



FIXING THE BUSINESS OF FOOD

HOW TO ALIGN THE AGRI-FOOD SECTOR WITH THE SDGs

EXECUTIVE SUMMARY



Columbia Center
on Sustainable Investment
A JOINT CENTER OF COLUMBIA LAW SCHOOL
AND THE EARTH INSTITUTE, COLUMBIA UNIVERSITY



This publication has been realized by the Barilla Foundation, UN Sustainable Development Solutions Network (UN SDSN), Columbia Center on Sustainable Investment (CCSI), Santa Chiara Lab - University of Siena (SCL).

The authors are Al Khatib Maher (SCL), Antonelli Marta (Barilla Foundation), Cordes Kaitlin Y. (CCSI), Cresti Simone (SCL), Espinosa Gaëlle (UN SDSN), Ocampo-Maya Carolina (CCSI), Riccaboni Angelo (SCL), Rossi Adriana (SCL), Sachs Lisa E. (CCSI), Sachs Jeffrey (UN SDSN), Schmidt-Traub Guido (UN SDSN), Sofra Elena (SCL), and Tozzi Cristiana (SCL).

September 2020

www.barillacfn.com - info@barillacfn.com

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Barilla Foundation.

Please quote this publication as:

Sachs J. et al., 2020. "Fixing the business of food. How to align the agrifood sector with the SDGs", Barilla Foundation, UN Sustainable Development Solutions Network, Columbia Center on Sustainable Investment, Santa Chiara Lab University of Siena.

ISBN 9788894528084





EXECUTIVE SUMMARY

What does it mean for a food and agriculture company to be aligned with the Sustainable Development Goals (SDGs)? Despite growing corporate sustainability efforts, the answer to this question remains unclear. Companies, investors, consumers, and citizens continue to face challenges in understanding what it means for a company or an investment to be considered “sustainable” or not. The lack of a rigorous and comprehensive framework through which to assess corporate alignment with the SDGs leaves companies without clear guidance on supporting SDG achievement. This gap also enables companies to downplay some areas of the SDGs when reporting on their sustainability performance.

In 2019, the Fixing the Business of Food Initiative presented a Four Pillar Framework for alignment of the food and agriculture sector with the SDGs. This report presents a deeper iteration of that conceptual framework to guide business alignment with the SDGs and the Paris Climate Agreement (PCA), specifically companies in the food and agriculture sector. We propose a Four Pillar Framework, which seeks to contribute to corporate SDG alignment by bringing rigor and clarity on the aspects of business activity that affect the SDGs. To understand how the framework might be applied to the food and agriculture sector, the report also elaborates on the key environmental, nutrition, and social & governance topics that companies in the food and agriculture sector need to tackle in order to achieve the SDGs. The report further assesses current sustainability reporting standards, frameworks, and certifications against the Four Pillar Framework and key identified topics, exploring whether available reporting instruments sufficiently support SDG alignment. It concludes by examining how business indicators might be developed under the Framework to support its application, using greenhouse gas (GHGs) emissions as an example.

THE FOUR PILLAR FRAMEWORK FOR CORPORATE SDG ALIGNMENT

The Four Pillar Framework has been developed based on more than a year of research and consultation with diverse stakeholders, and it will continue to be refined and elaborated moving forward. It identifies four dimensions of all business activity that holistically and indivisibly impact society and the planet, as described in the box below. The Framework aims at providing a tool for businesses of all sectors to align with the SDGs and the PCA. In this report, it has been specifically applied to the food and agriculture sector, and it is evolving.

1. BENEFICIAL PRODUCTS AND STRATEGIES

This pillar addresses the impact of companies' products, services, and strategies on human well-being and the planet's sustainability. For the food sector, this pillar focuses on business contributions to healthy and sustainable dietary patterns through their products and strategies. This includes whether product lines are healthful, and whether product use is conducive to well-being and supportive of improved living standards and consumers' life goals.

2. SUSTAINABLE BUSINESS OPERATIONS AND INTERNAL PROCESSES

This pillar considers the environmental and social impacts of business operations, including their production processes and other internal processes, with a focus on issues such as resource use (land, water, energy) and emissions, respect for human rights, diversity and inclusion, and decent work conditions that improve livelihoods of employees and their families. It also assesses whether companies encourage and reward conduct that strives to internalize externalities.

3. SUSTAINABLE SUPPLY AND VALUE CHAINS

This pillar reflects the company's role in and responsibility for the broader ecosystem of which it is part, including its interaction with its supply chain and value chain, producers, clients, consumers, and the industry in which it operates. This pillar focuses on whether the company supports realization of the SDGs through these interactions, and whether it collaborates to promote, incentivize, and ensure more sustainable practices and better livelihoods within its own value chain as well as within the relevant industries or sectors that its operations influence.

