

# BRAIN Biotech AG

Creating a #BiobasedFuture

## Capital Markets Day 2023

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Zwingenberg, February 27, 2023

**WE SUPPORT**



Since 2021 we have been committed to the UN Global Compact corporate responsibility initiative and its principles in the areas of human rights, labor, the environment and anti-corruption.



**Multi-Niche Enzyme Champion:** One BioProducts  
Rod Sears Black, MD BioProducts

# Merging BRAIN's Products businesses under the Biocatalysts roof

BRAIN BioProducts Division



# What is a multi-niche company?

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how to create real value upside

## **Currently: BioIndustrial “house of brands”**

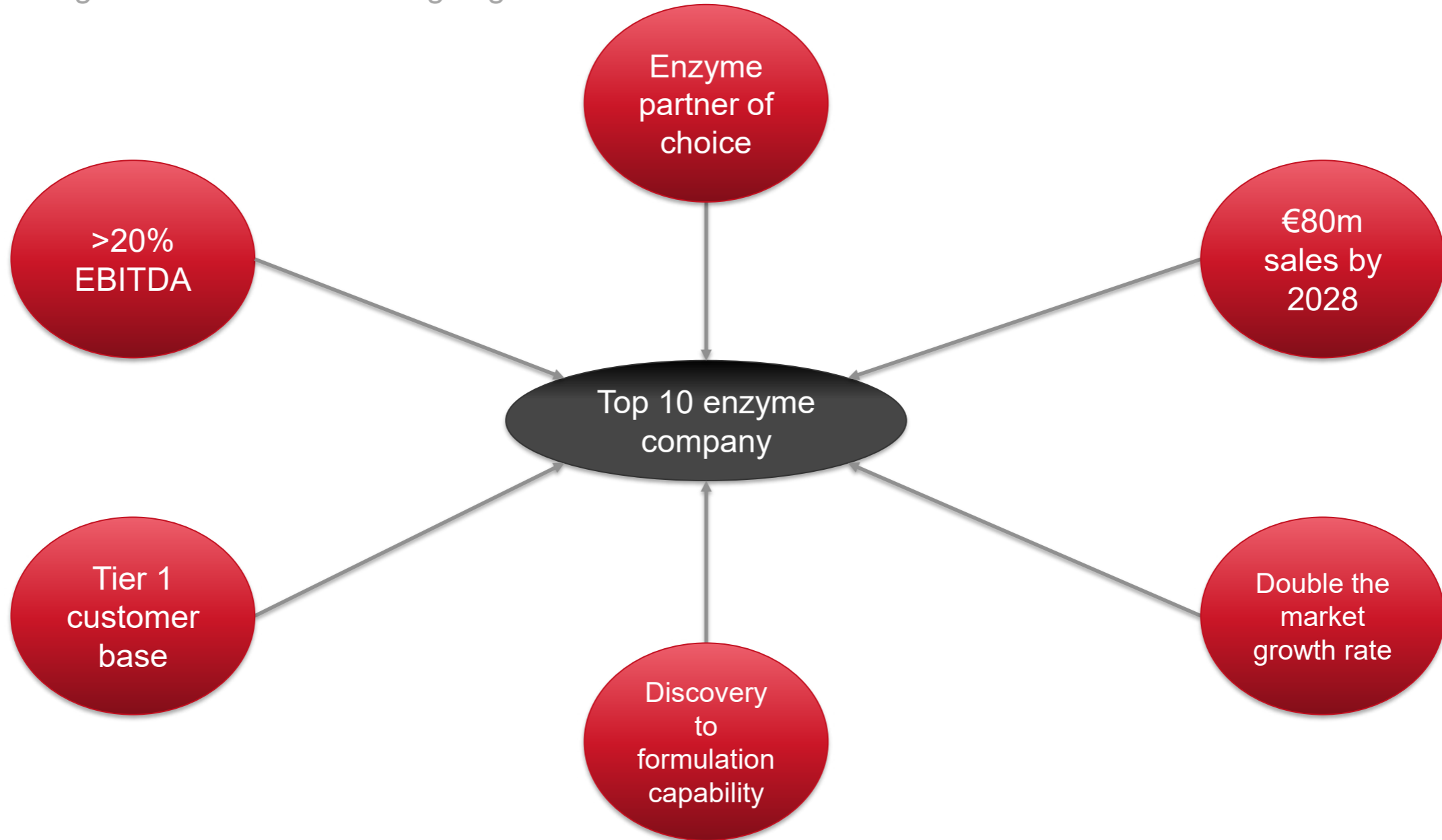
- Adjacent sectors and/ geographies
- Very little overlap in product, sector and market
- Independently resourced
- Operating in defined niches, limited by sector, application and technology

