



Criteria for responsible
pork:
*a roadmap to sustainable
and just animal protein*



World Business
Council
for Sustainable
Development

Criteria for responsible pork:

a roadmap to sustainable and just animal protein

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Introduction

The Responsible Meat Initiative (ReMI) is a Working Group of the World Business Council for Sustainable Development (WBCSD) consisting of eight businesses from the pork value chain working together to achieve a vision of meat being responsibly produced, accessible and consumed as part of a sustainable and just food system.

ReMI decided to start this process focusing on pig meat production. The majority of the criteria contained in this guideline are specifically related to the pig sector, although several criteria are also transferrable to other meat value chains.

ReMI members



This document provides a number of criteria that reflect ReMI's ambition. We have compiled these criteria following extensive consultation between the Working Group members participating in the ReMI project during 2021 and 2022. The framework should evolve over time to build on scientific developments and leading business practices already being observed, providing achievable and realistic ambition while – critically – moving the value chain towards responsible production.

We also acknowledge that the ambition documented here may sometimes be challenging to deliver as the science has yet to evolve or specific innovations/technologies are unavailable in some geographies. This does not weaken the ambition at all. It focuses the effort on finding appropriate and viable solutions that can support the delivery of the ambition.

Context

The world saw a year of extreme volatility throughout the agriculture sector in 2022, with increasing input costs for feed, fertilizer, energy and transport. These concerns and global labor shortages pose continuing challenges for the pig sector's profitability. Animal health risks are also prevalent, in particular, African Swine Fever (ASF) in multiple geographies. This results in significant ongoing disruption and unpredictability in meeting increasing consumer demand for pig meat. Such pressures are forecast to continue into and beyond 2023 alongside the variable strength of recovery following the COVID-19 pandemic and macroeconomic conditions that are impacting commodity values.

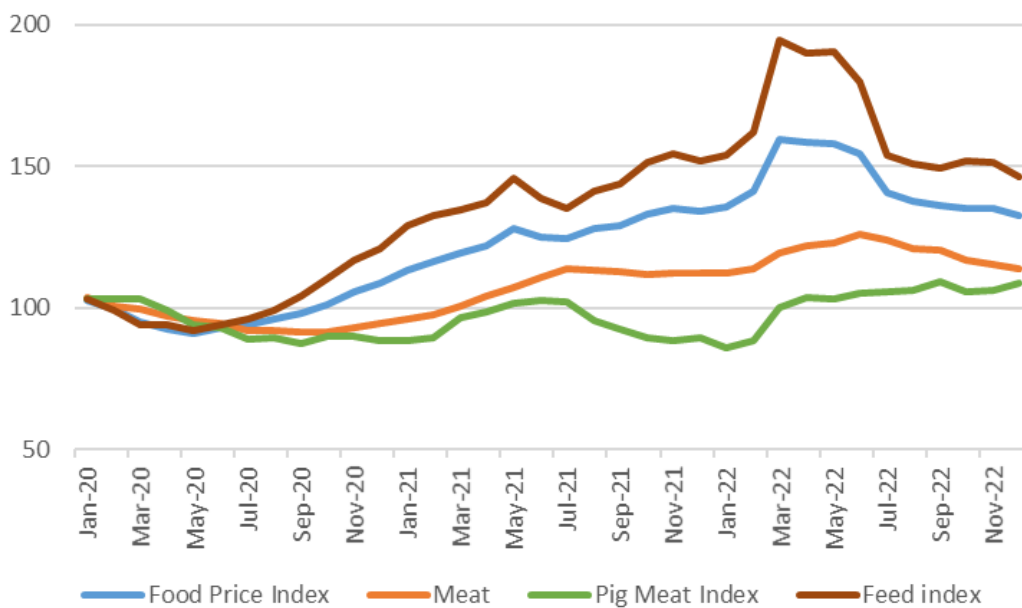


Figure 1: Increase in feed costs Jan 2020-Nov 2022

Source: Food and Agriculture Organization (FAO) of the United Nations global price data, indices set at 100 for the 2014-2016 average

High inflation and wavering consumer confidence in food purchases mean that “value” will likely be a significant driver of consumer choices in 2023.

