

June 2020

The Livestock Levy: Progress Report

An update on FAIRR's
2017 Livestock Levy White Paper

Foreword



Jeremy Coller
Founder of FAIRR,
CIO of Coller Capital

When FAIRR first released its [‘Livestock Levy’ White Paper](#) in December 2017, we aimed to highlight the long-term ‘pathway to taxation’, which we saw the animal protein sector moving towards. We argued that impacts from both a public health and a climate change perspective suggested a real possibility that some governments might consider taxing meat in the same way many countries now tax sugar, carbon and tobacco.

It was a paper that sparked a global discussion. The issue was covered in the pages of mainstream media outlets, from Newsweek in the US to The Times in London and the South China Morning Post. It aired on talk shows and was broadcast on the likes of CNN and the BBC. Clearly, we had hit a nerve.

The paper helped changed the conversation among investors too. In the past two years, we have seen enormous interest in FAIRR’s work, with investors — managing over \$20 trillion of AUM — now participating in our activities and monitoring the sustainability performance of the animal protein sector through tools such as the [Coller FAIRR Protein Producer Index](#) and the [Coller FAIRR Climate Risk Tool](#).

Meat tax is no longer hypothetical

We have also seen growing momentum for extending carbon or other taxes to the animal protein sector, including government-agreed proposals in New Zealand. The issue has even been raised by candidates in this year’s US presidential elections.

Given the attention from investors and regulators alike, we have factored an assumption into our [Coller FAIRR Climate Risk Tool](#) that carbon taxes will be applied to livestock emissions by 2050.

Given these new developments and the potential to affect markets and investor portfolios, we have decided that now is the time to publish an update to our Livestock Levy White Paper.

Five years on from Paris

This year marks five years since the historic Paris Agreement was signed. Once the COVID-19 pandemic has passed, governments will return to the negotiating table to revise national targets. In this pivotal year for climate action, a mechanism for reducing the agriculture sector’s emissions is going to be critical.

In the wake of COVID-19, the latest and most significant in a string of zoonotic disease outbreaks, regulators are expected to look at how to build a stronger wall between animal-based industries and human health. A root cause analysis of the COVID-19 pandemic is likely to show the urgent need for the meat and fish industries to improve biosecurity and screening practices. Who pays? In the post-COVID landscape, there is a risk that governments may stop subsidising animal agriculture and start taxing it instead.

Thus, the health and environmental impacts of the animal protein industry are under scrutiny as never before. Forward-looking investors should keep a close eye on meat tax-related discussions if they are to stay ahead of the curve.

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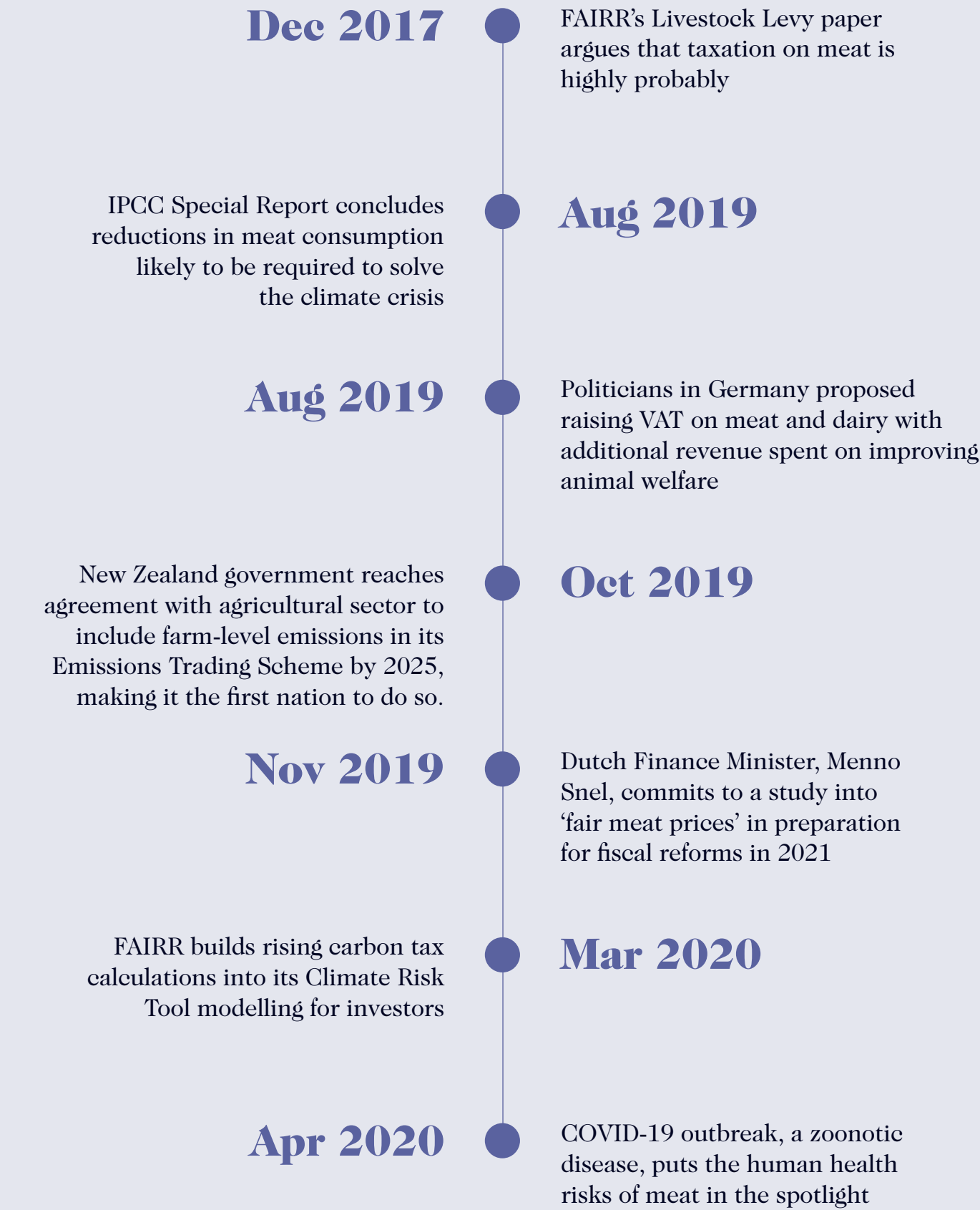
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Summary timeline



