

# WWF report Bending the Curve: The restorative power of planet- based diets

## Summary brief for business

### Introduction

The World Wide Fund for Nature (WWF) on October 9, 2020 launched the report "Bending the Curve: The Restorative Power of Planet-Based diets" as well as an online [Planet-Based Diets](#) platform to increase the understanding of the impact of dietary choices at the national level. The report analyses the impacts of food systems on environmental and human health while proposing a shift towards "Planet-Based diets", which are based on healthy and sustainable ingredients produced within planetary boundaries and adaptable to local contexts. This summary brief highlights the main points relevant to businesses.

What makes this report so important is that it highlights the need for locally adaptable sustainable diets, which is fully aligned with the work done by WBCSD's Food & Nature projects.

The report calls for a holistic approach to transforming food systems that considers local environmental, social and nutritional aspects. By implementing Planet-Based Diets, the world is expected to reduce 30% of food-based greenhouse gas (GHG) emissions, wildlife loss by 46%, agricultural land-use by at least 40% and premature deaths by at least 20%. By implementing this change in diets, as well as decreasing food loss and waste and shifting towards more sustainable food production practices, it will become possible to deliver healthy and sustainable diets for up to 10 billion people within planetary boundaries.

The report analyses data from 147 countries, six diets and eight human and environmental health indicators which were also used to develop an [Impact & Action Calculator](#) allowing users to customize diets across 13 food groups in order to determine national-level environmental and health impacts for various diets.

National Dietary Guidelines (NDGs) were also reviewed for 75 countries, as they are an important informative tool for governments, consumers and the private sector in guiding public health policies within a local context while promoting a healthy diet.

This report highlights the importance of the work of the Food and Agriculture Roadmap Chapter on Healthy Diets, which provides companies with targets, key action areas and solutions to ensure we can achieve healthy and sustainable diets for all. In addition, this report will be helpful input for the preparations for the summits scheduled for next year; the Convention on Biological Diversity COP15, the UN Convention to Combat Desertification COP15, the UN Framework Convention on Climate Change COP26, the UN Food Systems Summit and the Nutrition for Growth Summit.

## Headlines you need to know from the report

- **Our current diets have negative environmental and health effects:**
  - Diets are responsible for 27% of GHG emissions, 70% of freshwater withdrawals, are a main driver of nature loss and tropical deforestation (80% of mammal and bird species are at risk of extinction due to agriculture), and increase the risk for future pandemics.
  - Two thirds of food-related emissions are from the agriculture, forestry and land use sector (AFOLU) while one third of the emissions originates from processing, transport and packaging.
  - Global adoption of current G20 food consumption patterns by 2050 would **exceed the planetary boundary for food-related GHG emissions by 263%** and would require up to seven Earths to support these patterns of food consumption. On average, food-related GHG emissions in G20 countries as a whole need to be approximately halved by 2050 to ensure we can feed 10 billion people healthy diets within planetary boundaries and enable a more equitable global distribution of food-related GHG emissions.
  - 1 in 3 people are overweight or obese, 1 in 12 people are hungry or undernourished, current diets are the leading cause of death, and no country is on course to meet the 2025 global nutrition targets.
  - Although undernutrition, excess weight and obesity affect most countries, the rate of underweight people is up to **10 times higher in the poorest countries** while the rate of overweight and obese people is up to **5 times higher in the richest countries**.
- Fixing the food system could be the most effective pathway to navigate the planet to or close to a safe operating space of the planetary boundaries. The report calls for **five areas of action**:
  - 1. Reversing nature loss from food production:** rapidly slowing down and moving toward zero loss of nature from food production while also using agricultural systems to and regenerate nature and ecological integrity across the planet.
  - 2. Living within the global carbon budget for food:** reducing total greenhouse gas emissions from food production to at most 5 Gt CO<sub>2</sub>-eq – which means we grow our food within planetary boundaries.
  - 3. Feeding humanity on existing cropland:** stopping expansion of new cropland, or any agricultural land, at the expense of natural habitats, supplying future food demand on the same area of land as today (or ideally less).
  - 4. Achieving negative emissions:** moving agriculture from a carbon source to a carbon sink, including freeing up existing agricultural land that can be reforested or restored and rapid implementation of food production practices that increase carbon storage.
  - 5. Optimizing crop yields:** using all agricultural lands to their maximum potential including optimizing crop yields through better food production practices that more efficiently use water and fertilizers, preserve ecosystem functions and contribute to resilient landscapes.
- To stay within planetary boundaries, our carbon budget for food is set at 5Gt CO<sub>2</sub>-eq however food-related emissions are currently at 14 Gt CO<sub>2</sub>-eq. **To mitigate the 9 Gt CO<sub>2</sub>-eq in excess, dietary shifts will not be enough and other mitigation activities will be required at the global level.**
- **We have the potential to reduce global nature loss by 5% with a flexitarian diet, and by 46% with a vegan diet.** In the Latin American and Caribbean regions, nature loss could be reduced by approximately 50% to 70%, depending on the dietary pattern adopted. A reduction of cropland used for livestock feed can free up to 460 M ha of arable land for human consumption.
- Lower income countries are showing increasing levels of nature loss to tackle under-nutrition as more agricultural land is needed to feed the population. In this context, it is **critical to combine dietary shifts with sustainable agricultural practices and reduce food loss and waste.**
- Food imports from biodiversity-rich countries are a driver for nature loss. In Denmark, the consumption of coffee, tea, cocoa and spices from tropical regions account for more than half of its impact on nature loss as a result of food production and national dietary patterns.
- The report highlights a need to increase international trade from high-yielding and less biodiverse countries to lower-yielding and more biodiverse nations to optimize global land use and reduce nature loss.