Nevertheless¹, environmental sustainability and social impact remain super-imposed as macro trends, with 49% of consumers claiming to have changed their diet in the last two years to lead a more environmentally friendly lifestyle,² almost 30% of global consumers having actively boycotted a product or brand because of its ethical credentials, and 40% seeking out brands that guarantee the ethical treatment of farmers.³

¹ Nunes, K. (2022). Value shaping up to be dominant 2023 consumer trend. *Food Business News*. Retrieved from: <https://www.foodbusinessnews.net/articles/22637-value-shaping-up-to-be-dominant-2023-consumer-trend>.

² FMCG Gurus (2022). *Route to Sustainability Report*. Retrieved from: <https://fmcggurus.com/reports/fmcg-gurus-the-route-to-sustainability-in-2022-global-report/>.

³ Ibid.

As businesses working with animal protein continue to progress toward a more sustainable and just food system, factors such as improved production efficiency, brand reputation, access to capital, and regulatory changes will likely be major drivers of change along value chains.

Over the past two years, a significant expansion of environmental, social and governance (ESG)-linked funding demonstrates continued sustainability pressure from investors. Rabobank points out in its *Global Animal Protein Outlook 2022* report that: “In Q2 2021 alone, sustainability-focused net fund flows totaled USD \$139.2bn, 18% of total global investment net fund flow. Sustainability fund flows were less than USD \$50bn in Q2 2019. Sustainability-linked loans and bonds totaled USD \$131bn in 2020, down slightly from 2019, but in 2017, such financing totaled only USD \$5bn.”⁴

Many companies are responding to these pressures by establishing or updating environmental strategies and targets (e.g., greenhouse gas (GHG) emissions and deforestation) and related impact areas. It is, however, important to recognize that such targets (particularly scope 3 GHG emissions) are often beyond the direct control of the target owner and it is only possible to meet them through enhanced cooperation, sourcing arrangements, supply chain alignment and evidence gathering across the value chain.

The pork sector has made significant advances over the past decade – particularly in reducing GHG emissions and improving operational efficiencies. ReMI members envision going beyond today’s progress to achieve a positive role for pork production systems and their value chains in evolving food systems. They see the criteria defined in this document as playing a key role in supporting this process, with the primary intention of the criteria to define what responsible pig production in a sustainable food system means in practice.

Motivation for the application/implementation of the ReMI criteria

In response to the global context of and outlook for animal protein production, we see the primary drivers for the application/implementation of the ReMI criteria as follows:

- Consumer demand – The world is at an inflection point. Consumers increasingly care about the environmental impact and welfare of the animals associated with the foods they purchase.⁵
- Trust – By transparently demonstrating progress on key issues, companies can make it easier for all stakeholders to appreciate how animal protein supply chains are performing.
- Investor interest – Production input and pork price volatility, climate risk, disease incidence and biosecurity challenges continue to drive uncertainty for investors. The ReMI criteria can provide a useful indicator for lower risk, higher performing value chains.
- Continuous progress – Through self-assessment and benchmarking, food and agri-businesses can drive change within their organizations.
- Best practices – Highlighting innovative practices that can drive change in animal protein value chains is an important motivator for others to act.

⁴ RaboResearch (2021). *Global Animal Protein Outlook 2022*. Retrieved from: <https://research.rabobank.com/far/en/sectors/animal-protein/ap-outlook-2022.html>.

⁵ Center for Food Integrity (2020). *CFI360: The Future of Animal Protein*. Retrieved from: <https://foodintegrity.org/cfi-360-the-future-of-animal-protein/>.

- Roadmaps for sustainable animal protein – The framework approach, with three progressive criteria levels (Foundation, Intermediate, Advanced), provides a roadmap for progressing sustainability in the pork sector.