Introduction

This Progress Report is a follow-up to the [December 2017 'Livestock Levy' White Paper](#) and should be read in conjunction with that paper.

Chapter one restates analysis of whether the environmental and social issues associated with the animal protein industry place it on a pathway to behavioural taxation. It does this by offering an overview of how three other commodities - tobacco, carbon and sugar - all came to face similar regulatory tariffs.

Chapter two explores developments in the last few years that have fostered a growing international consensus on the negative environmental and social issues associated with the animal protein industry, with a focus on significant from the UN's Intergovernmental Panel on Climate Change and University of Oxford.

Chapter three examines how some countries and organisations have discussed the introduction of a tax on meat and considers practical questions and implementation issues.

Chapter four looks at potential next steps for investors and recommends questions that investors could consider on this topic in their active ownership.

Scope of the White Paper

The scope of this paper is to explore the extent to which meat or animal protein might be subject to a 'behavioural tax' similar to those placed on tobacco, carbon and sugar.

This paper does not attempt to define what a practical system of meat taxation might look like. Any such discussion of a 'meat tax' will include several variables, including, but not limited to:

- The types of meat products that might be taxed including beef, pork, chicken, fish, dairy or any combination of those products.
- The method of livestock production or management used to produce the meat product. For example, whether products from a cow raised on an 'organic' farm should be subject to different taxes to one raised in an intensive 'factory farm'.
- The form of taxation that might best be applied, such as a flat tax, sales tax or another mechanism.
- Whether the tax applies on outputs (such as the emissions or the product itself), or on inputs (such as the amount of energy used or on feedstock materials).
- The specific social or environmental harm a 'meat tax' aims to alleviate, and how the impact of the tax is calculated.

This paper recognises that the methodologies for a meat tax system are likely to be complex and contentious. It does not attempt to define what a successful system might be; rather, it focuses on detailing current proposals being considered to tax animal products.

This paper also recognises that behavioural taxes do not occur in a bubble. They tend to exist as part of a basket of other fiscal incentives and disincentives designed to affect the social behaviour being targeted. In the case of meat, for example, there is a wide range of agricultural subsidies that support the production of animal feedstuffs, such as maize. Research in 2013 found that specific livestock subsidies across all 34 OECD countries amounted to around £35 billion¹. This paper is aware that the debate on meat taxation exists within this context but does not seek to extend its scope to incorporate this.

Chapter 1: Pathways to taxation

Every government in the world faces challenges when it comes to balancing their budgets, and an increasingly attractive target for revenue creation is a ‘behavioural’ tax, levied on goods deemed unhealthy or damaging to the environment, or both. Over 180 countries impose a tax on tobacco, at least 40 governments worldwide have adopted some kind of price on carbon², and over 40 countries also currently impose taxes on sugar-sweetened beverages.³

What is a behavioural tax?

The term ‘behavioural tax’ in this paper is used to define a particular form of state-levied excise tax (i.e. a tariff levied against a specific product rather than a general sales tax for all products). It is a tax that imposes an extra cost on those products or services deemed to have unaccounted costs to wider society in terms of their environmental or social impacts. They are also known as ‘sin taxes’ or in economic terms ‘pigovian taxes’.

Unlike other taxes, the aim of behavioural taxes is not solely to generate revenue for governments. Rather their prime purpose is to reduce consumption of the commodity in question (by making it more expensive) or to lessen its impact. For example, behavioural taxes on tobacco in Britain make up more than 75% of the total cost to the consumer.

In our original ‘Livestock Levy’ White Paper, we undertook an analysis of the history, pricing, impacts and criticism of the behavioural taxes that have emerged for three different goods: tobacco, carbon and sugar. We found that there was a common series of steps that led to behaviour taxes being imposed on a product, which we call the ‘pathway to taxation’.





The common three-step path that led to a behavioural tax being introduced in the case of each of these three commodities was:

- Step 1 – Consensus:** Scientific evidence of negative societal impacts culminating in international consensus, backed by a UN body.
- Step 2 – Quantification:** A compelling financial public benefit case to justify the imposition of a tax. This usually justifies a cost incurred now (tax), to avoid the risks of more severe consequences in the future.
- Step 3 – Positive impacts:** The emergence of evidence or political support, that a tax can help lessen the societal/environmental harm being caused.

A snapshot of how these three steps unfolded in the case of tobacco, sugar and carbon, and how similar steps are unfolding in the case of animal protein is show in Figure 1.



