

Expectations to companies on
**Health and Sustainable Food
Systems**



Objective

This document is part of a series of expectation documents from DNB Asset Management (DNB AM), intended to explicitly outline to companies within our investment universe how we expect them to manage specific environmental, social, and governance (ESG) topics. Our expectations are based on internationally recognised principles such as the UN Global Compact, the UN Guiding Principles on Business and Human Rights (UN Guiding Principles), the G20/OECD Principles of Corporate Governance, the OECD Guidelines for Multinational Enterprises (OECD Guidelines) and other topic-specific standards.

The DNB Group Instruction for Responsible Investments (the Group Instruction) is the starting point when considering sustainable investment practices. The Group Instruction shall ensure that DNB does not contribute to human or labour rights violations, corruption, serious environmental harm, and other actions which may be perceived to be unethical and/or unsustainable. It shall also ensure that assessments of risks and opportunities arising from ESG factors are integrated into the investment decision-making process.

The purpose of this document is to define our expectations and criteria towards companies related to health and sustainable food systems, including in supply chains and other business relationships. This document forms the basis for dialogues with companies. Our expectations on health and sustainable food systems are closely linked to other expectation documents published by DNB AM, including expectations on climate change¹, human rights², oceans³, water⁴, biodiversity⁵, and serious environmental harm⁶. Health and sustainable food systems are also closely interlinked with the Sustainable Development Goals (SDGs) outlined by the United Nations (UN), including SDG 2 Zero Hunger, SDG 3 Good Health and Well-Being, and SDG 12 Responsible Consumption and Production. The SDGs call for major transformations in agriculture and food systems to end hunger, achieve food security and improve nutrition by 2030.⁷

Definition and scope

Health and sustainable food systems encompass a broad range of topics. Here follows some key definitions:

Health: A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.⁸ In this document, health is examined within the context of access to appropriate nutrition and health care.

Nutrition: The intake of food, considered in relation to the body's dietary needs. Nutrition is a critical part of health and development. Better nutrition is related to improved infant, child and maternal health, stronger immune systems, safer pregnancy and childbirth, lower risk of non-communicable diseases (such as diabetes and cardiovascular disease), and longevity.⁹

Food system: All the elements and activities involved in the production, processing, distribution, preparation, and consumption of food.¹⁰

Sustainable food system: A system that delivers food security and nutrition for all in such a way that the economic, social, and environmental bases to generate food security and nutrition for future generations are not compromised.¹¹

¹ DNB Asset Management. Expectations to companies on climate change. Retrieved from <https://s3.eu-north-1.amazonaws.com/dnb-asset-management/Climate-Change-Expectations-updated-v3.pdf>

² DNB Asset Management. Expectations to companies on human rights. Retrieved from <https://www.dnb.no/portalfont/nedlast/no/om-oss/samfunnsansvar/2023/Human-rights.pdf>

³ DNB Asset Management. Expectations to companies on oceans. Retrieved from <https://s3.eu-north-1.amazonaws.com/dnb-asset-management/Oceans-expectations-v6-published.pdf>

⁴ DNB Asset Management. Expectations to companies on water. Retrieved from https://www.dnb.no/portalfont/nedlast/no/om-oss/samfunnsansvar/2020/Water_Expectations.pdf

⁵ DNB Asset Management. Expectations to companies on biodiversity and deforestation. Retrieved from https://www.dnb.no/portalfont/nedlast/no/om-oss/samfunnsansvar/2021/Biodiversity_expectations_2021.pdf

⁶ DNB Asset Management. Expectations to companies on serious environmental harm. Retrieved from https://www.dnb.no/portalfont/nedlast/en/about-us/corporate-responsibility/2020/Serious_Environmental_Harm_2020.pdf

⁷ United Nations, 2015. The UN Sustainable Development Goals. Retrieved from <https://sdgs.un.org/goals>.

⁸ World Health Organization. Health and well-being. Retrieved from <https://www.who.int/data/gho/data/major-themes/health-and-well-being>

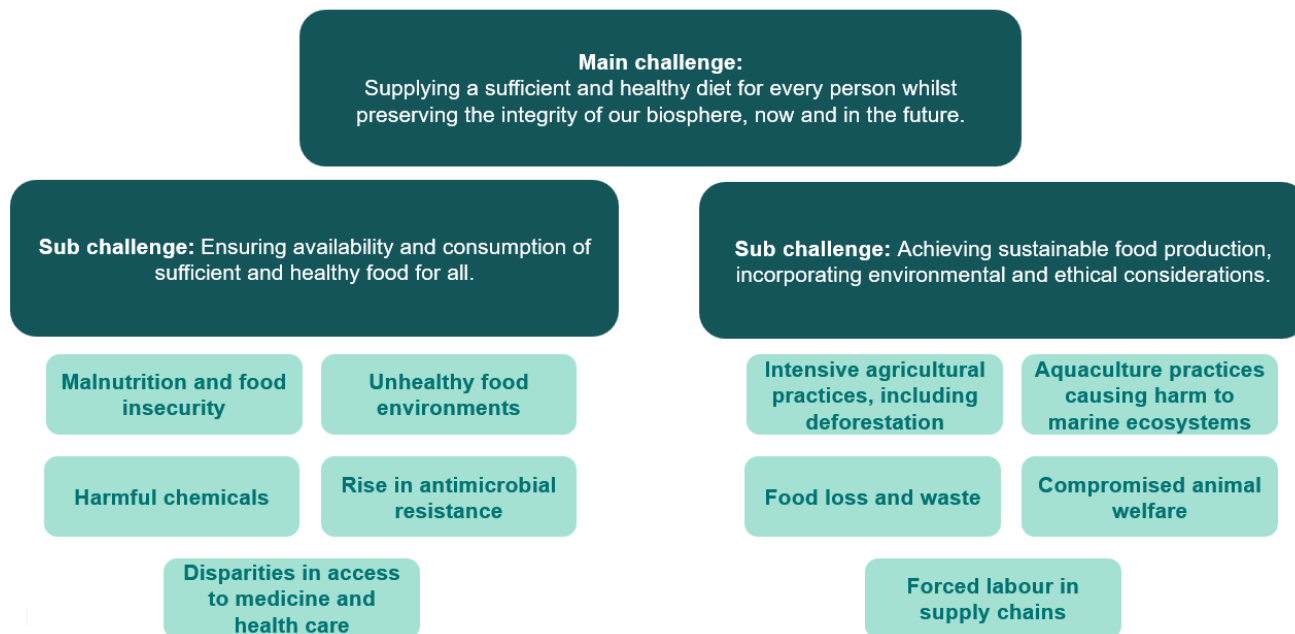
⁹ World Health Organization. Nutrition. Retrieved from https://www.who.int/health-topics/nutrition#tab=tab_1

