



CAPITAL MARKETS DAY 2023

# EXPANDING OUR SUSTAINABLE VALUE CREATION AMBITIONS

Paris | June 8<sup>th</sup>, 2023

# DISCLAIMER

This document is provided by Soitec (the “Company”) for information purposes only.

The Company’s business operations and financial position are described in the Company’s 2021-2022 Universal Registration Document (which notably includes the 2021-2022 Annual Financial Report) which was filed on June 20, 2022 with the French stock market authority (Autorité des Marchés Financiers, or AMF) under number D.22-0523 as well as in the Company’s FY23 half-year report released on November 23<sup>rd</sup>, 2022. The French versions of the 2021-2022 Universal Registration Document and of the half-year report, together with English courtesy translations for information purposes of both documents are available for consultation on the Company’s website ([www.soitec.com](http://www.soitec.com)), in the section Company - Investors - Financial Reports.

Your attention is drawn to the risk factors described in Chapter 2.1 of the Company’s 2021-2022 Universal Registration Document.

This document contains summary information and should be read in conjunction with the 2021-2022 Universal Registration Document and the FY23 half-year report.

This document contains certain forward-looking statements concerning Soitec. In some cases, you can identify these forward-looking statements by forward-looking words, such as “estimate”, “expect”, “anticipate”, “project”, “plan”, “intend”, “objective”, “believe”, “forecast”, “guidance”, “outlook”, “foresee”, “likely”, “may”, “should”, “goal”, “target”, “might”, “will”, “could”, “predict”, “continue”, “convinced” and “confident,” the negative or plural of these words and other comparable terminology. These forward-looking statements include, but are not limited to, predictions of the Company’s future prospects, activities, operations, direction, performance, results and strategy of Soitec and are based on analyses of earnings forecasts and estimates of amounts not yet determinable. By their nature, forward-looking statements are subject to a variety

of risks and uncertainties as they relate to future events and are dependent on circumstances that may or may not materialize in the future. Forward-looking statements are not a guarantee of the Company’s future performance. The occurrence of any of the risks described in Chapter 2.1 of the Company’s 2021-2022 Universal Registration Document may have an impact on these forward-looking statements (the current version of which is available on [www.soitec.com](http://www.soitec.com)). In addition, the future consequences of geopolitical conflicts, in particular the Ukraine / Russia situation, as well as rising inflation, may result in greater impacts than currently anticipated in these forward-looking statements.

The Company’s actual financial position, results and cash flows, as well as the trends in the sector in which the Company operates may differ materially from those contained in this document. Furthermore, even if the Company’s financial position, results, cash-flows and the developments in the sector in which the Company operates

were to conform to the forward-looking statements contained in this document, such elements cannot be construed as a reliable indication of the Company’s future results or developments.

The Company does not undertake any obligation to update or make any correction to any forward-looking statement in order to reflect an event or circumstance that may occur after the date of this document. In addition, the occurrence of any of the risks described in Chapter 2.1 of the Company’s 2021-2022 Universal Registration Document may have an impact on these forward looking statements.

The definition of EBITDA is detailed in the Company’s 2021-2022 Universal Registration Document.

This document does not constitute or form part of an offer or a solicitation to purchase, subscribe for, or sell the Company’s securities in any country whatsoever. This document, or any part thereof, shall not form the basis of, or be relied upon in connection with, any contract, commitment or

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# AGENDA

#01  
CEO VISION  
Pierre Barnabé

#02  
STRATEGY  
Steve Babureck

#03  
INNOVATION  
Christophe Maleville

#04  
MOBILE  
COMMUNICATIONS  
Jean-Marc Le Meil

#05  
AUTOMOTIVE  
& INDUSTRIAL  
Emmanuel Sabonnadière

#06  
SMART  
DEVICES  
Michael Reiha

Q&A #1  
BREAK

#07  
OPERATIONS  
Cyril Menon

#08  
FINANCE  
Léa Alzingre

Q&A #2

#09  
CEO  
WRAP-UP  
Pierre Barnabé



# CEO VISION

Pierre Barnabé

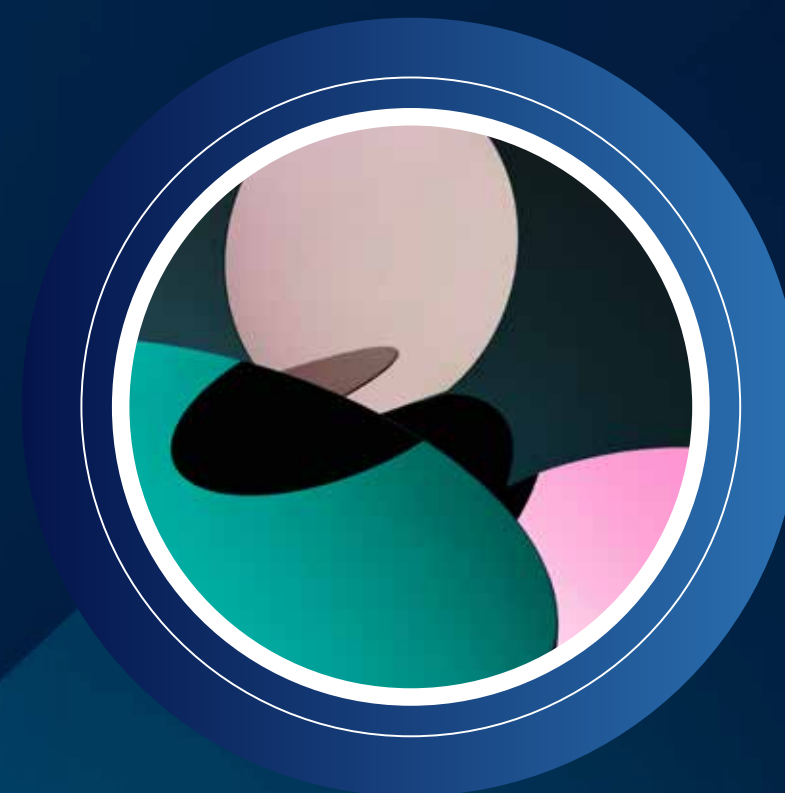
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# CEO KEY MESSAGES



Technology megatrends to fuel **MASSIVE DEMAND** for semiconductors and increased adoption of **ENGINEERED SUBSTRATES**



Deploying our sustainable value creation model to **STRENGTHEN OUR GLOBAL LEADERSHIP** in engineered substrates

