

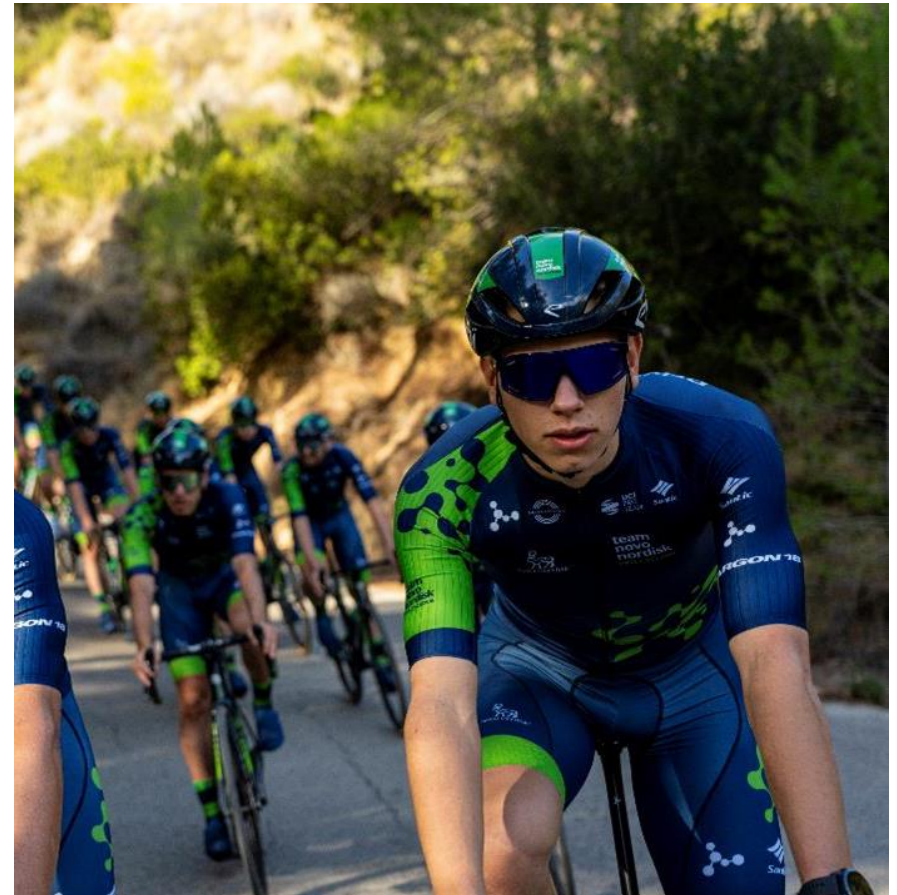
MORTEN DUUS ERIKSEN

Senior Global Freight Manager,
Novo Nordisk



Outcome of today's session

- How does Novo Nordisk maintain/develop a resilient Supply Chain in a fast-growing business?
- An insight into
 - Disruptions and challenges in the supply chain
 - A Systematic approach to resilience
 - Risk management
 - Supply Chain Design
 - Collaboration



Novo Nordisk at a glance

Supplier of nearly

50%

of the world's insulin

Net sales

232.3

billion DKK

Affiliates in

80

countries

More than

64,000

employees

Total tax contribution

51

billion DKK



R&D centres
in China, Denmark,
India, UK and US



Strategic production
sites in Denmark, Brazil,
China, France and US

Globally, serving

41.6

million people living with
diabetes and obesity

Novo Nordisk is a leading global healthcare company, founded in 1923 and headquartered in Denmark.

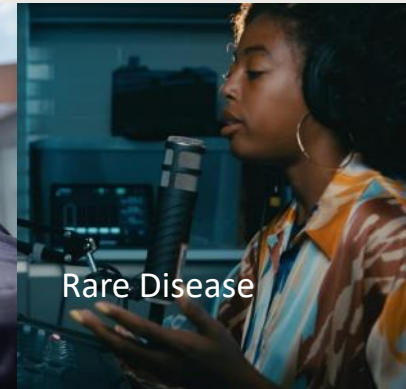
Our purpose is to drive change to defeat serious chronic diseases, built upon our heritage in diabetes.