¹⁰ UNICEF. (2019). The State of the World's Children 2019: Children, food and nutrition: Growing well in a changing world. Retrieved from <https://www.unicef.org/reports/state-of-worlds-children-2019>

¹¹ United Nations. Fast facts – What are sustainable food systems? Retrieved from <https://www.un.org/sustainabledevelopment/fast-facts-what-are-sustainable-food-systems/>

Food environments: A mix of factors that influence how children and families eat, including food availability, accessibility, affordability, and preference.¹²

The topics of health and sustainable food systems are highly interconnected.¹³ Health is a part of the notion food systems but is also covering other topics more directly linked to medicine. Our scope is based on the following challenges within connected topics:



We refer to our other expectations documents for more detail on the following topics:

- Oceans, for fishing, aquaculture, and other marine activities connected to food production.
- Climate change, for climate change impact through emissions of greenhouse gases during food production.
- Biodiversity, for nature risks including impact on deforestation causing habitat loss and disruption to ecosystems.
- Water, for water usage and excessive use of chemical fertilisers and pesticides.
- Human Rights, for labour rights and just transition.

This document is applicable to all companies, with particular relevance to the following sectors:

- The food and beverage industry in general, encompassing:
 - Primary production, including agriculture and aquaculture
 - Food processing, production and distribution
 - Retail and marketing
 - Food service industry
- Pharmaceuticals and biotechnology, specifically addressing issues related to antimicrobial resistance (AMR), harmful chemicals and access to medicine.

¹² UNICEF. (2019). The State of the World's Children 2019: Children, food and nutrition: Growing well in a changing world. Retrieved from <https://www.unicef.org/reports/state-of-worlds-children-2019>

¹³ Food and Agriculture Organization. (2017). Nutrition and food systems (p. 26). Retrieved from <https://openknowledge.fao.org/server/api/core/bitstreams/4ac1286e-eef3-4f1d-b5bd-d92f5d1ce738/content>

Introduction to Health and Sustainable Food Systems

Main challenge: Supplying a sufficient and healthy diet for every person whilst preserving the integrity of our biosphere, now and in the future

The global population is projected to reach nearly 10 billion by 2050¹⁴, with 68 per cent expected to live in urban areas¹⁵. This surge presents significant challenges for our food and agricultural systems. Organisations like the UN and the WHO stress the urgent need to transform our food systems for long-term sustainability. Transforming food systems worldwide provides a uniquely powerful approach to address the global climate, nature, and health emergencies while improving the lives of millions.¹⁶ Corporations are integral to driving this transition forward.¹⁷

Sub-challenge: Ensuring availability and consumption of sufficient and healthy food for all

The major challenges related to global health are **malnutrition and food insecurity**, with about 9 per cent of the world's population facing chronic hunger and around 30 per cent of the population experiencing moderate to severe food-insecurity in 2023.¹⁸ Conflicts and the impacts of climate change are key drivers of insecurity of global supply chains and has contributed to the largest global food crisis since the Second World War.¹⁹ Malnutrition, particularly affecting the poor, women and children, has far reaching human and economic consequences.²⁰ Unhealthy diets and malnutrition in all its forms are the leading cause of death and disability worldwide²¹, with one in three children not developing properly because of malnutrition²². Today the world faces a triple burden of malnutrition: undernutrition, overnutrition and micronutrient deficiency (hidden hunger).²³ Nutrition is increasingly recognised as a material issue for institutional investors, with risks related to litigation, regulation, and shifting consumer preferences potentially affecting food companies' profitability, brand value, and market share.^{24,25}

A key driver of malnutrition is **unhealthy food environments**, which encompass factors like food availability, accessibility, affordability, and preference that influence food choices. Families in cities, particularly the urban poor, face challenges in accessing healthy options, leading to reliance on highly processed and unhealthy foods. Food marketing, especially through digital channels, plays a pivotal role in driving demand for food and drinks of low nutritional value, contributing to the rise of childhood obesity.²⁶ Effective government regulation is vital to address this issue. Specific attention should be paid to nutrition during the first two years of a child's life.²⁷ The WHO emphasises the significance of optimal breastfeeding as a crucial element in infant and young child nutrition, while the International Code of Marketing of Breast-milk Substitutes encourages responsible marketing practices by baby food companies.²⁸

¹⁴ High Level Panel of Experts on Food Security and Nutrition (UN). (2017). Nutrition and food systems. Retrieved from <https://openknowledge.fao.org/server/api/core/bitstreams/4ac1286e-eef3-4f1d-b5bd-d92f5d1ce738/content>

¹⁵ National Research Council (US). (2009). The public health effects of food deserts. Retrieved from: <https://www.ncbi.nlm.nih.gov/books/ NBK208011/>

¹⁶ Food System Economics. (2023). FSEC Executive Summary: Global Policy Report. Retrieved from https://foodsystemeconomics.org/FSEC-Executive_Summary-Global_Policy_Report.pdf

¹⁷ World Economic Forum. (2024). Global Risks Report 2024. Retrieved from <https://www.weforum.org/publications/global-risks-report-2024/>

¹⁸ Food and Agriculture Organization of the United Nations, et al. (2023). The State of Food Security and Nutrition in the World 2023: Urbanization, Agrifood Systems Transformation and Healthy Diets across the Rural–Urban Continuum. Retrieved from www.fao.org/3/cc3017en/cc3017en.pdf.