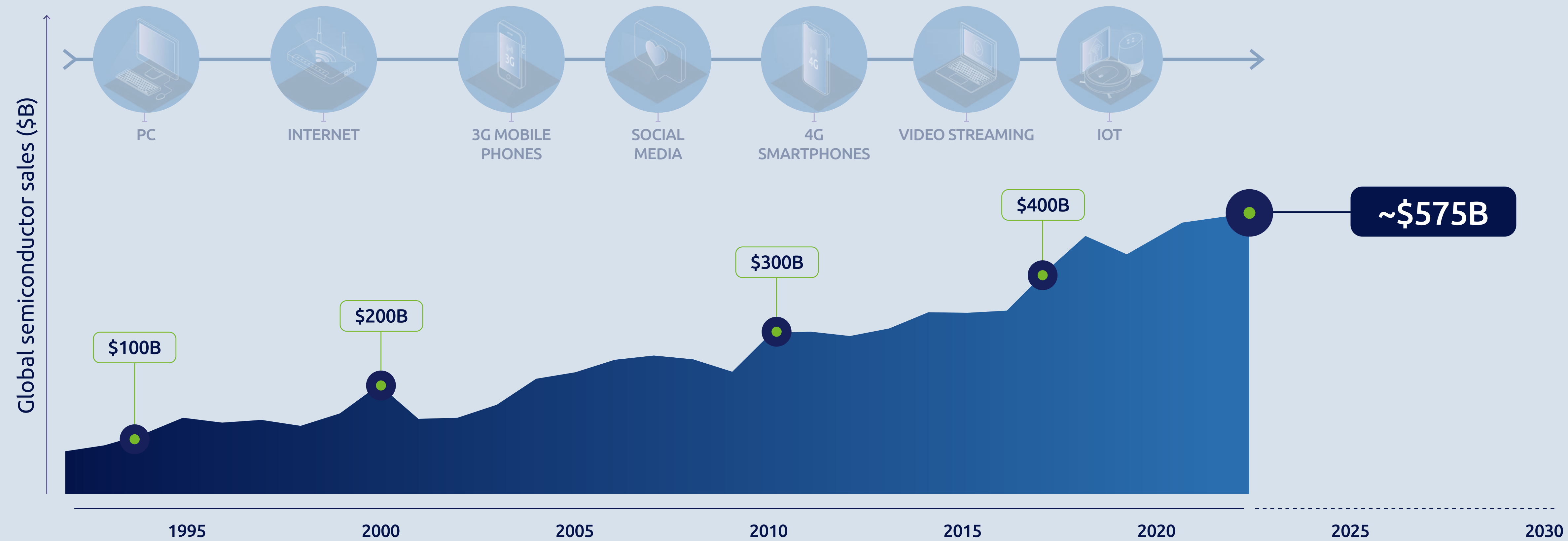


**FY26 REVENUE / EBITDA OBJECTIVES ON TRACK**  
**x2 EBITDA in 3 years**

**BEYOND FY26**  
**EXPAND** our sustainable value creation ambitions

# Technology megatrends to fuel massive demand for semiconductors and increased adoption of engineered substrates

# SEMICONDUCTORS HAVE TRANSFORMED THE WORLD WE LIVE IN



Source: SIA, IBS



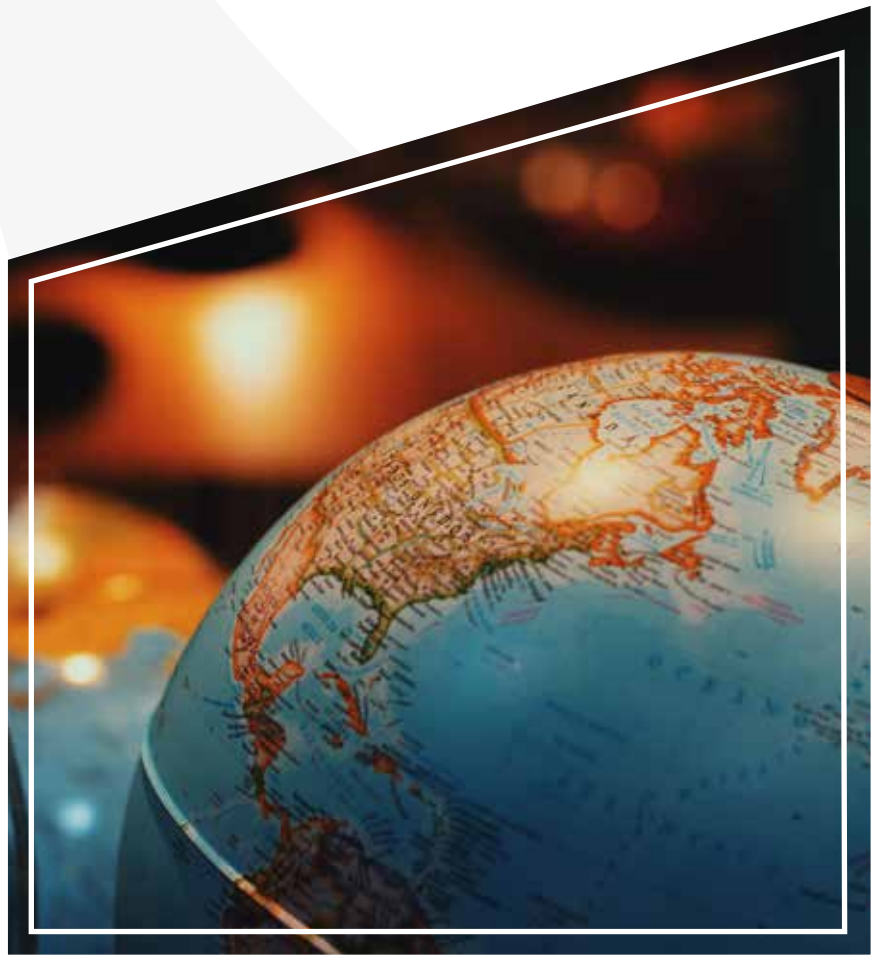


# GLOBAL SHIFTS CREATE CHALLENGES AND OPPORTUNITIES FOR SEMICONDUCTORS



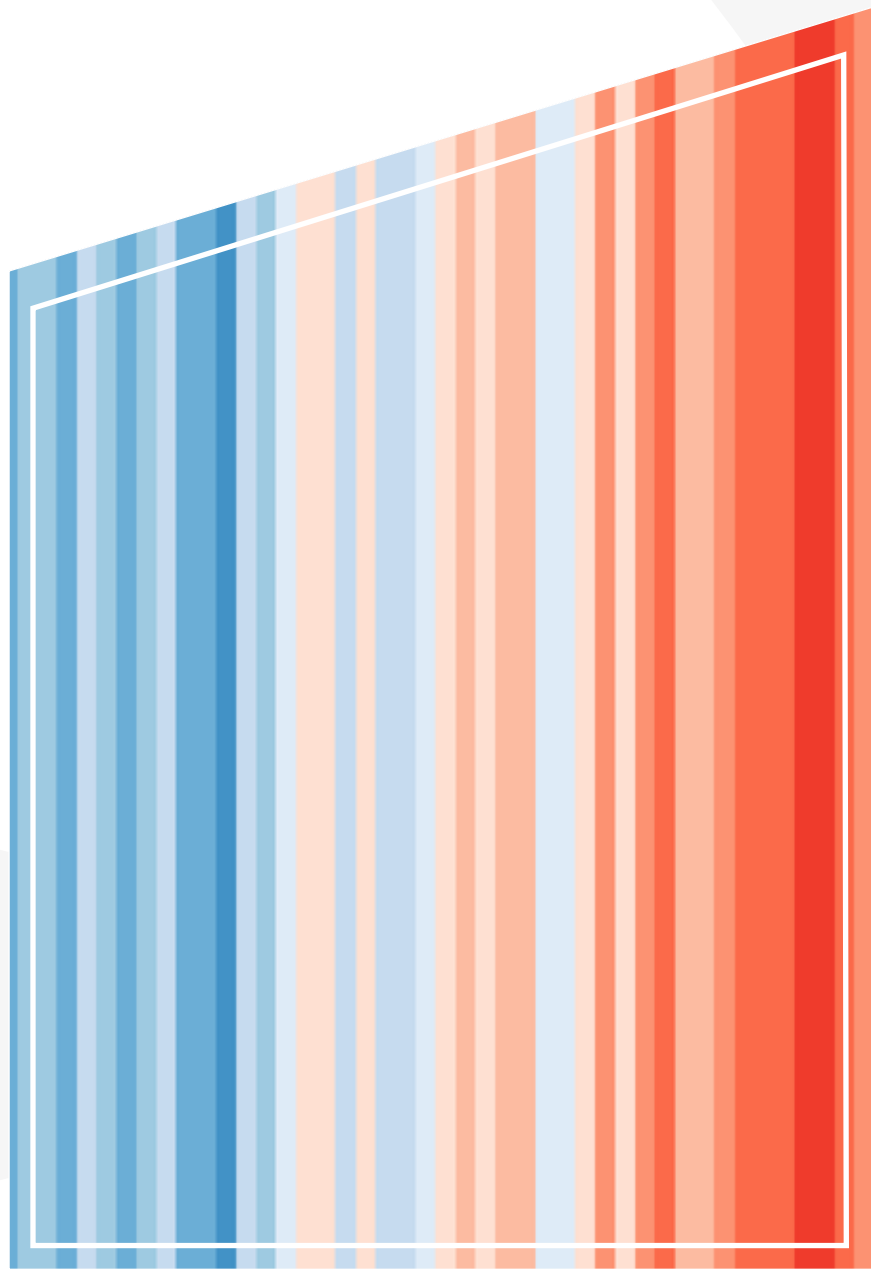
MACRO  
VOLATILITY

Active  
Management



GEOPOLITICAL  
TENSIONS

Leverage global footprint to  
address customers worldwide



ENVIRONMENTAL  
CHALLENGES

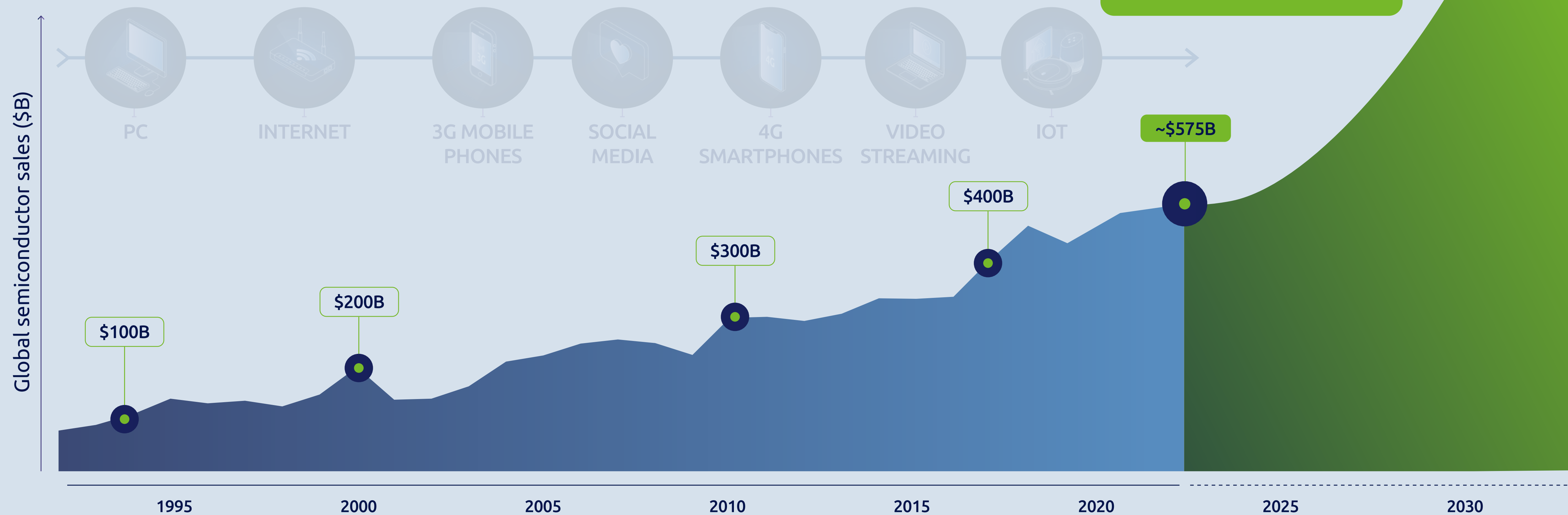
Deliver industry  
leading solutions to  
build energy efficient  
chips and devices

OPPORTUNITIES  
FOR SOITEC

Image credit: Warming stripes data visualisation created by professor and climatologist Ed Hawkins



# SEMICONDUCTOR GLOBAL SALES TO REACH ~\$1T BY 2030: ~7% CAGR 2022-2030



Source: SIA, IBS





SEMICONDUCTOR  
~\$1T BY 2030

# SEMICONDUCTOR MEGATRENDS



AUTONOMOUS &  
ELECTRIC VEHICLES



ARTIFICIAL  
INTELLIGENCE



5G



INDUSTRY 4.0



EDGE COMPUTING



WORK & LEARN  
FROM HOME



HEALTHCARE



SMART HOMES  
& SMART CITIES



AR / VR / MR

Global semiconductor sales (\$B)