Figure 1: Pathways to taxation, snapshot examples

	 Tobacco	 Carbon	 Sugar	 Animal Protein
Step 1: International consensus on social or environmental impacts	WHO Framework Convention on Tobacco Control (1995)	Establishment of IPCC (1988)	WHO Fiscal Policies for Diet and Prevention of Non-Communicable Diseases (2016)	WHO's International Agency for Research on Cancer ranks processed meats as Group 1 carcinogens and identified red meat as a probable cause of cancer (2015) IPCC Special Report on Climate Change and Land concludes that reductions in meat consumption and deforestation are likely to be required to solve the climate crisis
Step 2: Financial public benefit case	US National Cancer Institute/WHO study shows smoking costs global economy more than \$1tn annually (2017) ⁴	Stern Review suggests investing 1% of GDP to avoid a reduction in global economic output of 5-20% (2006)	WHO Global Burden of Disease report (2012) establishes non-communicable diseases (NCDs) like diabetes as the leading cause of sickness. NCDs calculated to cost \$30 tn over 20 years by WEF/Harvard report ⁵	Research by Oxford University concludes that a health tax on red and processed meat could save over \$40 bn in global healthcare costs (2018)
Step 3: Emerging evidence of the positive impacts of taxation	WHO data suggests a 10% increase in tobacco prices decreases consumption by 4-5% ⁶	The case for whether carbon taxes reduce greenhouse gas emissions is still inconclusive	Harvard research and emerging practical evidence from Mexico both suggest tax reduces consumption and incidences of obesity and diabetes	The case for whether a ‘meat tax’ would result in the desired environmental and health outcomes is unknown
Step 4: Current state of taxation levels	In 2020, nearly all countries tax tobacco on the grounds of health reasons, and 38 countries have taxes that make up more than 75% of the retail price of a pack of cigarettes ⁴	In 2020, a total of 57 carbon pricing initiatives have either been implemented or scheduled for implementation, 11 of those in the last two years. Of the 185 parties that have submitted their Nationally Determined Contributions to the 2015 Paris Agreement, 96 have stated that they plan to use carbon pricing as a tool to meet their commitments ⁷	In 2020, at least 40 countries have some form of sugar tax in place, including the UK and Mexico	Proposals for some form of ‘meat tax’ have been discussed in Sweden, Denmark, Germany, New Zealand and the Netherlands

Chapter 2: Mounting evidence

In 2017, we highlighted a growing body of evidence linking current levels of meat consumption with negative health and environmental impacts, and emerging research to demonstrate the benefits to public treasuries should governments disincentivise meat consumption through taxation.

That body of evidence has continued to grow in the last three years with significant contributions coming from international bodies such as the FAO, the EU and, perhaps most prominently, the Intergovernmental Panel on Climate Change (IPCC) – the UN’s body for assessing the science related to climate change.

What has been most striking since 2017, is the ascendancy of climate as the key driver of potential regulatory action. While the health issues connected with meat remain undiminished, it is the climate impact of animal protein that has become much more pressing for policymakers. Since 2017, over 28 countries and jurisdictions, covering 820 million citizens, have now declared a ‘climate emergency’⁸, which is radically changing the ‘meat tax landscape’.

Here, we review the most recent evidence of meat’s environmental and health impacts, which appears to suggest that ‘Step 1’ on the pathway to taxation may well have already been taken.

2.1 Environmental impacts

A paper from the UN’s Food and Agriculture Organisation (FAO) in 2017, reiterated its assessment that livestock products are responsible for more greenhouse gas emissions than most other food sources. According to the FAO, livestock supply chains account for 7.1 gigatonnes (Gt) of carbon dioxide (CO2), equivalent to 14.5% of global anthropogenic greenhouse gas emissions. This is more than all the planes, trains and cars in the world.

The biggest sources of emissions are enteric fermentation from cattle, feed production and manure storage. Cattle (beef and dairy) are responsible for about two-thirds of that total.⁹

An assessment published in a science journal in 2019 quantified that cattle and other ruminants contribute 37% of all [methane emissions](#) resulting from human activity.¹⁰

But by far the most significant assessment of the negative effects of animal farming on the environment came from the UN’s landmark IPCC report in 2019. The [IPCC’s ‘Special Report on Climate Change and Land’](#) found that an estimated 23% of total anthropogenic greenhouse gas emissions in the period 2007-2016 came from agriculture, forestry and other land use.¹¹

The report also recommended transitioning to plant-based diets as likely to be critical for mitigating climate change and achieving the goals of the Paris Agreement.