4. GOOD CORPORATE CITIZENSHIP

This pillar refers to how companies engage externally and how they seek to influence the rules that govern them. It assesses whether companies avoid strategies that would diminish social goods or societal well-being, and whether companies value and do not undermine the crafting and effective deployment of law and policies that advances sustainable development.



PILLAR 1

Pillar 1 in the food and agriculture sector refers to its contribution to healthy and sustainable dietary patterns through its products and strategies.



It denotes the products and services that a food company offers to the market, with a focus on the product's or service's qualities, its impact on human health and well-being, and its impact on the planet's sustainability. It recognizes that marketing and consumption of a company's products has a direct impact on individuals' health and well-being. The impact that a product has on health and well-being can result from factors such as: its ingredients; its nutritional value; its labeling; how it is marketed; how information about the product and about diets generally are communicated to consumers; and whether it supports the availability and affordability of nutritious foods. The shift towards more sustainable and healthier diets is a strong leverage to improve both planetary and human health, provided that over 70% of global deaths are caused by Non-Communicable Diseases and up to 37% of anthropogenic GHG emissions are related to food systems from farm to fork to disposal.¹

KEY AREAS OF IMPACT AND SDG-ALIGNED PRACTICES

- Embed nutrition-related commitments and targets to address undernutrition within the company's core business strategy and governance operations, tailored specifically to different market and geographical contexts.
- Disclosures related to the nutritional information of portfolios, with plans and targets to progressively transition towards more healthful products and portfolios.
- Clear, transparent, and accurate labeling of products.
- Marketing policies and strategies of products and brands that give primacy to healthy, nutritious, and sustainable diets and products, especially concerning children and other vulnerable groups.
- Commitments to food safety.
- Commitments to producing and marketing products and services in a manner that supports consumption patterns aligned with human health and planetary boundaries.



PILLAR 2

Pillar 2 encompasses a company's responsibility to adopt and implement socially and environmentally sustainable practices across its business operations (including production processes) and internal management.

This pillar covers many of the issues that are traditionally considered in ESG frameworks. It takes, as a starting point, basic accepted premises: chief among them, that companies must respect and not violate human rights and labor rights, and that companies must follow environmentally sound practices. The pillar also expands beyond those minimum requirements of doing no harm to address how food businesses can further actively contribute to the achievement of SDGs through their specific operations.

KEY AREAS OF IMPACT AND SDG-ALIGNED PRACTICES

- Robust and accurate disclosure of human rights and labor rights² compliance, beyond policy commitments, and action plans to eliminate any abuses across production processes and operations.
- Remuneration for all company employees and contractors that is “sufficient to afford a decent standard of living for the worker and her or his family”.³
- Operational principles to support the recognition and respect of land tenure rights and water and other natural resource rights (including legitimate but not formalized rights) of individuals and vulnerable rights holders, including disclosures of related grievances and remedies.
- Explicit integration of diversity and inclusion practices in corporate internal processes.
- Internal management and governance that supports alignment with the SDGs. This includes: representative and inclusive board composition, and executive compensation plans that are linked to performance aligned with the SDGs as explained under the Four Pillars.
- Incorporation of science-based targets and guidance to both measure and abate the impacts of food production on “climate change, biodiversity loss, freshwater use, interference with the global nitrogen and phosphorus cycles, and land system change (and chemical pollution)”.⁴
- Mitigation of internal processes' impacts on air and climate through the reduction of GHG emissions.
- Monitoring of internal processes in order to protect and restore soil and terrestrial habitat, addressing nature and biodiversity issues in local contexts.
- Ensuring sustainable use of water resources in order to improve both efficiency and wastewater quality.
- Monitoring food loss and waste linked to product production and consumption, designing mechanisms to minimize and control food loss and waste, and reporting periodically on total food loss and waste as well as improvements against targets.
- Commitment to high animal welfare standards, transparency for consumers regarding animal welfare, and elimination of cruel animal production practices.





PILLAR 3

Pillar 3 recognizes the impact and influence of companies beyond the perimeter of their direct and outsourced operations, and notes that in some contexts, companies have co-responsibility for enhanced sustainability throughout their supply chains, value chains, and within the ecosystems in which they operate.



