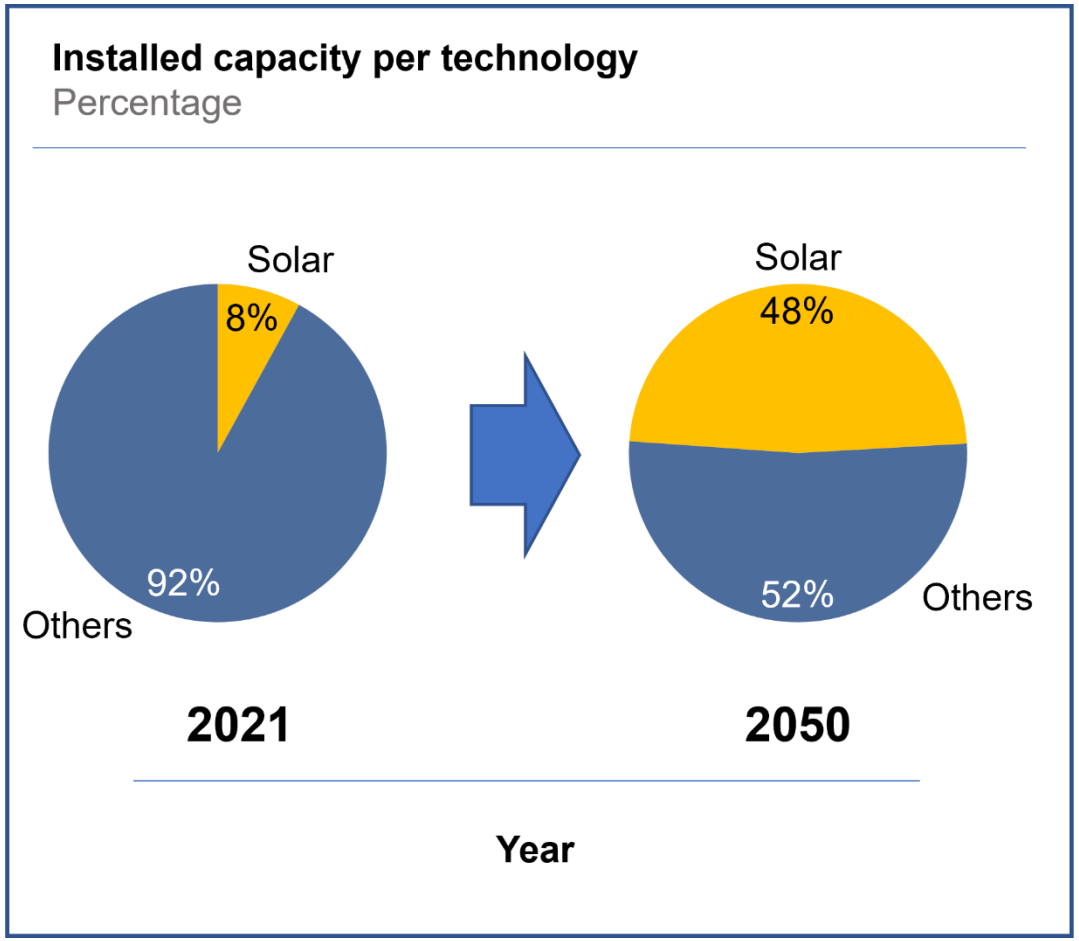

NEXWAFE
Green Solar Wafers Accelerate the Energy Transition
Davor Sutija, CEO NexWafe
Ecosummit March 2023
nexwafe.com

Solar Deployment to Energy Transition & Hydrogen Economy drives need for Green Solar Wafers



PV Solar

is a key technology for the Energy Transition.

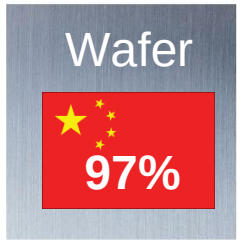
$ 30 billion TAM for solar wafers by 2030

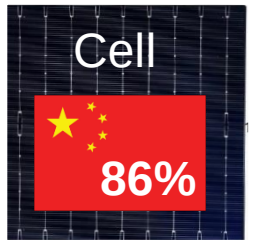
30.000 TWh of new renewable energy needed to satisfy **green hydrogen demand**