\$100B

1995

2000

2005

2010

2015

2020

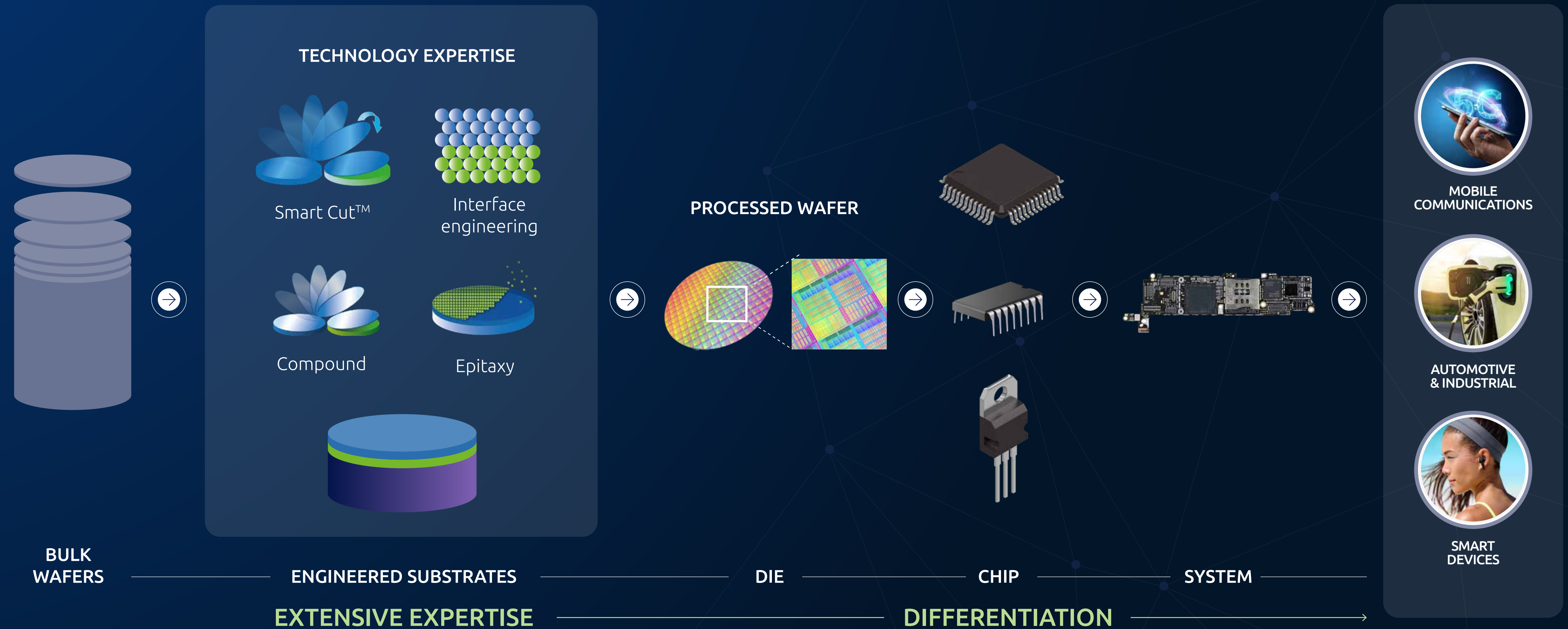
2025

2030

Source: SIA, IBS



# ENGINEERED SUBSTRATES ARE A CRITICAL COMPONENT OF THE SEMICONDUCTOR INDUSTRY



# BUILDING A DIVERSE PRODUCT PORTFOLIO TO FUEL OUR DIVISIONS VALUE CREATION ACROSS 3 STRATEGIC END MARKETS



RF-SOI

FD-SOI

Power-SOI

Imager-SOI

Photonics-SOI

POI

SmartSiC™

RF-GaN

Power-GaN

SmartGaN

InP

New materials

PREPARING  
EXPANSION  
BEYOND

EXPANDING INTO  
COMPOUND  
SEMICONDUCTORS

STRENGTHENING  
SOI LEADERSHIP

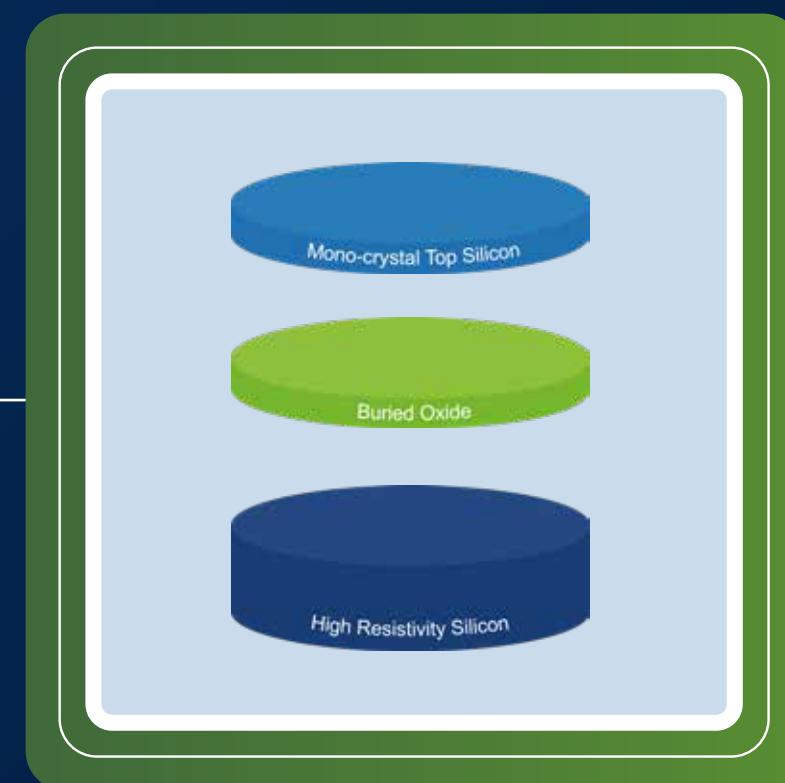
+ LICENSING / PATENT MONETIZATION



# 3 POWERFUL ENGINES TO DRIVE SOITEC ADDRESSABLE MARKET EXPANSION BY 2030



**SEMICONDUCTOR  
MARKET GROWTH**



**INCREASING  
ADOPTION OF  
ENGINEERED SUBSTRATES**



**SOITEC EXPANDING  
PRODUCT AND  
TECHNOLOGY PORTFOLIO**

**SOITEC  
ADDRESSABLE  
MARKET**

**x3**

**BY 2030**

(vs 2022)




Source: Yole, SEMI, Soitec estimates




Deploying our sustainable value creation model to strengthen our global leadership in engineered substrates

# SOITEC IS A GLOBAL LEADER IN ENGINEERED SUBSTRATES


EXPLORING NEW GEOGRAPHIES TO EXPAND OUR INNOVATION AND MANUFACTURING FOOTPRINT




>2,100  
EMPLOYEES  
WORLDWIDE  
(~35% WOMEN)



>50  
DIFFERENT  
NATIONALITIES



>11%  
OF REVENUE  
DEDICATED TO  
INVESTMENT IN R&D



~4,000  
ACTIVE PATENTS  
(~400 IN FY23)



SOITEC BERNIN 1, 2, 3, 4  
FRANCE



SOITEC BELGIUM  
BELGIUM



SOITEC PASIR RIS 1, 1A  
SINGAPORE



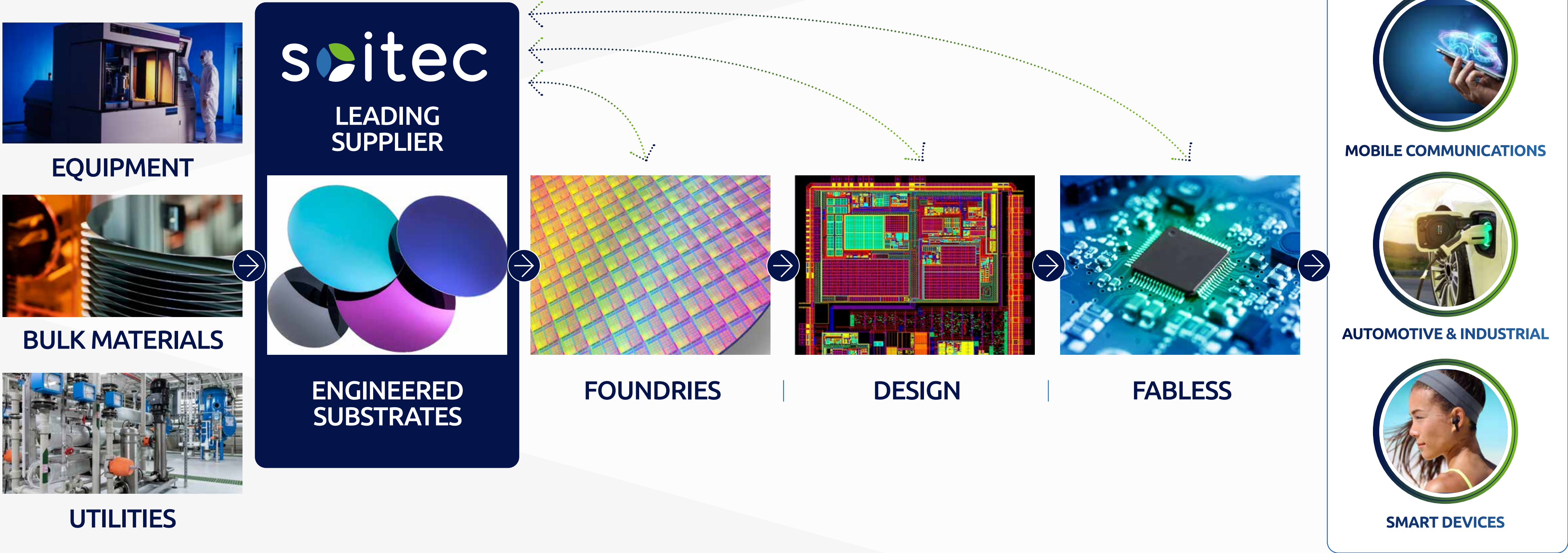
PARTNERSHIP WITH SIMGUI  
CHINA





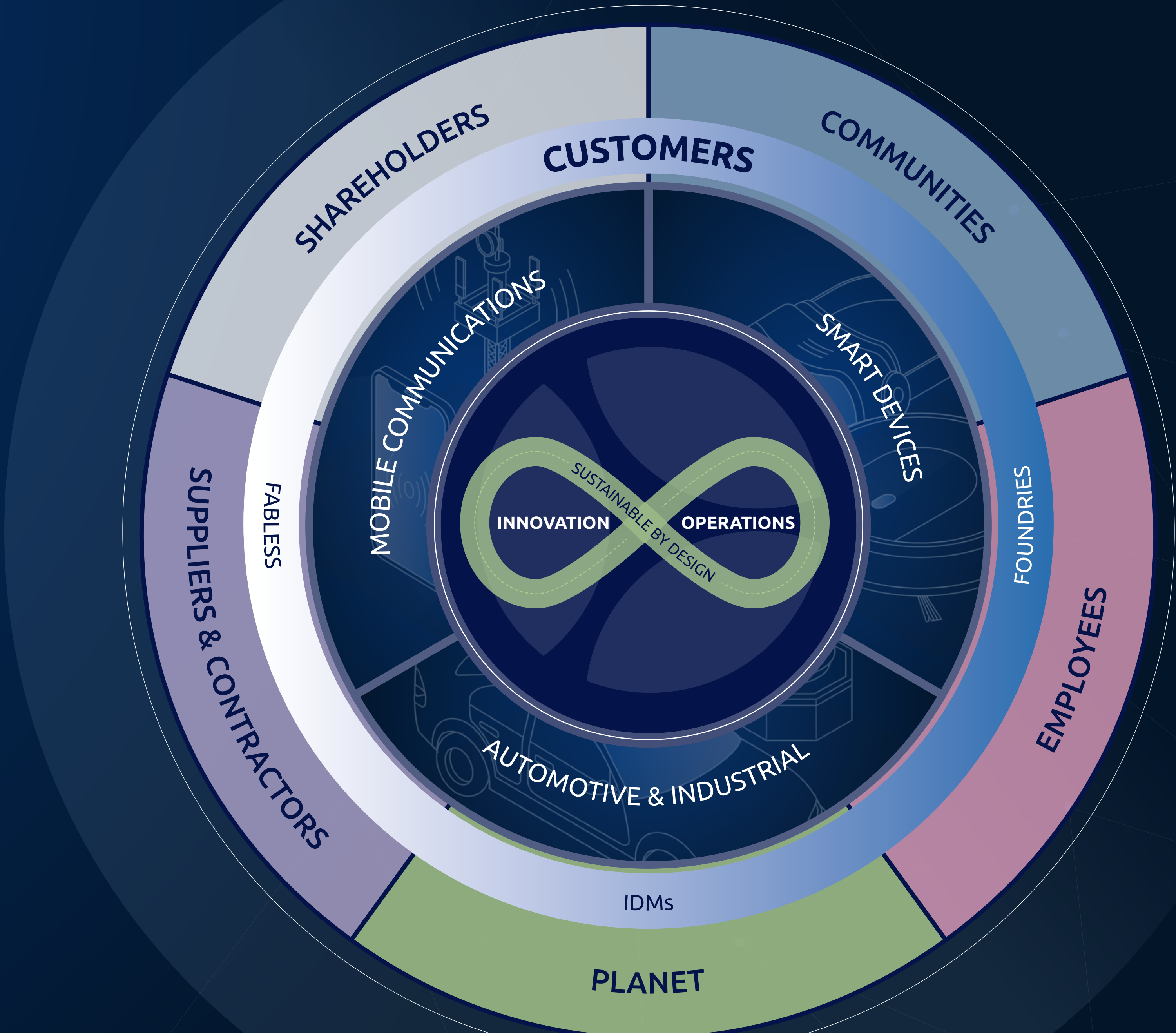
# SOITEC HAS BUILT A UNIQUE POSITION IN THE VALUE CHAIN

BUILDING CUSTOMER INTIMACY TO MAKE OUR PRODUCTS  
A STANDARD AND BECOME A REFERENCE





LEVERAGING OUR  
ROBUST AND  
SUSTAINABLE VALUE  
CREATION MODEL  
TO BENEFIT ALL  
STAKEHOLDERS





A DIVERSE AND STREAMLINED  
MANAGEMENT TEAM  
FOCUSED ON VALUE CREATION  
EXPANSION, SPEED OF EXECUTION,  
AND DELIVERY OF OUR AMBITIOUS  
STRATEGIC PLAN