This pillar does not suggest that companies are solely responsible for SDG realization, which primarily remains the remit of governments. But Pillar 3 does acknowledge the important ways that a company can and should contribute to positive social and environmental impacts on a broader scale than its direct operations. In some contexts, achievement of the SDGs throughout complex food systems may also require collective and pre-competitive collaboration by companies in the sector.

KEY AREAS OF IMPACT AND SDG-ALIGNED PRACTICES

The key areas of social and environmental impact and SDG-aligned practices overlap significantly with those identified in Pillar 2. The main distinction that Pillar 3 focuses on is the ways in which companies use their business relations, market power, and other leverage points to help promote better social and environmental impacts and practices, including through their supply chains and value chains. This could include, for example:

- Collective efforts to help farmers producing agricultural commodities relevant to the company to adapt to climate change, mitigate climate risk, and build climate resilience.
- Collection and disclosure of SDG-related data throughout a company's value chain, from producer to consumer, to support targeted engagement to progressively address SDG needs and challenges, including the well-being and livelihoods of smallholder farmers and their communities, in collaboration with local and national governments, civil society, communities, and other private sector partners.
- Robust requirements of first-tier suppliers and below first-tier suppliers—through contractual arrangements—to guarantee respect of human rights, labor rights, and resource rights, to avoid rights violations, and to redress any harms that have occurred.
- Proactive efforts to ensure fair prices or income support for farmers at a level that would allow viable farmers to earn a living income from the production and sale of agricultural commodities that the company sources.



PILLAR 4

Lastly, Pillar 4 considers companies' external strategies and engagement: both with the communities where they operate and with the rules that govern them.

This includes companies' contributions to local initiatives that promote realization of Agenda 2030. It also includes companies' relationship with the law, such as the ways in which they seek to influence the rules that govern them, as well as their use of strategies that may advance or undermine SDG achievement. To that end, Pillar 4 assesses whether companies' practices support and advance policy making, resource mobilization, and the rule of law that underpins achievement of the SDGs.

KEY AREAS OF IMPACT AND SDG-ALIGNED PRACTICES

- Establish local community engagement based on SDG-related and relevant data, in partnership with local actors and stakeholders, to contribute targeted corporate resources to local communities, aligned with SDGs achievement.
- Tax strategies that aid enforcement, strengthen taxes bases and curb profit shifting to low/no tax jurisdictions.⁵
- Transparent engagement in policy making, limited to supporting efforts that would help to achieve the SDGs, and avoiding efforts that would undermine public interest regulation.
- Any engagement in legal strategies and cases that involve consumer rights or the public interest should be transparent.⁶
- Establish assessment tools and protocols to identify and address conflicts of interest and promote anti-corruption practices.





COOPERATION WITH MAJOR ACTORS

These draft pillars provide a preliminary basis for assessing current sustainability reporting standards, frameworks, and certifications in the food sector. The draft Framework will continue to evolve, as pillars are refined and then elaborated to advance a robust framework that captures the broader set of business products, strategies, and activities that impact the SDGs.

The definition of the above-mentioned key areas includes, among others, a strong collaboration with the World Benchmarking Alliance (WBA) and the Food Foundation as WBA's Food and Agriculture Benchmark developed its draft for discussion. Such cooperation allowed the identification and group key environmental, nutrition, and social & governance topics that companies in the food and agriculture sector should address to achieve the SDGs. The WBA's Food and Agriculture Framework will be used to analyze and benchmark over 300 global food companies by the end of 2021.

ANALYSIS OF SUSTAINABILITY REPORTING STANDARDS, FRAMEWORKS, AND CERTIFICATIONS

Company frameworks for practice, measurement, and reporting must address the quantitative, time-bound SDGs if the business sector is to align with the 2030 Agenda. To understand current practices, the project assessed some of the 12 major corporate sustainability reporting standards, frameworks, and certifications against the Four Pillar Framework.

The list of standards, frameworks, and certifications analyzed is certainly not complete, but it should be taken as a sample of some of the most widely used sustainability standards by companies operating in different geographies. We also considered whether they address the quantitative nature and level of ambition of the SDGs. Overall, our analysis suggests major deficiencies in SDG alignment across those available reporting instruments. Our major findings indicate that:

1. THE VAST MAJORITY OF INDICATORS FOCUS ON PILLAR 2, LEAVING MAJOR REPORTING GAPS IN OTHER DIMENSIONS OF BUSINESS ACTIVITY

Indeed, 64% of company indicators defined in the analyzed reporting frameworks address companies' operations and internal processes, thereby leaving underrepresented the other equally important aspects of business impact on the SDGs.