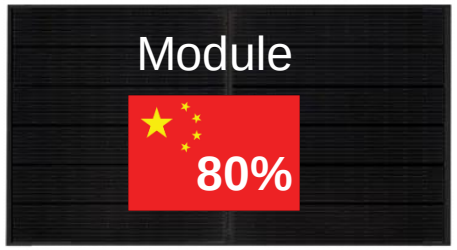
Combination of Solar and Wind makes arid/semi-arid locations ideal for Green Hydrogen

1. IEA net-zero scenario with 340 EJ final energy demand in 2050. HHV assumed. Excluding power.

PV industry requires higher efficiency wafers to reduce dependence on China







Improvement & scale of production largely exploited

LCOE* reduction will be driven by increasing cell efficiency

CO_2

Wafers are the most energy intensive component of a module

NEXWAFE

EpiWafer - a **green drop-in** replacement

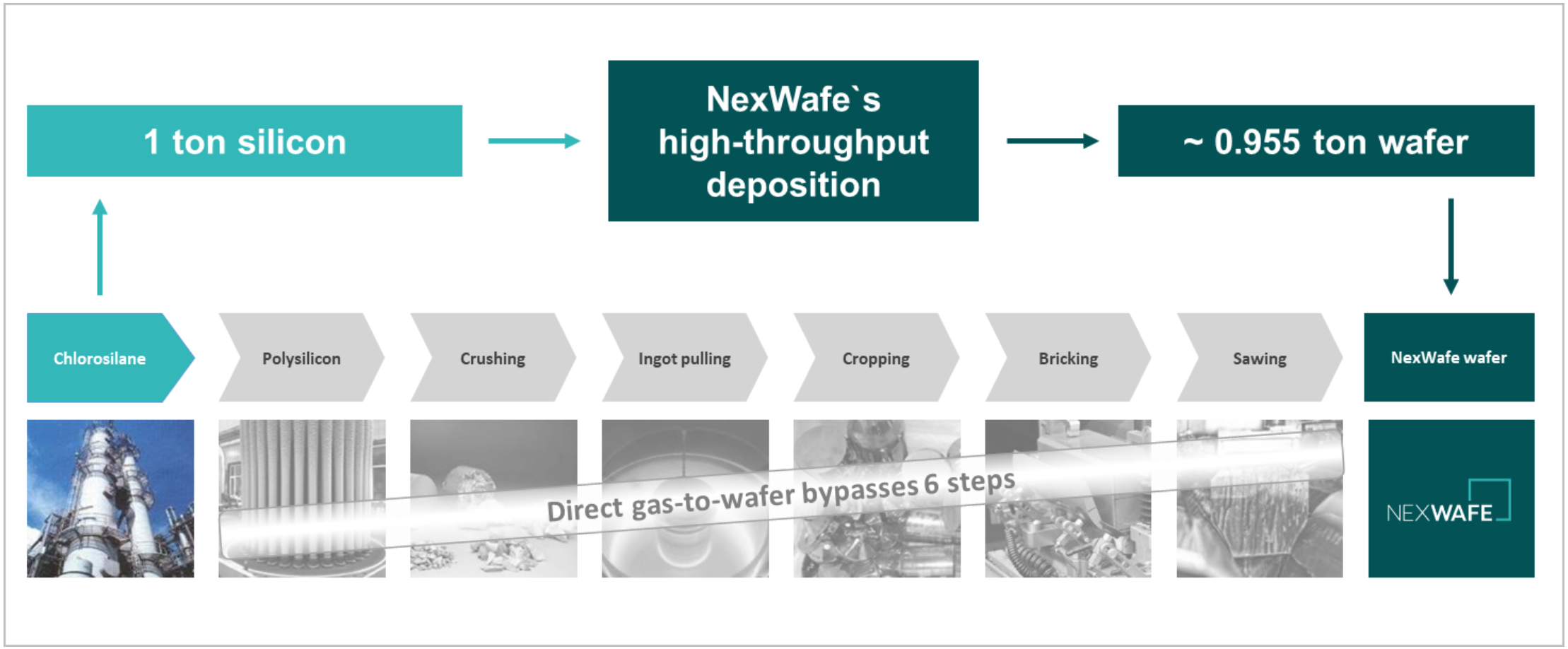
Wafers are the most expensive component of a module