Objectives

ReMI members are committed to raising the pork value chain's sustainability performance across environmental, social and economic pillars. We believe that the criteria outlined in this guide can play a role in inspiring the industry as a whole to improve.

We do not intend for these criteria to be a prescriptive tool dictating actions nor as an implementation structure for farms or companies. However, we recommend that stakeholders use them as a high-level benchmark on broad outcomes for comparative performance.

For those organizations that purchase pork products for consumption in canteens, restaurants, cafeterias and for supermarket retailers of pork products, we envisage a special role in raising the performance of the whole value chain. Research consistently demonstrates that consumers are more willing to pay (WTP) for a higher standard of product, particularly for higher animal welfare standards.⁶ While the realization of this potential on a practical basis can be variable, we see this nascent demand as a potential positive driver of change underpinned by the transparency that comes with the criteria outlined in this framework.

Research commissioned by ReMI additionally suggests multiple ways to engage with consumers on the topic of responsible pork, covering social influences, material incentives, choice architecture, rules and regulations, emotional influences, and improved information.⁷

We believe in the use of these criteria to holistically evaluate the responsibility of pork products and determine which companies are investing in improvements that raise their performance over time. In this way, companies can use the ReMI criteria to support decision-making (primarily at retail and food service levels) for new procurement contracts and ongoing monitoring and to support sales discussions for producers and other actors in the value chain.

While this framework does not define how companies should implement or report on their progress on the criteria, we recommend the external verification of any results where possible, either as part of a company's annual reporting process or as part of alternative reporting initiative. We also recommend that value chain stakeholders work towards action on these criteria, with an analysis of compliance with all applicable environmental, social and animal welfare legislation as a starting point for further improvement. This is often the basis of national/sector assurance schemes.

Furthermore, we recommend reporting against all criteria included in this document and discouraging reporting against only one or two criteria, as this could facilitate poor progress against other unreported criteria: a holistic approach is critical to the success of any individual criteria. Aligned with this is the acknowledgment of the potential cost and associated implications of change at the farm level – appreciating that the diversity of sustainable development in the global pork

⁶ Bastounis, A. et al. (2021). The Impact of Environmental Sustainability Labels on Willingness-to-Pay for Foods: A Systematic Review and Meta-Analysis of Discrete Choice Experiments. Retrieved from: <https://www.mdpi.com/2072-6643/13/8/2677>. *Nutrients* 2021, 13(8), 2677.

⁷ Responsible Meat Initiative (2023). Consumer Engagement. Retrieved from: <https://responsiblemeat.org/consumer-engagement/>.

sector, realistic demands, timescales and associated finance to facilitate improvements are critical components of the change process.

Relationships with existing standards and frameworks

There is already a considerable body of existing standards and certification schemes that cover certain aspects of animal protein production – particularly for animal welfare, husbandry practices and greenhouse gas (GHG) reporting. The ReMI Criteria naturally build on such standards in creating its vision and objectives.

The framework also differs in terms of focus – on multinational businesses, with a global rather than country-specific scope, as well as predominantly on issues of environmental sustainability.

The aspirational nature of this framework means that few businesses will achieve top-level “Advanced Criteria” performance across the board. Smaller businesses in particular may be well-advised to start with one of the excellent, more local frameworks available.

ReMI criteria

1. GHG emissions

Description of the challenge

ReMI website – [GHG emissions](#)

Why?

In order to avoid an increase in global temperature of more than 1.5°C, all industries must significantly reduce GHG emissions.

Critical value chain stages

Feed, input provider, producer and processor operations

Pathway

	Foundational	Intermediate	Advanced
GHG emissions	Annual public reporting of scope 1 & 2 GHGs	A carbon reduction target is in place, following the 1.5°C pathway*	Commitment to net-zero emissions by 2050***
		Annual reporting of scope 3 GHG emissions**	

*Covering scopes 1 & 2 and scope 3 if >40% of emissions (a well-below 2°C pathway is sufficient for scope 3 targets)

**It is noted that data on scope 3 emissions is currently poor – particularly in relation to animal feed. This may therefore require estimates and modelling, which will improve over time.