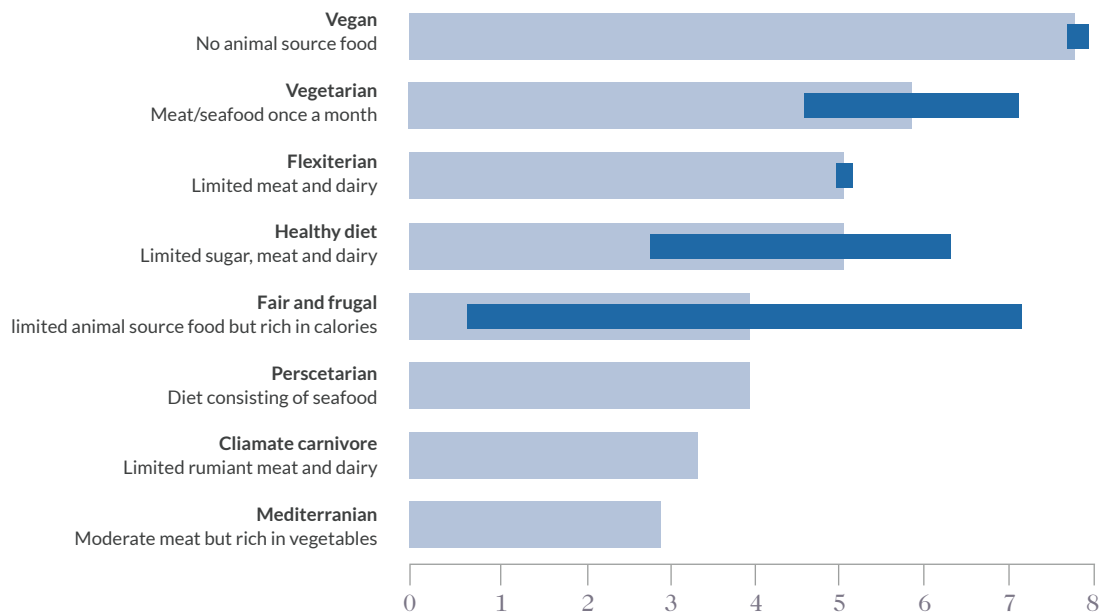
It said: “Response options throughout the food system, from production to consumption, including food loss and waste, can be deployed and scaled up to advance adaptation and mitigation (high confidence). The total technical mitigation potential from crop and livestock activities, and agroforestry is estimated as 2.3 – 9.6 GtCO2eq yr-1 by 2050 (medium confidence). The total technical mitigation potential of dietary changes is estimated as 0.7 – 8 GtCO2eq yr-1 by 2050 (medium confidence).”¹²

In other words, and as demonstrated by Figure 2, the more that global diets move away from high animal protein consumption, the more ‘bang for the buck’ there will be in terms of mitigation potential. For example, in the US, beef accounts for only 4% of the retail food supply by weight, yet it represents 36% of the diet-related GHG emissions.¹³

The IPCC also determined that alternative diets had a halo effect, finding that, “under the most extreme scenario, where no animal products are consumed at all, adequate food production in 2050 could be achieved on less land than is currently used, allowing considerable forest regeneration and reducing land-based GHG emissions to one-third of the reference ‘business as usual’ case for 2050”.

For example, replacing beef with beans in a US diet could achieve approximately 46 to 74% of the reductions needed to meet the 2020 GHG target for the US. In turn, this shift would free up 42% of US cropland (692,918 km2).¹⁴

Figure 2: Technical mitigation potential of changing diets by 2050, from IPCC Special Report



The implications for greenhouse gas emissions are clearly too big to ignore. And time is running out. The IPCC now warns that global emissions of carbon dioxide must peak by 2020 if we are to have a chance of keeping the planet from warming beyond 1.5°C. Pledges by national leaders at Paris were a good start, but currently add up to, at best, 3°C of warming¹⁵. As legislatures face up to the challenge of doing more to achieve the Paris Agreement, meat taxation could well be on the agenda.

A study specifically focused on the UK found that a climate tax on foods would see weekly shopping bills increase by about the cost of a cup of coffee, while the revenue generated by the government could be as much as £3.6 billion. The associated reduction in emissions would be in the range of 16.5 million and 18.9 million metric tons of carbon dioxide equivalent (CO2e), which is analogous to taking nearly 3.6 million cars off the road.¹⁶

Including meat taxes in climate cost forecasting

In March 2020, FAIRR launched the [Coller FAIRR Climate Risk Tool](#) – a first-of-its-kind tool providing investors with an online model to help quantify potential downside risks and upside opportunities for meat companies in a 2°C of global warming scenario.

The model draws on policy works such as the UNPRI’s [Inevitable Policy Response](#), which argues that low carbon transition policies are extremely likely (practically inevitable) in the coming decade. In at least some jurisdictions, that will include carbon pricing policies that encompass the land and agricultural sectors, such as in New Zealand, where – as explained in Chapter 3 – plans have already been drawn up. In others, it will include less market-driven approaches, ranging from border carbon adjustments to a ramping up of area protection and enforcing deforestation bans. These will have indirect and implicit risks for the livestock and animal protein sector.

FAIRR’s model projects a carbon tax on meat in line with the [IEA World Energy Outlook](#) for carbon taxes based on policies to which governments have already committed. Unless carbon taxes are applied to sectors such as the meat industry by 2050, and at much higher levels than currently pledged, global warming cannot be limited to 2 degrees.

It should also be noted that financial markets may anticipate a forthcoming tax on carbon and therefore, start pricing in new regulation much before its actual implementation. Hence, the argument is that a market repricing event is likely either before, during or after related policy announcements, meaning that markets will start to more accurately account for the large risks associated with carbon-intensive industries, including the animal protein industry.

Separately, a 2019 report by the LSE’s Grantham Institute on how to price carbon to reach net-zero emissions suggested that the UK government raise the price of beef by 23p/kg and the price of lamb by 46p/kg.¹⁷

2.2. Health impacts

As covered in our 2017 report, one of the biggest problems facing the animal protein sector is the increasing evidence of the association of high meat consumption with a number of health risks, including increased risks of colorectal cancers, cardiovascular disease, obesity, diabetes and antibiotic resistance. In 2020, the risk of zoonotic diseases on human health was also added to this list following the COVID-19 outbreak.

In October 2015, a report from WHO classified processed meat (including bacon, sausages and ham) along with tobacco and asbestos as products that undoubtedly cause cancer. Following a comprehensive assessment of the scientific evidence, experts concluded that 50g of processed meat a day increases the chance of developing colorectal cancer by 18%. The same report classified red meat as likely to be carcinogenic.

