



Simplifying Progress

Welcome to Sartorius Stedim Biotech

February 2024

SARTORIUS

Our ambition: Better health for more people

Mission




At Sartorius Stedim Biotech, we empower engineers to simplify and accelerate progress in bioprocessing. In this way, we enable new and better pharmaceuticals to be manufactured and help keep medications affordable.

Vision

We are a magnet and dynamic platform for pioneers and leading experts in our field. We bring creative minds together for a common goal: technological breakthroughs that lead to better health for more people.




Sartorius Stedim Biotech in 2023 numbers

~€2,8bn	Sales revenue	
28.3%	Profit margin ¹	
~90%	Sales with life science customers	



10,600+	Employees	
50+	Locations worldwide	

~€470mn	Investments in capacities	
2045	Target for climate neutrality	

¹ Underlying EBITDA margin

10,600 employees united by strong values

Sustainability

Growing profitably and acting responsibly towards all stakeholders



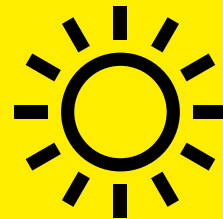
Openness

Driving change and progress internally and externally



Enjoyment

Working in an energetic and rewarding environment



102

Nationalities

57%

Younger than 40 years

39%

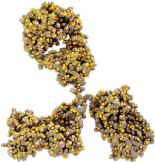
Women

58%

Joined since 2019

The promises of biologics: From established to new concepts

What are biopharmaceuticals?



Consist of complex molecules



Obtained from living cells in cell culture processes

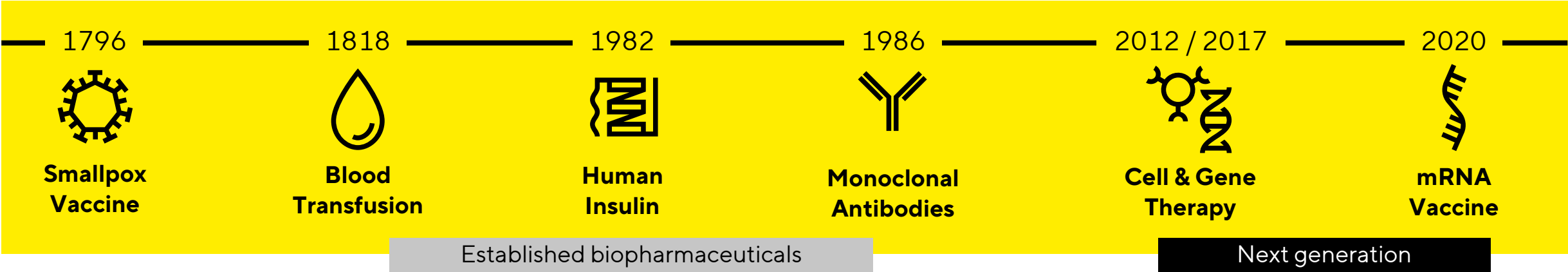


Administered mainly intravenously



Advantages

- Target only diseased cells
- Have fewer side effects
- Allow first-time or improved treatment of illnesses, e.g. cancer, multiple sclerosis, rheumatism



Many biotech medications are highly effective, but very expensive

Rheumatism

Monoclonal antibodies



~€12,000

Annual cost of treatment in GER

Blood cancer

CAR-T cell therapy



~€280,000

Cost per treatment in Europe

Hemophilia

Gene therapy



~\$3.5mn

Cost per treatment in the USA

The manufacture of biologics is complex



Providing technologies to increase productivity in bioprocessing

 Our ambition
More efficient bioprocessing

 Our solutions
Technologies for all phases of drug manufacturing



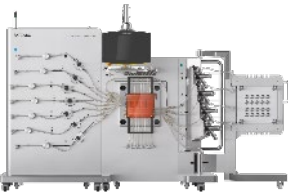
- Set up safe and flexible processes**
- Increase resource and material efficiency**
- Reduce investments**
- Enhance product yield**