***Scope as per the intermediate level

Alignment

These criteria are aligned with the following Science Based Targets initiative (SBTi) standards:

- [Short to medium-term targets](#)
- [Net Zero Standard](#)
- [Forest, Land, and Agriculture Science Based Target Setting Guidance \(FLAG\)](#)

Companies may present evidence on achieving these criteria through public disclosure in a sustainability report, disclosure or elsewhere. An [SBTi](#)-certified target is considered as the gold standard in demonstrating a rigorous standard of evidence on achieving the intermediate and advanced criteria for the business community.

Example

Bayer - [Soybean farmers reduce their emissions on a continental scale](#)

2. Circularity

Description of the challenge

ReMI website – [Circular economy](#)

Why?

Plastic pollution is a contributor to biodiversity loss around the world. Food packaging can be particularly challenging to deal with because of strict food safety regulations and because of recycling process contamination with food materials. At the same time, pigs are also part of the circular economy solution as they are a natural up-cycler that can convert materials that are inedible by humans to amino-acid rich edible animal protein and manure that provides useful input for crop production. Effective and efficient feeding solutions help to maximize this positive role.

Critical value chain stages

Input provider, producer, processor, retail/food service

Pathway

	Foundational	Intermediate	Advanced
Circularity	Recycling instructions on all packaging	100% of consumer-facing packaging designed to be reusable, recyclable or compostable	All plastic packaging has at least 30% recycled content**
	Manure management plan in place*	100% of manure used as fertilizers/composts or energy	Where possible, anaerobic digestion or alternative processes used to capture renewable natural gas
	Use of three-phase feeding strategy to optimize animal health and nutrient efficiency	Monitoring and a plan to reduce nitrogen and phosphorous excretion in kg/pig	Use of precision feeding strategy to optimize animal health and nutrient efficiency***

*Manure must be applied to land based on the levels of nutrients currently existing in the soil, the levels of nutrients in the manure and the nutrient requirements of the crop. It must only be applied at predetermined rates and times of the year to ensure the nutrients are fully incorporated into the soil to prevent runoff. Pig production can release amounts of nitrogen and phosphorus into the environment. Manure management combined with precision feeding – the consideration of feed nutrient content and the use of feed additive technology to improve both phosphorus and crude protein (CP) digestibility and reduce ammonia emissions – can reduce excess nitrogen and phosphorus excretion.

**Covers all products made of plastic used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer. Recycled content is taken as an average.

***For more information regarding animal nutrition, see [here](#)

Alignment

- Plastics content is aligned with the [Canada Plastics Pact](#) and the [Ellen MacArthur Foundation’s Plastics Pact Network](#)
- Feed content and manure use is aligned with [Vitale Varkens Houderij](#) (in Dutch)

Effective ways for companies to demonstrate their performance in this area include the following:

- A written plastics management plan
- Company policies and protocols
- Packaging samples

3. Land use and biodiversity

Description of the challenge

ReMI website – [Land use & biodiversity loss](#)

Why?

Pressure on land use from the sourcing of animal feeds is a key driver of deforestation and consequent loss of biodiversity. The industry has made great progress but challenges remain, particularly in complex agricultural commodity supply chains. Specifying zero deforestation and zero conversion in feed sourcing ensures that such problematic practices are resolved.

Critical value chain stages

Animal feed and bedding material production

Pathway

	Foundational	Intermediate	Advanced
Land use and biodiversity	Mapping of feed sourcing and other potential deforestation hotspots	Annual reporting of the progress made on zero-deforestation and zero-conversion commitments	Feed uses zero deforestation, zero land conversion, certified soy and palm and sustainable fishmeal; products sourced from regions with low deforestation risk; or products monitored and verified at the farm level
	Commitment to zero deforestation and conversion by 2030*		Businesses are investing in regenerative agriculture** projects within their supply chain that address land use and biodiversity

* This 2030 target aligns with the science-based approach of the [SBTi FLAG Guidance](#) (p. 29) and the commitments now seen from leading businesses.