NEXWAFE

EpiWafer – cost effectivce enabling production outside China

* LCOE – Levelized Cost Of Electricity

NexWafe EpiNex™ Gas-to-Wafer Technology skips energy-intensive steps



NexWafe EPINEX Process Flow

Key processes of Direct Gas-to-Wafer technology

Release Layer Formation

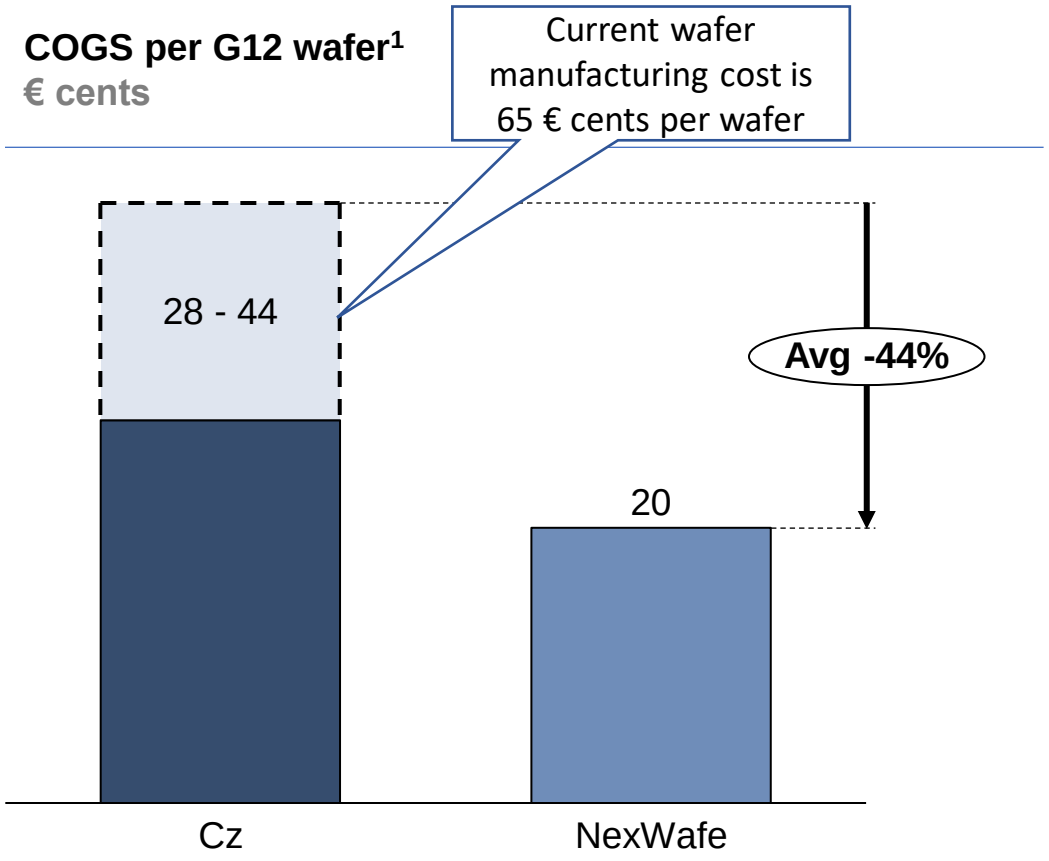
- Anodic oxidation
- Designed for wafer sizes up to 210 mm x 210 mm

High-Throughput Epitaxy

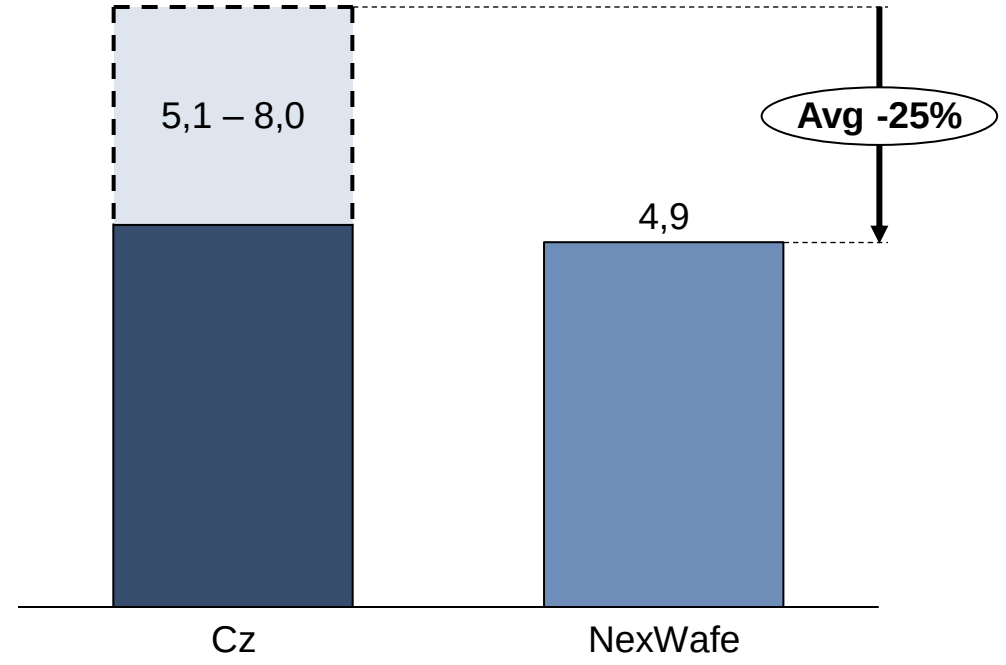
- Atmospheric pressure CVD
- Modular machine concept
- Chamber size equal size in production tool

