A person in a dark pinstriped suit is shown from the chest up, holding a silver and black fountain pen in their right hand and a tablet computer in their left. The tablet displays a document with text and a table. The background is a scenic view of a rolling landscape with green and brown vegetation under a clear blue sky. The overall image has a light blue and white overlay at the top.

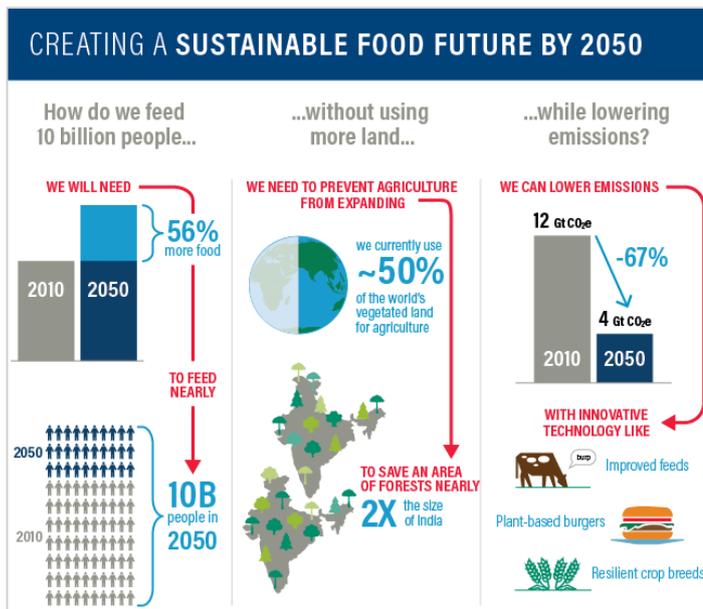
Food: a healthy investment theme

Digitisation, individualisation, big data, etc.: all current investment themes. But do you also have an eye for the theme of "food" within your investment portfolio? This contributes to a healthy and future-proof investment portfolio.

Recently the Dutch Central Bank launched the report "Op waarde geschat?" on how financial institutions are exposed to sustainability themes. The outcomes show that there is a relatively high risk related to water scarcity (€97 billion exposed), scarce natural resources (€56 billion) and loss of biodiversity¹. At first sight, the exposure to these themes mainly seems a result of investing in oil or mining industry. These sectors are often linked to financial and environmental risks, but looking a little bit beyond these usual suspects, shows that a major contributor to the issues described, is related to our dietary habits. Since it is too easy to make the consumers totally responsible for this, there is a role to play for the food and beverage industry, including their partners in the supply chain. The food industry may be at the dawn of a transition, creating risks as well as opportunities for existing and new companies.

CONSUMPTION PATTERN BOTTLENECK SUSTAINABILITY

Impacts of our current (food) production practices already make us cross several planetary boundaries, which basically is the essence of the DNB report we referred to. To feed a world population of 10 billion people in 2050, food production has to increase with 56% compared to 2010.² One of the drivers significantly contributing to global environmental problems, and that is untenable in the longer term, is meat consumption. Currently, the livestock sector contributes about 14.5 percent to global annual greenhouse gas emissions.³ It is projected that by 2050, demand for animal-based food grows by 70 percent and that pastureland accounts for two thirds of agricultural land use.



Source: wri.org/sustfoodfuture

This will result in massive loss of biodiversity, as expansion of pasturelands and feed production of e.g. soy beans will aggravate deforestation.⁴ Besides the environmental problems, excessive red meat consumption will also have a considerable impact on public health. Red meat consumption is associated with an increased risk of mortality, cardiovascular diseases, colorectal cancer and type 2 diabetes.

This is a publication of ACTIAM's Sustainability & Strategy team, consisting of 9 professionals with an average of 11 years in the industry.

ACTIAM manages assets of over €56 billion, making us one of the ten largest Dutch asset management companies. Our solid strategies and sound performance track record will help you to achieve your goals. We offer sustainable solutions to insurance companies, pension funds, banks and distribution partners, as well as to private investors.

This is achieved through actively and passively managed investment funds, via impact investing, mandates and ESG advice (Environmental, Social & Governance).

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¹ De Nederlandsche Bank (2019). Op waarde geschat? Duurzaamheidsrisico's en -doelen in de Nederlandse financiële sector. De Nederlandsche Bank, Amsterdam.