Media & reagents



Bioreactors & fermenters



Chromatography



Filtration



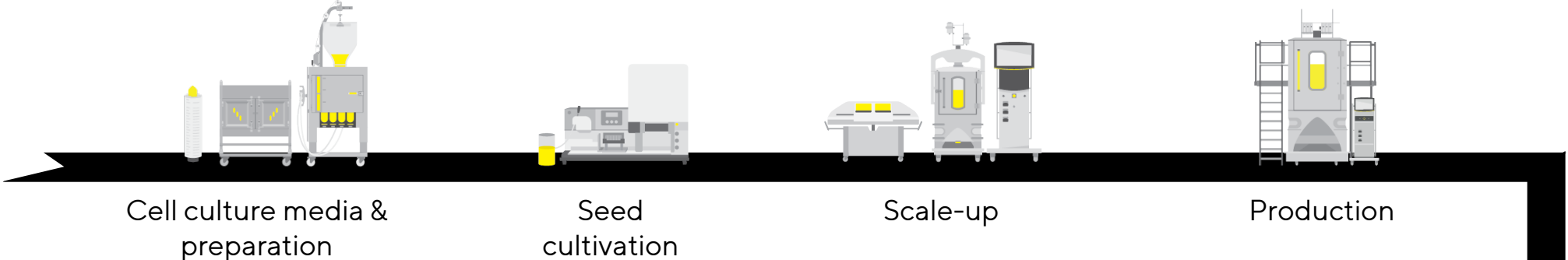
Fluid management



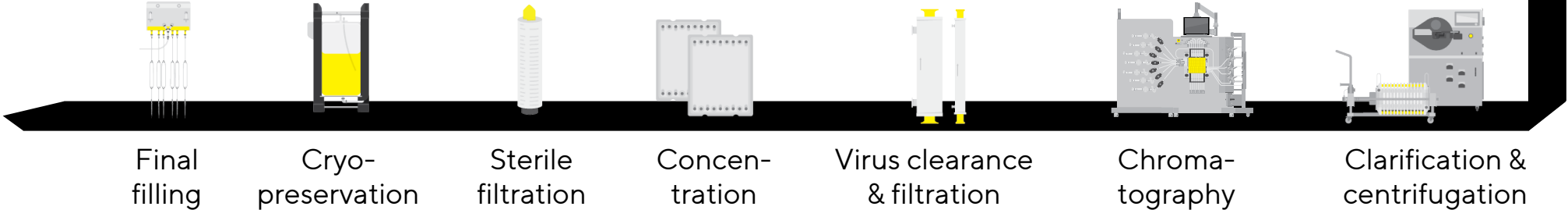
Data analysis

Offering integrated end-to-end manufacturing solutions

Upstream
Production of the desired drug




Downstream
Isolation and filling of the desired drug



Helping customers to reduce their environmental footprint



Single-use technologies



Process intensification




Data analytics



- No water-/energy-intensive cleaning
- Less cleanroom space, less energy usage
- Higher yields



Cell and gene therapies: New modalities, new challenges



Next generation biopharmaceuticals

Viral Vectors	mRNA	Stem Cells
Exosomes	DNA	New Vaccines

Innovative treatments for patients

6,000+	Candidates in development ¹
~60	Approved therapies worldwide

¹ GlobalData, October 2023, CGT = Cell & Gene Therapies

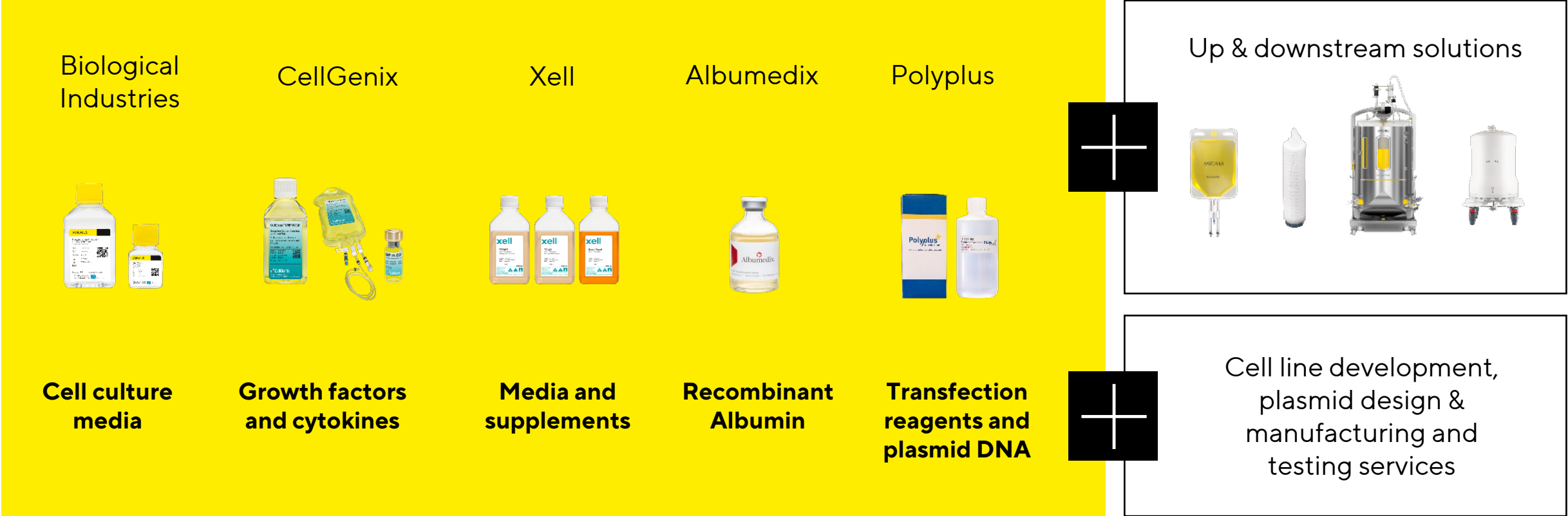


Enabling CGT: High need for innovation

- + **Robustness of production process**
- + **Yields, productivity, cost-per-dose**
- + **Time-to-market**
- + **Regulation under development**
- + **Manufacturing close to patients**