¹⁹ United Nations. Goal 2: Zero hunger. Retrieved from <https://www.un.org/sustainabledevelopment/hunger/>

²⁰ For a definition of malnutrition, we refer to WHO: Malnutrition (who.int)

²¹ <https://prod.nbim.no/contentassets/ea09c471019544d5b4d089849a443e13/guidance-framework-final.pdf>

²² United Nations Children's Fund (UNICEF). (2019). The changing face of malnutrition. Retrieved from <https://www.unicef.org/reports/changing-face-malnutrition>

²³ United Nations Children's Fund (UNICEF). (2020). New insights: 21st century malnutrition. Retrieved from <https://www.unicef.org/innocenti/stories/new-insights-21st-century-malnutrition>

²⁴ Planet Tracker. (2024). Materiality of nutrition. Retrieved from <https://planet-tracker.org/materiality-of-nutrition/>

²⁵ Schroders & Rathbone Greenbank. (2017). Sugar, obesity and noncommunicable disease: investor expectations. Retrieved from <https://prod.schroders.com/en/sysglobalassets/news/sugar-investor-expectations-report.pdf>

²⁶ United Nations Children's Fund (UNICEF). (2019). The changing face of malnutrition. Retrieved from <https://www.unicef.org/reports/changing-face-malnutrition>

²⁷ Access to Nutrition Initiative. (2023). BMS-CF Index methodology 2023. Retrieved from https://accesstonutrition.org/app/uploads/2023/01/BMS-CF-Index_methodology-2023.pdf

²⁸ WHO (1981) 'International Code of Marketing of Breast-milk Substitutes' Retrieved from <https://www.who.int/publications/i/item/9241541601>

Over the past decade, nutritional research has increasingly shed light on the potential health risks associated with **ultra-processed foods** (UPFs).²⁹ The NOVA framework categorises foods based on their processing levels, spanning from “unprocessed” to “ultra-processed”.³⁰ While food processing itself is a natural part of food preparation, UPFs stand out due to their industrial nature and intent of their processing.³¹ UPFs are industrially manufactured products comprising deconstructed and modified food components, recombined with various additives, with common examples including sausages, packaged snacks and soft drinks. Several studies have demonstrated positive associations between UPF consumption and the risk of adverse health impacts.³² In response to these concerns, there has been a growing regulatory emphasis in several countries, such as implementation of front-of-pack warning labels and marketing restrictions.³³

Another relevant topic threatening health is **harmful chemicals**, which can cause adverse health effects or environmental damage.³⁴ While certain chemicals are essential for food preservation and flavour enhancement, concerns are rising regarding the adverse effects of some additives, artificial colours, preservatives, and environmental toxins.³⁵ Of particular importance is endocrine-disrupting chemicals (EDCs), which interfere with hormone action, thereby increasing the risk of adverse health outcomes, including cancer, reproductive impairment, cognitive deficits, and obesity.³⁶ Under EU chemical safety law, REACH, endocrine disruptors may be identified as substances of very high concern (SVHCs) when there is scientific evidence of probable serious effects to human health or the environment.³⁷ Common examples include bisphenol A (BPA)³⁸, often used in food and beverage containers, and per- and polyfluoroalkyl substances (PFAS), also known as “forever chemicals”, for instance used in grease-resistant food packaging.³⁹ Exposure to some types of PFAS have been associated with serious health effects, including the disruption of the immune system.⁴⁰ The EU is placing chemicals management high on the agenda, advocating for a precautionary approach.⁴¹

The use of antibiotics in food production, especially by continuous feeding of low doses to animals for extended periods of time, can lead to the **development of antimicrobial resistance (AMR)**.⁴² WHO has stated that AMR is one of the biggest threats to global safety.⁴³ Bacterial infections, which are failed to be cured due to AMR, claim at least 700 000 human lives per year globally, and there are projections suggesting that 10 million lives will be lost yearly by 2050.⁴⁴ With predicted losses of USD \$100 trillion in global productivity by 2050, effective AMR mitigation strategies would offer substantial economic benefits while protecting human,

²⁹ Monteiro, C.A., Cannon, G., Lawrence, M., Costa Louzada, M.L., & Pereira Machado, P. (2019). Ultra-processed foods, diet quality, and health using the NOVA classification system. Rome: FAO. Retrieved from <https://www.fao.org/3/ca5644en/ca5644en.pdf>

³⁰ Monteiro, C. A., Levy, R. B., Claro, R. M., Castro, I. R. R., & Cannon, G. (2010). A new classification of foods based on the extent and purpose of food processing. *Cadernos de Saúde Pública*, 26(11), 2039-2049. Retrieved from <https://www.scielo.br/j/csp/a/fQWY8tBbJkMFhGq6gPzsGkb/?lang=en>

³¹ Koios, D., Machado, P., Lacy-Nichols, J., & Guallar-Castillón, P. (2022). Representations of ultra-processed foods: A global analysis of how dietary guidelines refer to levels of food processing. Retrieved from https://www.ijhpm.com/article_4197.html