## **Future: BioProducts an integrated multi-niche champion**

- Shared platforms for manufacturing, technology, regulatory, NPD and procurement
- Portfolio alignment and cross selling of capabilities
- Harmonised manufacturing base – second site reassurance for customers and cost base consolidation
- Single operating brand with aligned values and clear market positioning / alignment
- Best practice sharing, driven by the market and with cross category Key Account Management for single point accountability

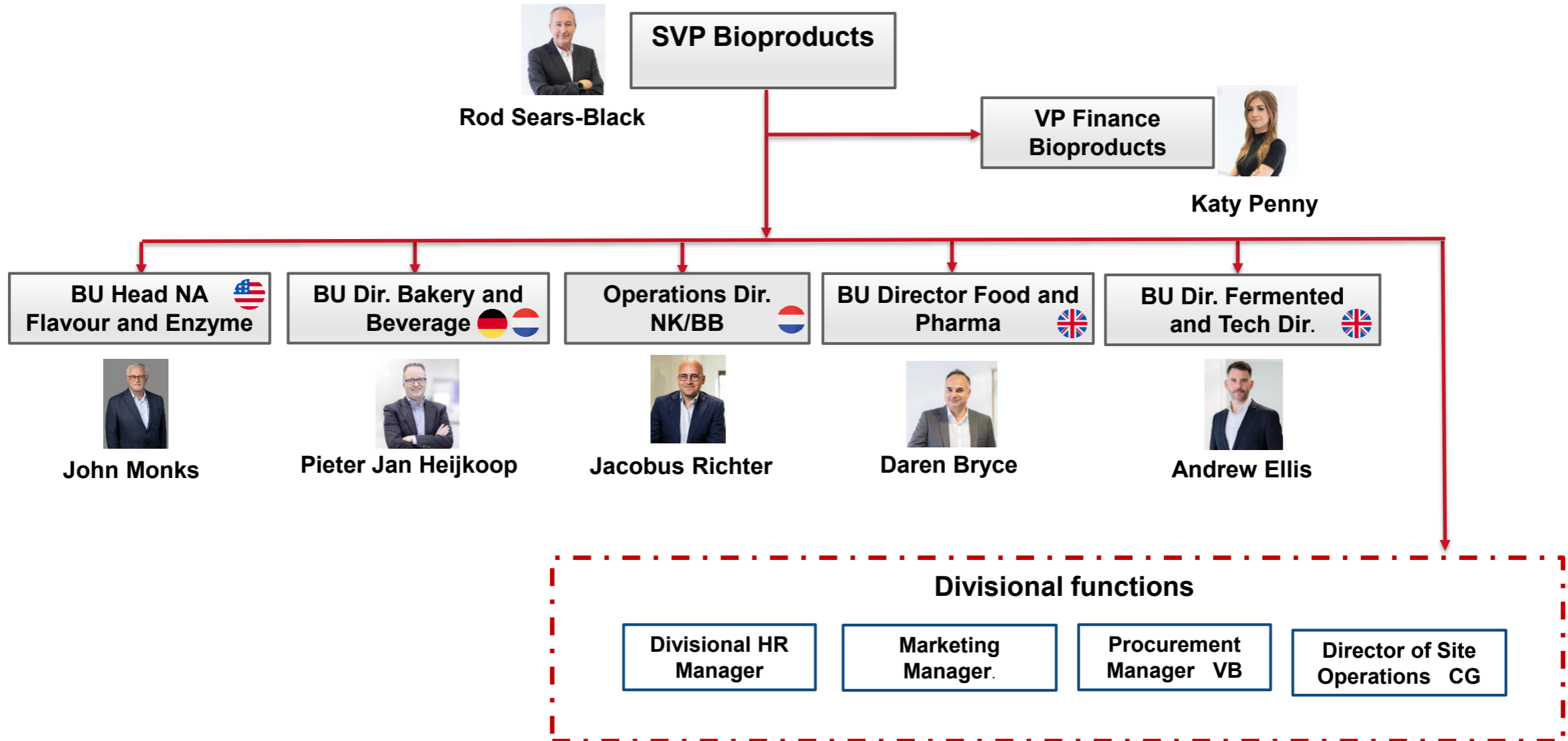
# One BioProducts: the big goals

why are we doing this and where are we going?