We do so by pioneering scientific breakthroughs, expanding access to our medicines, and working to prevent and ultimately cure disease.

¹ <https://companiesmarketcap.com/pharmaceuticals/largest-pharmaceutical-companies-by-market-cap/>
(As of 25 January 2024).



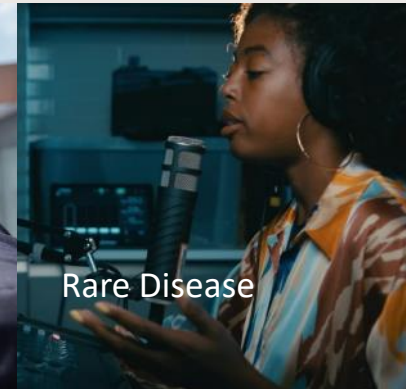
Cardiovascular & Emerging
Therapy Areas



Rare Disease



Obesity

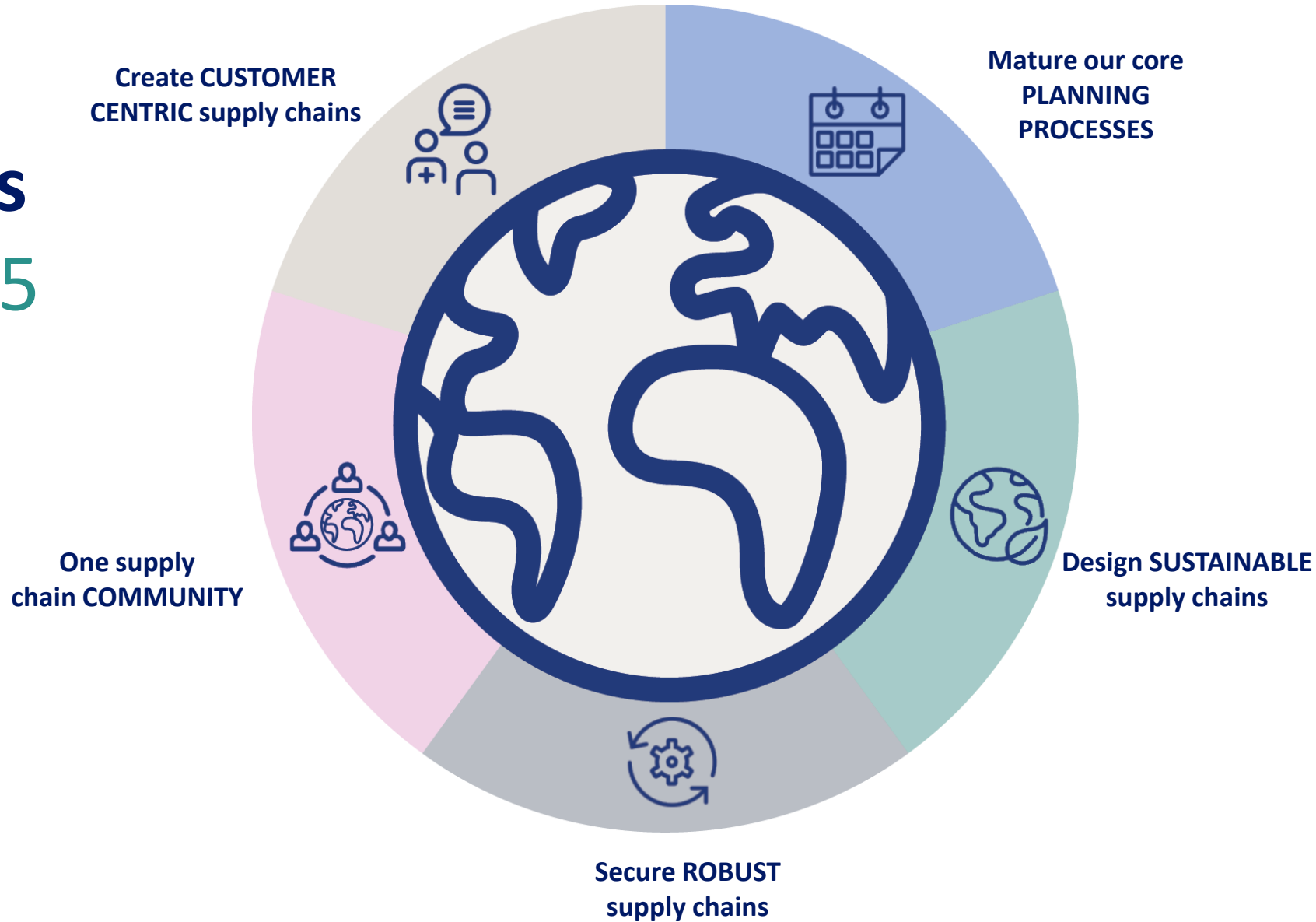


Diabetes

A top five

pharma company measured by
market value¹

Five strategic focus areas towards 2025



Novo Nordisk is growing like never before