³² Srour, B., Kordahi, M. C., Bonazzi, E., Deschasaux-Tanguy, M., Touvier, M., & Chassaing, B. (2022). Ultra-processed foods and human health: from epidemiological evidence to mechanistic insights. *Lancet Gastroenterol Hepatol*, 7(12), 1128-1140. Retrieved from [https://doi.org/10.1016/S2468-1253\(22\)00169-8](https://doi.org/10.1016/S2468-1253(22)00169-8)

³³ Popkin BM, Barquera S, Corvalan C, Hofman KJ, Monteiro C, Ng SW, Swart EC, Taillie LS. Towards unified and impactful policies to reduce ultra-processed food consumption and promote healthier eating. *Lancet Diabetes Endocrinol*. (2021). Jul;9(7):462-470. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/33865500/>

³⁴ World Health Organization. 10 chemicals of public health concern. Retrieved from <https://www.who.int/news-room/photo-story/photo-story-detail/10-chemicals-of-public-health-concern>

³⁵ European Food Safety Authority. Chemicals in food. Retrieved from <https://www.efsa.europa.eu/en/topics/topic/chemicals-food>

³⁶ La Merrill, M.A., Vandenberg, L.N., Smith, M.T. et al. (2020). Consensus on the key characteristics of endocrine-disrupting chemicals as a basis for hazard identification. *Nat Rev Endocrinol* 16, 45–57. Retrieved from <https://doi.org/10.1038/s41574-019-0273-8>

³⁷ European Chemicals Agency. Endocrine disruptor assessment. Retrieved from <https://echa.europa.eu/understanding-ed-assessment>

³⁸ Richter, C. A., Birnbaum, L. S., Farabolini, F., Newbold, R. R., Rubin, B. S., Talsness, C. E., & vom Saal, F. S. (2007). Bisphenol A: an endocrine disruptor with widespread exposure and multiple effects. *Reproductive Toxicology*, 24(2), 139-177. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/21605673/>

³⁹ U.S. Food & Drug Administration. Per- and Polyfluoroalkyl Substances (PFAS). Retrieved from <https://www.fda.gov/food/environmental-contaminants-food-and-polyfluoroalkyl-substances-pfas#:~:text=What%20Are%20PFAS%3F,%2C%20and%20fire%2Dfighting%20foams>

⁴⁰ Haug, L. S., Knutsen, H. K., & Thomsen, C. (2020). Fakta om PFOS og PFOA. Folkehelseinstituttet. Retrieved from <https://www.fhi.no/kil/ml/jogifter/fakta/fakta-om-pfos-og-pfoa/>

⁴¹ European Commission. Chemicals. https://environment.ec.europa.eu/topics/chemicals_en

⁴² Maron DF, Smith TJS, and Nachman KE. (2013). Restrictions on antimicrobial use in food animal production: an international regulatory and economic survey. *Globalization and Health* 9:48. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3853314/>

⁴³ BBC. (2014, April 30). Antibiotic resistance now ‘global threat’, WHO warns. <https://www.bbc.com/news/health-27204988>

⁴⁴ O'Neill, J. (2014). Tackling a crisis for the health and wealth of nations. *The Review on Antimicrobial Resistance*. https://amr-review.org/sites/default/files/AMR%20Review%20Paper%20-%20Tackling%20a%20crisis%20for%20the%20health%20and%20wealth%20of%20nations_1.pdf

animal and environmental health.⁴⁵ In addition to complying with WHO Guidelines⁴⁶, companies should refrain from lobbying or political influence activities that discourage regulatory solutions to AMR.

Another global critical issue, primarily relevant for companies within the pharmaceuticals and biotechnology industries, is **access to medicine**. Millions of people suffer from preventable illnesses and lose their lives due to the unavailability or unaffordability of essential vaccines, medicines, and diagnostic tests.⁴⁷ This disparity in access is particularly acute in low- and middle-income countries (LMICs), where vulnerable populations face significant barriers in obtaining life-saving medical resources. Furthermore, limited access to medicine and healthcare exacerbates health issues related to foodborne illnesses and nutritional deficiencies, highlighting the need for comprehensive strategies to address systemic inequities in healthcare delivery and accessibility.⁴⁸

Sub-challenge: Achieving sustainable food production, incorporating environmental and ethical considerations

To achieve sustainable food production, it is crucial to address the impacts of current agricultural practices. **Intensive agricultural practices** have led to soil degradation, biodiversity loss⁴⁹, and deforestation, causing habitat destruction and ecosystem disruption.⁵⁰ The excessive use of chemical fertilisers and pesticides exacerbates these issues. In response, the FAO advocates for integration of various sustainable agricultural practices, under the broader umbrella of Nature-based Solutions (NbS).⁵¹ Supporting smallholder farmers, who contribute significantly to global food production, is vital for ensuring their livelihoods and the health of ecosystems. Another key challenge of today's intensive agricultural practices is the antimicrobial misuse, with most of the global antimicrobial use occurring in animal agriculture.⁵² This is significantly contributing to the global threat of AMR mentioned above.