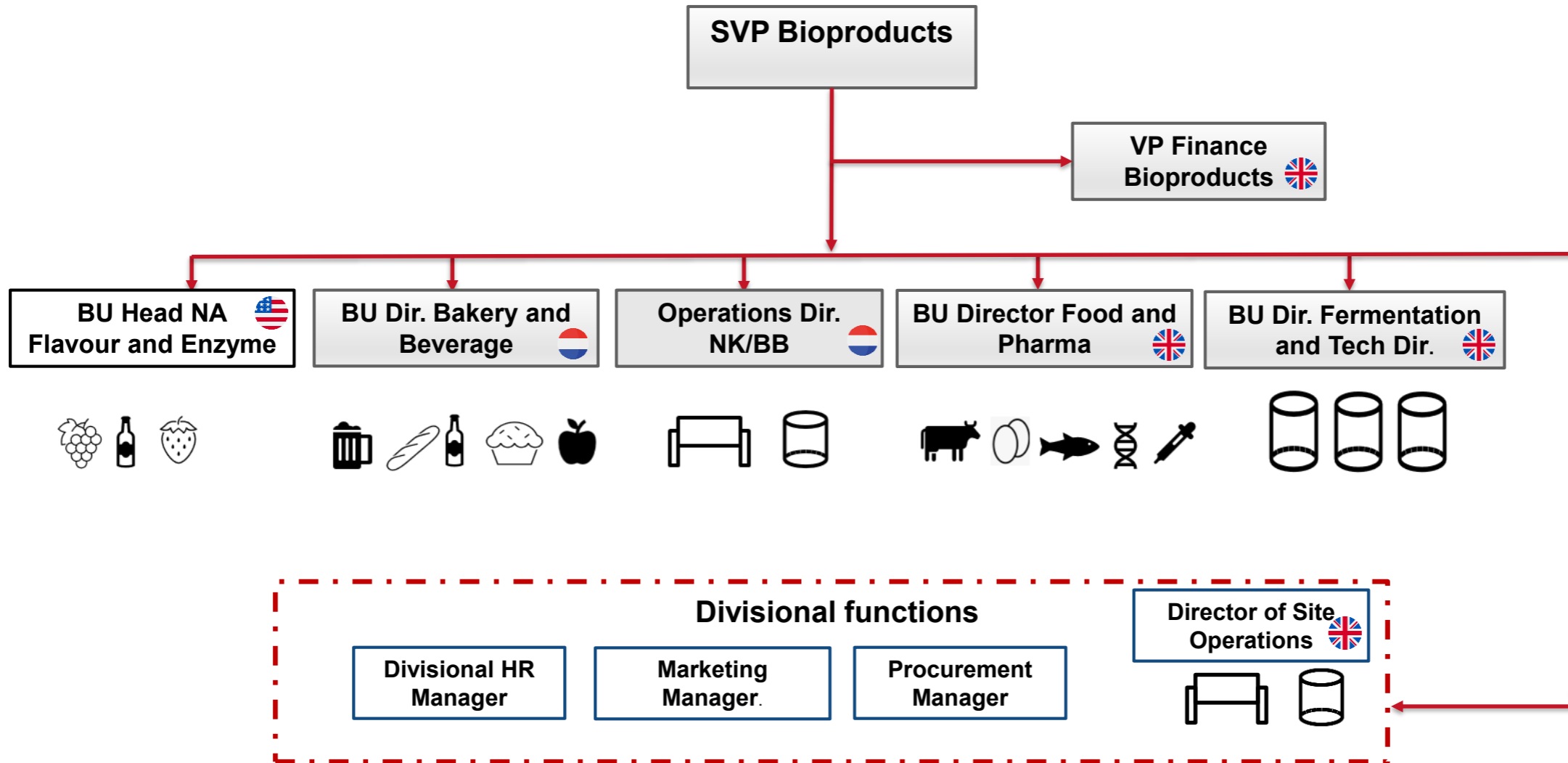
# One BioProducts: The Structure

clear responsibilities driven by an experienced international management team



# One BioProducts: Market sector driven

focussed, P&L driven commercial set up and flexible manufacture



# Why (should) customers come to Biocatalysts

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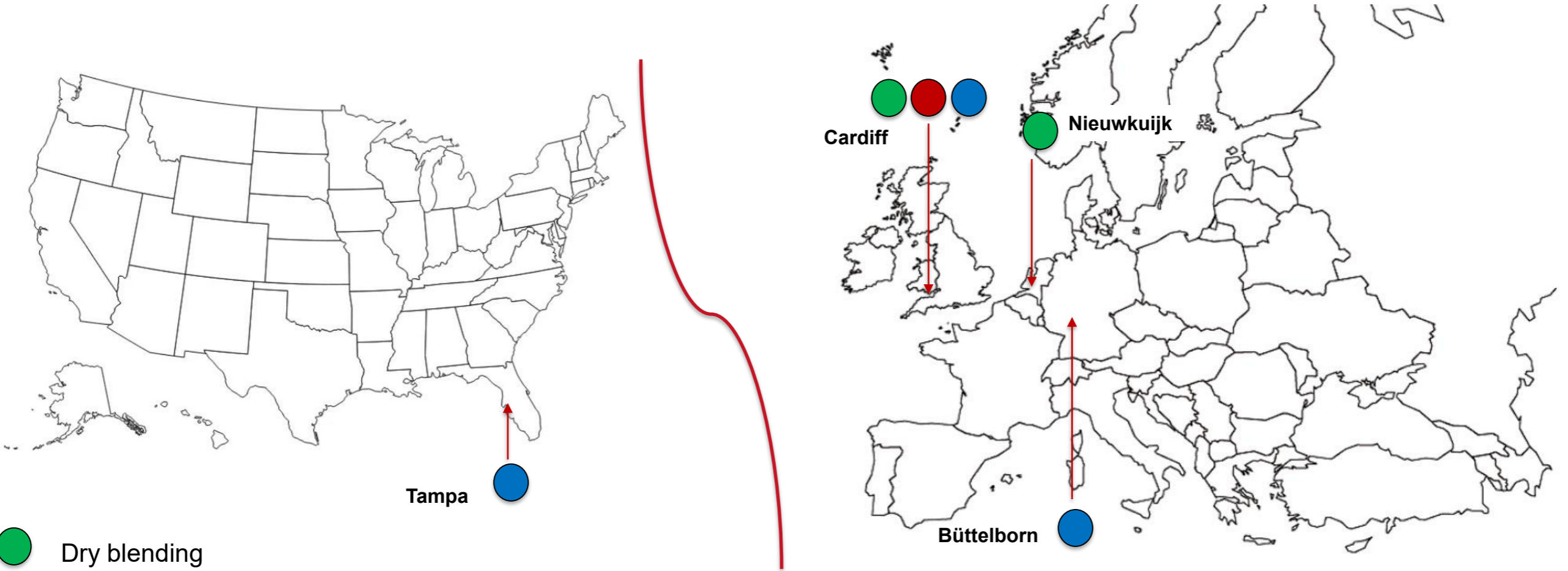
capability and partnership mindset

- Agile company with short communication lines and commercial and operational flexibility