Bloomberg

Novo Nordisk surpasses LVMH and becomes Europe's most valuable listed company

THE WALL STREET JOURNAL.

America's Obsession With Weight-Loss Drugs Is Affecting the Economy of Denmark

Novo Nordisk's market capitalization has matched the GDP of its home country

Forbes

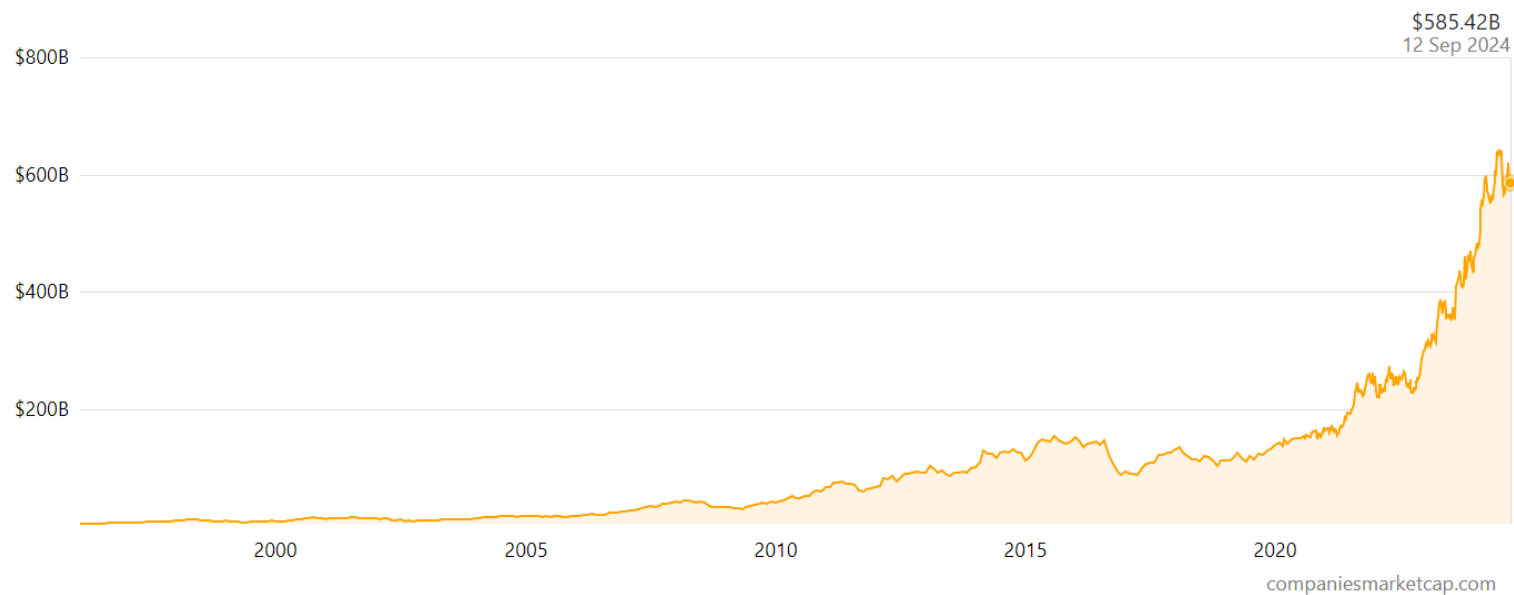
Shares of Novo Nordisk, which also makes the popular drug Ozempic, have also experienced a drastic rise since the start of the year, climbing nearly 38% on the year so far and increasing nearly 16% on Tuesday to a record high of more than \$187.