11  
EXECUTIVE COMMITTEE  
MEMBERS<sup>1</sup>

27%  
WOMEN

(1) As of August 2023







# DRIVE THE TRANSITION TOWARD A SUSTAINABLE ECONOMY THROUGH OUR INNOVATION AND OPERATIONS



INNOVATING TO REDUCE  
THE ENVIRONMENTAL  
FOOTPRINT ACROSS THE  
PRODUCT LIFE CYCLE

x10

RE-USABILITY OF DONOR  
SUBSTRATE THANKS TO OUR  
PROPRIETARY SMART CUT™  
TECHNOLOGY



ACTING TO REDUCE OUR  
CARBON FOOTPRINT  
IN LINE WITH THE 1.5°C  
PATHWAY

-25%

REDUCTION OF OUR **SCOPE  
1 & 2 ABSOLUTE GHG  
EMISSIONS** IN 2026 VS 2020,  
WHILE x2.5 VOLUMES

BUSINESS  
AMBITION FOR **1.5°C**  



RESPONSIBLE  
WATER MANAGEMENT  
TO SUPPORT OUR  
GROWTH

-50%

REDUCTION OF OUR  
WATER INTAKE PER UNIT  
OF PRODUCTION BETWEEN  
FY21 AND FY30





## LEVERAGE OUR INCLUSIVE AND INSPIRING COMPANY CULTURE



MAKING SOITEC AN  
ATTRACTIVE EMPLOYER  
TO SUPPORT OUR  
GROWTH

18%

ELIGIBLE EMPLOYEES  
PROMOTED INTERNALLY  
IN FY23

**HUMPACT** 



SHARING THE  
FRUIT OF GROWTH  
WITH ALL OUR  
EMPLOYEES

100%

EMPLOYEES ELIGIBLE TO FREE  
PERFORMANCE SHARE PLAN



AIMING FOR  
GENDER PARITY

40%

TARGET FOR THE PROPORTION  
OF WOMEN ACROSS  
THE GROUP BY FY30

SEMI INDUSTRY LEADER IN  
DIVERSITY AND INCLUSION  
AWARD IN 2022







# ALIGN GOVERNANCE PRACTICES WITH INDUSTRY- LEADING STANDARDS TO BECOME A REFERENCE



INCREASED  
NUMBER OF  
BOARD INDEPENDENT  
DIRECTORS

58%

OF INDEPENDENT  
DIRECTORS\*

\*Excluding employee representatives



A COMPENSATION POLICY  
AND GOVERNING BODIES  
ALIGNED WITH OUR  
SUSTAINABLE AMBITION

20%

WEIGHT OF ESG CRITERIA WITHIN  
CEO VARIABLE COMPENSATION  
AND EMPLOYEE FREE  
SHARE PLAN

CREATION OF THE BOARD OF  
DIRECTORS ESG COMMITTEE



SET HIGH ETHICAL  
STANDARDS FOR  
OURSELVES AND  
FOR OUR BUSINESS  
RELATIONS

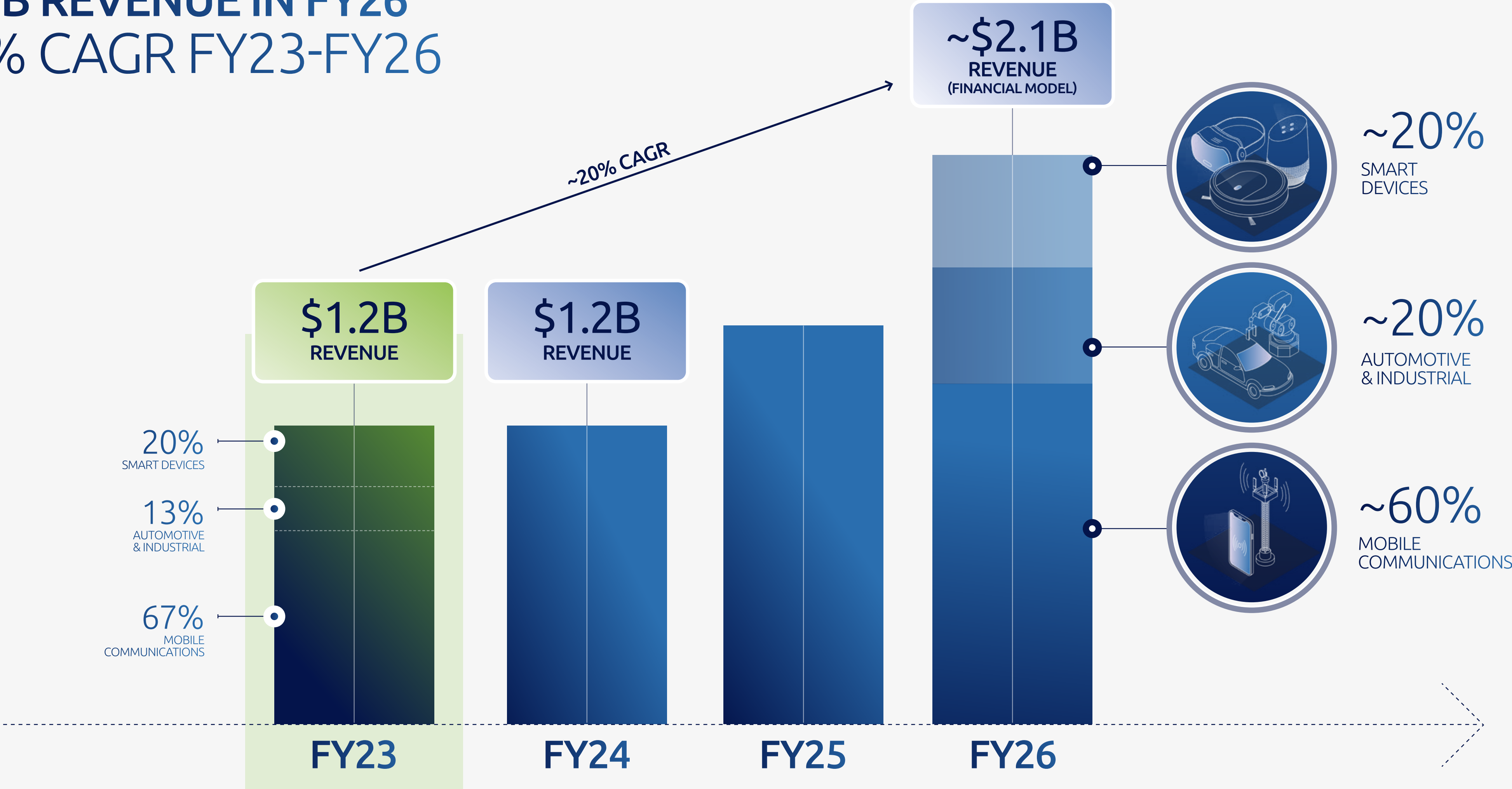
100%

OF OUR STRATEGIC  
SUPPLIERS ADHERE TO OUR  
SUPPLIER QUALITY POLICY



FY26 objectives on track  
x2 EBITDA in the next 3 years  
Beyond FY26 EXPAND  
Market share & Value creation

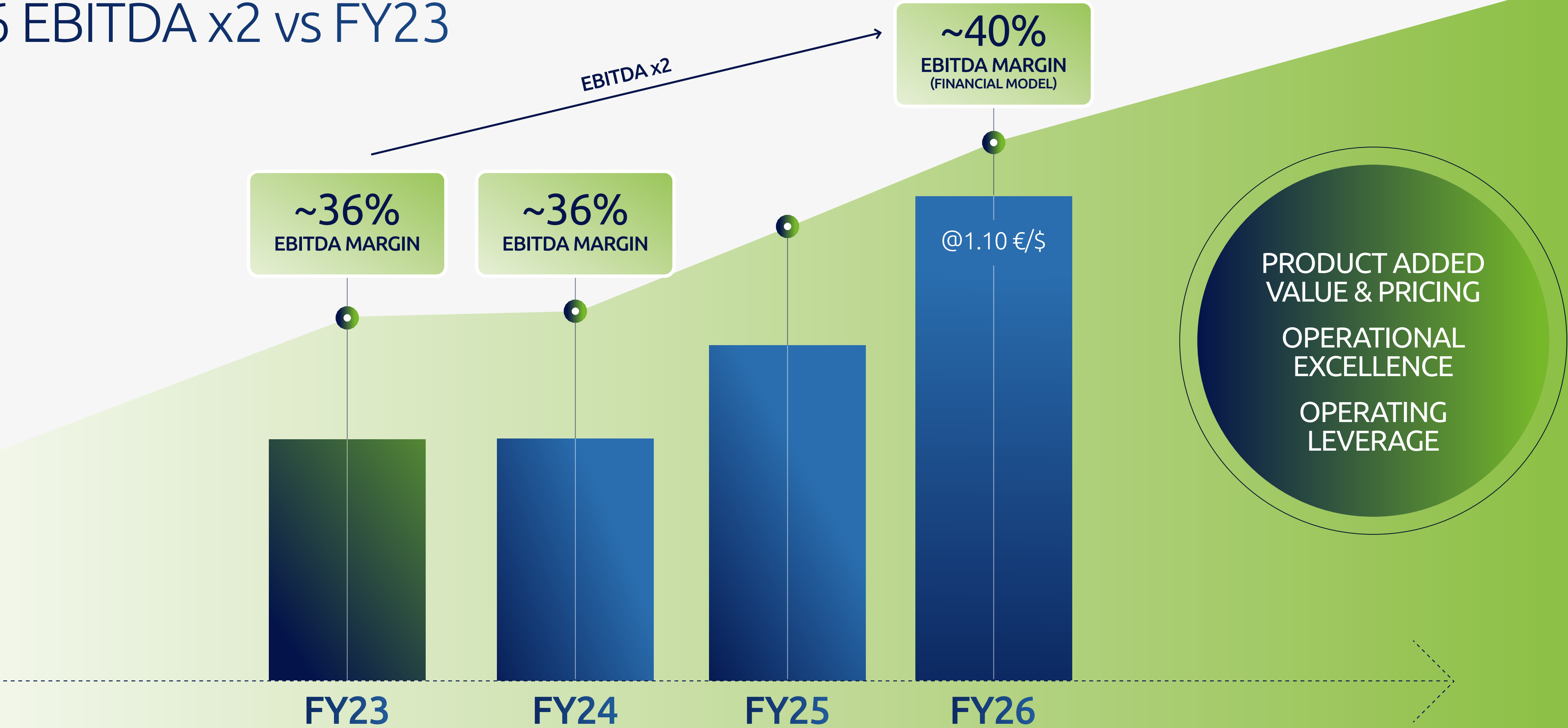
~\$2.1B REVENUE IN FY26  
~20% CAGR FY23-FY26





