doi.org/10.1111/sum.13092

154 Mitchell, E. et al. (2024) Making soil carbon credits work for climate change mitigation. Carbon Management.
[ONLINE] Available at: https://archive.ghginstitute.org/2025/01/17/making-soil-carbon-credits-work-for-climate-change-mitigation/

155 Verra (n.d.) Verified Carbon Standard (VCS) Registry.
[ONLINE] Available at: https://registry.verra.org/verra/public/program/VCS

156 International Monetary Fund (2023) Corporate Social Responsibility. IMF Annual Report 2023.
[ONLINE] Available at: https://www.imf.org/external/pubs/ft/ar/2023/who-we-are/corporate-social-responsibility/

157 SARA (n.d.) SARA Project Description (Version 2.16).
[ONLINE] Available at: https://drive.google.com/file/d/1rilLhrTkVY-smLw6cKiZWWcBUZZo8D6N/view

158 Mehre, J., Schneider, K., Jayasundara, S., Gillespie, A. and Wagner-Riddle, C. (2024) Adaptive Multi-Paddock Grazing Increases Soil Carbon Stocks and Decreases the Carbon Footprint of Beef Production in Ontario, Canada. Journal of Environmental Management, Vol. 371, Article 123255.
[ONLINE] Available at: https://www.sciencedirect.com/science/article/pii/S0301479724032419

159 Anthesis Group (2026) SARA Becomes First Regenerative Grassland Programme in South America to Pay Farmers for Carbon Credits.
[ONLINE] Available at: https://www.anthesisgroup.com/news/sara-first-in-south-america-to-pay-farmers-for-carbon-credits/

160 Microsoft (2025) 2025 Environmental Sustainability Report. 29 May 2025.
[ONLINE] Available at: https://cdn-dynmedia-1.microsoft.com/is/content/microsoftcorp/microsoft/msc/documents/presentations/CSR/2025-Microsoft-Environmental-Sustainability-Report.pdf

161 Twidale, S. and Jessop, S. (2026) Microsoft in Record Deal for Soil Carbon Credits as Data Centres Surge. Reuters, 15 January 2026.
[ONLINE] Available at: https://www.reuters.com/sustainability/climate-energy/microsoft-record-deal-soil-carbon-credits-data-centres-surge-2026-01-15

162 Agoro Carbon Alliance (2025) Agoro Carbon Secures Flagship 12-Year Agreement to Deliver 2.6 Million Soil Carbon Removal Credits to Microsoft. 24 June 2025.
[ONLINE] Available at: https://agorocarbonalliance.com/news-entry/agoro-carbon-microsoft-12year-agreement-soil-carbon-removal-credits/

163 Yara International (2026) Annual Report 2025, p. 271.
[ONLINE] Available at: https://www.yara.com/siteassets/investors/057-reports-and-presentations/annual-reports/2025/yara-annual-report-2025.pdf

164 Verra (n.d.) Agoro Carbon USA Pastureland Program (VCS Project 3656).
[ONLINE] Available at: https://registry.verra.org/verra/public/program/VCS/projects/3656

165 Verra (n.d.) Agoro Carbon USA Pastureland Program (VCS Project 3656) (p.38 and pg.58)

166 Smith, B. and Nakagawa, M. (2026) Responsibly Building the AI Future. Microsoft, 9 July 2026.
[ONLINE] Available at: https://blogs.microsoft.com/on-the-issues/2026/07/09/responsibly-building-the-ai-future/

167 Chevron Corporation (2026) Chevron Signs 20-Year Power Agreement with Microsoft for West Texas Data Center. 22 June 2026.
[ONLINE] Available at: https://www.chevron.com/newsroom/2026/q2/chevron-signs-20-year-power-agreement-with-microsoft-for-west-texas-data-center

168 Boomitra (2025) Measuring Soil Carbon from Space: Inside Boomitra's Proven Technology. 13 August 2025.
[ONLINE] Available at: https://boomitra.com/inside-boomitras-proven-technology/

169 Boomitra (2021) Boomitra Raises $4 Million to Accelerate Carbon Removal Through Agriculture Globally. 22 June 2021.
[ONLINE] Available at: https://boomitra.com/es/boomitra-raises-4-million-to-accelerate-carbon-removal-through-agriculture-globally-2/
and Yara International (2021) Yara Invests in Boomitra to Advance Soil Carbon Capture. 22 June 2021.
[ONLINE] Available at: https://www.yara.com/news-and-media/news/archive/2021/yara-invests-in-boomitra-to-advance-soil-carbon-capture/

Changing Markets © 2026 all rights reserved

170 Yara International (2026) Annual Report 2025, p. 271.
[ONLINE] Available at: https://www.yara.com/siteassets/investors/057-reports-and-presentations/annual-reports/2025/yara-annual-report-2025.pdf

