

**THE FUTURE OF FOOD:
ARE FOOD BUSINESSES ON TRACK TO DELIVER A SUSTAINABLE PROTEIN SYSTEM BY 2040?**

EXECUTIVE SUMMARY

Forum for the Future is a leading international sustainability non-profit with offices in London, New York, Singapore and Mumbai.

We specialise in addressing critical global challenges by catalysing change in key systems.

For over 20 years, we've been working in partnership with business, governments and civil society to accelerate the shift toward a sustainable future.

Together we are reinventing the way the world works.

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“The urgent need for the food system to transform, to enable a positive and sustainable future for people and the planet, has galvanised public interest. But we need to see companies taking a more ambitious, integrated approach to sustainable nutrition – and that means addressing sustainability across plant, meat and dairy production and consumption; and putting sustainable protein at the core of business strategies.

Businesses can lead the change needed and the five-point plan is designed to accelerate progress. The big question is what their business will look like in a world where sustainable, nutritious, affordable protein is the norm – and start shaping that future, today.”

Lesley Mitchell, Associate Director for Sustainable Nutrition at Forum for the Future



To download the full report visit:
forumforthefuture.org/the-future-of-food

EXECUTIVE SUMMARY

The food industry is at the centre of a number of major global challenges: among them how we address climate change and biodiversity loss, while also delivering healthy, nutritious food for all in the face of shrinking resources and a growing global population.

The food system can transform at scale and pace to deliver sustainable nutrition that is good for both people and planet. But, in the face of a growing emergency for climate and biodiversity, is it on the right trajectory given the time we have left?

This report assesses how a key aspect of our food system - protein - is changing. We know that our production and consumption of protein is in need of rapid transformation. This essential component of our diets is linked to a number of critical sustainability issues and, most prominently, to the climate challenge. Business as usual is not an option. For example, if the number of livestock continues to grow on its current trajectory, their cumulative emissions between now and 2050 could be equivalent to one third of the total remaining 1.5°C carbon budget. At the same time, much of the fertiliser applied to boost protein production ends up as a pollutant in waterways, while pressure on our natural ecosystems is at breaking point.

These critical issues formed the basis for the “Protein Challenge 2040” - one of the first ever international protein collaborations, centred on a core challenge: how do we provide up to 10 billion people with enough

protein in a way that is healthy, affordable and good for the planet? Formed in 2015 and facilitated by Forum for the Future, it brings pioneering businesses and NGOs together to focus and accelerate systemic change toward a new approach to protein. Through detailed diagnosis, this landmark collaboration identified a number of major impact areas in need of rapid transformation, which coalesced into two key workstreams: rebalancing protein in our diets; and building a sustainable future for animal feed.

Over the last four years the scale of attention to protein has increased rapidly. From the latest insights released by the World Resources Institute in 2018 to those from the EAT-Lancet Commission and the Food and Land Use Coalition in 2019, research highlights the need for a dramatic shift toward plant-based diets in Western diets, and the need to address the sustainability of meat and dairy production. And protein has hit public consciousness over the last 18 months, from excitement around innovative alternative protein sources, innovations in animal feed such as insects, a public debate raging around the future of meat in our diets, and a renewed focus on the role of our food system in the climate challenge.

In all this noise, this report aims to cut through the hype to understand whether current commitments and activities will all add up to a big enough change to meet our global challenges. Are businesses ready to deliver a sustainable protein system and what action is needed to make this transformation happen?

It shines a light on the current ‘State of the Market’, assessing the public commitments of 132 of the largest and most influential businesses globally that interact with protein - across retailers, food service, food and ingredient manufacturers, meat and dairy producers and feed producers, as well as understanding the enabling forces that shape markets: governments, NGOs and the investor community. It asks whether companies are:

- **Enabling rebalancing of Western diets towards a more diverse selection of proteins - especially plant proteins?**
- **Engaged with livestock protein by working to enable sustainable animal feed?**
- **Taking an integrated approach to protein in their business’ overall strategies?**

These are important indicators of what progress is being made, although it is worth noting that a comprehensive business strategy needs to cover a number of related impact areas, from animal welfare and management of fish stocks and aquaculture to regenerative agriculture practices and management of protein waste.