There is also a significant body of evidence that links high levels of meat consumption with obesity and diabetes. Research from the Harvard School of Public Health found that a daily serving of red meat no larger than a deck of cards increased the risk of adult-onset diabetes by 19%, while a daily serving of processed meat (e.g., one hot dog or two slices of bacon) increased diabetes risk by 51%¹⁸. A study by the University of Adelaide in 2016 analysed obesity rates in 170 countries and determined that the consumption of meat contributes just as much as sugar to the prevalence of global obesity.¹⁹

The negative impact of diabetes alone on global economic growth is enormous. The global cost of diabetes is set to nearly double to \$2.5 trillion by 2030, according to research from King's College London²⁰. That means that the cost of diabetes is likely to outweigh, in economic terms, agriculture's contribution to global GDP.²¹

The OECD has warned that under business-as-usual scenarios, public health costs across the developed world will become 'unsustainable' by 2050.

Another major contribution of the IPCC's special report in 2019

was also to tie the issues of health and emissions together by focusing on the impact of global diets. It highlighted that, to some extent, a healthy diet (one high in fruits and vegetables, low in meat and dairy, low in processed calories but using whole grains, and with a limit on total caloric intake) is associated with a lower GHG footprint. Hence, making a push for healthier diets and its economic benefits also produces climate mitigation as a 'bonus' co-benefit (or vice versa). Thus, the incentive for governments to get diets right is two-fold, improving both human and planetary health.

Researchers at the Oxford Martin Programme on the Future of Food and the International Food Policy Research Institute have attempted to quantify the public benefits of this dual approach. Their paper in late 2017 found that taxing foods, particularly emissions-intensive animal-based foods, by incorporating the price of the associated climate damages into the price of the foods could reduce global greenhouse gas emissions by about one billion tonnes, more than the global aviation industry's current emissions. The study also found that implementing the tax scheme could avoid half a million diet-related deaths if designed such that the tax revenues are partly rebated to poor households and used for health promotion programmes that would lead to greater consumption of fruits and vegetables.

The study suggested that to achieve a similar impact without tax, beef prices, for example, would have to increase by 40% on average.

Antibiotic resistance

Another rapidly emerging health threat attributed to meat consumption is antibiotic resistance.

Modern medicine relies on antibiotics, yet resistance is rapidly increasing and the pharmaceutical industry is proving unable to produce new antibiotics at an adequate rate. Widespread and prophylactic use of antibiotics in livestock is a significant contributor to this phenomenon. Antibiotic resistance is already responsible for over 20,000 deaths a year in the US, costing \$20 bn every year in excess direct healthcare costs. If unaddressed, health

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experts widely believe that the growth of antibiotic resistance will become one of the biggest public health crises of our generation. A UK government research paper estimates antibiotic-resistant infections could cost the world \$100 tn in lost output by 2050.²²

As livestock density increases and is in closer confines with wildlife and humans, there is a growing risk of disease that threatens every single one of us. In total, 75% of emerging infectious organisms pathogenic to humans are zoonotic in origin²³, and one or two new diseases emerge every year.²⁴

Following approval by the European Parliament, legislation banning the prophylactic use of antibiotics in farming is expected to come into force in the EU in 2022. The use of antimicrobials as a preventive measure will be limited to single animals and the drugs can only be used with a prescription from a veterinarian, representing a major step away from preventative group treatments of healthy animals²⁵. Yet despite consumer calls and regulatory action to halt antibiotic use, the factory farming sector is dragging its heels. Research from the Coller FAIRR Index in 2019 found that 47 (77%) of the world's 60 largest meat, fish and dairy producers are ranked in the 'high risk' category for management of antibiotics, including 22 firms that have no stated policy on antibiotics use.

COVID-19's impact on the meat industry

COVID-19 is the latest in a worrying increase in outbreaks of 'zoonotic' pathogens i.e. infections transmitted from animals to humans. These include SARS, Avian flu, H1N1 Swine Flu, Ebola and Zika. And the livestock sector is known to be a source of zoonotic disease transmission including avian flu viruses, E. coli and other coronaviruses. Going back further, the 1918 "Spanish flu" that killed an estimated 40 million people probably came from pig farming.

Meat processing plants are at the centre of the COVID-19 outbreaks worldwide. Workers at meat processing plants typically stand elbow-to-elbow as they cut, debone and package chicken and beef, thus creating ideal conditions for COVID-19 to spread. At the time of writing, over 10,000 workers in the US alone had contracted the virus. Slaughterhouses and processing facilities have been forced to close or reduce capacity in response to labour shortages and social distancing requirements.

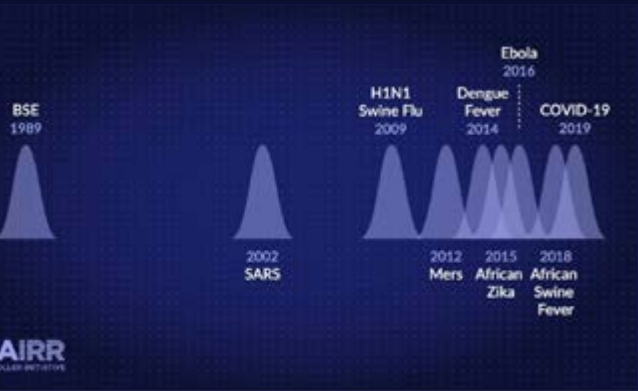
The disruption has led food industry giants such as Tyson Foods to warn in the Washington Post that meat's "food chain was breaking" and saw President Trump issue an Executive Order to label US meat-processing plants as critical infrastructure.