2. THE COVERAGE OF TOPICS THAT THE FOOD AND AGRICULTURE SECTOR NEED TO TACKLE REMAINS HIGHLY INCOMPLETE

For instance, very few questions focus on sustainable food production practices, hardly any reporting is required for food loss and waste, or on the livelihoods of smallholder farmers. Also, governance indicators do not have enough focus on tax practices, or the companies' use of litigation.

3. MOST OF THE INFORMATION REQUESTED FROM COMPANIES FROM THE STANDARDS ANALYZED IS PURELY DESCRIPTIVE AND THEREFORE INSUFFICIENT TO TRACK PROGRESS TOWARDS QUANTITATIVE, TIME-BOUND SDGS

Our analysis shows that on average, 65% of questions refer only to qualitative information, which makes it difficult to measure and compare company performance. Many questions focus on the availability of company policies, standard operating procedures, activity logs and other process indicators (e.g. signed sheets of training received by employees). Only 24% of questions asked to companies in the instruments require quantitative data that could help determine if companies are on track in their contribution to achieving the SDGs. Where quantitative information is requested, it is usually not supported by quantitative targets and multi-year reporting.



EVIDENCE FROM COMPANIES' SUSTAINABILITY REPORTS

We explored the main gaps in aligning practices and strategies to sustainability principles through a deep qualitative analysis, based on the Four Pillar Framework, of sustainability reports for 2018 and 2019 published by 12 global companies with high reputation in terms of sustainability. The major findings of this analysis are the following:

1. THERE ARE STILL MAJOR GAPS IN SUSTAINABILITY DISCLOSURES

Even when companies are asked to disclose their non-financial performance, as in the case of companies traded in the Stock Exchange market, or obliged to follow the European Non-Financial Disclosures Directive, our analysis confirms sustainability reporting and corporate transparency gaps.

Topics related to healthy and sustainable diets through products and strategies (Pillar 1) have a high degree of disclosure. However, such disclosures are mainly related to the description of products, ingredients and procedures, more than actively promoting healthy and sustainable diets.

Information on the sustainability of production processes is highly disclosed, partly because of the consolidation of so-called “environmental accounting”. Although the proliferation of external accountability mechanisms, standards and frameworks, information related to the sustainability of the value chain and good corporate citizenship remains scarce. More information on supply chains is found only in terms of impact on air quality and climate (GHG Emissions).

2. COMPANIES TEND NOT TO DISCLOSE TARGETS

Disclosed information is not supported by adequate targets and baselines. Therefore, it is difficult to understand a company's journey and its real commitment to sustainable development.

On average, targets were defined only for approximately 21% of the topics analyzed. Moreover, when measurable targets exist, it is not always clear how they were indeed defined. Often, companies set a medium to long term timeframe, between five and ten years, without defining intermediate targets. The achievement of set targets is presented in only 2% of the 2018 and 2019 disclosures.

3. COMPANIES' MATERIALITY ASSESSMENTS SHOW GAPS VIS À VIS THE FOUR PILLAR FRAMEWORK, ESPECIALLY WITH REFERENCE TO GOOD CORPORATE CITIZENSHIP

Our analysis shows a weak consistency between the relevant topics the companies stated in their materiality assessments and the information we collected and analyzed through our framework. Major gaps were detected in the disclosure of Corporate taxes and Resource Rights, where little information was reported even as materiality was high. This sheds light on the necessity to strengthen these topics, only mildly recognized as material by companies, and scantily reported, when they are crucial for achieving the SDGs.

Our analysis also found good alignment of the Four Pillar Framework with the materiality analysis proposed by the Sustainability Accounting Standards Board (SASB). Therefore, sustainability performance as monitored by companies using our framework could be in line with requirements by investors.

4. CRITICAL ISSUES RELEVANT TO SUPPLY CHAINS STILL NEED TO BE DISCLOSED

The analysis of disclosures shows that supply chain topics are deemed only moderately material by the vast majority of the companies analyzed. Overall, this is not sufficient for the purposes of SDG alignment as laid out in the Four Pillar Framework. Future research should focus on understanding how material topics within the supply and value chains can be more comprehensively and consistently measured and reported.

5. COMPANIES SUFFER THE LACK OF A CONSISTENT AND COMPREHENSIVE FRAMEWORK FOR SUSTAINABILITY REPORTING

Many companies seem to have understood the importance of implementing sustainable practices and communicating their sustainability performance and, in some cases, started following an integrated approach. All of the analyzed companies publish their Sustainability Report based on the Global Reporting Initiative (GRI) and all but one declare to have adopted the SDGs within their management system. The flexible nature of the GRI framework makes it a useful tool to support companies in their reporting processes. However, such flexibility also allows companies to use different standards and metrics developed by several initiatives and organizations, making it more difficult to compare and use information and data to measure SDG achievement, as well as challenging specific target follow up and accountability.