# DRIVING EBITDA MARGIN<sup>1</sup> UP TO ~40% BY FY26

## FY26 EBITDA x2 vs FY23



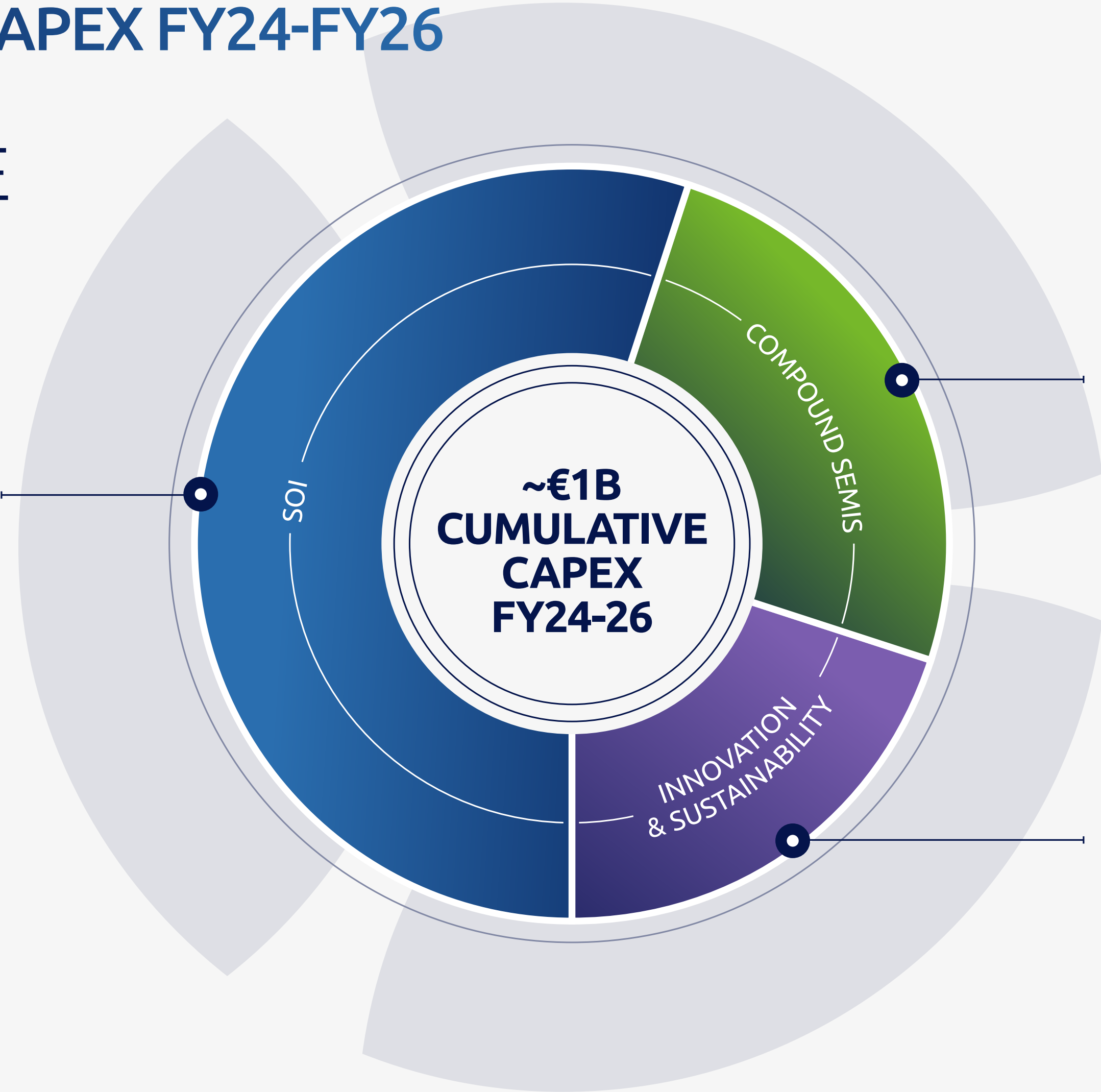
(1) EBITDA represents operating income (EBIT) before depreciation, amortization, impairment of non-current assets, non-cash items relating to share-based payments, provisions for impairment of current assets and for contingencies and expenses, and disposal gains and losses. EBITDA is not a financial indicator defined by IFRS and may not be comparable to EBITDA as reported by other groups. It represents additional information and should not be considered as a substitute for operating income or net cash generated by operating activities



~€1B CUMULATIVE CAPEX FY24-FY26  
EQUIPMENT AND  
INFRASTRUCTURE

~55%

FRANCE / SINGAPORE  
300mm  
Capacity expansion  
and Refresh



~30%

FRANCE / BELGIUM  
150/200mm  
Capacity expansion  
SmartSiC™, POI, GaN



~15%

INNOVATION  
SUSTAINABILITY  
IT, MAINTENANCE, ETC.





# BEYOND FY26

## ROBUST FINANCIAL FUNDAMENTALS TO REACH FY26 OBJECTIVES AND EXPAND BEYOND

### SOUND BALANCE SHEET

**€140M NET CASH  
position** in FY23  
(€788M Cash and Cash  
equivalents)



### STRONG FCF THROUGH INVESTMENT CYCLE

**Rising EBITDA and  
lower CAPEX / Sales**  
toward FY26



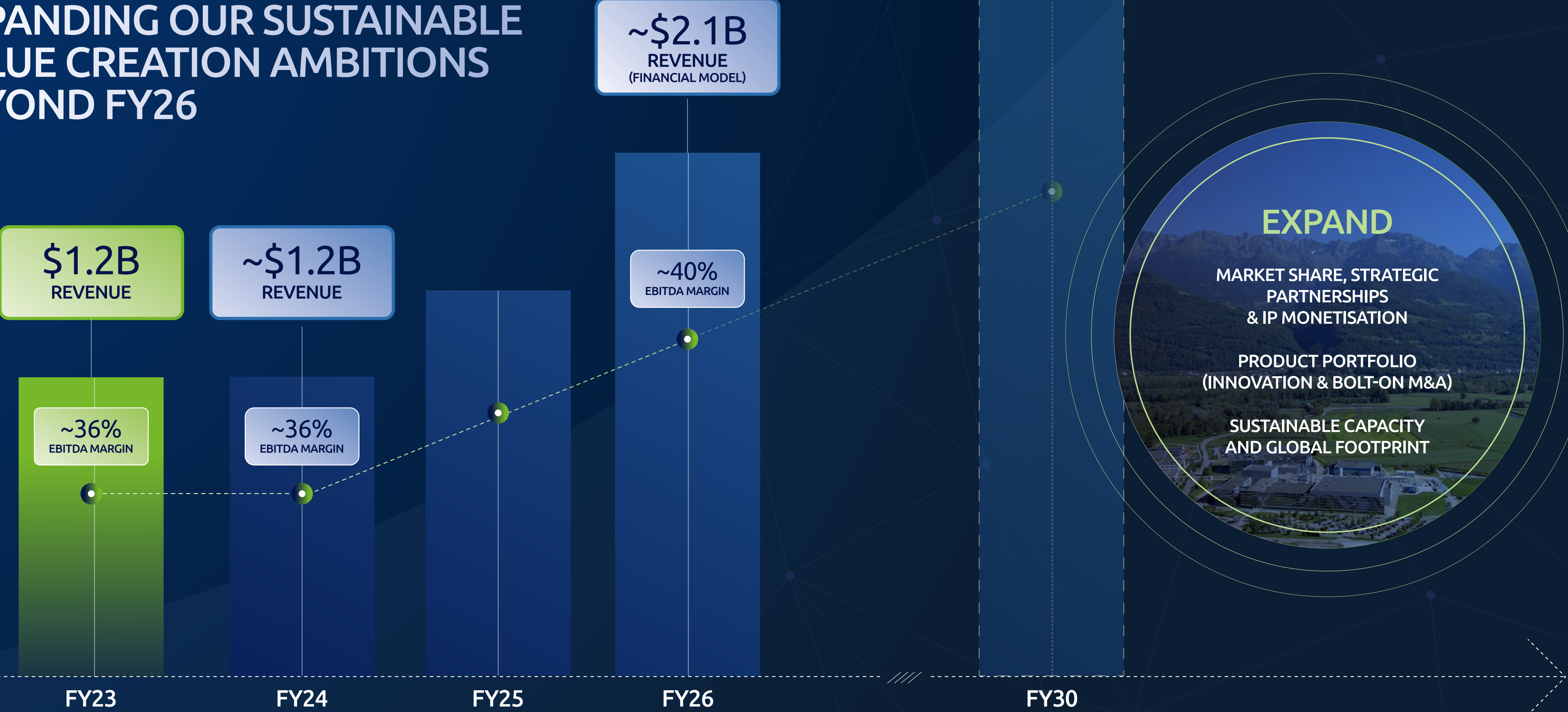
### ATTRACTIVE ROCE<sup>1</sup> FOR OUR INVESTMENT PROJECTS

**ROCE from ~20% in  
FY23 to ~25% in FY26**

(1) Post-tax Return on Capital Employed: EBIT after tax / (non current assets + working capital)



# EXPANDING OUR SUSTAINABLE VALUE CREATION AMBITIONS BEYOND FY26



EBITDA represents operating income (EBIT) before depreciation, amortization, impairment of non-current assets, non-cash items relating to share-based payments, provisions for impairment of current assets and for contingencies and expenses, and disposal gains and losses. EBITDA is not a financial indicator defined by IFRS and may not be comparable to EBITDA as reported by other groups. It represents additional information and should not be considered as a substitute for operating income or net cash generated by operating activities



# STRATEGY

Steve Babureck

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# STRATEGY KEY MESSAGES

TECHNOLOGY MEGATRENDS  
WILL SUSTAIN A MASSIVE DEMAND  
FOR SEMICONDUCTORS

SEMICONDUCTOR DEVICES  
WILL REQUIRE MORE  
ENGINEERED SUBSTRATES

ENGINEERED SUBSTRATES  
PENETRATION TO SIGNIFICANTLY  
INCREASE BY 2030

SOITEC ADDRESSABLE MARKET x3

Technology megatrends will sustain  
a massive demand for semiconductors

Semiconductor content will continue to increase  
in consumer / industrial applications