NexWafe's EpiNex™ technology is more competitive at scale than Cz on both COGS and Capex

COGS per G12 wafer[1]
€ cents



Capex per watt[2]
€ cents



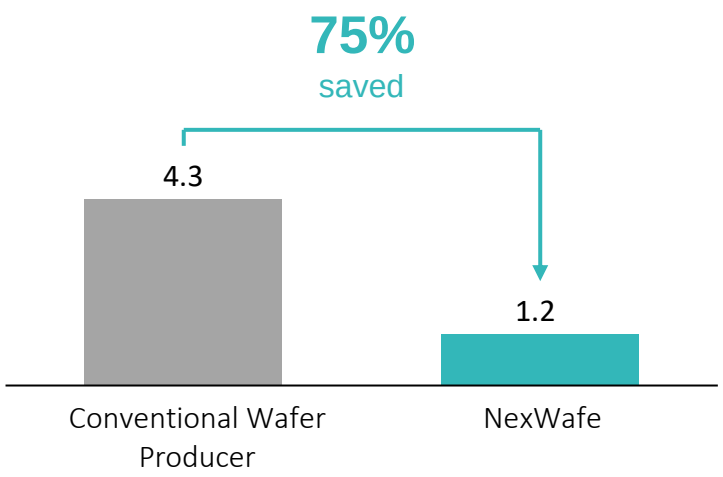
1. Expected COGS in 2027-2029 for a 12 GW factory, it does not include depreciation costs
2. Cz capex for recent wafer and polysilicon fabs built in China, NexWafe reference for a 12 GW factory

Source: Exawatt and NexWafe analysis

Dramatic reduction of CO_2 emissions during manufacturing

Less energy intensity equals less CO_2[1]

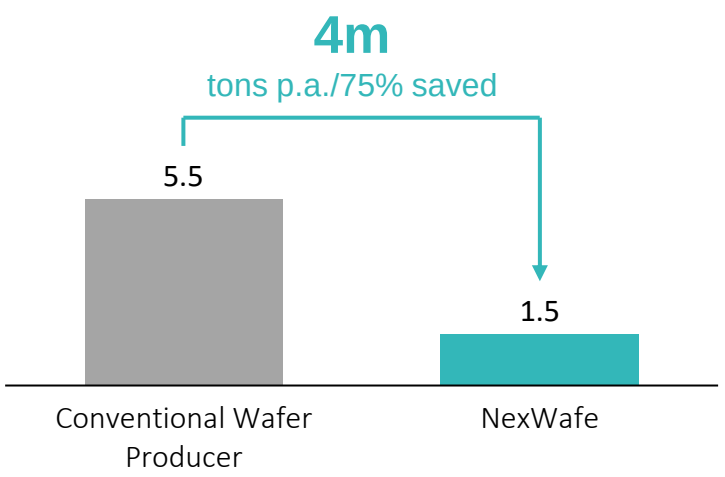
kg CO_2 per wafer



Obsoletes energy-intensive steps:
(no polysilicon production,
no ingot pulling and shaping)

Potential for carbon credit saving

m tons CO_2 emitted
per 15 GW wafer fab annually



At carbon credit levels of €25/ton a **saving of >€100m/year.**
Adding **>20% to EBITDA**