KEY FINDINGS

We are seeing the seeds of transformation, with signs of change towards a diverse and sustainable protein offer, for example:

- The **inclusion of plant-based meals** by catering companies such as Sodexo, Compass and BaxterStorey.
- High-profile **acquisitions of disruptive plant protein companies** by food businesses, especially in the EU and US, such as Sweet Earth, acquired by Nestlé and WhiteWave, acquired by Danone, both in 2017.
- The **launch of blended meat products** from a number of meat producers, alongside launches of plant-based ranges across the globe, from US retailer Kroger with its Simple Truth plant-based range to UK retailer M&S with its vegan Plant Kitchen range.
- The **emergence of novel animal feedstocks** such as insects, algae and single cell proteins from both innovative start-ups and market leaders such as Corbion and Cargill. And retailers such as Waitrose starting to work towards use of home-grown forage crops in their supply chains.
- **Commitments towards high-profile issues**, such as reducing the fishmeal used in aquaculture and ensuring deforestation-free soy, a key ingredient in animal feed, often grown in regions where important natural ecosystems are at risk, such as the Cerrado in Brazil.

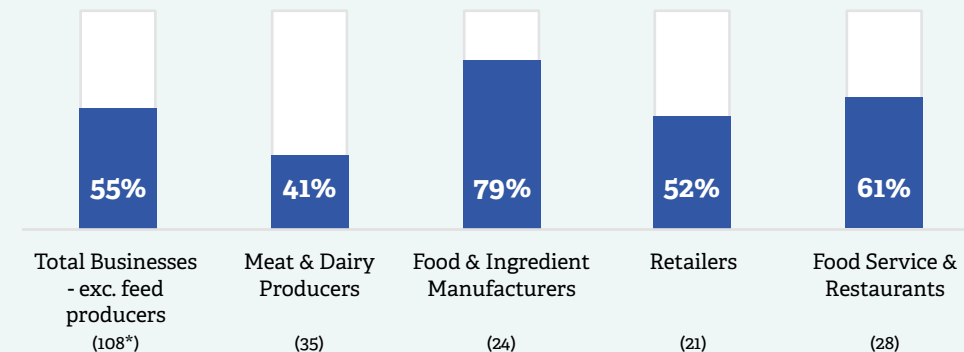
White heat or white noise?

We have seen dramatic innovation in alternative protein offers: 55% of the reviewed companies report activities to increase the availability of plant protein products for human consumption. Some of the most significant progress we observed was in the food service sector with 61% of businesses adding new plant-based meals to menus and 52% of retailers also now having a clear plant-based offering.

This picture is rapidly evolving, even as we write this report, with 79% of food brands either investing, acquiring or launching new plant-based products and recent launches of blended meat and plant products from some of the largest meat producers in the world such as Tyson, Vion, Tulip, JBS and Smithfield.

Rebalancing protein in Western diets

% of businesses actively advancing plant protein in portfolios or menus in the public domain*



*For meat and dairy producers and food and ingredient manufacturers, includes: acquisitions, investments, new innovations, public commitments to expand range. For retailers and food service and restaurants, includes: new plant-based meals on menus, sales based targets, clear and promoted plant protein proposition on website, public commitment to expand range.

55%
of businesses are increasing availability of plant protein for human consumption

Sustainable animal feed is still a new issue:

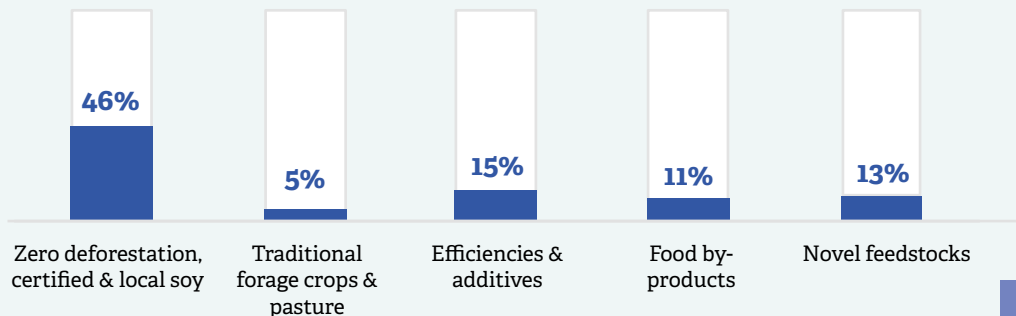
Only a third (33%) of businesses are starting to make shifts towards delivering sustainable feed beyond single issue commitments, for example to zero deforestation soy, with the least public action coming from food service (only 25% have commitments towards responsible soy and even fewer have actions in feed beyond these single issue areas). The use of traditional forage crops and pasture-fed strategies received the least public attention from businesses across protein with only 5% highlighting activities in this area.