# 5G

## SUSTAINED GROWTH IN GLOBAL MOBILE DATA TRAFFIC

### 5G DATA TRAFFIC IN ACCELERATION BEYOND 2022



Public & private networks



Smart transportation

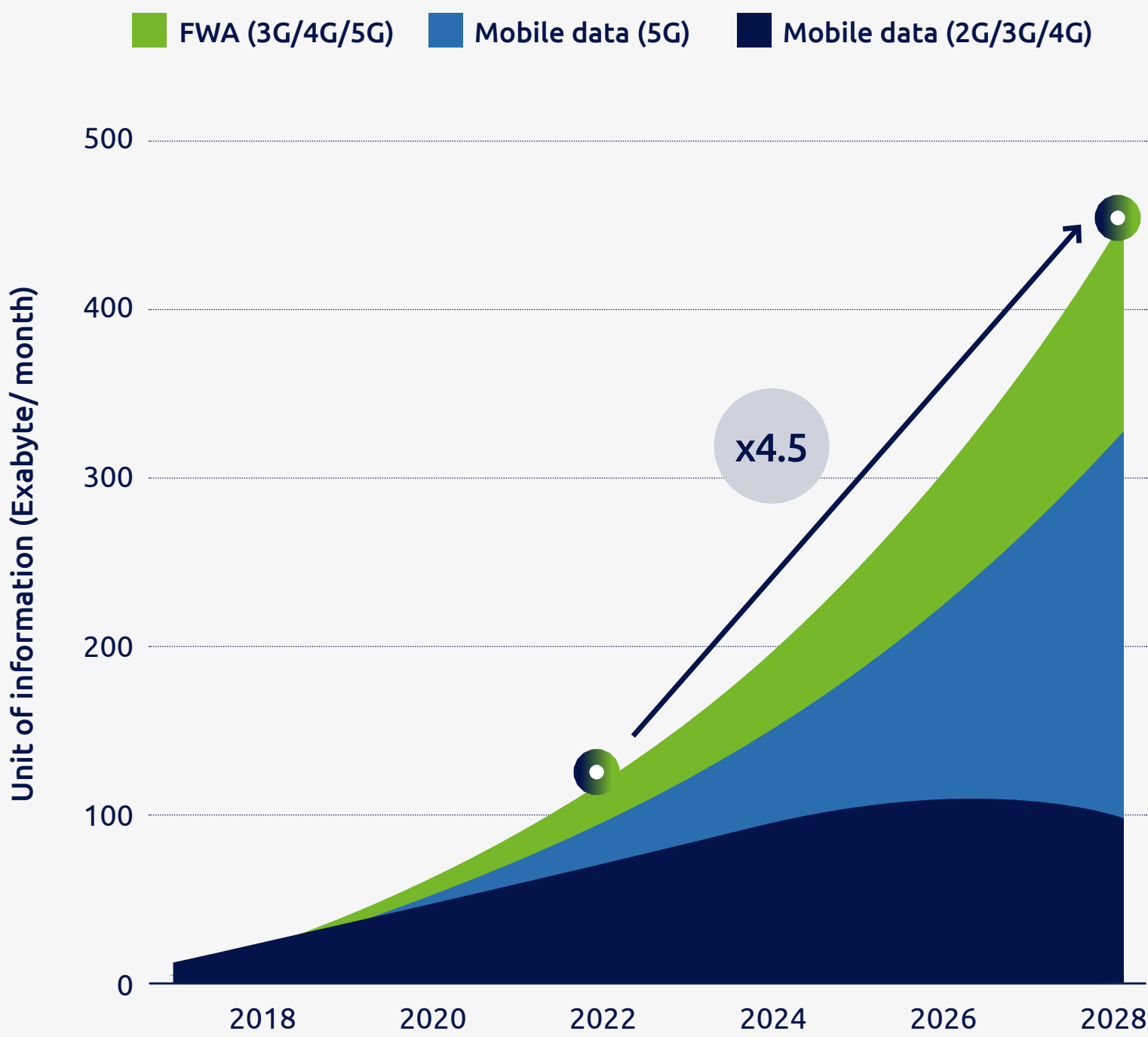


Massive IoT



Industry 4.0

### 5G enabling significant data traffic growth



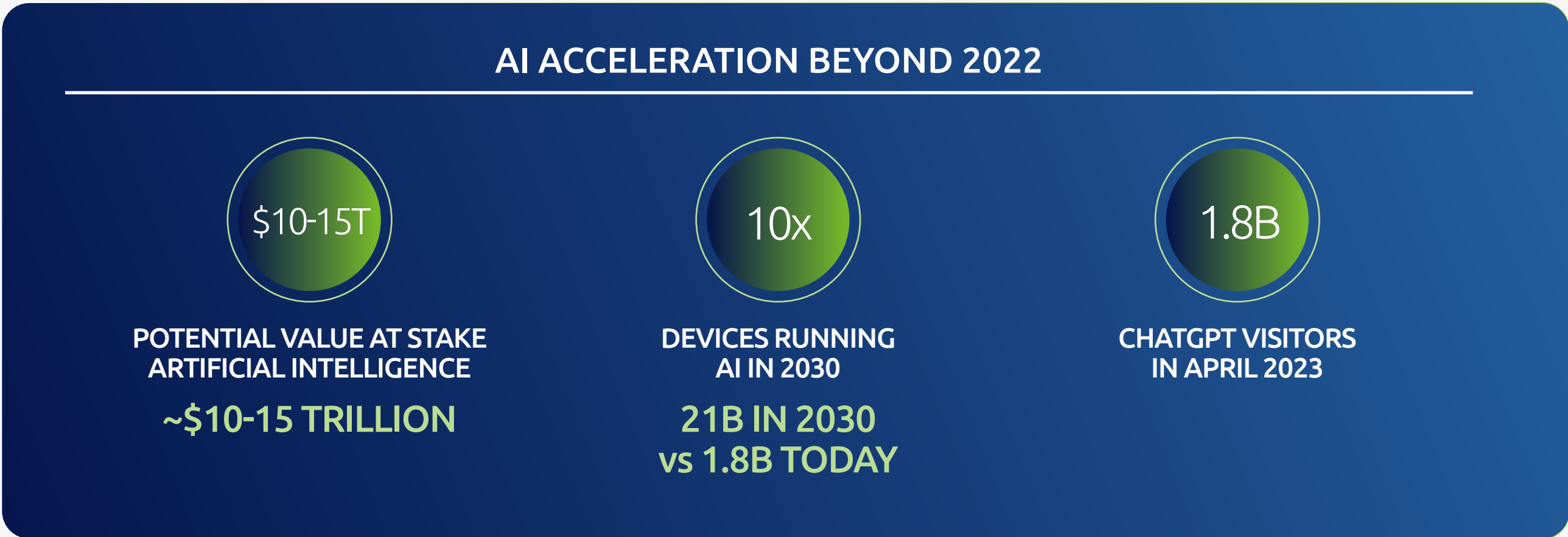
FWA (Fixed Wireless Access)

Source: Ericsson Mobility report November 2022





# ARTIFICIAL INTELLIGENCE EXPONENTIAL GROWTH IN COMPUTING POWER



Healthcare diagnostic



Autonomous driving



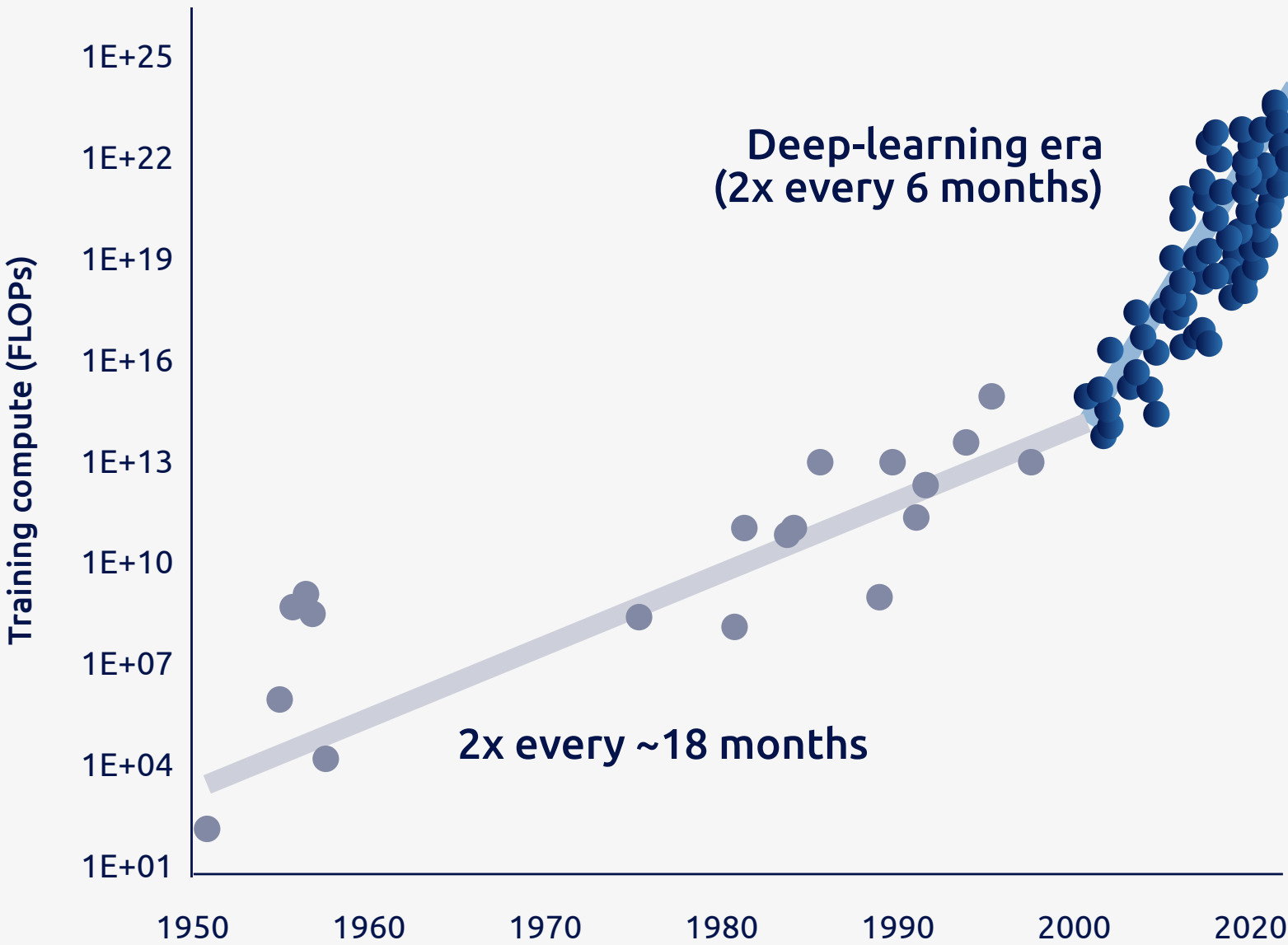
Industry 4.0



Digital creation

Source: McKinsey 2022, Transforma Insights, OpenAI

## Acceleration of Computing Power Beyond Moore's Law



Source: Cornell University (Sevilla et al)





# ENERGY EFFICIENCY SOLUTIONS MANDATORY TO SATISFY GLOBAL ELECTRICITY DEMAND

## GLOBAL ELECTRICITY DEMAND TO NEARLY DOUBLE BY 2050



GLOBAL ELECTRICITY  
DEMAND FROM 2021  
TO 2050



SHARE OF ELECTRICITY IN  
ENERGY CONSUMPTION  
FROM 2023 TO 2050



EV ELECTRICITY  
CONSUMPTION  
FROM 2022 TO 2030



Industrial  
applications



Datacenters



Smart Cities

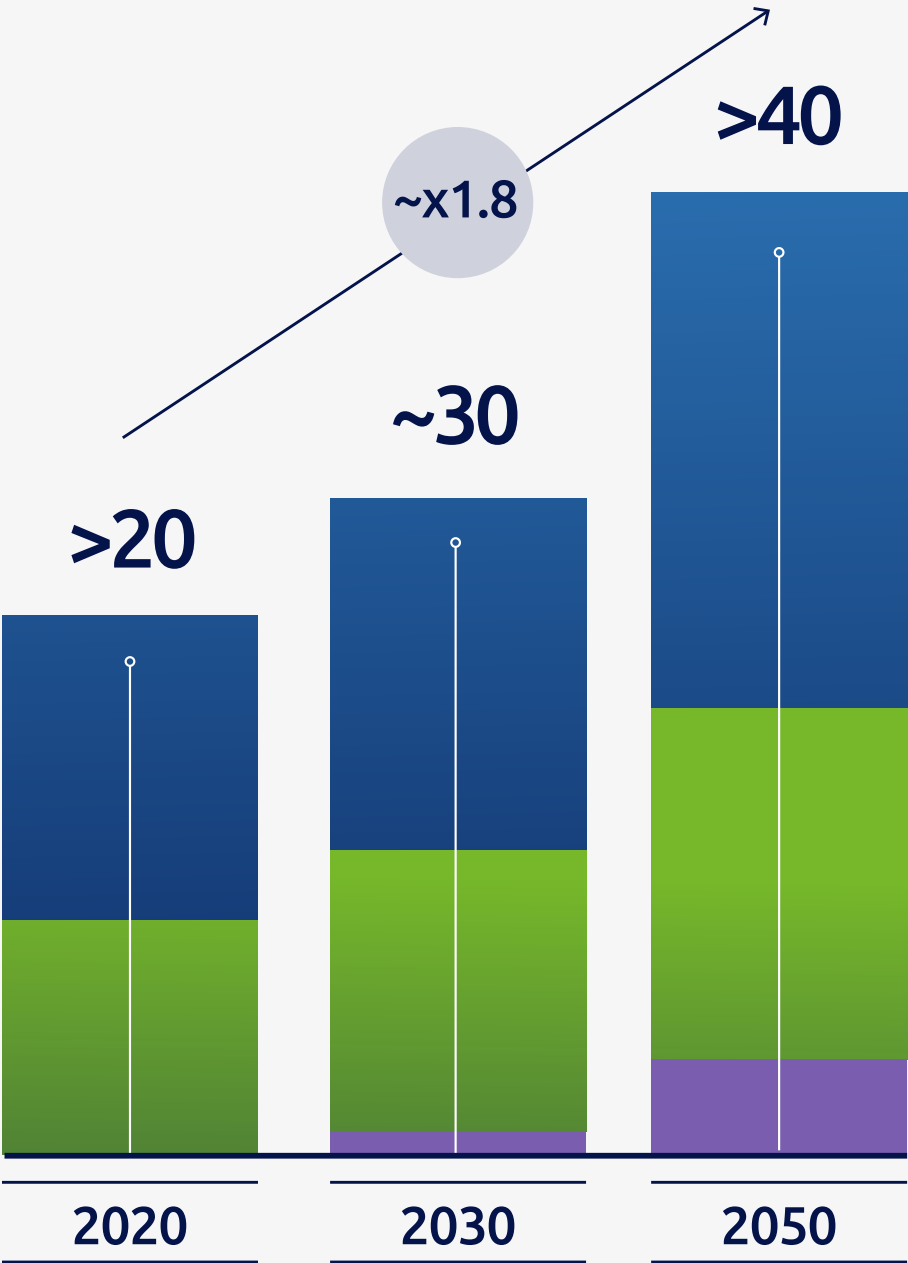


EV charging  
infrastructure

## Global electricity demand requires energy saving solutions

ELECTRICITY DEMAND IN TWH (STEPS<sup>1</sup> IEA SCENARIO)