- Focused on niches and happy to do so
- Foundation in BioScience: Full Biotech toolkit and end to end capability from Discovery to Products
- Close connection to parent company BRAIN and access to its toolset
- Off the shelf premium products and best-in-class delivery reliability
- Custom build solutions; blends, fermentations, concentrations
- Application expertise aligned with market needs such as the test bakery in Nieuwkuijk



# Manufacturing footprint

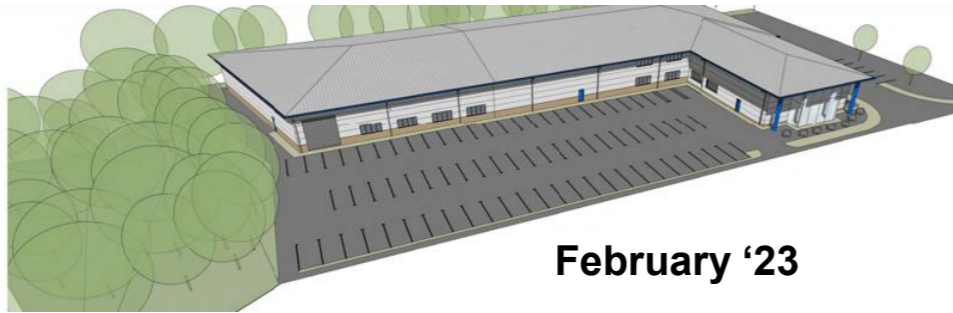
growing international manufacturing and distribution setup