6. CHANGES IN EU FOOD REGULATORY CONTEXT ASK FOR A GREATER ATTENTION TO INNOVATIVE BUSINESS MODELS AND SUSTAINABLE BUSINESS STRATEGIES

A radical transformation is needed to cope with the environmental, social, and economic challenges of agri-food systems at the global and local levels. In 2020, the COVID-19 pandemic has exacerbated global development challenges especially for the most vulnerable communities around the globe. The European Union is promoting such transformation through the European Green Deal and the 'Farm to Fork' Strategy, aiming to make European food 'the global standard for sustainability'.

In this new regulatory context, food companies are considered actors of primary relevance. Companies are required to move beyond "business as usual", aligning their strategic objectives and initiatives with Agenda 2030, adopting innovative business models and defining, monitoring and disclosing indicators and targets that are aligned with the achievement of the SDGs.

Generally, this evolution is coherent with the growing relevance that investors and consumers are also placing on sustainability. It is often seen by smaller businesses as a threat. From our analysis we conclude that the Four-Pillar Framework has a great level of coherence with the goals and targets of the European 'Farm to Fork' Strategy. Therefore, the Four Pillars could be a tool to support companies in the transition towards a more sustainable food system.

TOWARDS AN SDG INDICATOR FRAMEWORK FOR BUSINESS

Given the conclusions of our analyses, we introduce an indicator framework for business, based on the SDGs and the Four Pillar framework. We start by describing the principles that guide the design of our proposed indicator framework for the food and agriculture sector. We then apply these principles to the issue of GHG emissions. Based on feedback received on this indicator framework, we will develop indicators for most topics introduced in this report (see section 3 Key topics for business to align with the SDGs).

PRINCIPLES

For each topic, we identify the major drivers from the food and agriculture sector and consider abatement options which companies need to tackle to support the achievement of the SDGs and the PCA. These inform the identification of business indicators and associated targets to facilitate implementation. Our aim is to make the indicators as operational as possible by targeting actions that companies can measure and control. In some cases, it may be better to track an “input” or “action”, so reporting against proxy indicators facilitates the setting of corporate objectives and monitoring. The targets we recommend are framed in technological or physical terms that have a direct effect on the proposed proxy indicators.

PROPOSED BUSINESS INDICATOR FRAMEWORK FOR GREENHOUSE GAS (GHGs) EMISSIONS

Starting with the key topic of *air and climate*, we propose to focus on the most important GHG emission sources without being exhaustive. Focusing on the production side, we start by asking the following question: where are the main emissions of GHGs coming from, specifically in food production?

According to scientific research, we found four major drivers of GHG emissions from the food and agriculture sector:

1. Deforestation and land use change, representing approximately 44% of all the sector’s emissions,
2. Energy use accounting for about 24%,
3. Livestock farming with 22%, and
4. Methane (CH₄) and Nitrous Oxide (N₂O) Emissions from Cultivation with 9%.

Due to its importance, we added one major driver that is not a production-side issue, but rather a complete supply chain issue

5. Food loss and waste.

This driver is estimated to contribute up to 30% of the sector’s GHG emissions, but we present it separately to avoid double counting with the 4 major production-side GHG emission drivers. Ultimately, reductions in food loss and food waste will lead to lower demand for agricultural products and therefore reduce production. For this reason, we propose an indicator framework that focuses on GHG emissions from the production and distribution of food. We therefore present emissions from food loss and waste “below the line”.

To tackle deforestation and land-use change, the biggest GHG emission driver in the food and agriculture sector, we propose that companies track the percentage of agricultural inputs from certified Zero Deforestation sources aiming at certifying 100%.

Regarding energy use, all food and agriculture companies should report GHG emissions from their power consumption and aim to bring these to zero. In most cases, GHG emissions from energy use fall under Pillar 2 (sustainable production processes).

To reduce GHG emissions from livestock farming, we propose that food companies in the downstream of the supply chain track the share of products containing animal-based proteins, aiming at reducing it. Indeed, food companies could have a major effect in promoting healthier and more plant-based diets through their marketing and nutrition strategies. In this way, there could be a reduction of animal-based protein consumption, which should decrease demand and production of livestock farming, hence reducing GHG emissions. Regarding companies producing or dealing with ruminant meat (cattle, sheep, goat), we propose they report and target 100% of feed with methane-reducing properties for ruminants and 100% of manure management to reduce GHGs.