Buildings Industry Transportation

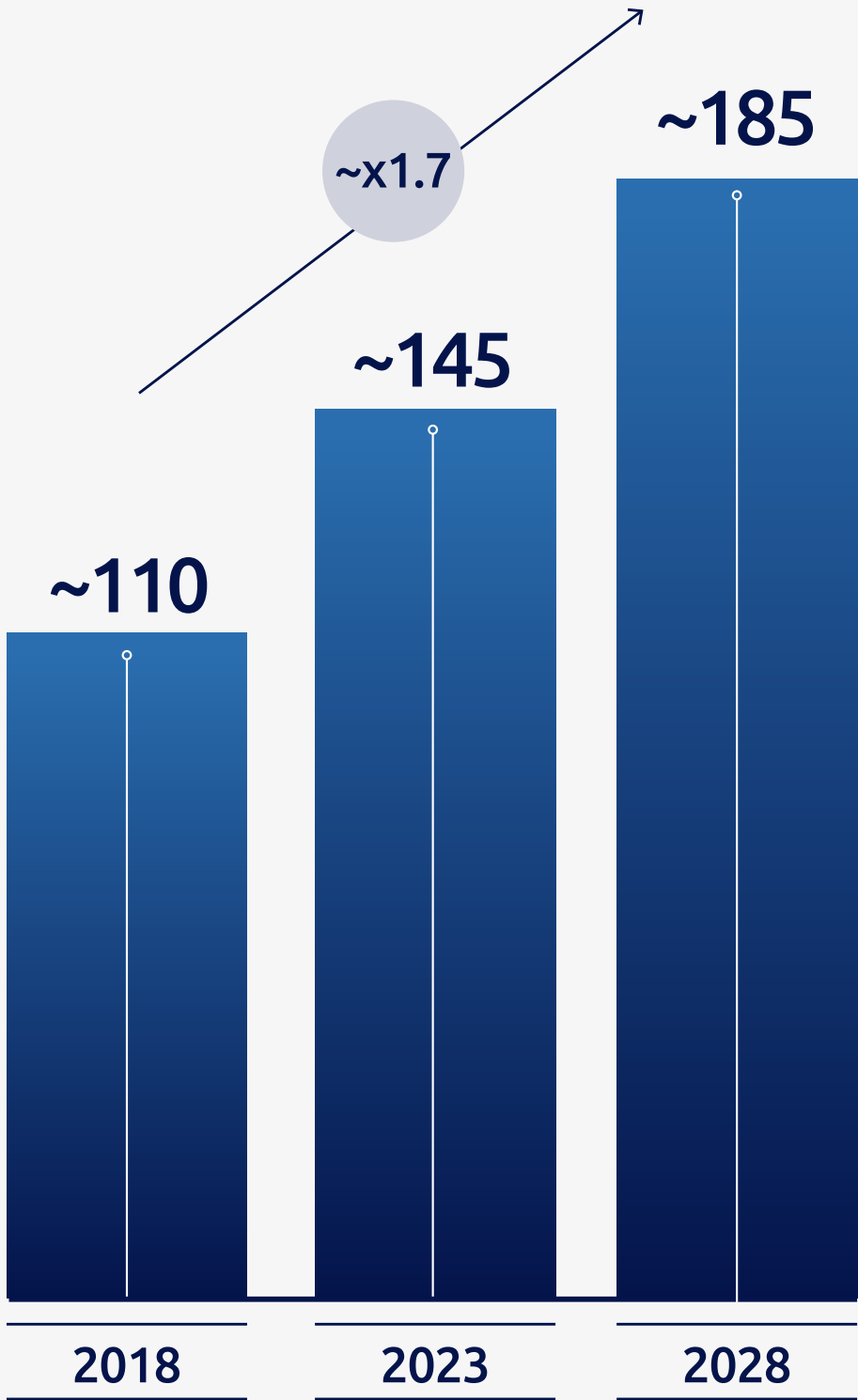


Source: IEA World Energy Outlook 2022

(1) The Stated Policies Scenario reflects existing policies and measures, as well as firm policy ambitions and objectives that have been legislated by governments around the world

# MOBILE SEMICONDUCTOR CONTENT PER SMARTPHONE

Semiconductor content  
per smartphone (\$)



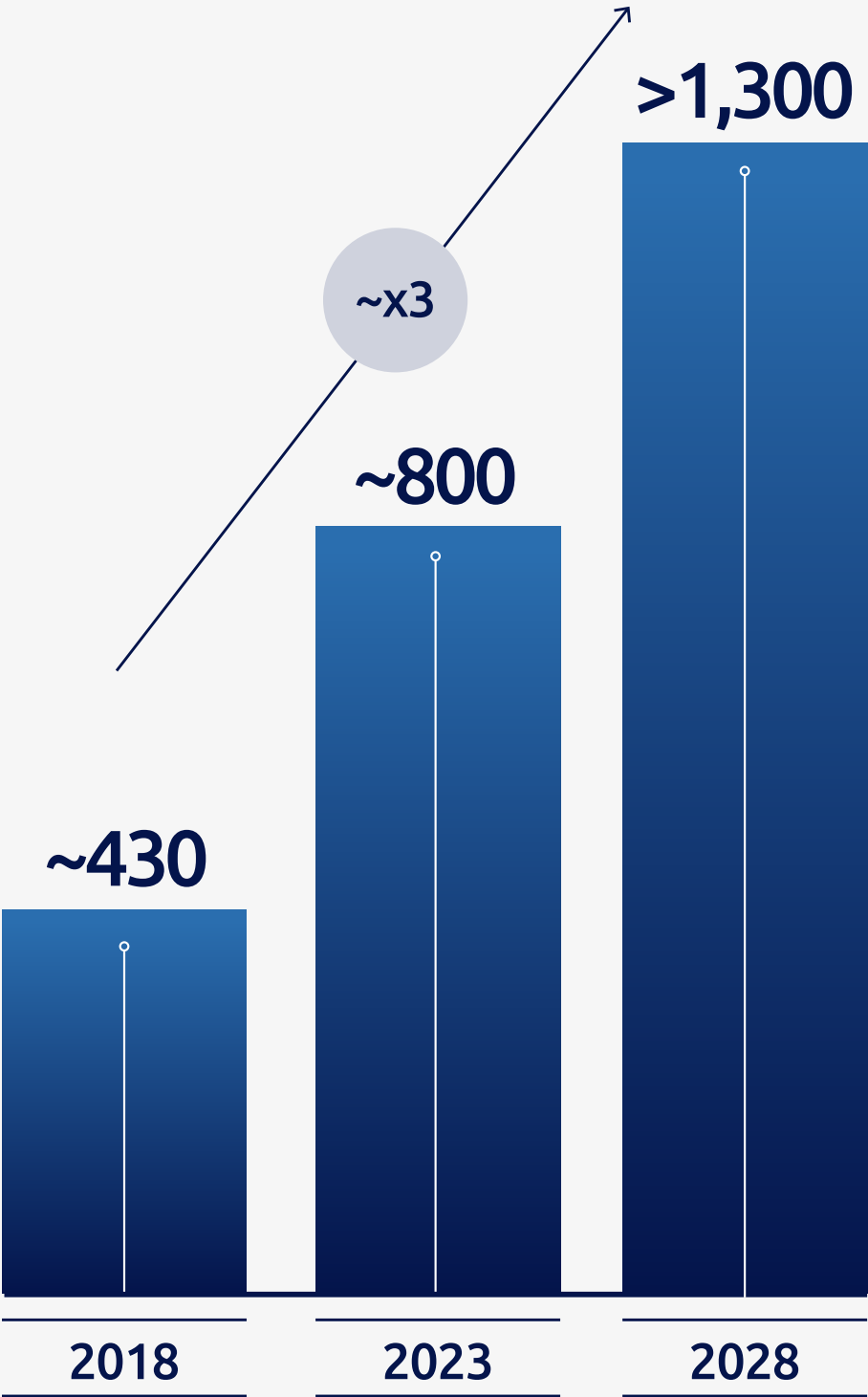
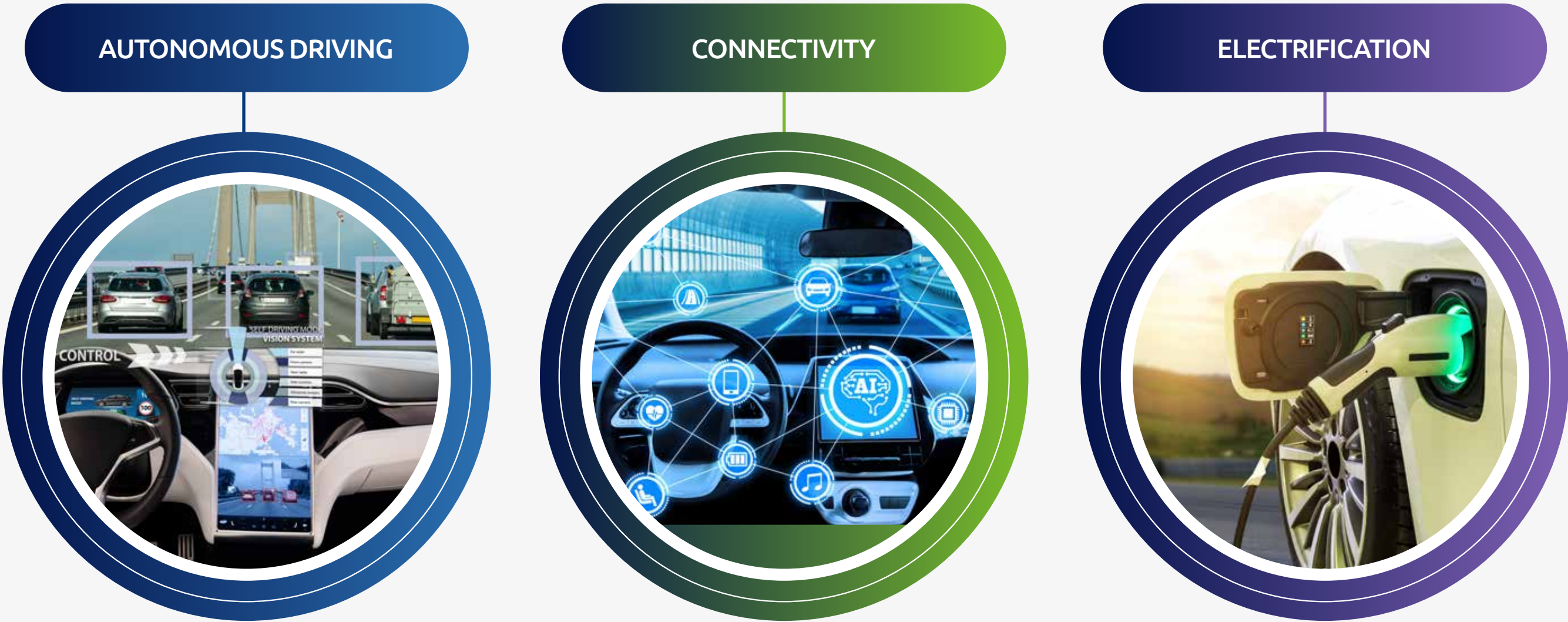
Source: TechInsights, IC Insights, IHS Markit, Soitec estimates





