World’s largest meat company, JBS, increases emissions by 51% in five years despite 2040 net zero climate target, continues to greenwash its huge climate footprint

Rising Emissions: Misleading investors and the public

"Some government and business leaders are saying one thing – but doing another. Simply put, they are lying – and the results will be catastrophic." UN Secretary-General Antonio Guterres

That’s how UN Secretary-General Antonio Guterres presented the latest report from the Intergovernmental Panel on Climate Change (IPCC) released earlier this month. He could have easily been talking about Brazilian meat giant JBS and its misleading net zero target.

The company, which is the largest meat processor in the world, increased its annual greenhouse gas emissions by a whopping 51% between 2016 and 2021, from 280 million metric tonnes to 421.6 million metric tonnes (mmts), based on the Institute for Agriculture and Trade Policy (IATP)’s latest calculations.\(^1\)

This is more than fossil fuel giant Total’s 2020 emissions.\(^2\) It is more than Italy’s annual climate footprint and 95% of France’s (at 443 mmt). As JBS prepares for its annual general meeting (AGM) on 22 April in São Paulo, this briefing outlines how the company’s “green” claims fail to live up to reality and the meat giant continues to mislead in its communications with investors and the public.

JBS is promising to reach net zero emissions by 2040 and has been working hard to paint itself as an ally in the fight against climate change. It signed a joint declaration with governments at the COP26 climate summit to develop a Paris Agreement-aligned sector plan and issued a “Sustainability Linked” bond soon after.

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1 Using the UN Food and Agriculture Organization’s GLEAM model, GRAIN and IATP calculated JBS’s 2016 emissions in Emissions Impossible 2018. IATP has used the same methodology to update the company’s 2021 emissions. See Dataset here.

2 Total Energies emissions 2020: 417 MtCO2e; Richard Heede, Climate Accountability Institute, personal communication, 9 April 2022. See also, our Dataset, “Comparisons” worksheet comparing JBS’s emissions with that of other carbon majors and countries.
But JBS’s “net zero” plan is heavy on rhetoric and light on detail, conveniently ignoring the company’s principal source of emissions: the increasing number of animals in its global supply chain (sometimes referred to as “Scope 3” emissions).  

The number of animals in JBS’s supply chain in the past five years has increased substantially: the number of cattle has increased by 54%, pigs by 67% and chickens by 40%, resulting in the enormous increase in emissions. For industrial livestock companies, the animals in their supply chains make up 90-97% of their emissions. In 2021, JBS processed 26.8 million cattle, 46.7 million pigs and 4.9 billion chickens. Both the livestock numbers and the emissions are a conservative estimate given the lack of transparency in the industry regarding the number of animals they slaughter.

JBS increased its climate footprint even by the metric that the livestock industry most prefers – “emissions intensity”. This sees companies focus on reporting efficiency – measuring their emissions per kilo of meat – as opposed to the total.

In 2020, JBS pledged to make a 30% cut within 10 years to its Scope 1 and 2 emissions, which covers greenhouse gases emitted directly or indirectly by the company’s operations (limited to its plants and offices).

Yet, JBS reported in 2021 that its emissions intensity actually increased by 30% between 2019 and 2020, according to figures it submitted to the Carbon Disclosure Project (CDP).

The company has been rapidly expanding in recent years by buying up rivals and increasing its share of the supply chain, with 250,000 employees globally. Its customers include well-known chains such as Burger King, McDonald’s, Tesco and Walmart.

JBS is currently listed on the Brazilian stock exchange but is seeking an initial public offering (IPO) in the U.S. – something it has been pursuing for several years.

But if the world is to have a hope of tackling the agriculture sector’s climate impacts, JBS and other livestock companies must disclose their emissions in full, including Scope 3 emissions (i.e., those emitted all along its supply chain) while governments must enact stronger laws on deforestation and regulate the industry’s spiralling emissions.

Below, JBS’s “green” claims are compared with the reality of their operations.