Market capitalization of Novo Nordisk (NVO)

Market cap: **\$585.42 Billion**

As of September 2024 **Novo Nordisk** has a market cap of **\$585.42 Billion**. This makes Novo Nordisk the world's **15th** most valuable company by market cap according to our data. The market capitalization, commonly called market cap, is the total market value of a publicly traded company's outstanding shares and is commonly used to measure how much a company is worth.

Market cap history of Novo Nordisk from 1996 to 2024



Growth opportunities and the global situation call for a larger, more robust and flexible manufacturing network

Very challenging geopolitical situation

Pressure on global supply chains

More than double sales within the next decade

Expanding into new therapy areas and technologies

Security threats

New significantly higher cGMP requirements



Zero CO₂ from own operations and transport by 2030

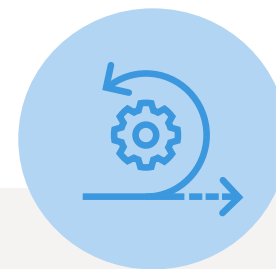
Supply Chain resilience – A systematic approach



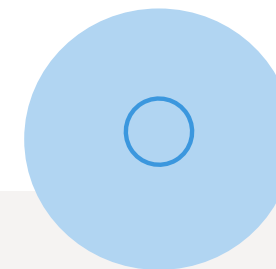
**Risk Management
Culture**



Supply Chain Design



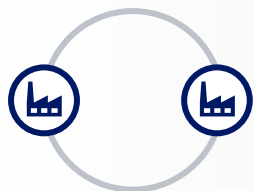
Agility



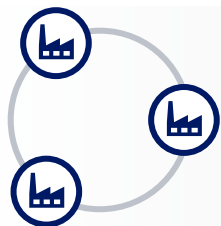
Collaboration

SUPPLY CHAIN DESIGN

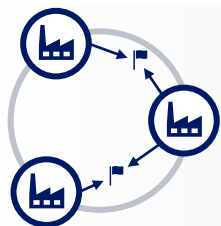
No production without a backup and multiple locations for large volume and high value

**Small¹ volume production**

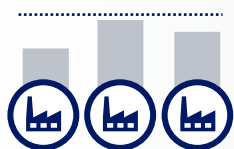
To protect against major supply disruptions, production should be performed on **two separate locations²**

**Large¹ volume production**

To protect against major supply disruptions, large volume production should be split on a minimum of **three separate locations²**

**Regulatory flexibility**

To reap the value of a network designed for backup we must achieve a minimum of **two regulatory approvals for every product**

**Value concentration**

To limit the risk associated with site-level catastrophes, **maximum 20% of NN revenue** can be produced at a single location