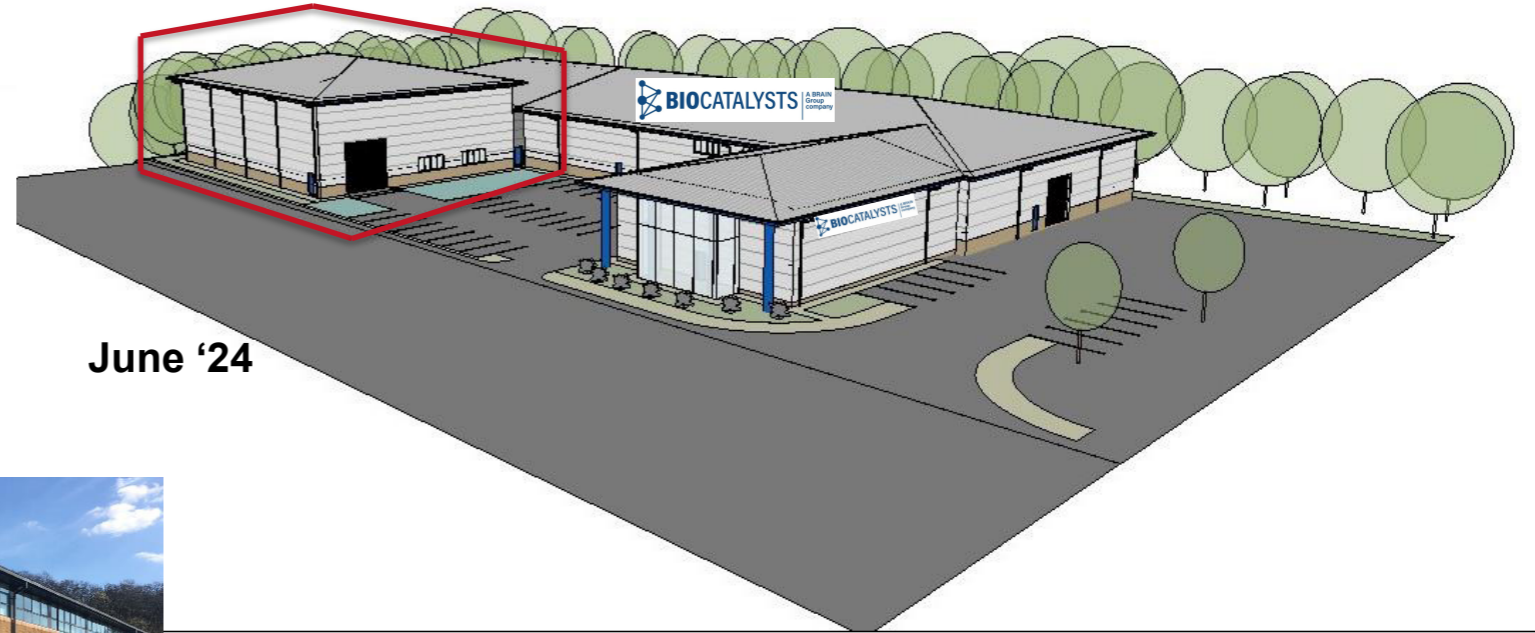
Numbers based on FY 2021/22

# Growth Initiatives under way

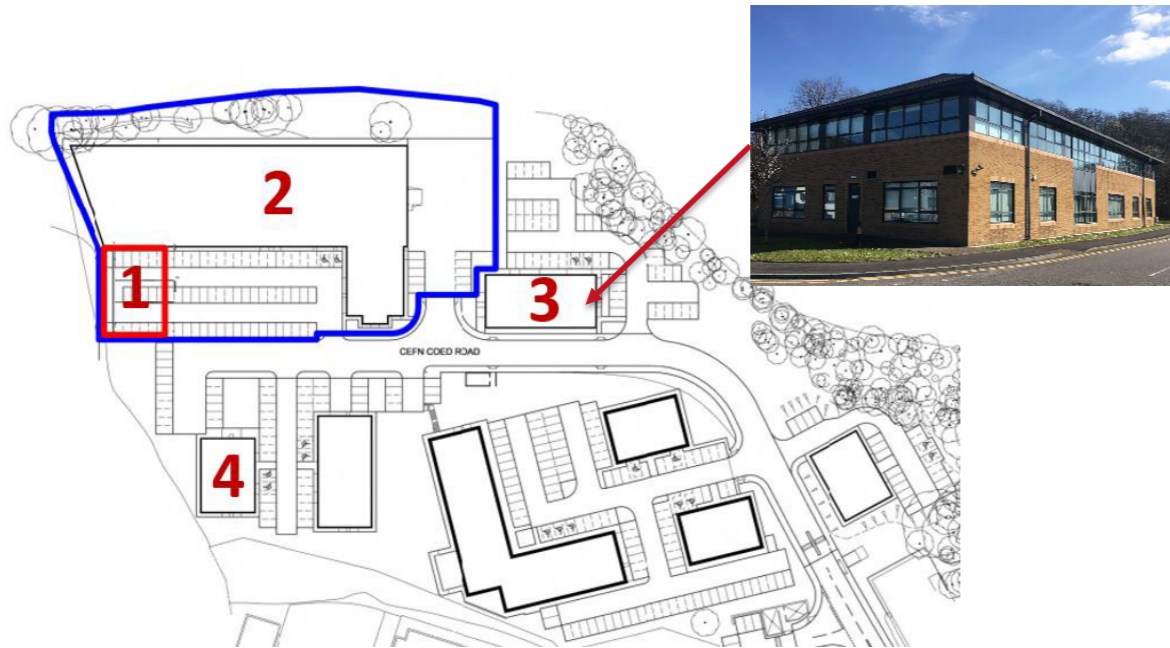
large scale fermentation expansion project and site expansion



February '23



June '24



Biocatalysts – Cardiff “phase 3” development of new fermentation hall for 25m<sup>3</sup> fermenters and automated liquid blending facility

Future “people space” acquired summer 2022

Completion summer 2024 building and blending  
Completion summer 2025 first large fermenter

**Building fermentation revenue capacity to ~€30M**

# Future Opportunities

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growth challenges to master

## **Simplification and value add to all of our activities**

Elimination of duplication

## **Planned investment programme, expand to include all site development activity, reconsider the footprint**

The aggressive plan for maximum growth

## **Breatec expansion for the future**

What does this look like?

## **What can we do to accelerate WBT?**

Focus on routes to market

## **What do we require in the USA?**

Is there any real value in local manufacture?

## **How would we future proof fermentation supply to the USA**

Partnership, acquisition, investment

# Accelerating Profitability in Manufacturing

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clearly identified drivers

## **Control of input costs – group purchasing initiatives**

Supplier and material rationalisation

## **Fermentation expansion and management of processes**

Plant utilisation

## **Improvements to yield and recovery**

Must do, every year

## **Site simplification**

Can we consolidate?

## **Carry out complete cost comparison – Europe vs US for sales to NA and Latam**

Does it make sense for local manufacture

# Scales of fermentation

a unique range of capabilities