171 Boomitra (2025) Boomitra Achieves Verra Registration for South America Grasslands Restoration Project.
[ONLINE] Available at: https://boomitra.com/registration-south-america-grasslands/

172 Earthood Services Limited (2025) Validation Report: Boomitra Grassland Restoration in the Temperate Grasslands of South America through Soil Enrichment (VCS Project 3291). Version 04, 19 May 2025, pp. 177–178.
[ONLINE] Available at: https://www.scribd.com/document/932063780/VCS-VAL-23-159-ValR-Boomitra-3291-19052025-PRR-3-CL

173 Earthood Services Limited (2025) Validation Report: Boomitra Grassland Restoration in the Temperate Grasslands of South America Through Soil Enrichment, Verra Project 3291, pp. 176–178.
[ONLINE] Available at: https://registry.verra.org/verra/public/program/VCS/projects/3291

174 Verra (n.d.) Boomitra Grassland Restoration in Northern Mexico (VCS Project 2887).
[ONLINE] Available at: https://registry.verra.org/verra/public/program/VCS/projects/2887

175 United Nations Framework Convention on Climate Change (UNFCCC) (n.d.) Article 6.2: Cooperative Approaches.
[ONLINE] Available at: https://unfccc.int/process-and-meetings/the-paris-agreement/article-6/article-62

176 Boomitra (2025) Singapore Government Signs Deal with Boomitra to Purchase 625,000 Tonnes of Soil Carbon Credits. 16 September 2025.
[ONLINE] Available at: https://boomitra.com/es/singapore-government-signs-deal-with-boomitra/

177 Ministry of Trade and Industry, Singapore (2025) Singapore Signs Implementation Agreement on Carbon Credits Collaboration with Paraguay. 23 May 2025.
[ONLINE] Available at: https://www.mti.gov.sg/newsroom/singapore-signs-implementation-agreement-on-carbon-credits-collaboration-with-paraguay/

178 Vista Energy (2026) 2025 Sustainability Report.
[ONLINE] Available at: https://vista-energy.cdn.prismic.io/vista-energy/w4ZygfF9JgJ_PO4D_2025SustainabilityReport.pdf

179 Vista Energy (2026) 2025 Sustainability Report.
[ONLINE] Available at: https://www.vistaenergy.com/docs/2025-sustainability-report-hsirgv.pdf

180 Changing Markets Foundation (2024) The New Merchants of Doubt: How Big Meat and Dairy Avoid Climate Action.
[ONLINE] Available at: https://changingmarkets.org/report/the-new-merchants-of-doubt-how-big-meat-and-dairy-avoid-climate-action/

Changing Markets © 2026 all rights reserved

Timeline references

i James Melville (2024) Post on X.
[ONLINE] Available at: https://x.com/JamesMelville/status/1792805390176182427

ii Wide Awake Media (2024) Post on X.
[ONLINE] Available at: https://x.com/wideawake_media/status/1830788330805424349

iii Mixed Times (n.d.) Lab-grown meat backlash builds as more states say no to Bill Gates' fake food.
[ONLINE] Available at: https://www.mixedtimes.com/news/lab-grown-meat-backlash-builds-as-more-states-say-no-to-bill-gates-fake-food

iv End Wokeness (2024) Post on X.
[ONLINE] Available at: https://x.com/EndWokeness/status/1858233256900002091

v Effektivt Landbrug (2024) Bekendtgørelsen er nu offentliggjort.
[ONLINE] Available at: https://effektivtlandbrug.landbrugnet.dk/artikler/kvaeg/106483/bekendtgoerelsen-er-nu-offentliggjort

vi No Farmers No Foods (2024) Post on X.
[ONLINE] Available at: https://twitter.com/NoFarmsNoFoods/status/1862074422590361819

vii Dairies McQueens (2024) Post on X.
[ONLINE] Available at: https://twitter.com/DairiesMcqueens/status/1862145339299443104

viii James Melville (2024) Post on X.
[ONLINE] Available at: https://x.com/JamesMelville/status/1863209348744261888

ix Rupert Lowe (2024) Post on X.
[ONLINE] Available at: https://twitter.com/RupertLowe10/status/1863549646640918734

x Robin Monotti (2024) Post on X, 2 December 2024.
[ONLINE] Available at: https://x.com/robinmonotti/status/1863558456562593859

xi Jonatan Pallesen (2024) Post on X, 3 December 2024.
[ONLINE] Available at: https://x.com/jonatanpallesen/status/1864088723673186549

xii Peter Sweden (2024) Post on X, 3 December 2024.
[ONLINE] Available at: https://x.com/PeterSweden7/status/1864049160174891384