Similarly, regarding methane (CH₄) emissions from cultivation, we propose that companies track the percentage of agricultural inputs sourced from production using methane reducing techniques, such as Alternate Wetting and Drying (AWD) practices in the case of rice paddies or other proven methods that reduce methane emissions. Indicators on Nitrogen Use Efficiency & N₂O emissions will be developed in the future. Indeed, the excessive use of fertilizers has several effects that include GHG emissions but that can also result in runoff and pollute water tables. This complex and important subject requires more research to propose robust indicators that are useful for business.

Finally, all companies should achieve a 50% reduction in food loss and waste by 2030, as stated by SDG 12 on Responsible Consumption and Production. As there is a risk of double-counting GHG emissions from a production perspective and a food-loss-and-waste lens, we do not propose at this stage more detailed indicators related to greenhouse gas emissions from food loss and waste.

Companies in the food and agriculture production sector that do not have any relation to livestock or rice, for example, should not report on these specific matters. This business indicator framework for GHGs proposes that the sector focuses on the most pressing issues that are currently creating the majority of emissions. Time and resources should be allocated to the strategies that will bring the biggest system changes. Any company in the food and agriculture sector will have to deal with deforestation and land use change, since almost half of the sector's GHG emissions arise from these. A strong commitment and a clear, rigorous path to carbon neutrality can be an important starting point to accelerate corporate transition to a more sustainable pathway. Carbon neutrality starts with the quantification of GHG emissions. The purpose of this exercise is also to point the industry in the direction it should be looking. Not one company can solve any of these challenges alone. However, together with business alliances, governments and other stakeholders, putting the focus on the actual drivers will bring the solutions the world needs.

The next table summarizes the suggested company proxy indicators and targets.

PROPOSED COMPANY INDICATORS AND TARGETS FOR EACH DRIVER OF GHG EMISSIONS

	FOOD AND AGRICULTURE GHG EMISSION MAIN DRIVERS	GHG EMISSIONS (million tons CO ₂ eq./year)	GHG EMISSIONS GLOBAL TARGETS FOR 2030-2050	COMPANY INDICATORS	COMPANY TARGETS
1	Deforestation and Land Use Change (44%)	6 600 ⁷	0 or negative ⁸	Percentage of agricultural inputs from certified Zero Deforestation sources (Certified no deforestation since minimum 2014 ⁹) ¹⁰	100% certified Zero Deforestation inputs
2	Energy use (24%)	3 611 ¹¹ Including Post-Production activities: 1 534 Energy use: 1 502 Fertilizer manufacture: 575	4 000 ¹²	Percentage of all company power consumption emitting zero GHG emissions	Zero GHG emissions from power consumption
3	Livestock farming (22%)	3 294 ¹⁴ Including Ruminant enteric fermentation: 2 260 Manure: 1 034 ¹⁵		[Percentage of products sold containing animal-based protein inputs] For livestock producing companies specifically: Percentage of feed with methane reduction properties (including additives) Percentage of manure managed to prevent GHG emissions ¹⁶	Sharply decreasing tendency For livestock producing companies specifically: 100% of feed with methane reduction properties 100% of manure managed to reduce GHG emissions
4	Methane (CH ₄) and Nitrous Oxide (N ₂ O) Emissions from Cultivation (9%)	1 398 ¹⁷ Including Rice Cultivation 1 120 Fertilizer application : 278 ¹⁸		Percentage of agricultural inputs sourced from production using methane reducing techniques Indicators on Nitrogen Use Efficiency & N ₂ O emissions to be developed	100% inputs produced with reduced methane emissions
	TOTAL 100%	14 903 ¹⁹		4 000 (-73%)	
5	Food Loss and Waste (FLW) ²⁰	4 400 ²¹		Percentage of Food Lost and/or Wasted	-50% reduction in FLW (SDG 12)

RECOMMENDATIONS

A more sustainable food system requires greater and more focused commitments by businesses; a more comprehensive and coherent framework to align corporate practice, measurement, and reporting to the SDGs; and the creation of more precise SDG-aligned metrics.