** [See definition](#) from *One Planet for Business and Biodiversity (OP2B)*.

Alignment

These criteria are aligned with the following resources:

- [European Compound Feed Manufacturers' Federation \(FEFAC\) Sourcing guidelines](#)
- United Nations Biodiversity Conference (COP15) [Biodiversity pact at COP15](#)

Companies wishing to demonstrate performance in this area may choose to comply with the [FEFAC Soy Sourcing Guidelines](#) (2021), the [Round Table on Responsible Soy \(RTRS\) Standard for Responsible Soy Production](#), or the Proterra Standard for Social Responsibility and Environmental Sustainability Responsibility, or equivalent certifications.

The [Marine Stewardship Council \(MSC\) standard](#) provides a good standard of evidence for sustainable fishmeal.

Companies may demonstrate performance through biodiversity survey reports, farm procedures or documented evidence of investment in supply chain partnerships to improve biodiversity.

Example

ADM – [Policy to Protect Forests, Biodiversity and Communities](#)

Bayer - [Long-Term ecological enhancement project in the Upper Rhine Valley in Germany](#)

4. Water use and discharge

Description of the challenge

ReMI website – [Water](#)

Why?

Establishing a water management plan and demonstrating continuous water use efficiency improvement is a great indicator of positive progress in reducing the use of freshwater resources.

Critical value chain stages

Feed production and processing, input providers, producer and pork processing

Pathway

	Foundational	Intermediate	Advanced
Water use and discharge	Management plan in place (including manure management) to minimize water pollution*	Practices implemented to protect water quality**	Analysis of water-related risks and dependencies and plan to become more resilient throughout pork value chain operations
		Continuous water efficiency improvement in operations***	Quantified water use reduction over 5-year period

Note that this differs from a manure management plan by way of an overarching objective to contain contaminants and prevent spills, protecting water quality. A manure management plan is more focused on the rate of distribution of manure on land.

*** Soil health practices such as grassy waterways, buffer strips, cover crops, and good practice in the management of lagoons, e.g., covering and monitoring.*

**** Improved water use intensity.*

Alignment

A management plan including internal procedures is also often the basis of performance standards such as [ISO 14001](#) and [ISO 46001](#) and makes a logical starting place for improvement.

The [Alliance for Water Stewardship standard](#) provides thorough criteria for responsible water use and the protection of water resources.

Companies may demonstrate performance by certification with the above standards or through the publication of documentation such as a water management plan, a risk analysis, meter readings or alternative evidence of efficiency improvements, evidence of closed loop water recycling practices

Example

Tyson – [Water is essential to producing safe food](#)

5. Workers and communities

Description of the challenge

ReMI website – [Worker welfare](#)

Why?

An excellent health and safety record should be the basis of any good business. Likewise, companies should protect worker rights and freedoms through appropriate practices and procedures. As the next level up from these basic protections, businesses should aim to improve the stability, quality of life and future progression of their workers and the workers in their value chains. These criteria currently reflect best practices for a business’ own workers. It is envisioned that in the future they could extend to include the distribution of value along the supply chain – ensuring that farmers and others receive adequate compensation for their vital contributions.

Critical value chain stages

All levels

Pathway

	Foundational	Intermediate	Advanced
Workers and communities	Declare support for the UN Guiding Principles on Business and Human Rights by having a policy in place to respect human rights and a human rights due diligence process	Target of zero work-related workplace injuries	Evaluation of social risks for workers and support programs in place that 1. maintain stability and 2. help workers to advance their welfare over the longer term*
	Commitment to and reporting on the following: <ul style="list-style-type: none"> • Elimination of all forms of forced or compulsory labor • Effective abolition of child labor • Elimination of discrimination with respect to employment and occupation • Freedom of association and the effective recognition of the right to collective bargaining • A safe and healthy working environment. 	Continuous improvement in reducing the frequency of workplace injuries and “near misses”	Commitment to understanding worker cost of living and to paying living wages in own employees and tier 1 suppliers
		Worker grievance procedures in place	