## Creating the enabling environment for change

Food systems transformation will be integral for the world to be able to deliver the Paris Climate Agreement and the SDGs. COVID-19 has exacerbated the fragility of our current systems, showing the vulnerabilities and at the same time the cruciality of vital supply chains. The current pandemic has been a catalyst for food system transformation and its extended duration opens a window for incremental system shocks (political, trade, conflict, financial, environmental), which greatly influences the shape of change. Business has an urgent, critical role to protect people's livelihoods and nutrition in the face of COVID-19 and advance collective efforts to build

an equitable, sustainable and resilient food system for all. Next year's Food Systems Summit and the Nutrition for Growth Summit will be key milestones for the world to adopt commitments and renew our relationship with how we produce and consume food. The Action Tracks launched by the UN Food Systems Summit secretariat showcase that the Summit will make a direct link to nature, climate and people.

The WWF report clearly outlines the need for a range of policy levers to be implemented at the national level to support a dietary shift towards Planet-Based Diets and succeed in the five strategic actions. It shows that National Dietary Guidelines (NDG)

are an important tool to guide dietary recommendations within a local context, however not all the NDGs are compatible with global health and environmental targets such as the Paris Agreement or the global health agenda on non-communicable diseases. Looking at the Nationally Determined Contributions (NDCs) for climate, including measures that include leveraging dietary shifts at the country level could be hugely beneficial. Further to dietary shifts, we will need a reduction in GHG emissions from the food sector which includes sustainable food production practices, decarbonizing the food value chain and reducing food loss and waste.

## What can business do?

This report echoes the many reports launched last year, which highlight the need for change – for our health and the wellbeing of our planet for future generations. Now is the time to mitigate the impacts of food systems on nature loss, GHG emissions, food loss and waste, hunger and malnutrition. One of the key levers pointed out is the need for dietary shifts as a tool to influence environmental and human health on a country basis. The report uses the planetary boundaries framework to show that the current way food is produced is outstripping natural resources. To feed 10 billion people by 2050 while bending the curve on nature loss and living within the global carbon budget for food, we will need to move away from business-as-usual and focus on sustainably improve crop yields where possible to optimize production on all available land while also considering where key habitats and ecosystem services can be restored.