Given the depth of the transition required, the support of international and national institutions and investors to agri-food companies is imperative. The Four Pillar Framework aims to support businesses to confidently contribute to the realization of the SDGs, and to be recognized for their critical contributions to that end. With those objectives in mind, we recommend:

SUSTAINABILITY STANDARDS, frameworks, certifications, and accounting mechanisms should update and review their reporting requirements to help companies better align to the SDGs and the PCA, which are time-bound, quantitative agendas. To do this, monitoring systems should first guide companies' in the food and agriculture sector to focus on the key topics described in this report. Second, they should define clear and comparable quantitative targets, that can allow all stakeholders to see the progress companies are making, rewarding the most innovative and committed companies and more clearly showing the laggards. We propose a first attempt of an SDG indicator framework for GHG emissions, which can be useful for standards, frameworks, and certifications that wish to align their own indicators to the quantitative achievement of SDGs. Indeed, we propose a Four Pillar Framework to analyze a company's performance: by the products it sells, its production processes, its impact and relations with its supply and value chains and the broader ecosystem those chains impact, and its behavior as a corporate citizen. Harmonization among the Four Pillars, the key topics and the quantitative metrics and targets should bring reliable, comparable results to bring the transformation of companies in this sector to form a sustainable food system.

COMPANIES IN THE FOOD AND AGRICULTURE SECTOR

should address the areas highlighted by the Four-Pillar Framework, once finalized, as well as an SDG indicator framework to measure and report their impact on the SDGs. This tool, and particularly, the proxy indicators to monitor alignment to the time-bound, quantitative targets of the SDGs and the PCA, will help to focus efforts and resources on the right approaches to transform the currently unsustainable food system. As shown in our company analysis, even though companies report on some of the key topics, there are still major gaps on what is being measured and reported, particularly in terms of targets. Businesses in the food and agriculture sector should more systematically disclose their strategies, practices, and achievement or non-achievement of targets. There is a clear need for a set of indicators, targets and benchmarks to measure the adaptation of companies' strategies both to Agenda 2030 and to the 'Farm-to-Fork'

POLICY MAKERS should support more ambitious regulation, emphasizing more forceful alignment of business practices with the SDGs and the PCA, as well as robust and rigorous measurement and reporting of such alignment. Policy makers should call on reporting frameworks to align to the SDGs using the Four Pillar Framework as a useful analytical tool and by including indicators in line with our proposed SDG indicator framework for business. This indicator framework should be useful for policy makers to include targets that will significantly accelerate the needed transformation in the food and agriculture sector to meet Agenda 2030.

INVESTORS in the food and agriculture sector should closely monitor companies' performance on issues covered by all four pillars of the Framework, and should make investment and engagement decisions accordingly. Depending on the investor's approach to sustainability, this may include making decisions to invest or not invest based on performance against the pillars, and/or proactively engaging with companies regarding their performance and ways to improve. Investors are encouraged to consider the issues covered by the four pillars as part of a holistic strategy to ensure overall sustainability of their portfolios and the companies in which they are invested, and not simply as part of company or portfolio risk assessments.

Finally, the creation of a community of businesses sharing practices and experiences could help illuminate the implications of the transition to an SDG aligned sector, showcase effective business models and practices, support businesses in aligning in the post-Covid 19 context, and gather useful feedback from regulators, investors, institutions and experts.

The Fixing the Business of Food Initiative has initiated a focused framework for business alignment with the SDGs. The next step is to refine and elaborate this framework, capturing the broader set of business products and activities that impact the SDGs, specifically in the food and agriculture sector, with actionable standards for business and robust indicators and targets by which business stakeholders can assess alignment. This work to refine and elaborate the framework will reflect feedback from relevant stakeholders and experts, with an ultimate goal of finalizing an effective framework with actionable standards that help companies contribute effectively to achievement of the SDGs.



¹ A. Arneith et al., "Climate Change and Land. IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems." (Geneva: Intergovernmental Panel on Climate Change, 2019); WHO, "Obesity and Overweight," 2020, <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>.

² The most critical human rights violations are related to labor rights through forced labor, child labor, degrading treatment, human trafficking, discrimination, lack of access to social security, and excessive overtime working schedules, among other problems. Besides labor issues, business operations in the food sector include human rights violations such as abuses towards migrant workers, pervasive gender-based violence and discrimination, harm to indigenous communities, forced displacement, and extremely high usage of clean water (nearly 70%), affecting its availability for other human needs FoodPrint, "Labor and Workers in the Food System," FoodPrint, 2020, <https://foodprint.org/issues/labor-workers-in-the-food-system/>; OECD and FAO, "OECD-FAO Guidance for Responsible Agricultural Supply Chains: How It Can Help Achieve the Sustainable Development Goals.," 2020, <http://mneguidelines.oecd.org/How-the-OECD-FAO-Guidance-can-help-achieve-the-Sustainable-Development-Goals.pdf>.