Similarly, **aquatic food systems** represent a viable solution for improving global food security and nutrition.⁵³ However, transformation is essential for realising this potential. The sector faces major challenges, including climate change and natural disasters, water scarcity, pollution and biodiversity loss.⁵⁴ To effectively address these interconnected challenges, it is crucial to adopt a value chain perspective, and to consider the marine and agricultural sectors jointly. Our expectations for companies within aquaculture and fishing are outlined in our document on oceans.⁵⁵

A topic highly relevant for both agriculture and aquaculture is **animal welfare**, concerning the physical and mental well-being of animals. It encompasses a wide range of factors, including animal husbandry, transport, slaughter, and scientific procedures. The Five Freedoms of Animals provide a framework for understanding and addressing animal welfare concerns.⁵⁶ Improving animal welfare aligns with consumer priorities and can

⁴⁵ FAIRR. Health and wealth: The investor's guide to antimicrobial resistance. Retrieved from https://go.fairr.org/health_and_wealth_the_investors_guide_to_antimicrobial_resistance

⁴⁶ World Health Organization. WHO guidelines on use of medically important antimicrobials in food-producing animals. Retrieved from <https://www.who.int/publications/i/item/9789241550130>

⁴⁷ Access to Medicine Index (2022). Retrieved from <https://accesstomedicinefoundation.org/news/2022-access-to-medicine-index-more-companies-move-to-address-access-to-medicine-will-they-now-go-further>

⁴⁸ Access to Medicine Index (2022). Retrieved from <https://accesstomedicinefoundation.org/news/2022-access-to-medicine-index-more-companies-move-to-address-access-to-medicine-will-they-now-go-further>

⁴⁹ Our expectations related to biodiversity and deforestation is outlined in a separate expectations document: DNB Asset Management. Expectations to companies on biodiversity and deforestation. Retrieved from https://www.dnb.no/portalfront/nedlast/no/om-oss/samfunnsansvar/2021/Biodiversity_expectations_2021.pdf

⁵⁰ World Wildlife Fund. Deforestation and forest degradation. Retrieved from <https://www.worldwildlife.org/threats/deforestation-and-forest-degradation>

⁵¹ Nature-based Solutions are defined as actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits. Nature-based solutions in agriculture: Project design for securing investment (fao.org)

⁵² FAIRR. Animal pharmaceuticals engagement. Retrieved from <https://www.fairr.org/engagements/animal-pharma>

⁵³ Food and Agriculture Organization. (2024). World fisheries and aquaculture 2024. Retrieved from <https://openknowledge.fao.org/server/api/core/bitstreams/131ab804-f871-4562-bd0d-2457ebad0e47/content/sofia/2024/world-fisheries-aquaculture.html>

⁵⁴ Food and Agriculture Organization. (2024). The state of world fisheries and aquaculture 2024. Retrieved from <https://effop.org/wp-content/uploads/2024/06/FAO-Report-The-State-of-World-Fisheries-and-Aquaculture-2024.pdf>

⁵⁵ DNB Asset Management. Expectations to companies on oceans. Retrieved from <https://s3.eu-north-1.amazonaws.com/dnb-asset-management/Oceans-expectations-v6-published.pdf>

⁵⁶ AWECA Advisors. What is animal welfare? Examples in farm animals. Retrieved from <https://awecadvisors.org/en/farm-animals/what-is-animal-welfare/>

mitigate financial and reputational risks for businesses, while also addressing broader sustainability issues like climate action and biodiversity conservation.⁵⁷

Achieving sustainable food systems is not possible without addressing **food waste and loss**. Food waste refers to food that is fit for consumption but consciously discarded at the retail or consumption phases. Food loss, however, occurs before the food reaches consumers, and is caused by issues in the production, storage, processing, and distribution.⁵⁸ According to a UN report from 2021, about 931 million tonnes of food are wasted each year, with households, food services, and retail as primary contributors.⁵⁹ By 2030, it is estimated that food waste will significantly increase, alongside a rise in global hunger.⁶⁰ Addressing food waste is crucial, as it accounts for 8-10 per cent of global carbon emissions and imply enormous economic losses⁶¹. Moreover, FAO underscores the need to optimise food resource use, as global food demand is expected to rise by 50 per cent by 2050, while arable land expansion is limited.⁶²

Forced labour, as defined by the International Labour Organization (ILO)⁶³, is a critical issue in the food and beverage supply chains, particularly affecting migrant and minority workers in developing countries. The sector's reliance on labour-intensive practices and exploitative payment systems, exacerbated by climate change and unsafe working conditions, increases the risk of forced labour. Despite some companies showing commitment to address this issue, the KnowTheChain benchmark report reveals that progress is stagnating, with many companies failing to improve recruitment processes and overall labour conditions.⁶⁴ Promoting human rights in food systems is essential for sustainable development and requires concerted efforts for improvement.⁶⁵ Expectations on labour rights is outlined in our document on human rights.⁶⁶

Expectations to companies

Our expectations are relevant for all companies within our investment universe and are viewed by us as best-practice guidance. However, companies within food and beverage sectors are the main target group for our expectations document. See also the appendix for more details on relevant international standards.

1. Governance

- a) Ensure board-level oversight for material issues relating to health and sustainable food systems, including AMR and harmful chemicals.
- b) Support the development of standards and best practices related to health and sustainable food systems.
- c) Actively support relevant public health-related government interventions and refrain from lobbying against regulations aimed at promoting health and sustainable food systems.
- d) Establish ethical marketing practices that do not mislead consumers, especially children, with regards to food products and their health benefits. Ensure that marketing of breast milk substitutes is in line with the principles outlined in the International Code of Marketing of Breast-Milk Substitutes.
- e) Adopt a precautionary approach to chemical use, adhering to internationally recognised standards.