While 24% of feed and feed ingredient producers refer to research and development on novel feedstocks such as algae and insects, transforming this into mainstream production is a long way in the distance with little public commitment towards it from food and ingredient manufacturers or retailers.

Projects such as Feed Compass - part of Protein Challenge 2040 - promote collaboration across the supply chain to drive action on sustainable feed, but more widely action still seems in its infancy. This is potentially a significant risk for the livestock sector and may contribute to animal protein being further challenged as part of a future sustainable diet.

Sustainable animal feed

% of businesses with public actions or commitments to each feed strategy*



*Total number of businesses included is 132; The numbers in the chart will not add up to 100%, as some businesses may occur twice if they are using a variety of strategies e.g. have a commitment towards zero deforestation soy and are also experimenting with novel feedstocks.

33%
of businesses are working on sustainable feed beyond single issue commitments

Integrating action across protein:

When looking for wider strategic transformation, few companies appear to be systemically joining the dots on integrated protein strategies to deliver better end outcomes for people and planet. On the surface, the numbers are promising: 45% of businesses reviewed have activities in their protein portfolios relating to both diversifying protein and sustainable animal feed. But this is fragmented, with the bulk of progress focused on product innovation in plant-based food and the specific commitment to transition to zero deforestation or certified soy in feed. A refocusing of food companies' strategies toward an integrated approach to sustainable protein is overdue.

Integrated protein strategies

% of businesses with public actions or commitments to each strategy area

45%

of businesses have actions across both rebalancing protein in Western diets and sustainable animal feed*

15%

of businesses have actions across rebalancing protein in Western diets and sustainable animal feed that go beyond sustainable soy*

15%

of businesses have developed a sustainable nutrition narrative*

11%

of businesses have Scope 3 emissions targets (time bound commitments to lower emissions from their supply chain and post consumption)**

* Includes 108 businesses (exclude feed and feed ingredient manufacturers as they are largely not active in rebalancing consumer diets); ** Includes all 132 businesses

Increasing access to alternative protein products in retail and food service is promising, but what motivation underlies this? Is it simply a response to today's consumer zeitgeist, or a deeper commitment to delivering healthy sustainable diets?

Deep systemic change is urgently required. For example, new innovations in animal feed often remain more expensive and require greater structural change in the market to scale; change requires clear commitments from the market, and advocacy to signal what changes are needed in subsidies and incentives to make this a reality.

Uptake of protein alternatives and new plant-based proteins requires a **revolution in how we make and eat food based on new culinary skills** which, to date, have only been a focus for a few food service companies.

Most importantly, for true mainstream transformation, **pre-competitive action is essential.** Working together with others can reap huge benefits: or example, look at the impact of organisations joining together to deliver against time-bound commitments on zero-deforestation through collaborations such as The Tropical Forest Alliance 2020.

The narrative emerging from businesses is slow to mature into one that includes both **sustainability and nutrition as explicit goals.** This is needed to deliver good outcomes for people and planet, and to prevent any unintended consequences, or a consumer backlash. And, despite a number of food businesses and retailers setting climate targets that cover their supply chains, few are publicly making the connection with their protein portfolio, potentially missing opportunities to lower emissions through development of alternative feed or rebalancing product portfolios towards plant protein.



SHAPE UP FOR THE NEW PROTEIN SYSTEM: A FIVE-POINT PLAN

There is huge potential on the horizon for companies to lead a transformative shift anchored around sustainability, health and nutrition and to send a strong demand signal for change via integrated public strategies and commitments. Here we present five key recommendations to drive truly transformative action:

1. Develop an integrated protein strategy:

Develop an integrated protein strategy that puts sustainable nutrition at the centre of delivering healthy diets, links to corporate climate targets and covers key protein impact areas.

2. Make public, time-bound commitments:

Make public, time-bound commitments to shift to sustainable animal feed that send clear signals to the market.

3. Embed across the business:

Focus resources on understanding the shifts needed across all consumer product portfolios to embed and enable healthy balanced diets, and how to align this across all business functions with a supportive business model, led from the top.