Reduction of 75% of CO_2 equals …

~480k
homes' annual energy usage

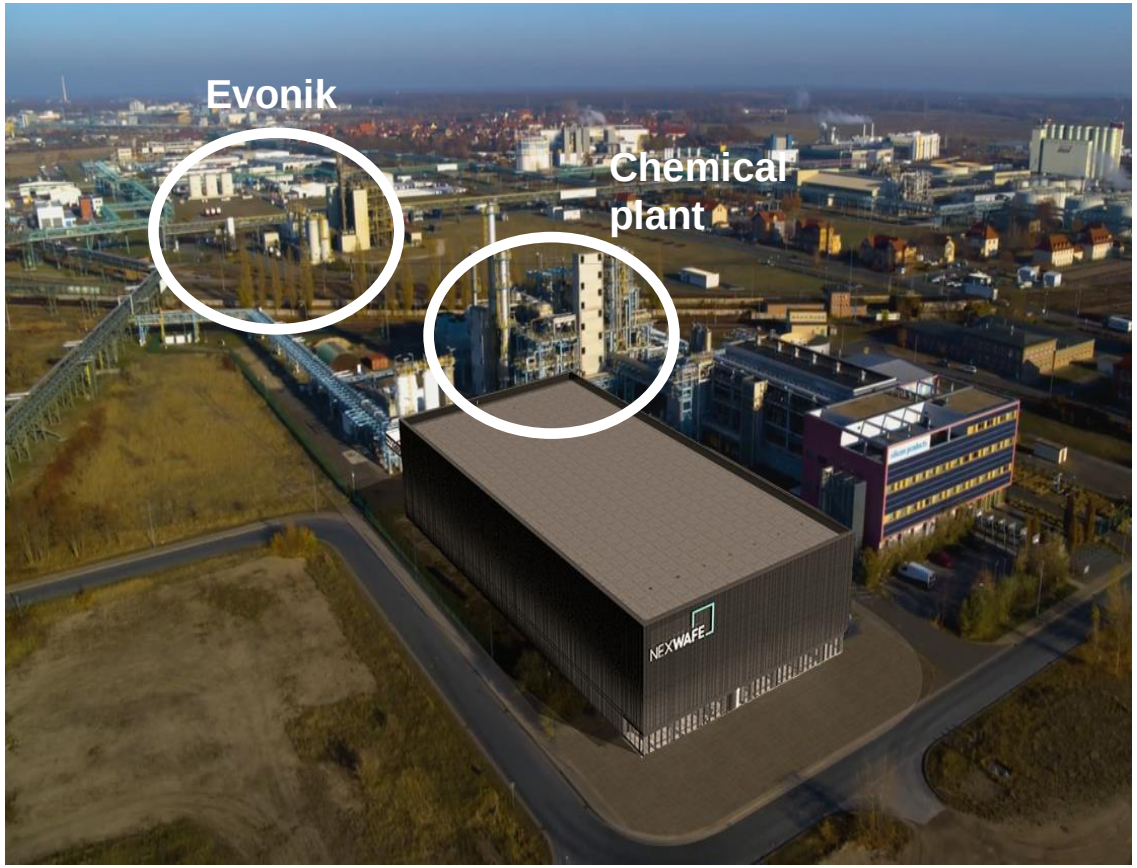
or

~870k
Passenger cars driven for one year

Planned First Commercial Factory – Bitterfeld, Saxony-Anhalt

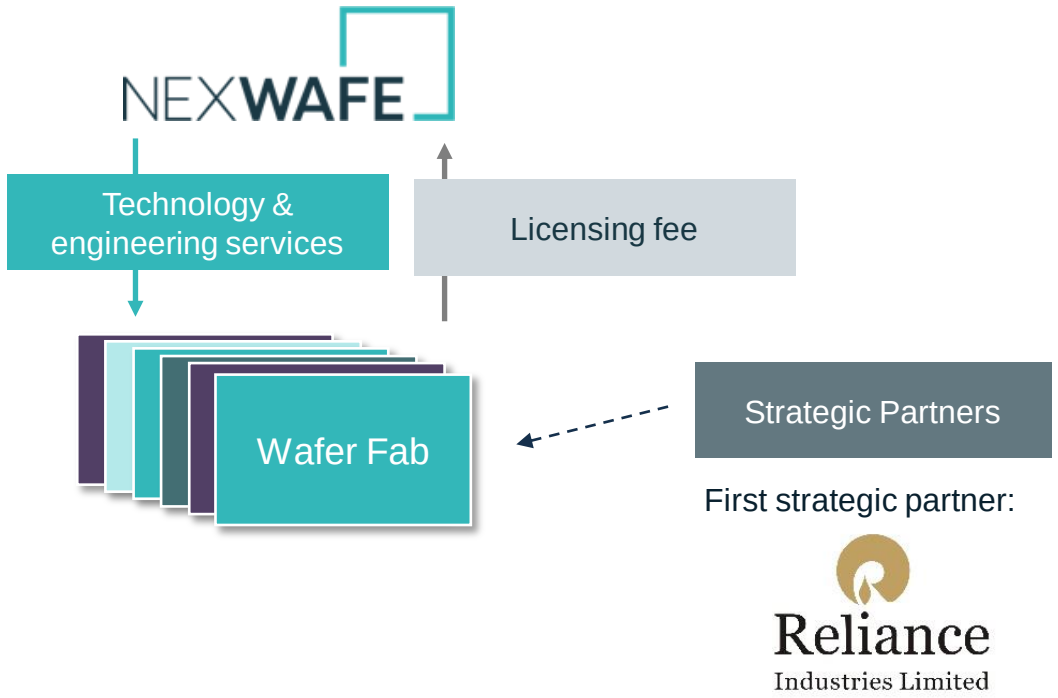
- ✓ **Chemical plant already on site**
  reduces Nexwafe's time to market by 2 years
- ✓ **Raw material supply next door**
  STC delivered through pipeline from Evonik
- ✓ **Growth optionality at lower CAPEX**
  minimal capex in chemical plant for expansion to 3 GW

