

# Healthy diets for all within planetary boundaries

## Animal Protein Sustainability



### Sustainability at DSM: A brighter future for all

*Purpose led, Performance driven*, DSM is a science-based company. Our strong growth platform is centered on developing innovative solutions addressing Nutrition & Health, Climate & Energy and Resources & Circularity, together with increased customer centricity and large innovation projects. At DSM, sustainability is not only our core value and a key responsibility, it is also increasingly an important business driver that is fully engrained in our purpose, strategy, business and operations.

So we focus our business on creating a positive societal impact whilst doing good business. The reason is simple. We don't want to be successful in a world where the ice caps melt; coral is decimated; millions are left homeless and destitute due to climate change; while hundreds of millions remain undernourished. It was humans that caused this situation. But we really do have the power to change it...

### Time for action

We now live in a world where 821 million people suffer from hunger, while more than 650 million people are obese. That's why, at DSM, we're fully behind healthier diets for all - within planetary boundaries. Everyone deserves the right to eat well and enjoy the benefits that good nutrition brings. Today, we're working with everyone - from scientists and business partners, to the World Food Programme and Africa Improved Foods - to make this happen and fulfil five of the UN's most important Sustainable Development Goals:



Sustainability is who we are and what we do at DSM. This is not some idealistic call to simply make the world a better place. At DSM, we see sustainability as the core driver of our business, and we believe that by creating solutions that address societal needs and offer our customers

innovative, sustainable solutions, we will enjoy above-average growth, allowing us to deliver attractive returns to the shareholders who place their trust in our company.

## Raising the bar on Climate Action

To be a leader in climate action it's important to lead by example. That's why at DSM we closely manage our absolute Greenhouse Gas (GHG) emission reduction; GHG efficiency; and energy efficiency. In fact, in 2018 we again raised the bar by targeting a **30% absolute reduction** of the company's direct GHG emissions (Scope 1) and emissions from our purchased energy (Scope 2), by 2030, and reduce **indirect value chain emissions (Scope 3) by 28%** per ton of product produced in the same period. These targets have been validated by the [Science Based Targets initiative](#) (SBTi) as being aligned with the Paris climate agreement.

**DSM has also set a long-term target to reach net-zero emissions before 2050.** We report on our climate actions through CDP (Carbon Disclosure Project), and we've committed to reporting this information in mainstream reports as part of our fiduciary duty implementing the recommendations of the [Task Force on Climate-related Financial Disclosures](#) (TCFD).

In 2018 DSM also concluded a new €1 billion Revolving Credit Facility with our long term banking partners that links the interest rate payable to our GHG emission reductions., underscoring the importance of sustainability in everything we do - including corporate finance. Furthermore, as our suppliers play a key role in delivering our strategy and targets, we are working closely with them on emission reduction projects through a newly established CO2REDUCE program.

## Renewable energy

In line with Sustainable Development Goal 7 (affordable and clean energy for all) we're committed to responsible, efficient use of energy. At DSM we depend on the availability of renewable electricity via the grid or local electricity production. As local policies affect our ability to scale-up our procurement of renewable electricity, we work closely with authorities and other companies to scale-up supply of renewable electricity on the grid, including our own on-site solar fields at several sites.

We're also a signatory of the Climate Group's [Renewable Energy 100 \(RE100\)](#) initiative, which brings together the world's leading companies committed to sourcing 100% of their electricity from renewable sources at the earliest possible opportunity. The intermediate target we set for 2030 is for 75% of our purchased electricity to be obtained from renewable sources.

At DSM we've set an internal carbon price - which means incorporating the cost of all GHG emission-based decisions that require significant capital expenditure. Currently this is €50 per ton of CO<sub>2</sub> equivalents.

We're among more than 1,400 companies who have made the same shift. Why? Because it serves as a useful model for redirecting and scaling up investments towards low-carbon technologies;

for driving operational efficiencies and especially in markets that already have a carbon price or in regions where a carbon price is expected to emerge.