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3 The livestock sector is the single largest contributor to anthropogenic methane emissions; deforestation linked to cattle ranching and the production of animal feed, meat processing and transport also make a significant contribution to climate change.
4 IATP 2021 Dataset, source: JBS (2022) Institutional Presentation including 4Q21 and 2021 Results.
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<th>JBS’s “Green” claims</th>
<th>The reality</th>
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<td>● No commitment to measure, disclose or cut Scope 3 emissions, despite the fact they represent up to 97% of JBS’s climate footprint</td>
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<td></td>
<td>● No target to measure, disclose or cut methane</td>
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<td>● Will not stop deforestation across its global supply chain before 2035</td>
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<td>● No accountability mechanism to ensure this target is met</td>
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<td>“Praised for our efforts to fight deforestation”</td>
<td>● Multiple investigations have found that JBS’s activities are driving deforestation</td>
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<td>“Supporting firefighters and other environmental protection initiatives”</td>
<td>● JBS suppliers have been found to be linked to fires</td>
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| ● No scientific evidence that feed additives will make a sizeable difference to methane emissions | ● Energy use is a small proportion of JBS’s emissions  
● JBS is making a profit selling carbon credits from its biodiesel plants, without proof this is deforestation-free |
| “On a path to net zero by 2040” |  
In March 2021, JBS announced a goal of reaching net zero emissions by 2040, in what it claims is a first for a major livestock company. Its CEO has described the pledge as JBS’s “most important commitment”.  

But the target currently lacks any credibility. This is not only because of JBS’s continued refusal to disclose its full emissions, but also because the company only plans to cut Scope 1 and 2 emissions by 2030, which account for less than 10% of its climate footprint. Expanding mass production of livestock will wipe out any gains in emissions reduction, something the company has itself admitted. Independent estimates suggest that its indirect “Scope 3” emissions, which cover the whole of its supply chain, represent as much as 97% of JBS’s contribution to climate change.  

While the company claims its total emissions for 2020 were only 6.8 Mt CO$_2$-equivalent, this figure excludes emissions from the animals in its supply chain, the production of animal feed and emissions from deforestation, which together make up the vast majority of the company’s climate footprint.  

**The Institute for Agriculture and Trade Policy (IATP) and GRAIN calculated JBS’s 2016 emissions to be 280 Mt CO$_2$-eq, using the UN-approved GLEAM model.** This is roughly half that of oil majors like ExxonMobil, Shell and BP, and equivalent to the total emissions of Taiwan or one-fifth of Brazil’s. Since then, JBS has only increased the...
number of animals in its supply chain. JBS’s scope 1 and 2 target is only a reduction in “emissions intensity”, so emissions are likely to continue rising in absolute terms, given the company’s growth ambitions.

The plan also states that an unspecified proportion of the target will be reached through carbon sequestration in the future, but provides no timescale or details on how these offsets will be achieved. Land-based carbon sequestration is easily reversible due to human and natural events, with the IPCC’s recent 6th Assessment report warning that this carbon is increasingly vulnerable to release due to climate change.

JBS claims that its emissions reduction target was recognised by the Science Based Targets initiative (SBTi) in June 2021, but this has still not been validated. It refuses to disclose its full emissions to both SBTi and CDP.

The company’s net zero goal was ranked “very low” for both transparency and integrity in a recent report by the New Climate Institute think tank.

“Praised for our efforts to fight deforestation”

JBS boasts about being “classified as the Brazilian protein company with the lowest risk of links to deforestation in its operations”, according to Forest 500 rankings. It also says it is one of the most sustainable livestock companies globally, according to the Collar Fairr Protein Producer ranking.

But in its 2040 net zero target, JBS admits that it currently causes illegal deforestation and will only eliminate this by 2025. Legal deforestation will continue until 2035, under the company’s target.

This commitment is itself merely a reiteration of a deforestation promise it made in 2009 and has failed to keep.

JBS’s total deforestation footprint in six Brazilian states since 2008 has been conservatively estimated at 200,000 hectares (ha) in its direct supply chain and 1.5 million ha in its indirect supply chain.

Multiple investigations have found evidence of JBS suppliers causing both legal and illegal deforestation in recent years.

In January 2022, a Bloomberg investigation concluded that JBS was “one of the biggest drivers of Amazon deforestation”.

In November 2021, the New York Times linked leather in luxury SUVs to JBS cattle production and illegal deforestation in Brazil.