² Wri.org/sustfoodfuture

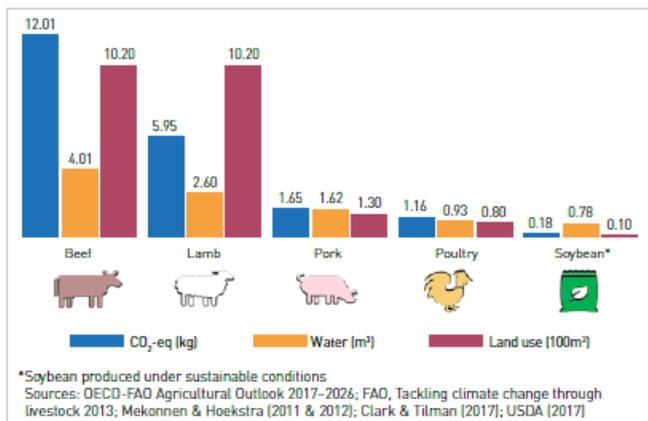
³ FAO (2013). Tackling climate change through livestock: a global assessment of emissions and mitigation opportunities. FAO, Rome.

⁴ <https://www.wri.org/blog/2018/12/how-sustainably-feed-10-billion-people-2050-21-charts>

The EAT-Lancet Commission (a global non-profit startup dedicated to transforming our global food system through sound science, disruption and new partnerships) recently estimated that currently this results in approximately 11 million premature deaths among adults per year⁵. This number is expected to rise if meat consumption in emerging markets grows with increasing income levels. At the same time, this puts increasing pressure on health insurance systems.

Changing our dietary habits towards alternative protein food will improve both environmental quality and public health. In fact, this can have a positive contribution to reach the Paris Agreement and several of the Sustainable Development Goals if dietary habits change. Although we currently see some change, especially in the developed markets, the growth in the world population especially comes from emerging markets, where many people do not have the luxury to choose for a varied eating pattern and where economic growth is expected to first lead to increased meat demand.

The environmental impact of animal protein (per kg of protein)



NEW INVESTMENT OPPORTUNITIES

It is a global challenge to feed the future population without compromising planetary boundaries and violating basic human needs. We identify three signs that this challenge also starts to impact business behavior and business opportunities, and therefore also investor choices⁶.

First, in the food sector awareness of the financial materiality of their environmental management practices is growing. The [Materiality Map of the Sustainability Accounting Standards Board](#) (SASB) shows that for the food and beverage sector, especially so for the meat, poultry and dairy

subsector, climate issues, water risks and ecological impacts are of high material importance.⁷

This also applies for firms more downstream in the supply channel. Several of the biggest fast food companies, such as McDonalds and Chipotle or a commodity trading firm such as Bunge Ltd, have sustainability principles in place aiming to reduce waste, end deforestation and reduce emissions in their supply chains. Another important initiative is the *Cool Food Pledge*, a platform to help cafeterias and dining centers to serve appealing and healthy dishes, while fighting the negative effects of climate change⁸. It has already been signed by companies (like Sodexo) that together serve more than 60 million meals annually.

Second, governments increasingly introduce policies to nudge people's consumption habits towards healthier lifestyles, at the same time creating environmental improvements. An example is the fatty foods levy in Denmark, which was only short-lived due to heavy social pressure, but which during its short existence impacted Danish grocery habits⁹. Other countries, such as the United Kingdom, Hungary and Mexico, have introduced sugar taxes to discourage unhealthy lifestyles, impacting sugar content in soft drinks and soft drink sales. In the UK it was a success with companies lowering the added sugars to soft drinks. Such policies will be good for some, but problematic for other companies; for example Associated British Foods (a British food processing company) is impacted by the sugar tax. We see more initiatives in the field of taxes. According to the Farm Animal Investment Risk & Return Initiative (FAIRR), it is only a matter of time before governments introduce meat taxes, with Sweden having the most concrete plans to tax CO₂-impacts of food products.

Third, business sees increasing demand for cleaner and healthier food products and innovative meat substitutes. Market shares for vegetarian meals and alternative protein food products grow fast and demonstrate a remarkable acceleration. Meat substitutes have seen a growth rate of 451% in the last four years in the European market, and products containing grain legumes have grown with 39%¹⁰. This is supported by new and exciting innovations in meat substitutes. For instance, Beyond Meat produces hamburgers and sausages based on plant-proteins that look, taste and feel like meat, realizing a doubling of their sales over the past year. Another example is the production of lab-based meat products. Start-ups such as Dutch Mosa Meat, Israeli SuperMeat or the US based Memphis Meat and Just, expect to be able to compete on prices with animal-based meat within 5 to 10 years.¹¹ Their investors are traditional food companies such as Cargill, Tyson Foods, PHW and Bell Food Group, but also pharmaceutical company Merck, venture capitalists and some of the world's billionaires¹².

⁵ Willett, W., Rockström, J., Loken, B. et al. (2019). Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. *The Lancet*, January 2019.

⁶ FAIRR (2018). Plant-based profits: investment risks & opportunities in sustainable food systems. UK.

⁷ <https://materiality.sasb.org/>

⁸ <https://www.wri.org/our-work/project/cool-food-pledge>

⁹ Smed, S., Scarborough, P., Rayner, M. and J.D. Jense (2016). The effects of the Danish saturated fat tax on food and nutrient intake and modelled health outcomes. *European Journal of Clinical Nutrition*, 70: 681-686.