## Healthy, diverse & sustainable animal proteins

Within the framework of our activities in Nutrition and Health, this means that we advocate healthy, balanced and affordable diets for all that will allow the world's growing population to be fed using the natural resources available while staying within the planetary boundaries. This involves, among other things, increasing the quality and nutritional content of food – and also of feed, which is where our Animal Nutrition and Health business comes in. DSM wants to support all forms of proteins produced with the highest sustainable standards. Based on expertise in human and animal nutrition, as well as environmental science, we enable and produce sustainable proteins: from plant-based proteins to meat, eggs and fish. For all forms, we are tirelessly working on combating the key challenges such as reducing the greenhouse gas emissions, limiting nitrogen and phosphorous emissions, while keeping the highest nutritious standards and ensuring good livelihoods.

We must offer nutritional solutions that allow us to produce more animal protein – significantly more animal protein – with greater efficiency, paying full regard to animal welfare, product quality and process safety, while reducing the impact of our operations on the environment. At the same time, we have to ensure that our innovative portfolio provides our customers with opportunities for competitive advantage and profitable growth.

DSM's Animal Nutrition and Health Business therefore focuses on sustainable animal production, helping decrease antimicrobial resistance; reducing our reliance on marine resources; dropping livestock emissions; making efficient use of natural resources; producing safe, quality nutrition with less food loss and waste; and improving animal performance over the lifetime.

At DSM, we address these different challenges with our products and innovations for human and animal nutrition. DSM offers breakthrough solutions in many areas – from eubiotics as effective alternatives to AGPs through algae-based omega-3 to reduce the aquaculture industry's reliance on finite marine resources to enzymes to improve the digestibility and utilization of multiple feed ingredients. More information can be found at the [DSM Feed Talks](#) hotsite.

**Reducing greenhouse gas emissions:** With livestock and fish production contributing to 14.5% of our world's Greenhouse Gas (GHG) emissions, it's essential that we take action now – especially when you consider that the world will demand an additional 40 million tons of meat and 25 million tons of fish each day by 2026. Reducing GHGs – and especially methane emissions – is an urgent priority for the world. At DSM, our bright science is helping to reduce methane emissions in cows by 30% or more with our new solution [Bovaer](#).

**Protecting marine life and providing for omega-3s:** Salmon is an excellent source of protein, as well as omega-3 EPA and DHA that help keep the heart healthy. Currently, 76% of the world's fisheries are either depleted or exploited. DSM and Evonik produce algal omega-3 EPA and DHA oil

with the natural marine algae [Veramaris](#). This reduces the dependency of finite wild catch resources and supports sustainable aquaculture.

**Reducing nitrogen emissions:** Another focus for sustainability standards in animal proteins is reducing the nitrogen emissions. The [RONOZYME® ProAct feed ingredient](#) does exactly that, whilst improving feed efficiency in poultry.

**Fighting anti-microbial resistance:** Anti-microbial resistance (AMR) poses a major health threat. Livestock is one of the contributors due to misuse and overuse of antibiotics in animal feed. [DSM's eubiotics](#) support a healthy animal and can help to minimize the sub-therapeutic use of antibiotics for growth promotion, thereby reducing the spread of AMR. The result: better animal welfare, and higher food security at more affordable prices for all.

**Helping farmers:** We support farmers every day with insights and advice on animal health, food safety and environmental management. For example, the DSM 'business-to-farm' project in China helps small-scale farmers with training and general support, thus enabling them to increase the safety and quality of the food they produce, while reducing its environmental impact and supporting farmer livelihoods.

DSM is ranked #1 globally by Sustainalytics, AAA rating in MSCI, with a prime score in ISS-Oekom and a leading position in Vigeo and platinum status in Ecovadis rating. DSM's climate change strategy received an A-rating from CDP. DSM is listed in Forbes Global 2000 as the Worlds' Best Employers, listed in the inaugural Financial Times Diversity Leaders, a ranking on company in 10 European countries on a diverse and inclusive workplace.

## More information:

[www.dsm.com/corporate/sustainability](http://www.dsm.com/corporate/sustainability)



MSCI has upgraded DSM from an AA position to AAA (2019)



For the 3th year DSM is on Fortune Magazine's Change the world list (2018)



A-rating for Climate change and B- rating for water security (2018)



Chemical Industry leader in Sustainalytics ESG ranking (2019)