**Can include investment in worker education, support with transport, childcare, housing, legal issues, food security.*

Critical value chain stages

Producers, processors, feed, retail and food service

Alignment

Declaration of support for the UN Guiding Principles on Business & Human Rights: [WBCSD Membership conditions](#)

[The Business Commission to Tackle Inequality \(BCTI\)](#)

[WBCSD's Healthy People, Healthy Business: How business can contribute to realizing global health](#)

International Labour Organization (ILO) [Declaration on Fundamental Principles and Rights at work](#)

ISO management standard [45001](#) (formerly BS OHSAS 18001) on occupational health and safety provides a system that can support continuous improvement in health and safety performance in-line with this criteria

The [Global Living Wage Coalition](#) provides resources and guidance on addressing the living wage within business operations and supply chains.

Companies may choose to demonstrate performance on these issues through the use of the [Corporate Human Rights Benchmark](#) (CRHB) methodology and other widely respected standards that provide useful, verified data on performance on the topic of worker rights and engagement. Companies may supplement CRHB data with documents (including policies and procedures) covering any of the above criteria.

Example

DSM – [Human rights Policy](#), [Fair Remuneration framework](#)

6. Antimicrobial interventions and animal health

Description of the challenge

ReMI website – [Antimicrobial interventions and animal health](#)

Why?

Demonstrating action on minimizing antibiotic resistance is a significant action that the animal protein sector can take in building and maintaining public trust and support. Adequate supervision and reducing the use of Highest Priority Critically Important Antibiotics (HPCIA) for Human Health (EMA category B) are particularly important steps.

Critical value chain stages

Feed, input provider (including veterinary), producer

Pathway

	Foundational	Intermediate	Advanced
Antimicrobial interventions and animal health	Antibiotics are not used for growth promotion or group prophylaxis	Management plan in place including monitoring procedures and targets for reducing antibiotic use	Quantified reductions in antibiotic use over a rolling 5-year period
	World Health Organization (WHO) Highest Priority Critically Important Antibiotics for Human Health used only as a last resort*		
	Any antibiotic should be under supervision of a veterinarian with a duration plan		

* This means that they should be confined to use in veterinary medicine only as a last resort after conducting sensitivity testing and when no other antibiotic would be clinically effective – [WHO classification of priority antibiotic classes](#).

Alignment

These criteria are aligned with multiple sources of guidance on the judicious use of antibiotics, including the [WHO](#), the [World Organization for Animal Health \(WOAH\)](#), the [American Veterinary Medical Association \(AVMA\)](#).

Companies wishing to demonstrate performance on this issue may choose to do so through a documented antibiotic policy, heard health management plans and monitoring against targets, and data regarding use of antibiotics by class. The [Certified Responsible Antibiotic Use Standard \(CRAU\)](#): Pork is considered an excellent standard of evidence.

Example

CP Foods – [Sustainability Report – Responsible and Prudent Use of Antibiotics](#)

Tyson – [Position on Antibiotics Stewardship](#)

7. Animal welfare

Description of the challenge

ReMI website – [Animal welfare](#)

Why?

Animal welfare is an important ethical consideration of farmers, consumers, NGOs and key stakeholders throughout the value chain.

Critical value chain stages

Producer and processor

Pathway

The critical objectives are to ensure that proposed sustainability criteria for pork production are based on science and applicable to all pork production systems and their markets in an equitable way, wherever they are located. ReMI originally worked to identify a few specific welfare targets for companies to aim to achieve through existing value chains worldwide. As the group progressed and sought input from external specialists, however, several important points emerged:

1. Welfare is a complex and multi-factorial topic and to only focus on a few welfare-related criteria (such as enrichment or housing systems) was not appropriate as a more globally representative and holistic approach was necessary.
2. Welfare science is complex, subject to local considerations and continuously evolving.
3. Many stakeholders had ambitious and sometimes divergent recommendations.
4. Companies that have achieved advanced welfare recommendations operate predominantly in niche value chains where they can extract value from the marketplace in support of the deliverables. Others often are not in the same position.