Multiple small scale fermenters from 250ml to 3 litre

50l and 750l fermenters with full range of DSP including freeze drying and chromatography purification capability

10m<sup>3</sup> fermenter on site with plans for 25m<sup>3</sup> and partner scale to >50m<sup>3</sup>, DSP including drying at all scales



## Mini 8s and 3l fermenters-

Enzyme development, process evolution, first scale up step



## 50l and 750l fermenters –

Enzyme development, process evolution  
Scale up step  
Diagnostic enzyme manufacture  
Speciality high value manufacture



## 10m<sup>3</sup> fermenters and more –

Manufacturing processes  
Diagnostic enzyme manufacture  
High value manufacture of food enzymes  
Perfect pharma / life science scale

# Breatec

baking centre of excellence and state of the art dry blending facility



- Modern factory and offices
- Great application facility – test bakery
- Highly efficient blending
- Advanced dust control, ready for future requirements
- Capacity to grow and potential for expansion to adjacent space

# Biosun

base for expanded US operations



- Good quality factory and offices
- Temperature controlled storage
- Liquid blending capability
- Entry point to US for Biocats products and onward distribution partner
- Legal entity in our main target market
- Capacity to grow will be challenged by overall site space in the future

# Critical Success Factors

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we must deliver here

- Talent retention, development and attraction
- Innovation pipeline
- Key customer retention and acquisition of new ones
- Fermentation: Yields, capacity utilisation
- Maintain a solid core in blended enzymes, liquid and dry across all sites
- In-group collaboration with BRAIN Zwingenberg
- Extracting hard and soft synergies within the group
- Geographic expansion