⁵⁷ FAIRR Initiative. (2023). Why animal welfare is an investment risk. Retrieved from <https://www.fairr.org/news-events/insights/why-animal-welfare-is-an-investment-risk>

⁵⁸ Harvard T.H. Chan School of Public Health. Food waste. The Nutrition Source. Retrieved from <https://nutritionsource.hsph.harvard.edu/sustainability/food-waste/>

⁵⁹ United Nations Environment Programme. (2021). UNEP Food Waste Index Report 2021. Retrieved from <https://www.unep.org/resources/report/unep-food-waste-index-report-2021>

⁶⁰ Boston Consulting Group. Closing the food waste gap. Retrieved from <https://www.bcg.com/featured-insights/closing-the-gap/food-waste>

⁶¹ World Economic Forum. (2021). Global food waste twice the size of previous estimates. Retrieved from <https://www.weforum.org/agenda/2021/03/global-food-waste-solutions/>

⁶² FAO (2018). The future of food and agriculture – Alternative pathways to 2050. Summary version. Retrieved from <https://www.fao.org/3/CA1553EN/ca1553en.pdf>

⁶³ "situations in which persons are coerced to work through the use of violence or intimidation, or by more subtle means such as manipulated debt, retention of identity papers or threats of denunciation to immigration authorities", from ILO, source: The meanings of Forced Labour (ilo.org)

⁶⁴ KnowTheChain. (2023). 2023 Food & Beverage Benchmark Findings Report. Retrieved from <https://knowthechain.org/wp-content/uploads/KTC-2023-FB-Benchmark-Report-Oct-23.pdf>

⁶⁵ OHCHR. (2022). Human rights depend on healthy and sustainable food systems. Retrieved from <https://www.ohchr.org/sites/default/files/2022-05/Food-Summary-Final.pdf>

⁶⁶ DNB Asset Management. Expectations to companies on human rights. Retrieved from <https://www.dnb.no/portalfont/nedlast/no/om-oss/samfunnsansvar/2023/Human-rights.pdf>

2. Strategy

- a) Promote innovation and sustainable agricultural practices across the food value chain to support health and environmental sustainability, including soil health. Strong owners of marketplaces and brands should facilitate investments in new technologies and production methods at the primary level.
- b) Collaborate across sectors to effectively develop and implement innovative circular solutions that align with the objectives of the EU Circular Economy Action Plan⁶⁷, including sustainable feed solutions that integrate aquaculture and agriculture.⁶⁸
- c) Integrate responsible antibiotic use into company policies, with a time-bound commitment to eliminate routine antibiotic use in animal agriculture and aquaculture.
- d) Develop strategies to minimise food loss and waste across the supply chain, educate consumers on proper food storage, and support food redistribution programs.
- e) Develop a comprehensive nutrition strategy to deliver affordable, accessible, and healthy food and beverage options in all markets. Adopt a precautionary approach to producing and marketing ultra-processed products⁶⁹.
- f) Collaborate with local communities and organisations to improve nutrition and food availability in underserved areas.
- g) Adopt a precautionary approach to the use of harmful chemicals in food production and processing and allocate resources for R&D focused on sustainable alternatives to harmful chemicals.
- h) Uphold ethical treatment and welfare standards throughout all stages of animal production, adhering to the Five Freedoms of Animals and internationally recognised standards listed in the appendix. Minimise animal testing through alternative methods and strict adherence to the 3Rs principle (Replace, Reduce, Refine) and collaborate to advance alternative testing methods.
- i) For pharmaceutical companies, implement tiered pricing models and licensing agreements to enhance the affordability and local production of essential medicines, especially for neglected diseases and underserved populations.

3. Risk Management and Engagement

- a) Conduct comprehensive risk assessments to understand and quantify potential antibiotic resistance-related risks. If identified as a risk factor, disclose it in public reporting under the key risks section along with actionable steps for risk mitigation.
- b) Regularly test food products to detect and mitigate the presence of harmful chemicals and phase out the most harmful ones.⁷⁰ Implement robust supply chain risk management, auditing suppliers for compliance with regulations and best practices related to the use and handling of harmful chemicals.
- c) Implement policies for food safety and traceability covering sourcing and own operations. Conduct regular audits and ensure adherence to international safety standards.
- d) For companies involved in genetically modified organisms (GMOs), ensure that GMO products are safe for human consumption and the environment. This involves rigorous testing and compliance with regulatory standards set by governments and international bodies.
- e) Implement robust measures to prevent forced labour.⁷¹ Conduct due diligence to identify, prevent, and address risks of forced labour in the supply chain.

4. Disclosure, Metrics, and Targets

- a) Report on alignment of lobbying efforts with corporate commitments on both climate and health.
- b) Provide transparent reporting on management of material issues in the annual report, including clear performance metrics and measurable targets. Material issues may encompass, but are not limited to, the following:

⁶⁷ European Commission. (2020). Circular economy action plan: For a cleaner and more competitive Europe. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A98%3AFIN>

⁶⁸ Norwegian Research Council. (2023). Et samfunnsloft for bærekraftig fôr: Samfunnsoppdrag om bærekraftig fôr: forslag til mål og organisering. Oslo. Retrieved from https://www.forskningsradet.no/siteassets/publikasjoner/2023/et-samfunnsloft-for-barekraftig-for_21nov.pdf

⁶⁹ According to NOVA Group 4, illustration retrieved from https://www.researchgate.net/figure/Spectrum-of-processing-of-foods-based-on-the-NOVA-classification-The-figure-provides_fig1_355481122

⁷⁰ Avoid the use of substances banned under the Stockholm Convention on Persistent Organic Pollutants (POP) and those listed in Annex III of the Rotterdam Convention, as well as pesticides included in the SIN List or categorized as WHO Class 1A or 1B.

⁷¹ Including ensuring workers have free access to their documentation, establishing clear and transparent policies against forced labour and trafficking, carefully monitoring labor agencies to prevent exploitation, and providing workers with a living income that allows them to meet their basic needs and have a decent standard of living.