Regulatory pressure

It is, therefore, considered highly likely that we will, in the aftermath of the pandemic, see political and scientific pressure on the industry to take actions to avoid future zoonotic pandemics. Just as the response to the 2008 financial crash built stronger barriers to protect Main Street from Wall Street, so is the response to COVID-19 likely to build a stronger wall between animal-based industries and human health.

It is unlikely that this will come in the form of a 'meat tax' but it is certainly likely to increase the regulatory burden on the sector. For example, it may include enforcing firm, time-bound actions to phase out routine and preventative use of antibiotics, more frequent and rigorous testing for pathogens along the food supply chain, greater reporting and disclosure on health-related issues and the imposition of tougher food safety standards.

Figure 3: Zoonotic outbreaks are becoming more frequent



Chapter 3: Policy discussions

In our last paper, we explored parliamentary and regulatory discussions and proposals in Denmark, Sweden, Germany and China. All four countries had put an animal protein tax on the political agenda in some form, though not on the statute book.

This chapter explores how more of these discussions have emerged in the intervening years, most notably in the Netherlands, New Zealand and Germany. All of these instances have been driven by climate concerns.

It is also clear from the most recent swathe of proposals that lessons have been learned from other successful behavioural taxes, and tied incoming revenues from the tax to specific societal benefits, such as lower prices of fruit and vegetables or supporting farmers to transition to more climate-friendly produce.



3.1 New Zealand: Livestock as part of emissions trading by 2025

New Zealand's agriculture sector currently emits 48% of the country's total greenhouse gas emissions.²⁶

In April 2019, New Zealand's Climate Change Committee proposed a compulsory emissions price on agricultural emissions. The taxation recommendations outlined a two-step process for pricing methane and nitrous oxide emissions from livestock from 2025 onwards. The Committee suggested pricing emissions at the processor level as well as adding a farm-level levy with rebates for those that move towards lower emission land uses.

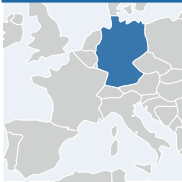
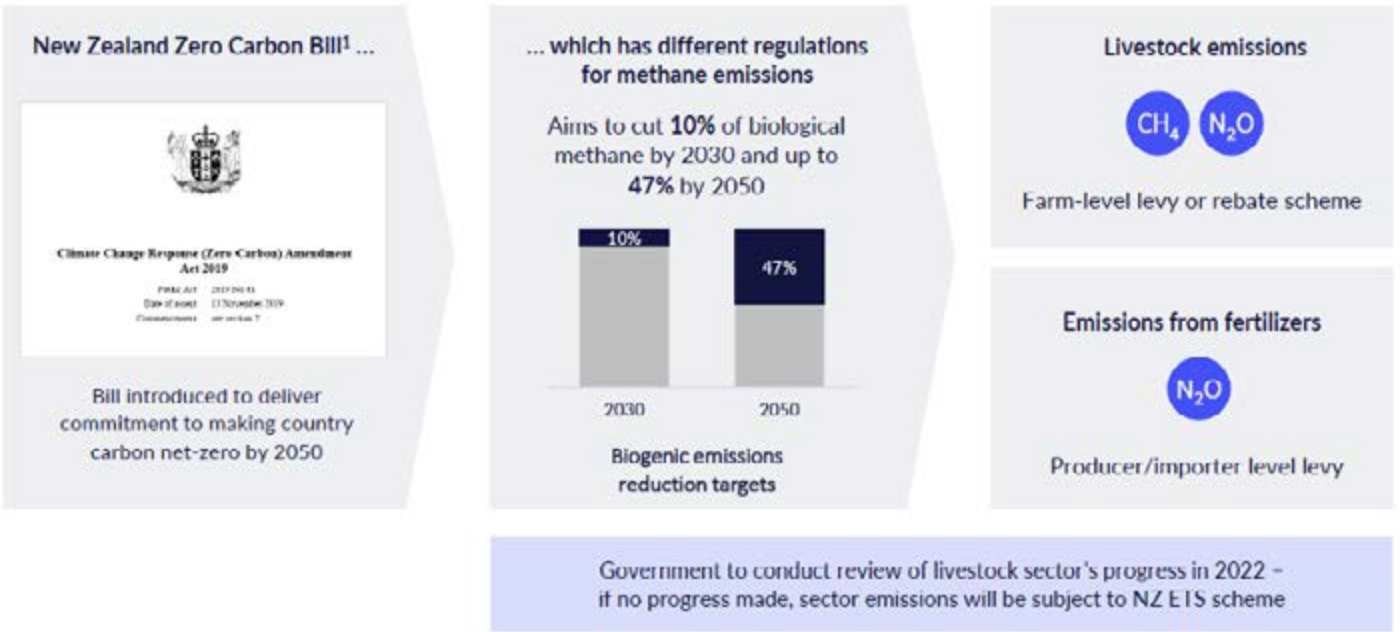
In October 2019, the original proposal was rejected, but an agreement was reached between the government and agriculture sector to foster on-farm emissions reductions and work towards implementing farm-level pricing by 2025. This means that farmers must make progress in finding ways to measure and price emissions at the farm level or face the introduction of penalties as early as 2022. This is also due to come under the Emissions Trading Scheme (ETS) in 2025, which would make New Zealand the first country to involve farmers in its ETS.²⁷

Meanwhile, Prime Minister Jacinda Ardern has made a landmark commitment to reach carbon net-zero by 2050. Under the Zero Carbon Bill, different regulations will be applied for methane emissions within the agricultural sector. Gross methane emissions must be reduced by 10% by 2030 and by 24-47% by 2050, relative to 2017 levels.²⁸

As part of the trailblazing legislation, the government will assist with providing improved tools for estimating and benchmarking emissions and develop integrated farm plans that include a climate module. It will also provide incentives for early adopters and recognition of on-farm forestry mitigation, such as small plantings, riparian areas and natural cover.²⁹

Though challenges remain in terms of defining who would be obligated to take part, and how emissions accounting systems would work, Ardern's pledge is set to spark further discussion as to whether farmers in other countries should participate in the EU's emissions trading scheme (ETS). Established in response to the Kyoto Protocol in 2003, the EU's ETS does not currently include agriculture in emissions trading alongside transport, buildings and waste.