In this context and at this point in time, ReMI thus decided to encourage pig producers and those responsible for the purchasing of pork and pork products to adopt and implement as a minimum the [World Organisation for Animal Health \(WOAH\) Terrestrial Code](#) – Chapter 7.13 on Animal Welfare and Pig Production Systems (updated in 2019).

The code also includes suggested outcome measures (*animal-based criteria*) for each component that companies should also apply in some form to understand if actions they are taking do indeed support the desired continuous improvement.

Furthermore, ReMI credits the many local frameworks and standards that already exist in different geographies as an excellent starting point. Furthermore, the group welcomes the work of those organizations that challenge and encourage continuous welfare improvement.

Example

CP Foods – [CP Foods is progressing toward the group gestation pen](#) (*example of action on a component of animal welfare*)

The responsibility of actors in the pork value chain

All actors in the pork value chain will need to work together (along with consumers, policymakers, financial markets and other stakeholders) if we are to scale the use of production practices as described in this document. Single actors in the value chain cannot shoulder the responsibility alone. At a high level, the beneficial actions of different stakeholders that will support producers and processors include:

Input and equipment suppliers – Innovate, develop and market new and sustainable products that support the realization of the criteria outlined in this document.

Banks and financial market participants – Understand the risks associated with unsustainable practices in the pork value chain and channel flows of capital to the more sustainable and lower risk operators. This may include offering preferential rates for high-performing businesses.

Retailers and food service companies – Communicate to consumers and specify responsibility criteria in procurement contracts.

With such support, producers, suppliers of feed and other inputs and other value chain businesses will have the support they need to take important actions in the transition to future production practices.

Throughout this document, we have included links to examples of good practices from ReMI members that companies operating in the value chain can adopt. ReMI member companies commit to advancing performance in line with the criteria defined within this document as we transition to a sustainable and just food system.

About WBCSD

WBCSD is the premier global, CEO-led community of over 200 of the world's leading sustainable businesses working collectively to accelerate the system transformations needed for a net-zero, nature-positive, and more equitable future.

We do this by engaging executives and sustainability leaders from business and elsewhere to share practical insights on the obstacles and opportunities we currently face in tackling the integrated climate, nature and inequality sustainability challenge; by co-developing “how to” CEO-guides from these insights; by providing science-based target guidance, including standards and protocols; and by developing tools and platforms to help leading businesses in sustainability drive integrated actions to tackle climate, nature and inequality challenges across sectors and geographical regions.

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 creating a world in which 9+ billion people are living well, within planetary boundaries, by mid-century.

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References

1. Nunes, K. (2022). Value shaping up to be dominant 2023 consumer trend. *Food Business News*. Retrieved from: <https://www.foodbusinessnews.net/articles/22637-value-shaping-up-to-be-dominant-2023-consumer-trend>.
2. FMCG Gurus (2022). *Route to Sustainability Report*. Retrieved from: <https://fmcggurus.com/reports/fmcg-gurus-the-route-to-sustainability-in-2022-global-report/>.
3. Ibid
4. RaboResearch (2021). *Global Animal Protein Outlook 2022*. Retrieved from: <https://research.rabobank.com/far/en/sectors/animal-protein/ap-outlook-2022.html>.
5. Center for Food Integrity (2020). *CFI360: The Future of Animal Protein*. Retrieved from: <https://foodintegrity.org/cfi-360-the-future-of-animal-protein/>.
6. Bastounis, A. et al. (2021). The Impact of Environmental Sustainability Labels on Willingness-to-Pay for Foods: A Systematic Review and Meta-Analysis of Discrete Choice Experiments. Retrieved from: <https://www.mdpi.com/2072-6643/13/8/2677>. *Nutrients* 2021, 13(8), 2677.
7. Responsible Meat Initiative (2023). *Consumer Engagement*. Retrieved from: <https://responsiblemeat.org/consumer-engagement/>.



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