- chemical management practices, including targets for reducing and eliminating the use of harmful chemicals,
 - pesticides and fertiliser usage, including strategies for responsible application and reduction,
 - responsible antibiotics usage, including a definition of responsible use, how sales and marketing policy supports this, assigned responsibilities for implementation, and R&D expenditure on antibiotic alternatives,
 - labour practices, including measures to identify, prevent, and address risks of forced labour in the supply chain,
 - animal welfare practices, including commitment to uphold welfare standards throughout the supply chain,
 - food loss and waste practices, including initiatives aimed at minimising waste,
 - health and nutrition, including clear standards for defining healthy products, targets for increasing the proportion of healthier products, and an analysis of food product portfolios and profitability using established labelling systems like the Health Star Rating system,
 - access to medicine, including targets for increasing access in underserved regions.
- c) Ensure consistent and available disclosures empowering customers to make informed choices, including:
- clear and honest product labels with detailed ingredient lists, including additives and processing methods, along with evidence to support any health claims,
 - detailed nutrition information online for all products sold on online stores,
 - clear labelling of GMO products.

Appendix:

Laws, norms, and standards relevant for health and sustainable food systems that DNB AM expects companies to be compliant with

International Standards and Initiatives	Description of Principles
<p>The World Organisation for Animal Health (WOAH) International Standards</p> <ul style="list-style-type: none"> • The Terrestrial Animal Health Code • The Aquatic Animal Health Code 	<ul style="list-style-type: none"> • The Terrestrial Animal Health Code provides international standards for improving animal health and veterinary public health, including systems for early detection, reporting, and control of diseases in terrestrial animals. • The Aquatic Animal Health Code establishes standards for the health and welfare of aquatic animals, including farmed fish, and guidelines for the responsible use of antimicrobial agents in aquaculture.
European Convention for the protection of animals kept for farming purposes	The purpose of this convention is to lay down minimum common standards for the protection of animals kept for farming purposes. It applies to animals reared or kept for the production of food, wool, skin, or fur or for other farming purposes. It concerns in particular animals in intensive stock-farming systems.
The UN Convention on Biological Diversity (CBD) and the Post-2020 Biodiversity Framework. See also the Cartagena Protocol on Biosafety and the Nagoya Protocol on Access and Benefit-sharing	The CBD is an international legally binding treaty with three main goals: Conservation of biodiversity, sustainable use of the components of biodiversity, and fair and equitable sharing of the benefits arising out of the utilisation of genetic resources
The EU Biodiversity Strategy for 2030. See also the EU Wildlife Trade Regulations and the EU taxonomy	The EU's biodiversity strategy for 2030 is a comprehensive plan to protect nature and reverse the degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030.

EU Farm to Fork strategy	A strategy at the heart of the European Green Deal aiming to make food systems fair, healthy, and environmentally friendly.
EU Chemicals Strategy for Sustainability (CSS)	A strategy aiming to better protect human health and the environment from hazardous chemicals, boost innovation for safe and sustainable chemicals, and support the transition to a toxic-free environment. Part of the EU's zero pollution ambition, which is a key commitment of the European Green Deal.
Other EU regulations and directives relevant for health and sustainable food systems	<ul style="list-style-type: none"> • Regulation (EU) 2023/1115 aims to minimise global deforestation and forest degradation driven by the EU's consumption of certain commodities. • Regulation (EU) 2018/848 lays down the principles and rules for organic production, certification, labelling, and advertising of organic products, applying to both agriculture and aquaculture. • Regulation (EC) No. 1830/2003 mandates that all products containing or produced from GMOs must be labelled clearly. This includes food, feed, and seeds derived from genetically modified plants. • Directive 2010/63/EU establishes stringent ethical and welfare standards for the use of animals in scientific research, aiming to replace, reduce, and refine the use of animals in experiments. • - Common Agricultural Policy (CAP) provides financial support to farmers and promotes sustainable agricultural practices.
The Taskforce on Nature-related Financial Disclosures (TNFD)	TNFD is a global initiative which aims to give financial institutions and companies a complete picture of their environmental risks. It will deliver a framework for organisations to report and act on evolving nature-related risks
United Nations Convention on the Law of the Sea (UNCLOS, 1982)	The "constitution for the ocean". Defines the rights and responsibilities of nations with respect to their use of the world's oceans
Sustainable Ocean Principles (UN Global Compact)	Builds on the UN Global Compact. The nine principles cover the topics: ocean health & productivity, governance & engagement, and data & transparency
The UN Forest Principles (Rio Forest Principles)	The UN Forest Principles is a non-legally binding document that makes several recommendations for conservation and sustainable development of forestry
The CDP Forest – and the questionnaire	CDP Forests provides a framework of action for companies to measure and manage forest-related risks and opportunities, transparently report on progress, and commit to proactive action for the restoration of forests and ecosystems
United Nations Water (UN Water)	The topic of water is not managed by any single UN body, but rather is linked to more than 30 different UN bodies. UN Water coordinates the efforts of UN entities and international organisations working on water
Principles for Responsible Investment (PRI)	The PRI provides a platform for collaborative engagements, also related to biodiversity. They have also produced a range of relevant materials for investors