¹⁰ [https://www.uni-hohenheim.de/en/press-release?tx_ttnews\[tt_news\]=39041](https://www.uni-hohenheim.de/en/press-release?tx_ttnews[tt_news]=39041)

¹¹ <https://innovationorigins.com/nl/waarom-eten-we-nog-geen-kweekvlees/>

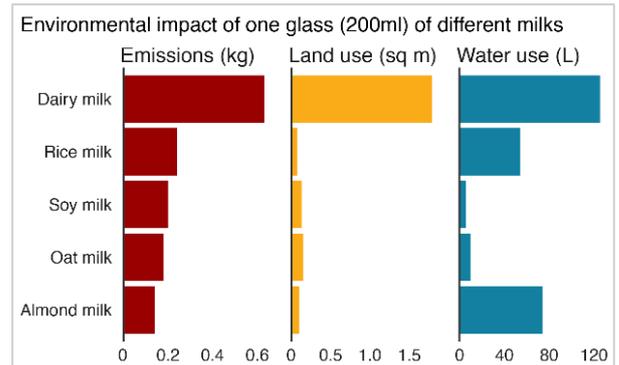
¹² <https://www.volkskrant.nl/kijkverder/2018/voedselzaak/artikelen/kweekvlees-is-hard-op-weg-naar-uw-bord/>

WHAT DOES THIS MEAN FOR INVESTORS?

Investors increasingly see the financial risks attached to current diets and production systems, and the opportunities for innovations. For one thing, asset managers can monitor the financial risks related to their investments in the food industries. As an example, the Collier FAIRR Protein Producer Index assesses how the 60 largest global intensive livestock and fish farming companies, with a combined market capitalization of \$297 billion, are managing critical risks facing the sector.¹³ This index contains companies involved in breeding, processing, distributing and selling meat, dairy and/or aquaculture products. They conclude that overall, 60% of the meat and fish producers in the index, worth \$152 billion, are categorized as ‘high risk’ for investors, not managing well financially material issues related to climate change, deforestation, water scarcity, antibiotics, animal welfare, food safety and sustainable proteins. In fact, more than 80% of the companies do not have a zero deforestation or water use policy and only 5 of the 60 companies account for the emergence of alternative, non-meat protein foods. As the index only includes companies at the beginning of the supply chain, the potential market risk is much bigger. In total about 6% of the ACWI World benchmark is related to or dependent on food production and will, therefore, be impacted by changes in food production methods and dietary habits. To mitigate these risks, ACTIAM does not invest in companies who show too little progress in shifting towards more sustainable healthy food products or preventing impact to fragile ecosystems. Moreover, behavioral change of the most vulnerable companies can be reached through active ownership. An example is a call of over 80 investors, urging the largest fast-food companies to reduce greenhouse gas emissions and water usage of their meat and dairy suppliers.¹⁴

ACTIAM engages with a few dozen companies, calling them to diversify their food products towards more alternative protein foods, to develop a ‘no deforestation, no peatland, no exploitation’ policy for their production systems or to reduce antibiotics usage for their livestock.

Which milk should I choose?



Source: Poore, J. and T. Nemecek (2018), Science.
<https://www.bbc.com/news/science-environment-46654042>

Finally, through impact investing companies mitigating for the risks or making the transition towards more healthy and sustainable food products can be supported. Just recently, a \$100 million investment fund, the New Protein Fund, was launched by the specialized private venture New Crop Capital. They focus on the rising number of people purchasing vegan and clean meat as they see the current livestock sector as ‘antiquated and inefficient’ with serious vulnerabilities for investors¹⁵. Also ACTIAM actively supports developments in agribusiness, currently planning a new impact investment strategy with short and medium term loans to medium sized farmers, producers, traders, distributors and input suppliers, active in various stages in the agriculture value chain, in order to contribute to global food security, social & economic development and sustainable ecosystems.

To conclude, the traditional meat and livestock industries will not disappear overnight, but a combination of public health and environmental policies, changing food habits and novel food developments will put pressure on these sectors and create incentives for new entrants. Food offers tools for risk management, but certainly also opportunities for investors. Attention for this theme therefore contributes to a healthy and future-proof investment portfolio.

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¹³ FAIRR (2019). Collier FAIRR Protein Producer Index Report: Benchmarking intensive livestock and fish farming on environmental, social and governance issues. www.FAIRR.org.

¹⁴ <https://www.ceres.org/news-center/press-releases/global-investors-turn-heat-fast-food-companies-tackle-climate-and-water>

¹⁵ See: <https://www.livekindly.co/new-100-million-protein-investment-fund-focus-vegan-clean-meat/>