WBCSD's CEO Guide to Food System Transformation outlines seven transformation pathways and clear actions for CEOs to transform our food system in the next decade. It highlights the business leadership needed for a deep, rapid and systemic transformation

of the food system to achieve healthy people and a healthy planet. WBCSD is now developing a Food and Agriculture Roadmap to operationalize the CEO Guide's transformation pathways and it builds on the body of work developed by our [Food Reform for Sustainability and Health \(FRoSH\)](#), [Scaling Positive Agriculture \(SPA\)](#) and [Global Agribusiness Alliance \(GAA\)](#) projects. The Roadmap sets out transformational targets, key action areas and solutions urgently required to transform food systems to achieve environmental sustainability, equitable livelihoods, and healthy and sustainable diets for all. Grounded in scientific and economic analysis, the Roadmap helps companies prioritize and develop business-led solutions while advancing supportive policy, regulatory and financial frameworks.

The transformational targets identified in the Roadmap will be used to support the development of the Responsible Business Pledge for Better Nutrition's commitment areas. The Roadmap will help determine where collective commitments could have the greatest impact based on the gaps identified in achieving the identified targets. The

Pledge has been developed by WBCSD, GAIN, IFBA, FIA, CGF and ATNF as a framework for generating ambitious private sector commitments in the lead up to the Tokyo 2021 Nutrition for Growth (N4G) Summit.

Additionally, WBCSD previously launched a [protein pathways white paper](#) to guide transformation in food systems. This work has identified business solution spaces that have the potential to reduce agricultural GHG emissions from 8.8 GtCO<sub>2</sub>-eq down to 1.6 GtCO<sub>2</sub>-eq by 2030 and increase the land area that could support biodiversity conservation by more than 20% by 2030, emphasizing the need for dietary shifts as an urgent action.

## WBCSD in Action

Please take a look at our recently launched [Chapter 1 on Healthy Diets from the Food and Agriculture Roadmap](#). This Chapter puts forward a set of transformational targets, action areas and solutions primarily aimed at the food and agriculture sector to provide healthy, accessible, enjoyable food for all, produced in a socially responsible manner within planetary boundaries.

WBCSD is convening a series of Science-to-Policy Dialogues of which the first dialogue workshop took place from 8-10 September, bringing together representatives from business, academia and civil society to co-construct transformative food systems-related policy asks after a month-long discussion process.

Please find [here](#) the outcome paper of this process. For more information, please contact Susanne Kat ([kat@wbcسد.org](mailto:kat@wbcسد.org))

Join the Bold Actions for Food as a Force for Good virtual event hosted from 23-24 November.

This event will focus on accelerating action to transform food systems by bringing together leaders from governments, the private sector, civil society and academia. For more information, please contact Clea Kaske-Kuck ([kaske-kuck@wbcسد.org](mailto:kaske-kuck@wbcسد.org))

## Working together to deliver solutions

WBCSD is working with members on solution areas to create and mobilize a collective voice of business and create solutions to deliver against these challenges through the [Food & Nature Program](#) which includes projects such as [Scaling Positive Agriculture \(SPA\)](#), Food Reform for Sustainability and Health ([FReSH](#)),

[True Value of Food](#), and the [Global Agribusiness Alliance](#). WBCSD also participates in multi-stakeholder initiatives like the [Food System Dialogues](#), the [Food Action Alliance](#) and the [Food and Land Use Coalition \(FOLU\)](#).

## Additional resources

Download the full report: [Bending the Curve: The restorative power of planet-based diets](#).

WBCSD has published business summaries of other important reports. Please see the [EAT-Lancet Commission on Food, Planet, Health](#) with the business summary [here](#); [FOLU Growing Better Report](#) with the business summary [here](#).

## About the World Business Council for Sustainable Development (WBCSD)

WBCSD is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world. We help make our member companies more successful and sustainable by focusing on the maximum positive impact for shareholders, the environment and societies.

Our member companies come from all business sectors and all major economies, representing a combined revenue of more than USD \$8.5 trillion and 19 million employees. Our global network of almost 70 national business councils gives our members unparalleled reach across the globe. Since 1995, WBCSD has been uniquely positioned to work with member companies along and across value chains to deliver impactful business solutions to the most challenging sustainability issues.

Together, we are the leading voice of business for sustainability: united by our vision of a world where more than 9 billion people are all living well and within the boundaries of our planet, by 2050.

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