Figure 4: New Zealand's Zero Carbon path



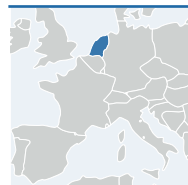
3.2 Germany: Sales tax on meat and dairy for climate reasons

In May 2017, Germany's federal environment agency proposed raising taxes on animal products such as liver sausages, eggs and cheese from 7% to 19% for environmental reasons. The increase in tax was designed to offset the agricultural industry's high methane emissions. A study conducted by the authority found that 90% of industry subsidies – totalling €57 billion per year, according to 2012 data – are harmful to the environment and work against Germany's implementation of the Paris Agreement³⁰. In February 2017, the Minister for the Environment announced a ban on serving meat at all official functions due to its environmental impacts.

In 2019, politicians from the Social Democrats and Greens proposed removing the lower tax rate on meat products, raising value-added tax (VAT) on meat and dairy from 7% to the standard rate of 19%, with additional revenue spent on improving animal welfare.

Currently meat and dairy in Germany are subject to a 7% VAT alongside fruit, vegetables and cereals, rather than the regular 19% tax rate. This led the Environment Agency to conclude that VAT

reductions on animal products such as meat and cheese amount to environmentally harmful subsidies, and due to the environmental harm caused by meat and dairy products, these commodities should face a higher tax rate³¹. The agriculture spokesperson for Angela Merkel's Christian Democrat party said it was open to some form of tax on meat, though suggested that the revenue should be used to help livestock farmers to restructure their businesses, rather than being invested in animal welfare initiatives. The debate of this issue in the German parliament, which coincided with the release of a UN report that warned of the need for a move away from livestock farming, marked a serious parliamentary consideration of the policy. Although German discussions have yet to result in a consensus, it is fair to say that, if any country is to pave the way for meat taxation, German consumers might be the most receptive to such a measure. The country has one of the highest rates of vegetarianism and veganism in the Western world and has witnessed a steady fall in the rate of meat consumption since 2011.³²



3.3 The Netherlands: A government-commissioned study into fair meat prices by 2021

In November 2019, the Dutch Finance Minister Menno Snel committed to a study into 'fair meat prices' in preparation for fiscal reforms in 2021. The announcement came after the TAPP (True Animal Protein Price) Coalition presented research in the Dutch parliament, outlining plans to establish a 'fair meat price' tax.

“This is a very interesting thought. Many food products are not priced right... We need to make the sustainable and healthy choice the mainstream choice.”

The Dutch conversation is having a ripple effect across Europe. Jeroom Remmers, Director of the TAPP Coalition, presented his findings at the UN's COP25 talks in Madrid in December 2019, and to the European Parliament in February 2020. TAPP has proposed that the 27 EU countries place a minimum tax on meat of €1 per kilogram

A levy of €0.10-27 per 100g of meat was proposed from 2021 onwards, rising to €0.20-57 in 2030. Revenues would be used to lower the prices of fruit, vegetables and plant-based meat alternatives while additional financial support would be given to farmers for sustainability. The TAPP Coalition demonstrated that the majority of the Dutch public was in favour of a 'fair meat price' if VAT was reduced on fruit, vegetables and meat alternatives, if farmers are compensated and if low-income households received compensation to account for the rising prices of meat and dietary shifts. The organisation argues that between 52-63% of the Dutch population is prepared to pay extra for meat, saying that the measures could reduce meat consumption by 50% by 2030 in the Netherlands.

From a policy perspective, the discussion in the Netherlands is at an early stage. However, with significant coverage in national media, the issue of a Dutch meat tax has firmly entered the public consciousness. It is even set to feature among the policy announcements of candidates running in the Dutch general election in 2021, following the results of the government-commissioned study. This study was published in April 2020 and included a proposal for a 'real price of meat' — an excise duty per kilogram of meat, based on environmental costs (GHG-emissions, nitrogen, particulate matter and biodiversity loss). It is a differentiated tax (beef and pork will have higher tariffs compared to chicken), which can be implemented in 2023 and will lead to revenues of €1.7 billion. This could be used to subsidise vegetables and fruits, as well as farmers for investing in sustainability. The effects are calculated to lead to a 2 Mton reduction in CO₂, 9,000 fewer patients (eg. diabetes 2, stroke, cancer) and a €57 million reduction in health care costs per year. The Dutch case also brings attention to how taxation on meat might be named, with the TAPP Coalition opting to label their proposals as a 'fair price' rather than a sales tax.

between 2023 and 2025. By 2030, this would rise to €4.77/kg for beef or veal, €3.61/kg for pork and €1.73/kg for chicken, reflecting the different health and environmental costs of different types of meat. TAPP argues these charges could reduce EU consumption of beef by 67%, pork by 57% and chicken by 30% by 2030, cutting Europe's carbon dioxide emissions by up to 120 million tons a year — nearly 3% of all EU greenhouse gas emissions.

