

Reducing emissions from livestock

THE CONTEXT



Animal farming accounts for
~14.5%
of all **greenhouse gas emissions**



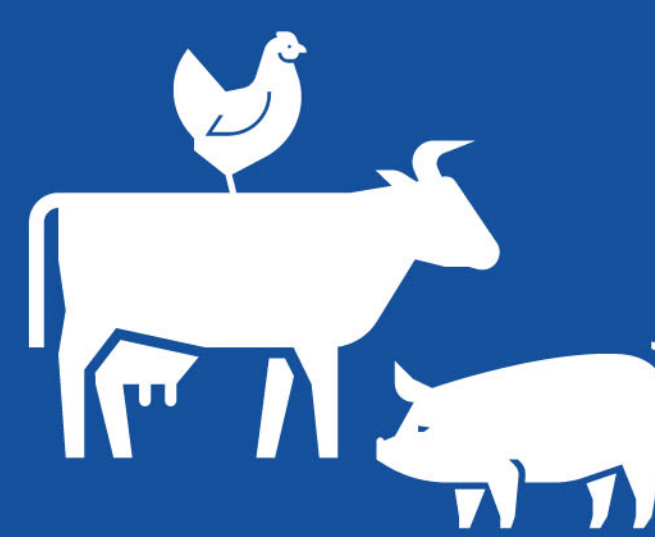
INCREASE IN
animal-based food demand = greenhouse gas emissions



By **2050** greenhouse gas emissions **must reduce** by **38 GIGATONS** to tackle **rising global temperatures**

OUR AMBITION

Reduce methane, nitrogen and ammonia emissions at scale from the animal farming industry



Create a **low-emissions future** for animal farming

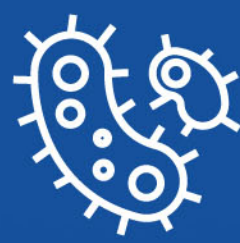
OUR SOLUTION



A range of **HIGHLY INNOVATIVE FEED ADDITIVES**



Our novel compound **3-NOP (Bovaer®)***



Acts on cow gut microbes



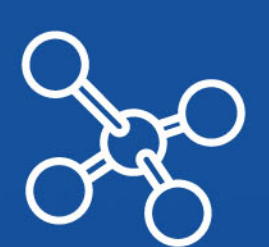
Inhibits a key methyl enzyme in cow's stomach



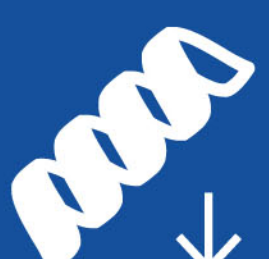
Reduces methane emissions from dairy cows by **30%**



Our protease feed enzymes



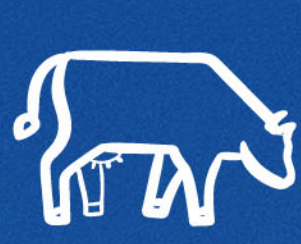
Improves digestibility of proteins



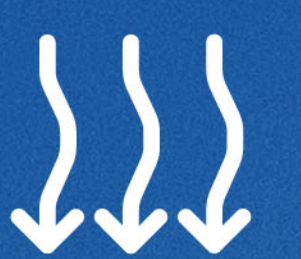
Reduces undigested protein content in manure



Optimises nutritional value of proteins in animal feed



Reduces protein needed in feed



Decreases nitrogen pollution from manure by **35%**



Our ultra-pure (99.9%) benzoic acid (VevoVital®)



Regulates the acidity of the digesta



Lowers urinary pH



Manure acidification helps control ammonia emissions by up to **20%**

THE RESULT

Our science-led feed solutions help to produce
NUTRITIOUS, HIGH-QUALITY, SUSTAINABLE FOOD
by **reducing greenhouse gas emissions.**

A real breath of fresh air for our future



If not us, who? If not now, when?

WE MAKE IT POSSIBLE

Find out how DSM can help transform animal nutrition and health sustainably at
www.dsm.com/wemakeitpossible

*Bovaer® is currently seeking market authorization and may not be available for commercialization in all jurisdictions

NUTRITION • HEALTH • SUSTAINABLE LIVING



DSM

BRIGHT SCIENCE. BRIGHTER LIVING.