RESPONSIBLE INVESTMENTS

CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora)	An international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival
Responsible Lobbying Framework	Principles and practical steps for organisations to ensure their lobbying activities are transparent, accountable, consistent, and legitimate.
The IUCN Red list Threatened Species	The world's most comprehensive information source on the global extinction risk status of animal, fungus, and plant species
The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal	The object is to protect human health and the environment against the adverse effects of hazardous waste
The Bern Convention on the Conservation of European Wildlife and Natural Habitats	The Convention is a binding international legal instrument in the field of nature conservation, covering most of the natural heritage of the European continent and extending to some States of Africa
The Convention on Wetlands of International Importance (the Ramsar Convention)	An international treaty for the conservation and sustainable use of wetlands. It is also known as the Convention on Wetlands
Various UN (FAO) frameworks related to food and agriculture	<ul style="list-style-type: none"> • Principles for Responsible Investment in Agriculture and Food Systems • The United Nation's Principles of Responsible Investment in Farmland • The OECD-FAO Guidelines for Responsible Agricultural Supply Chains
Various UN (FAO) voluntary guidelines relevant for fishing and aquaculture (seafood)	<ul style="list-style-type: none"> • The Code of Conduct for Responsible Fisheries (FAO) • Principles for Responsible Shrimp Farming (FAO etc.) • Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (FAO etc.) • - Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (FAO)
The World Health Organization Guidelines on Use of Medically Important Antimicrobials in Food-Producing Animals	Guidelines aiming to preserve the effectiveness of antibiotics crucial for human medicine by promoting practices that reduce the risk of antimicrobial resistance. Recommend stopping the routine use of antibiotics for growth promotion and disease prevention in healthy animals.
The Five Freedoms of Animals	Globally recognised standards promoting ethical treatment of animals: freedom from hunger and thirst, freedom from discomfort, freedom from pain, injury, or disease, freedom to express normal behaviour, and freedom from fear and distress.
EU Chemicals Strategy for Sustainability and the EU chemical safety law, REACH	<p>A strategy adopted by the European Commission in October 2020 as part of the EU's zero pollution ambition and the European Green Deal, aiming to better protect citizens and the environment from harmful chemicals, and boost innovation by promoting the use of safer and more sustainable chemicals.</p> <p>REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) is a regulation of the European Union, adopted to improve</p>

	the protection of human health and the environment from the risks that can be posed by chemicals, while enhancing the competitiveness of the EU chemicals industry. It applies to all chemical substances and places the burden of proof on companies to demonstrate how a substance can be safely used.
Regulation on classification, labelling and packaging of chemicals (CLP)	The CLP Regulation ensures that hazards presented by chemicals are clearly communicated to workers and consumers in the European Union through classification and labelling. It incorporates the classification criteria and labelling rules agreed at the United Nations level, known as the Globally Harmonised System of Classification and Labelling of Chemicals (GHS).
The Stockholm Convention on Persistent Organic Pollutants (POP)	A global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have harmful impacts on human health or on the environment.
The Rotterdam Convention	A multilateral treaty to promote shared responsibilities in relation to the importation of hazardous chemicals. The convention promotes open exchange of information and calls on exporters of hazardous chemicals to use proper labelling, include directions on safe handling, and inform purchasers of any known restrictions or bans.
The SIN (Substitute It Now) List	A database of chemicals likely to be banned or restricted in a near future, as they have been identified by the EU as Substances of Very High Concern due to their potential negative impacts on human health and the environment.
The WHO Recommended Classification of Pesticides by Hazard	This document sets out a classification system to distinguish between the more and less hazardous forms of selected pesticides based on acute risk to human health. It lists common technical grade pesticides and recommended classifications. WHO Class 1A or 1B pesticides are classified by the WHO as extremely or highly hazardous. These are often restricted or banned due to their high levels of acute toxicity, the ease with which they can be absorbed, and their ability to cause severe health effects.

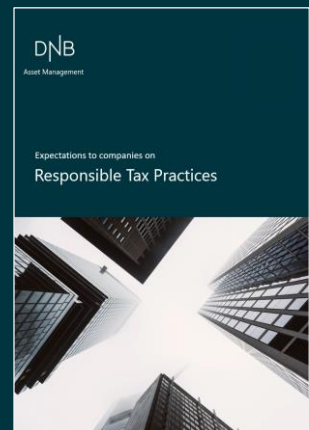
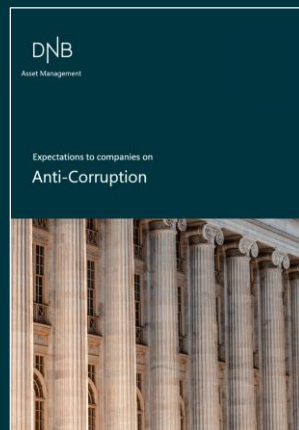
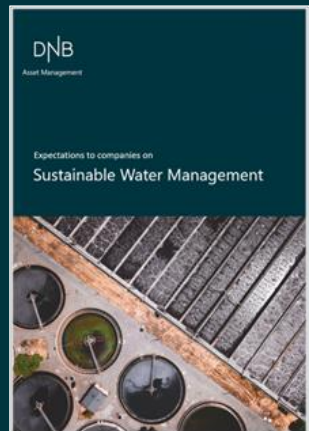
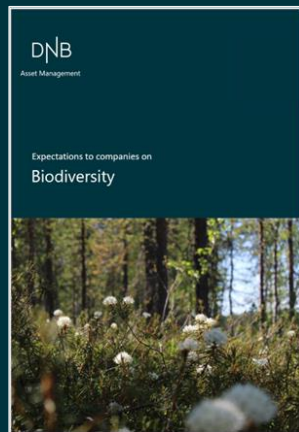
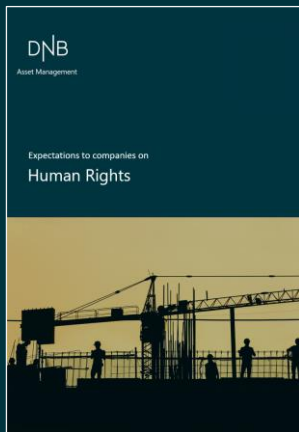
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DNB Asset Management

Below are our additional expectation documents.

See our website <https://dnbam.com/en/responsible-investments/guidelines-and-exclusions> for a full and updated list of our expectations on sustainability topics.



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