GW-scale production in North America next step – Pilot shows commercial viability allowing NexWafe to adopt licensing model



Reliance signed as first Partner – Further Scale anticipated with Partnerships in Low-cost Countries

Strategic partner approach



Attractive fab economics at each size and location

	250 MW	3 GW	6 GW	10 GW	12 GW
Europe	**PILOT** **>25%** gross margin[1]	**~20%** project IRR **>35%** gross margin[1]			
United States					**~70%** project IRR **>65%** gross margin[1]
India			**~32%** project IRR **>50%** gross margin[1]		**~53%** project IRR **>70%** gross margin[1]
Middle East				**~46%** project IRR **>65%** gross margin[1]	

Each Gigafactory adds €1 bi in NPV to NexWafe

Investors include:

Fraunhofer ISE

Reliance Industries Limited

saudi aramco energy ventures

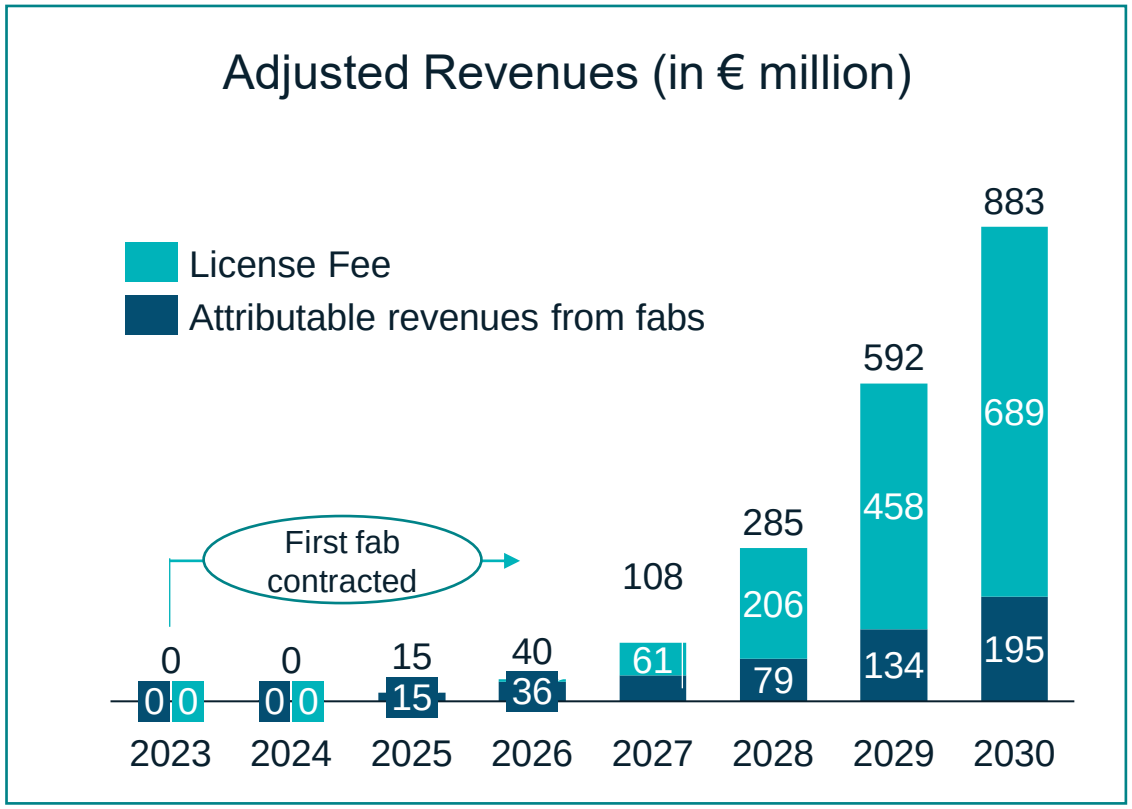
ATHOS KG

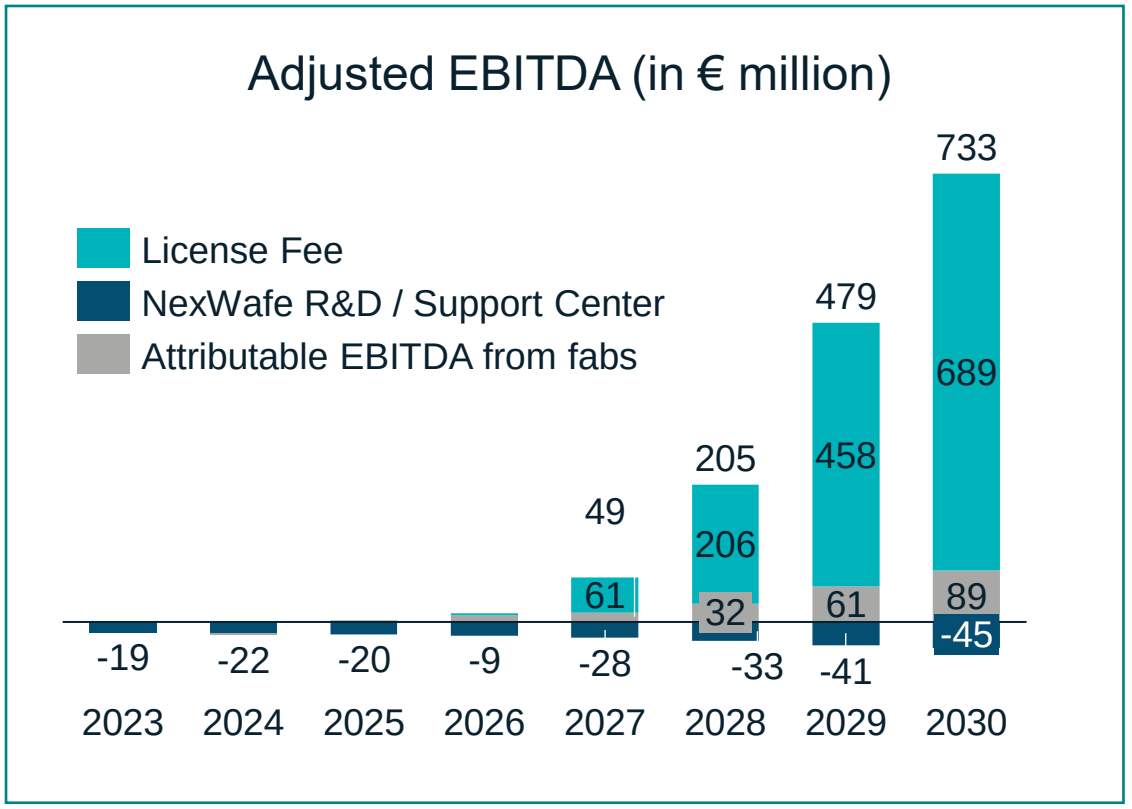
eit InnoEnergy Knowledge Innovation Community

