

The Story of Danish Biosolutions

Why Biosolutions

The era of biosolutions is upon us. Through the utilization of fermentation and other biological processes, biosolutions provide a new approach that causes us to rethink how we produce and manufacture products in a variety of sectors including agriculture, food, energy, construction, textile, transportation, water, and waste management. The world stands on the forefront of a new age, where tiny but mighty enzymes, functional proteins and microbes are some of the key drivers of innovation which has the potential to help solving some of humanity's most pressing challenges. This transformation seeks to harness the power of biology, introducing innovative methods that serve as an option next to chemical and mechanical approaches. These refined processes maximise the value of our limited resources and have the potential to advance more sustainable solutions. The biosolutions currently at hand have the potential to cut 4,300 million tonnes of CO2 by 2030, equivalent to 8% of today's global emissions¹. This demonstrates the immense capacity of nature's own toolbox to tackle the globe's climate and environmental challenges. Both the EU and Denmark are decarbonising its economies, with biosolutions paving the way for new products and services that reduce our climate footprint.

Why Denmark

The Danish biosolutions sector excels in developing new technologies and scaling them to commercial use. Building on a longstanding tradition, Danish research institutes and businesses have developed and applied biosolutions. This legacy ensures that advanced technologies like fermentation and biorefining are deeply integrated into the Danish industrial ecosystem, supported by a strong research community that holds extensive expertise and produces the necessary breakthroughs to drive the industry forward. This intersectoral linkage has led to increasing competitiveness and strong public-private partnerships and making Denmark a European centre of excellence. This progression highlights the innovative solutions of Danish companies alongside the Danish government's consistent strategic emphasis on the sector.

In scaling biosolutions globally, collaboration between governments, industries, academia, and civil society continues to be of critical importance. In Denmark, the notion of collaboration goes back to the co-operative movement in the 1800s when farmers united to develop and grow their sector. Today, close tie-ups between businesses, knowledge institutions, and the government mean that Denmark has a highly developed ecosystem for startups, students, researchers, and big businesses. Interdependent and well-organized, they exchange knowledge and talents, thus accelerating development.

The future of biosolutions is global and green

With continued investments, research and collaboration, biosolutions can support the transition of the existing economy into a more bio-based and sustainable one. Danish companies have already demonstrated this potential through proven and resource-efficient solutions that are applicable in a wide range of sectors. [Insert cases of choice]. biosolutions are already making a visible impact on people's lives every day, yet there is still much more potential to be unlocked. Denmark is well on the way, continually welcoming new ideas, talents and companies from around the world to excel in the sector and foster global cooperation.

Tagline

Danish businesses are cutting-edge when it comes to biosolutions. As a well-established research-based industry with a strong international engagement, the Danish biosolutions cluster provides abreadth of ways to initiate and accelerate the green transition across industries.

¹ the-potentials-of-biosolutions_final_20sep2022.pdf (allianceforbiosolutions.dk)