xiii Shawn Baker (2024) Post on X, 5 December 2024.
[ONLINE] Available at: https://twitter.com/SBakerMD/status/1864690414869225961

xiv GSGB01 (2024) Post on X, 6 December 2024.
[ONLINE] Available at: https://twitter.com/GSGB01/status/1865065220168630287

xv EssexPR (2024) Post on X, 6 December 2024.
[ONLINE] Available at: https://twitter.com/EssexPR/status/1865058577867530248

xvi NoFFF Danmark (2025) Video posted on TikTok.
[ONLINE] Available at: https://www.tiktok.com/@nofff.danmark/video/7461605951024401686

xvii NoFFF Danmark (2025) Video posted on TikTok.
[ONLINE] Available at: https://www.tiktok.com/@nofff.danmark/video/7461713157296360726

xviii Torsten Gejl (2025) Post on X, 31 January 2025.
[ONLINE] Available at: https://twitter.com/TorstenGejl/status/1885246525564957023

xix Kent Nielsen (2025) Post on X.
[ONLINE] Available at: https://twitter.com/Kentfrihedniels/status/1907720011885559890

xx Kent Nielsen (2025) Post on X.
[ONLINE] Available at: https://x.com/Kentfrihedniels/status/1908787452942164359

xxi Gareth Wyn Jones (n.d.) Post on Facebook.
[ONLINE] Available at: https://www.facebook.com/1garethwynjones/posts/pfbid02omGcvJu1gshgA4qm9c6iRhUMi9Wg4MZWa81J6Kt-aNM7mNckhhJ8NpfV4rj8gd6nol

xxii Bovaer.dk (n.d.) Bovaer.dk – Facebook Group.
[ONLINE] Available at: https://www.facebook.com/groups/1230586088624601/

xxiii jemmm85517813 (2025) Post on X.
[ONLINE] Available at: https://x.com/jemmm85517813/status/1976010626112835653

xxiv Kent Nielsen (2025) Post on X.
[ONLINE] Available at: https://twitter.com/Kentfrihedniels/status/1983807465088282907

xxv Kent Nielsen (2025) Post on X.
[ONLINE] Available at: https://twitter.com/Kentfrihedniels/status/1985377032646058256

xxvi Kent Nielsen (2025) Post on X.
[ONLINE] Available at: https://x.com/Kentfrihedniels/status/1986035220252889270

xxvii Bovaer.dk (2025) Post in Bovaer.dk Facebook Group.
[ONLINE] Available at: https://www.facebook.com/groups/1230586088624601/permalink/1393941105622431/

xxviii Kent Nielsen (2025) Post on X.
[ONLINE] Available at: https://x.com/Kentfrihedniels/status/1987102405045911801

xxix Jonatan Pallesen (2025) Post on X.
[ONLINE] Available at: https://x.com/jonatanpallesen/status/1984576256747159630

xxx Facebook (n.d.) Video posted on Facebook Reels.
[ONLINE] Available at: https://www.facebook.com/reel/3317800278370069

xxxi Kent Nielsen (2025) Post on X.
[ONLINE] Available at: https://twitter.com/Kentfrihedniels/status/1985377032646058256

xxxii newstart_2024 (2025) Post on X.
[ONLINE] Available at: https://x.com/newstart_2024/status/1984742666358137132

xxxiii BGatesIsaPyscho (2025) Post on X.
[ONLINE] Available at: https://x.com/BGatesIsaPyscho/status/1985637805939200170

xxxiv Peter Sweden (2025) Post on X.
[ONLINE] Available at: https://x.com/PeterSweden7/status/1984585703670353928

Changing Markets © 2026 all rights reserved

xxxv ABridgen (2025) Post on X.
[ONLINE] Available at: https://twitter.com/ABridgen/status/1984672441935843779

xxxvi Facebook (n.d.) Video on Facebook Watch.
[ONLINE] Available at: https://www.facebook.com/watch/

xxxvii YouTube (n.d.) Video on YouTube.
[ONLINE] Available at: https://www.youtube.com/watch

xxxviii James Melville (2025) Post on X.
[ONLINE] Available at: https://twitter.com/JamesMelville/status/1987282267845378512

xxxix ouTube (n.d.) Video posted on YouTube.
[ONLINE] Available at: https://www.youtube.com/watch?v=f8J7b42hjkU

xl Joanna Blythman (2025) Post on X.
[ONLINE] Available at: https://twitter.com/JoannaBlythman/status/1991146583119790179

xli Gareth Wyn Jones (n.d.) A Message from a Farmer in Denmark – Facebook Post.
[ONLINE] Available at: https://www.facebook.com/1garethwynjones/posts/a-message-from-a-farmer-in-denmark/1387209179688115/

Changing Markets
FOUNDATION