Scalable revenues from licensing and joint-venture model

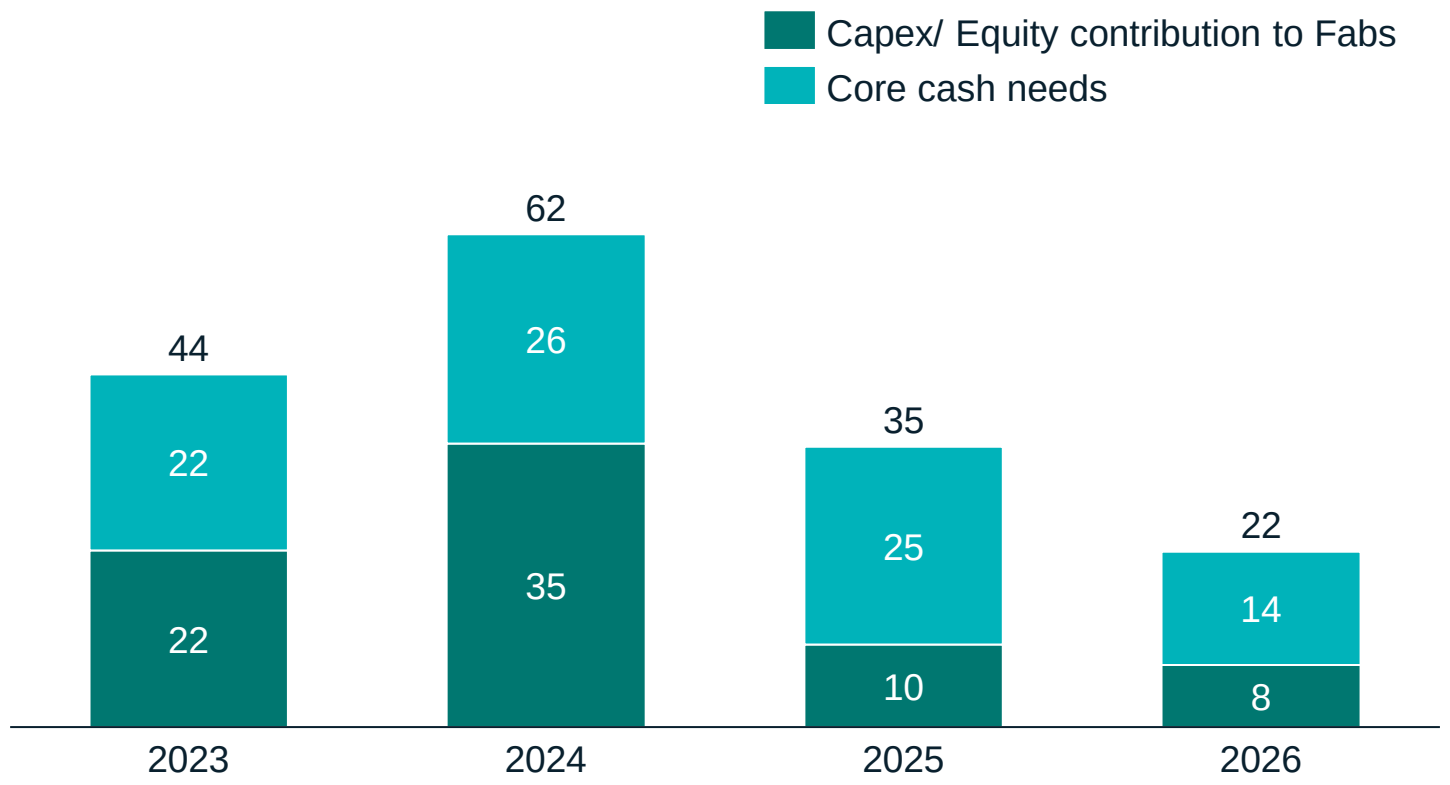
Ideal Partners:

- Provide market access and leverage existing supplier ecosystem
- Benefit from IRA and other regional private-public partnerships
- Often established process engineering Forbes 2000 companies





Net cash needs €146m over next 4 years until NexWafe reaches profitability



- **Cash positive in 2027**
- Total **net cash needs** until 2027 sum up to **€146m**
- **Cash needs** in 2025 and 2026 can be **dialed up or down** depending on **ownership of fabs** and **speed of scalability**
- **Series** D aiming at raising **€120 – 150m** and potentially be **last round of financing**

Series D Completes Funding Required for first commercial factory

	C ROUND	D ROUND	EXIT / IPO
	Q4 2021	FY2023E	<FY2028E
MILESTONES	Team in place	Pilot Fab construction	Large Scale Fabs running
	TRL 5 level	TRL 7/8 level	TRL 10 level
	Strong customer interest	Goal: 2nd Strategic partner signed	Multi-GW deployed
			
FINANCING	Raised 39m € Strategic Partnership with RIL	120-150m, of which half from current investors	Profitable with >200m EBITDA

Significant cost advantage

CO_2 savings

Roadmap to ultra-high efficiency

Best in-class and protected innovation

t: +49 761 7661 186-00
f: +49 761 7661 186-99
e: info@nexwafe.com
w: nexwafe.com

NEXWAFE

Thank you for your time