4. Collaborate:

Identify and collaborate on pre-competitive challenges, from shifting our food culture and transforming across the value chain to creating an effective enabling environment for scaling sustainable animal feed.

5. Advocate for change:

Advocate for change across the food sector, engaging policymakers and institutions. With 10 years left to address the climate challenge, businesses can play an active role in engaging policy makers, investors, funders and NGOs to accelerate action - sending a clear signal for outcomes that deliver both sustainability and nutrition outcomes and shifting incentives in the market.

Policy makers, trusts and foundations, investors, and NGOs can also be part of leading and accelerating progress on this critical challenge by assessing their role using tools such as Forum for the Future's Scaling up Impact framework featured below.



Figure 4: Forum for the Future's Scaling Up Impact Framework highlights key actions needed from trusts & foundations, policy makers, investors, and other convenors of change in order to enable systemic change on protein.


CALL TO ACTION

We can be sure that the future of food will look very different and business as usual is not an option. Food businesses need to urgently future-proof themselves and their supply chains by moving beyond the current surge of product innovations to deliver integrated protein strategies that cover the production as well as consumption of protein and actively drive better outcomes for sustainability and nutrition.

What will food businesses look like when sustainability is mainstream and our value proposition is based on nutritious, affordable protein consumption?

Today's business leaders can shape that future. Many in the food industry are already starting to take a leading stance; what is your role in this rapidly changing picture?

To access the full toolkit for protein businesses and enabling organisations visit forumforthefuture.org/the-future-of-food



“The global food system is at the very heart of the climate crisis, both through its greenhouse gas emissions and the impact of weather extremes on production systems and changing consumer/regulatory sentiment on markets.

This report highlights that while welcome steps are being taken in response, business commitments and actions are still far short of the pace and extent of the change that’s needed. I see real opportunities for businesses that are prepared to lead in this space and embed sustainable protein into their core business strategies.”

Mike Barry, Sustainable Change Maker
(ex. Director of Sustainable Business, M&S)

PROTEIN CHALLENGE 2040

The Protein Challenge 2040 is a forward-looking, international, multi-sector collaboration across industry and NGOs working to accelerate action on sustainable protein. It is facilitated by international sustainability non-profit Forum for the Future, bringing 20 years of expertise in running multi-stakeholder collaborations to solve complex sustainability problems.

We believe there has been enough talk about the problem. We seek to catalyse action that fundamentally shifts the system we all operate in.

In 2015 this international collaboration undertook an exhaustive diagnosis process to understand the key sustainability challenges that the food system faces around protein. Through this process we identified six key points of change and developed and tested collaborative responses to unlock barriers, prioritising those where interventions were perceived to have the greatest impact potential.

From this we focused our collaborative efforts on two priorities and developed pilots for each area. Alongside exploring visions for a sustainable future for the protein system, our pilot projects addressing these two areas are designed to test what it takes to shift the whole system: in practice, this means combining several solutions, working collaboratively and looking to the long-term.

Sustainable animal feed

Addressing protein production with a particular focus on how to scale up use of sustainable animal feed for fish and livestock.

Pilot: Feed Compass

Providing support and advocacy that influences organisations to take more ambitious action on feed. This includes the development and testing of Feed Compass principles that outline the qualities of sustainable animal feed for shaping decision making.

Rebalancing protein consumption

Reducing the total quantities of protein consumed in Europe and the US in line with individual country dietary guidelines; improving the sustainability of the meat, fish and dairy that's consumed; and increasing the proportion of non-animal protein in the average diet by 50%.

Pilot: Chefs Challenge

Increasing the supply of skills into the food industry for creating and cooking great tasting rebalanced dishes with a greater proportion of plant protein, by testing how to transform mainstream chefs training.

Pilot: School Meals

Influencing next generation behaviour by testing how to get more plant-based protein meal options into the US school lunch programme, alongside testing approaches to shifting mindsets to make plant based options more acceptable, normal and desirable.

JOIN US

The window for us to solve this huge challenge is shrinking fast. Get involved today and join our dynamic collaboration - **The Protein Challenge 2040** - to benefit from being part of a network that shares collective expertise and influence. To find out more, contact Roberta Iley on r.iley@forumforthefuture.org



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To find out more about the Protein Challenge 2040 visit: www.forumforthefuture.org/protein-challenge

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