In October 2021, Brazilian federal prosecutors concluded that JBS had purchased over 300,000 cattle from ranches with “irregularities” the previous year, including illegal deforestation in the Amazon region, and that the situation was worsening.
In 2020, a joint investigation by Repórter Brasil, the Bureau of Investigative Journalism and The Guardian found evidence connecting JBS to cattle supplied from a farm in the Brazilian Amazon under sanction for illegal deforestation.

Cattle ranching accounts for 80% of deforestation in the Amazon, according to Yale's Global Forest Atlas, and is also a leading cause of deforestation in Australia, where JBS is the largest meat processing company.

“Supporting firefighters and other environmental protection initiatives”

In recent years, images of forest fires in the Amazon and Pantanal wetlands of Brazil have shocked the world and spurred political action.

JBS says it is partnering with a conservation charity to preserve the biodiversity-rich Araguaia corridor in the Amazon and that it is “supporting” 80 fire brigades to tackle fires in the Pantanal wetlands, as well as five teams from the Aliança da Terra NGO. The company says it is issuing real-time alerts to firefighters using satellites and cameras installed on farms.

But the main driver of biodiversity destruction and fires is cattle ranching, with ranchers even suspected by police of starting them. A Greenpeace investigation last year found that JBS had purchased beef from ranchers linked to the 2020 Pantanal fires and was still failing to guarantee that its supply chain was free of this beef. The company’s net zero pledge does not include any commitment to end the use of fires to clear land on its ranches.

“Innovating to reduce methane”

In its recently published 2021 Management Report, JBS describes how it is developing feed additives to cut methane emissions from cattle and claims to have made progress already in cutting the powerful greenhouse gas from its supply chain.

JBS also says it is investing in the “circular economy” by recycling plastic and using biodiesel and organic fertilisers, as well as using blockchain technology to better monitor its supply chain.

Whatever limited impact these techno-fixes may have, they are far outweighed by the company’s overall emissions and continuing plans to expand.

Its feed additive is still in development, and there is no evidence yet that it will make a meaningful dent in methane emissions from cattle.

Methane (CH₄) emissions are responsible for almost one-quarter of global warming, with a warming impact 84 times as high as CO₂ over a 20-year period. UN studies show agriculture is the largest human-made source of methane, with livestock producing 32% of emissions. According to the IPCC, reducing global methane emissions in particular by 2030 and 2040 will reduce the likelihood of reaching peak warming and overshooting warming limits.
Methane emissions reduction proved a key theme at the COP26 summit in Glasgow, with countries and businesses pledging to slash emissions of this often overlooked greenhouse gas, and the latest [IPCC report](https://ipcc.ch/report/ar6/) specifically recommended that methane emissions be slashed by one-third by 2030 in order to hold temperature rise to 1.5°C.

**“Boosting green energy”**

In its 2021 Q4 [earnings presentation](https://www.objectiva.com.br/cp/releases/presentation/2021/PRESENTACAO_2021Q4.pdf), JBS says it is increasingly running its operations on renewable energy, with “100% renewable electricity sources” at its Pilgrim’s UK subsidiary and a target of 100% solar-powered stores for its Swift subsidiary in Brazil.

As part of its net zero goal, the company pledges to power its facilities around the world with 100% renewable energy by 2040.

But JBS’s energy use constitutes a small proportion of its overall emissions, so the switch to renewables will make little difference to JBS’s climate footprint.

Moreover, JBS counts methane gas captured from giant manure lagoons sourced from megafarms as renewable energy, despite this causing an array of environmental impacts and incentivising industrial livestock production.

Furthermore the company is making millions selling carbon credits from its biodiesel plants, even though the fuel is made with animal fat from its slaughterhouse operations and there is no traceability showing it to be a deforestation-free product. In 2020, JBS generated 430,000 Decarbonization Credits (CBios) through the production of biodiesel. Considering the average price of a CBio over the past year (R$ 43), JBS may have profited by more than R$ 18 million (3.5 M Euros) from the operation, not counting the amount received from the sale of the biofuel itself.