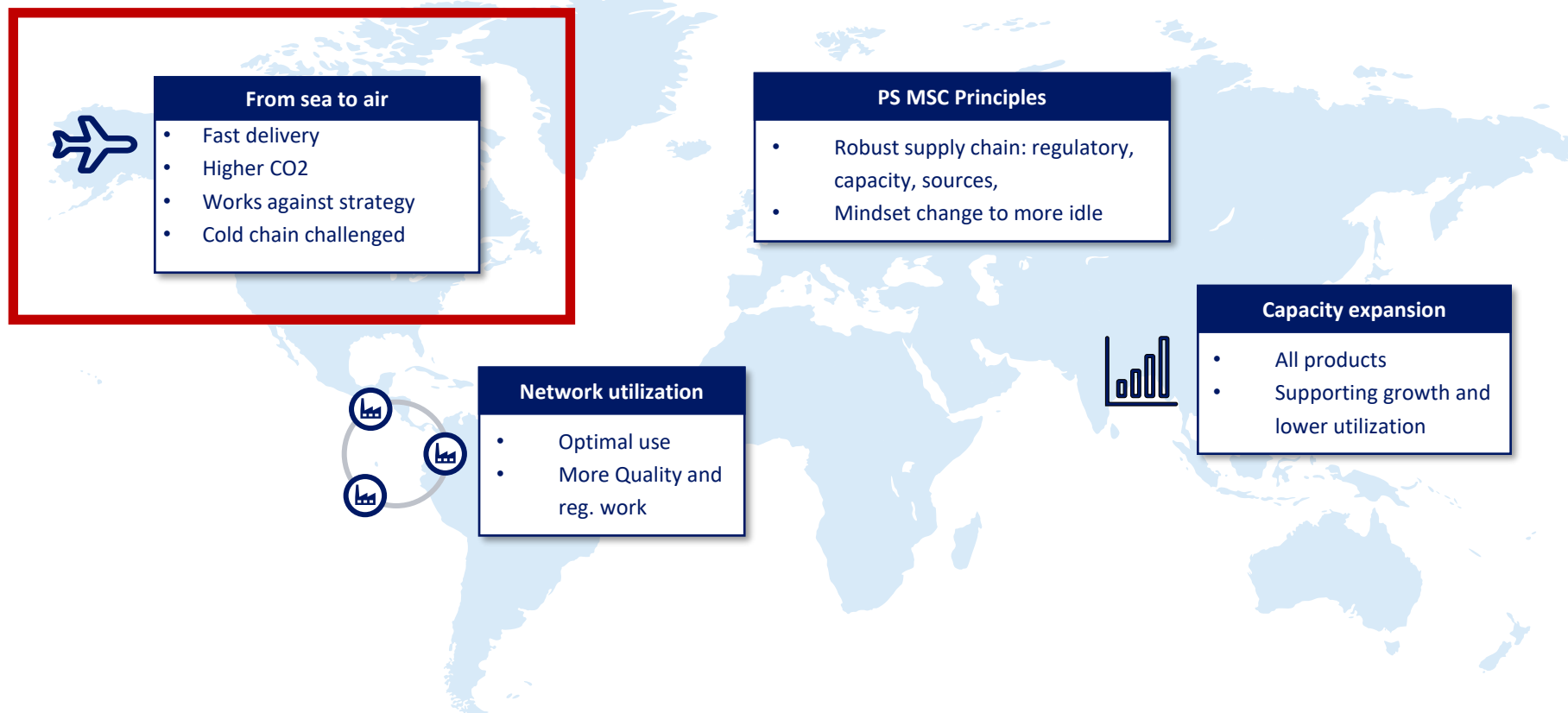
Note: If the above is not possible, we must secure at least one production site inside EU and adhere to a max 50% utilization for the product

1) Product volume incl all buffer which can fit on a single production line is categorized as small. Remaining is categorized as large

2) With building layouts securing sufficient physical separation of lines in individual fire sections, we can achieve multiple "locations" on the same site in the future. This does not apply to value concentration

CHANGE IS HAPPENING FASTER THAN EVER

Developing our principles to cater for growth, production risk and market volatility



Collaboration with stakeholders to strengthen supply chain

Collaboration with other companies on

- Distribution and warehouse network
- Sustainability



LET'S SHARE

Learnings and topics for your reflection

*Key learnings to share with you:*

- Systematic approach to get a resilient supply chain
- Need for clear guiding principles
- Resources needs to be in place to be ahead of the curve
- Prioritization is key to meet demand
- Digitalization is needed to automate processes and reporting
- Collaboration across the industry or with other industries can strengthen your supply chain