The proposed meat tax would also raise €32 billion a year in revenue for EU governments. TAPP suggests that approximately €12 bn of this should be used to compensate farmers and help them adapt to either sustainable or more plant-based agriculture. Around €10 bn would be used to subsidise fruits and vegetables, which would lower the cost of healthy foods for consumers. Another €6 bn would then be spent on support for low-income households, preventing a punitive effect of new taxes on the poorest in society. Finally, €4 bn would be used for climate mitigation, afforestation and zero deforestation projects in developing countries.

Sabine Jülicher, the lead author of the European Commission's upcoming Farm to Fork Strategy said, "This is a very interesting thought. Many food products are not priced right... We need to make the sustainable and healthy choice the mainstream choice."

That presentation suggested that an EU-wide meat tax is unlikely in the short term, but momentum is clearly building in European capitals.

Meat Tax increasingly enters political rhetoric

- In January 2020, Green Party MP, Caroline Lucas, urged the UK government to consider imposing a levy on all meat products to reduce the GHG emissions that result from British farming
- In the US presidential election, Democratic candidate, Andrew Yang, argued that "internalising the cost of emissions" could be a potential policy for cattle producers.³³
- The introduction of a meat tax was a hotly debated topic in Finland's 2019 presidential election, with leaders of both the Social Democratic Party and Green League voicing support for a meat tax.³⁴

3.4 EU Green Deal: Could a meat tax finance Europe's low-carbon transition?

Europe's vision under the EU Green Deal to be the first climate-neutral continent will require bold action and innovative approaches to green finance. The Commission has been resolute that greater use of green budgeting tools will be needed to redirect public investment, consumption and taxation to green priorities, and away from harmful subsidies.

On the issue of taxation, Brussels has been forthright that well-designed tax reforms can play a key role in boosting resilience to climate shocks, adding that tax reforms can send the right price signals and provide the right incentives for sustainable behaviour by producers, users and consumers. The EU Green Deal makes clear that long-term signals are needed to direct financial and capital flows to avoid stranded assets. At the national level, the European Green Deal will create the context for broad-based tax reforms, shifting the tax burden from labour to pollution, while taking social considerations into account.

The Commission has acknowledged in the EU Green Deal that business-as-usual and conventional approaches will not be enough to achieve zero carbon by 2050. Brussels has proposed shoring up the EU budget for the bloc's ecological transition by seeking new revenue streams via "Own Resources". One of such streams suggested is based on the non-recycled plastic-packaging waste³⁵. The aforementioned proposal of a meat tax by TAPP has also generated significant discussion among Members of the European Parliament.

The EU Green Deal seeks to manage and integrate climate and environmental risks into the financial system and a meat tax would help to achieve this. At the time of writing, the EU Green Deal's Farm to Fork Strategy had been delayed due to COVID-19. Given the fact that COVID-19 represents another 'zoonotic' pathogen — an infection transmitted from animals to humans — it is likely to put the animal protein sector under the microscope and heighten calls for legislative action aimed at reducing the consumption of animal protein.



Chapter 4: Next steps for investors

Food and agriculture is an industry to which most large investors have some exposure. It is also one of particular concern to those pension funds and institutional investors whose fiduciary horizons extend into a future that will see a more crowded planet with a more volatile climate.

Although no legislature has thus far adopted a formal meat tax, the analysis in this document suggests that investors with exposure to global meat production should be conscious of this situation changing over the medium to long-term.

How can investors seek to better integrate this potential risk into their investment processes and active ownership activities?

The FAIRR Initiative is helping investors to quantify potential risk with its freely-available [Coller FAIRR Climate Risk Tool](#), newly launched in June 2020. As explained on page 9, this tool incorporates the assumption of a carbon tax on animal protein into its modelling, thereby enabling investors to quantify its impact on estimated future returns.

FAIRR also produces the annually-updated Coller FAIRR Protein Producer Index, which benchmarks 60 of the largest meat, fish and dairy companies on their sustainability performance. It runs several related engagements such as the Sustainable Protein engagement, which highlights the risks and opportunities posed by a reliance on industrially produced animal proteins. With that, it asks major food multinationals to future-proof their supply chains by diversifying protein sources.

Other ways in which these risks and opportunities may feature in active ownership strategies are included in the box below.

Potential meat tax-related questions that investors can ask investee companies in the food sector

- Have you performed a climate scenario analysis? Did this include the potential for additional taxation on meat?
- Have you identified the areas of your supply chain which are the biggest contributors to your emissions?
- What are your plans to mitigate your GHG footprint, and what targets have been set?
- Has the company considered diversifying its protein portfolio exploring more plant-based products to mitigate the potential impact of some form of additional taxation on meat?
- Have targets been set to reduce the meat content of certain composite product ranges?
- Has the company set clear meat supply standards to mitigate potential health and environmental risks? For example, does its meat production supply chain seek to reduce its environmental impacts, reduce the use of antibiotics or improve health and safety standards for workers?

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About FAIRR

Established by the Jeremy Collier Foundation, the FAIRR Initiative is a collaborative investor network that raises awareness of the material ESG risks and opportunities caused by intensive livestock production.

FAIRR helps investors identify and prioritise these factors through cutting-edge research that investors can integrate into their investment decision-making and active stewardship processes.

FAIRR also runs collaborative investor engagements with global food companies to improve performance on selected ESG issues in intensive livestock production.

Contact Us

www.fairr.org
[@FAIRRInitiative](https://twitter.com/FAIRRInitiative)
info@fairr.org