Finally, JBS also pushed false solutions like sending manure and slurries from their factory farms to anaerobic digestors. Biogas from such agriculture facilities has been labelled “factory farm gas” by many campaigners because, in a similar way to carbon capture and storage (CCS) technologies being applied to coal power stations, biogas may mitigate some emissions from the manure but incentivizes operations to expand their number of animals to produce even more manure. For instance, biogas subsidies in Northern Ireland have facilitated an explosion in the size of factory farmed chicken and pigs, with one of the major beneficiaries being Moy Park (part of Pilgrim’s Pride, majority owned by JBS) which now not only saves money on waste disposal but is also paid by the digestors for their manure.⁶

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“Producing meat more efficiently”

JBS claims to be producing meat more efficiently by increasing its feed conversion ratio, thereby cutting the “emissions intensity” of its products.

But in its most recent disclosure to CDP for 2020, JBS reported that its emissions intensity – covering just scope 1 and 2 emissions – had increased by 30% since the previous year.

Even if the company manages to cut its emissions intensity in future years, its rapid growth will easily cancel out any efficiency gains. The company’s base of direct cattle supplier farms in the Amazon more than doubled between 2009 and 2020, from around 7,700 to 16,900. The number of JBS slaughterhouses in the Amazon also more than doubled over this period, a recent Bloomberg investigation found.

A history of violations

JBS also has a long history of breaking the law over non-environmental issues, raising further doubts about the likelihood of its compliance with the 2040 net zero target.

In just the last few months and years, JBS has:

- Settled with US Department of Justice for $53 million for price-fixing scheme in beef markets (February 2022)
- Obtained court approval to settle price fixing in the poultry market for $76 million (December 2021)
- Agreed to pay $12.7 million to settle pork price-fixing charges (November 2021)
- Been fined $59,000 by the US Occupational Safety and Health Administration due to a fatality at a JBS operation (October 2021)
- Been fined multiple times for failing to adequately protect its employees at various plants during the COVID-19 pandemic (2020)
- Seen six executives of JBS’s poultry division Pilgrim’s Pride personally indicted on federal price-fixing charges (2020)
- Paid $3.2 billion for bribing finance officials in Brazil to obtain government-backed loans (2017)

Industry-wide problems

The greenwashing outlined above is far from unique to JBS. Livestock companies consistently fail to disclose their full emissions – or under-report them by excluding indirect (scope 3) emissions, as reports from IATP in 2018 and 2021 show. The industry is responsible for as much as 19% of global greenhouse gas emissions and is under growing pressure from scientists, campaigners and the general public for this vast contribution to climate change. In response, companies and their trade associations have developed a series of public relations techniques to reassure consumers that no
significant action is needed: by setting ambitious-sounding targets and claiming to develop innovative solutions.

Without transitioning away from the industrial model of animal agriculture, the world’s remaining forests face destruction and “agriculture alone would produce almost twice the emissions allowable from all human activities” by 2050, according to the World Resources Institute.

**What investors, food companies and governments should do**

Feedback and the Institute for Agriculture and Trade Policy are calling for:

- Investors, banks and financiers to divest from JBS and its subsidiaries, following the example of Nordea, and exclude JBS from their investment funds and bond portfolios. Three of JBS’s six largest investors (Fidelity, Vanguard and BlackRock) are members of the Net Zero Asset Managers Initiative, which claims to be “committed to supporting the goal of net zero greenhouse gas emissions by 2050 or sooner”. Many other smaller JBS investors are also signed up to the scheme. JBS’s second largest stake is owned by BNDES, Brazil’s publicly-owned development bank. Other financial institutions, such as Barclays, which provided $860 million in financial backing to JBS last year alone, should cease to provide its services to the company.
- The Brazilian government to divest all financing for JBS via Brazil’s BNDES development bank.
- Supermarkets, retailers and food service companies to drop JBS and its subsidiaries as a meat supplier.
- JBS to report all its emissions – both direct and indirect – including carbon dioxide, methane and nitrous oxide, and allow an independent third party to verify its net zero claims.
- JBS to report all of its offsets, including specific project details.
- Governments to introduce strong, enforceable rules against deforestation, including agriculture-driven deforestation.
- Governments to regulate factory farm methane emissions, i.e. large-scale cattle, dairy and pork production.
- Governments to regulate nitrous oxide emissions, particularly the excess use of nitrogen fertiliser often linked to animal feed production worldwide.

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