

# INDUSTRIAL BIO, MARINE BIO AND BIO-BASED ECONOMY

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The Biobased economy is one of the strategic growth areas for DSM. Energy and materials will be made from plant biomass in the future and DSM is developing technology for this. The biobased economy is here to stay, there is no other alternative. In this field algae technology will play an important role as well. However there are several breakthrough steps needed to turn phototrophic algae technology into an economical viable option. This presentation sketches the position of algae technology in the biobased economy and key steps for a successful implementation of phototrophic algae technology are discussed. Options for cost price reduction of algae biomass are presented and DSM's view on technology breakthroughs which are needed to achieve this, will be explained.

The different markets for algae biomass (regionally and functionally) are tightly linked to cost price reductions needed to unlock these market potentials. A stepwise development from high value product to commodity products which are produced by phototrophic algae technology is the most realistic way forward. This roadmap for the future of algae technology will conclude this presentation.