³ Elements of a decent standard of living include food, water, housing, education, health care, transport, clothing, and other essential needs including provision for unexpected events" Global Living Wage Coalition, "What Is a Living Wage?," 2018, <https://www.globallivingwage.org/about/what-is-a-living-wage/>.

⁴ Walter Willett et al., "Food in the Anthropocene: The EAT–Lancet Commission on Healthy Diets from Sustainable Food Systems," *The Lancet* 393, no. 10170 (February 2019): 447–92, [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4).

⁵ Corporate tax strategies are heavily influenced by the tax frameworks set by governments. In recognition that existing frameworks limit governments' ability to address their development needs, there have been ongoing efforts at the international level focused on how governments can strengthen tax frameworks to meet their needs. (See for instance the OECD/G20 Inclusive Framework on BEPS). As this report focuses on corporate alignment with the SDGs, we emphasize here the role that companies can proactively play to help strengthen tax bases that support achievement of the SDGs.

⁶ Companies should also disclose pertinent information regarding other legal actions that stand to affect the public interest, including submission of amicus curiae, challenges to laws, rules or administrative decisions, and settlements related to matters of public interest.

⁷ Simon Bager et al., "Food Emissions," CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), Big facts on climate change, agriculture and food security, 2020, <https://ccafs.cgiar.org/bigfacts/#theme=food-emissions&subtheme=indirect-agriculture>.

⁸ FABLE, "Pathways to Sustainable Land-Use and Food Systems. 2019 Report of the FABLE Consortium." (Laxenburg and Paris: International Institute for Applied Systems Analysis (IIASA) and Sustainable Development Solutions Network (SDSN), 2019).

⁹ Rainforest Alliance, "2020 Certification Program," Rainforest Alliance for Business, 2020, <https://www.rainforest-alliance.org/business/tag/2020-certification-program/>.

¹⁰ Unless it differs from local regulation

¹¹ Tim Searchinger et al., "World Resources. Creating a Sustainable Food Future. A Menu of Solutions to Feed Nearly 10 Billion People by 2050.," World Resources Institute, Princeton University, 2018, https://wri.org/sites/default/files/2019-07/WRR_Food_Full_Report_0.pdf; Sonja J. Vermeulen, Bruce M. Campbell, and John S.I. Ingram, "Climate Change and Food Systems," *Annual Review of Environment and Resources* 37, no. 1 (November 21, 2012): 195–222, <https://doi.org/10.1146/annurev-enviro-020411-130608>.

¹² FABLE, "Pathways to Sustainable Land-Use and Food Systems. 2019 Report of the FABLE Consortium."

¹³ Proxy indicators and targets for fertilizer application and use are not included in this section and will be detailed in the next edition

¹⁴ Searchinger et al., "World Resources. Creating a Sustainable Food Future. A Menu of Solutions to Feed Nearly 10 Billion People by 2050."

¹⁵ Including both manure management in confined settings and on pastures

¹⁶ Searchinger et al., "World Resources. Creating a Sustainable Food Future. A Menu of Solutions to Feed Nearly 10 Billion People by 2050."

¹⁷ Searchinger et al.; Vermeulen, Campbell, and Ingram, "Climate Change and Food Systems."

¹⁸ Estimated by removing the higher-bound estimate of 575 million tons CO₂eq. per year GHG emissions from fertilizer manufacture by Vermeulen, Campbell, and Ingram, "Climate Change and Food Systems." from the 853 million tons CO₂eq. per year GHG emissions from soil fertilization by Searchinger et al., "World Resources. Creating a Sustainable Food Future. A Menu of Solutions to Feed Nearly 10 Billion People by 2050." that included the manufacture, transportation and application.

¹⁹ According to J. Poore and T. Nemecek, "Reducing Food's Environmental Impacts through Producers and Consumers," *Science* 360 (2018): 987–92. Food Supply Chain GHG emissions (13 700 Mt CO₂eq/year) and Non-Food Agriculture GHG emissions (2 800 Mt CO₂eq/year) create about 16 500 Mt CO₂eq/year.

²⁰ To avoid double counting, food loss and waste is presented separately from other GHG emission drivers

²¹ Searchinger et al., "World Resources. Creating a Sustainable Food Future. A Menu of Solutions to Feed Nearly 10 Billion People by 2050."

DISCOVER MORE ON
www.fixing-food.com

ALL THE BCFN PUBLICATIONS ARE AVAILABLE ON
WWW.BARILLACFN.COM



Barilla
Center
FOR FOOD
& NUTRITION

Follow us on our social networks