Creating a technology platform for cell and gene therapy applications



Resilient global setup, well prepared for further growth

- 
Customer proximity
- 
Redundant capacity
- 
Operational excellence
- 
Global resilience



Songdo, South Korea
Media, bags, filtration, labs, training



Freiburg, Germany
Cell culture components



Göttingen, Germany
Filter production, product development




Aubagne, France
Clean rooms, product development, labs

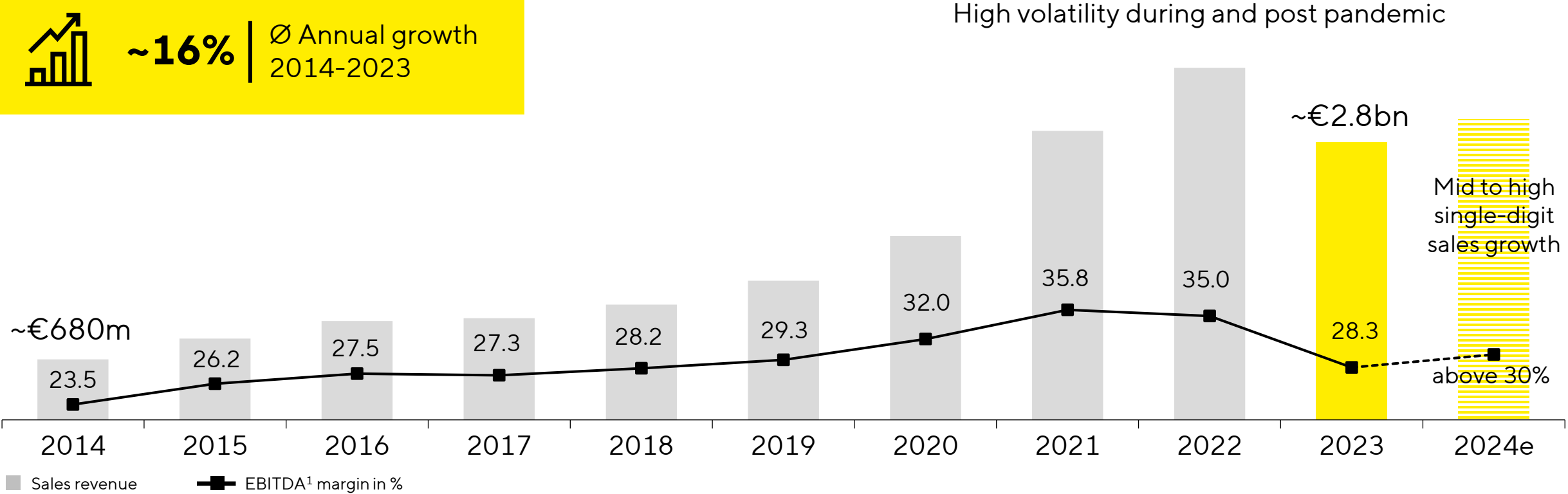


~€400 mn
Planned investment
2024

Expansion of production and R&D capacities; selected current projects


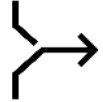


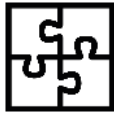




Strong financial track record; profitable growth expected for 2024


~16% | Ø Annual growth 2014-2023



Sales CAGR for continued operations, in constant currencies; EBITDA margin excluding extraordinary items

Ambitious midterm targets backed by strong market fundamentals

 <p>Growing and aging world population</p>	 <p>Clear strategy</p>	 <p>Ambition to 2028</p> <p>Low to mid-teens range avg. annual sales growth¹</p> <p>above 35% Underlying EBITDA margin</p>
 <p>Expanding market for biopharmaceuticals incl. biosimilars</p>	 <p>Competitive, integrated product portfolio</p>	
 <p>Dynamic market segment of novel therapies</p>	 <p>Strong, customer-focused team</p>	
 <p>High need for innovation</p>	 <p>Powerful and resilient production and R&D infrastructure</p>	

¹ Thereof around a fifth through acquisitions

Broad and ambitious sustainability agenda in implementation

2030 mid-term targets

~10% av. reduction of CO ₂ eq emission intensity p.a. (Scopes 1-3)	Zero avoidable ¹ emissions in Scopes 1 and 2	100% electricity from renewable sources
>75% revenue with products designed according to circularity principles ²	Zero operational waste to landfill	35 av. annual Employee Net Promoter Score

2045 long-term target

Net-zero emissions

Decarbonization of the entire supply chain in collaboration with suppliers and customers



1 Process emissions from membrane manufacturing are currently considered unavoidable based on available technology, 2 Including product and transport packaging

Simplifying Progress

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