# AUTOMOTIVE SEMICONDUCTOR CONTENT PER VEHICLE

Semiconductor content per car (\$)



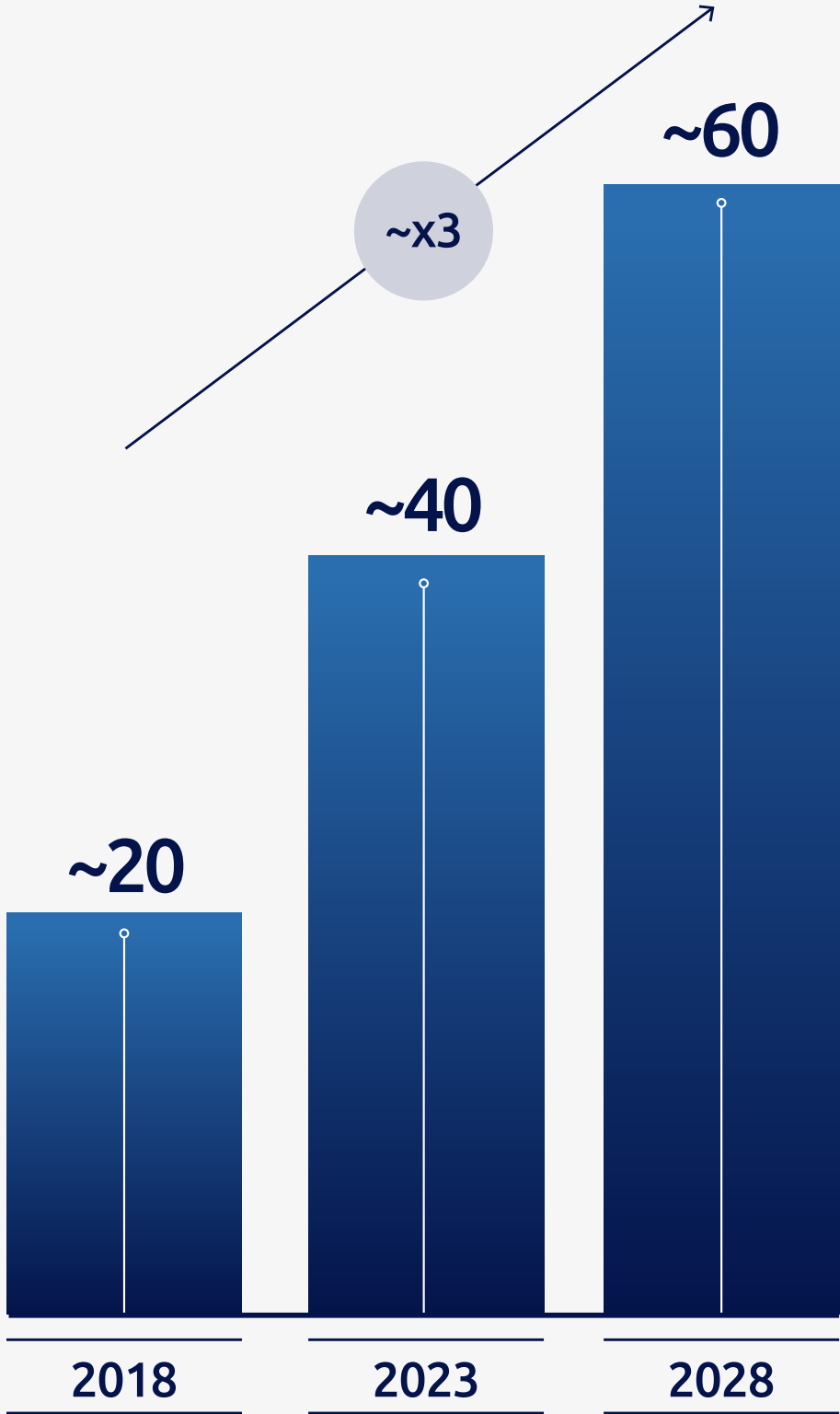
Source: IHS Markit 2023, Gartner 2022, UBS 2023, Soitec estimates




# SMART DEVICES

## SEMICONDUCTOR CONTENT PER SMART DEVICE


Semiconductor content per smartwatch (\$)




WEARABLES



HEARABLES



SMART HOMES

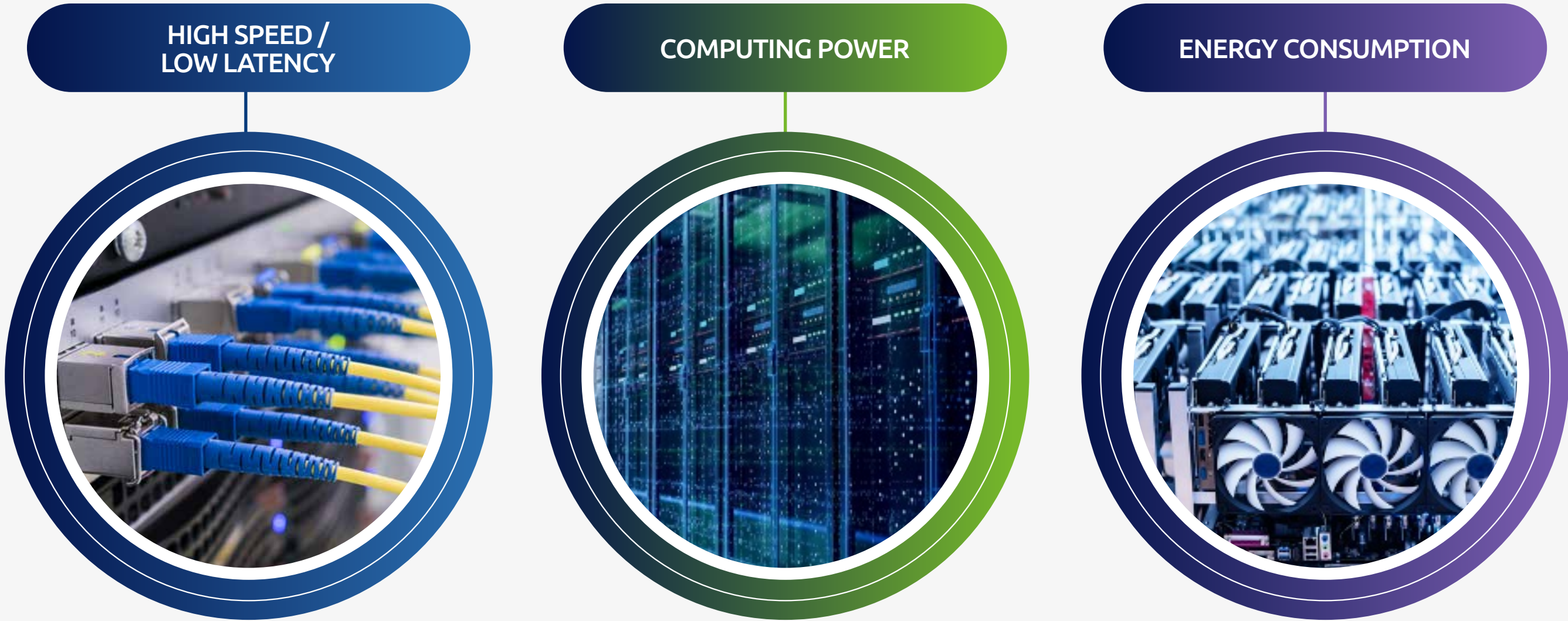


Source: TechInsights, IC Insights, Counterpoint, Yole SystemPlus, Soitec estimates

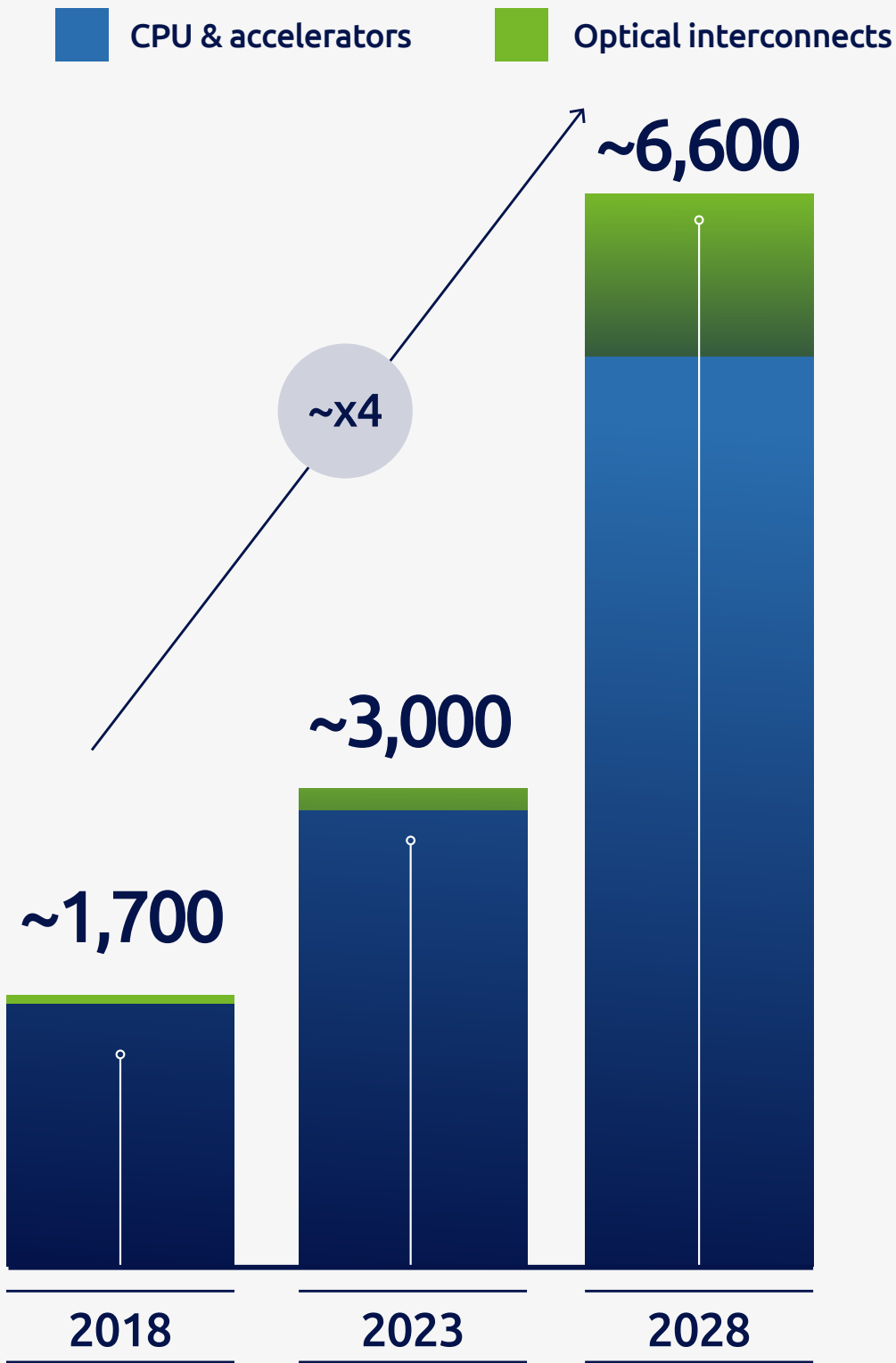




# DATACENTRES SEMICONDUCTOR CONTENT PER DATACENTER SERVER



Semiconductor content  
 per datacenter (\$)



Source: Applied Materials 2021, NVIDIA, Yole server processors forecast, Soitec estimates



## Semiconductor devices will require more engineered substrates to enable

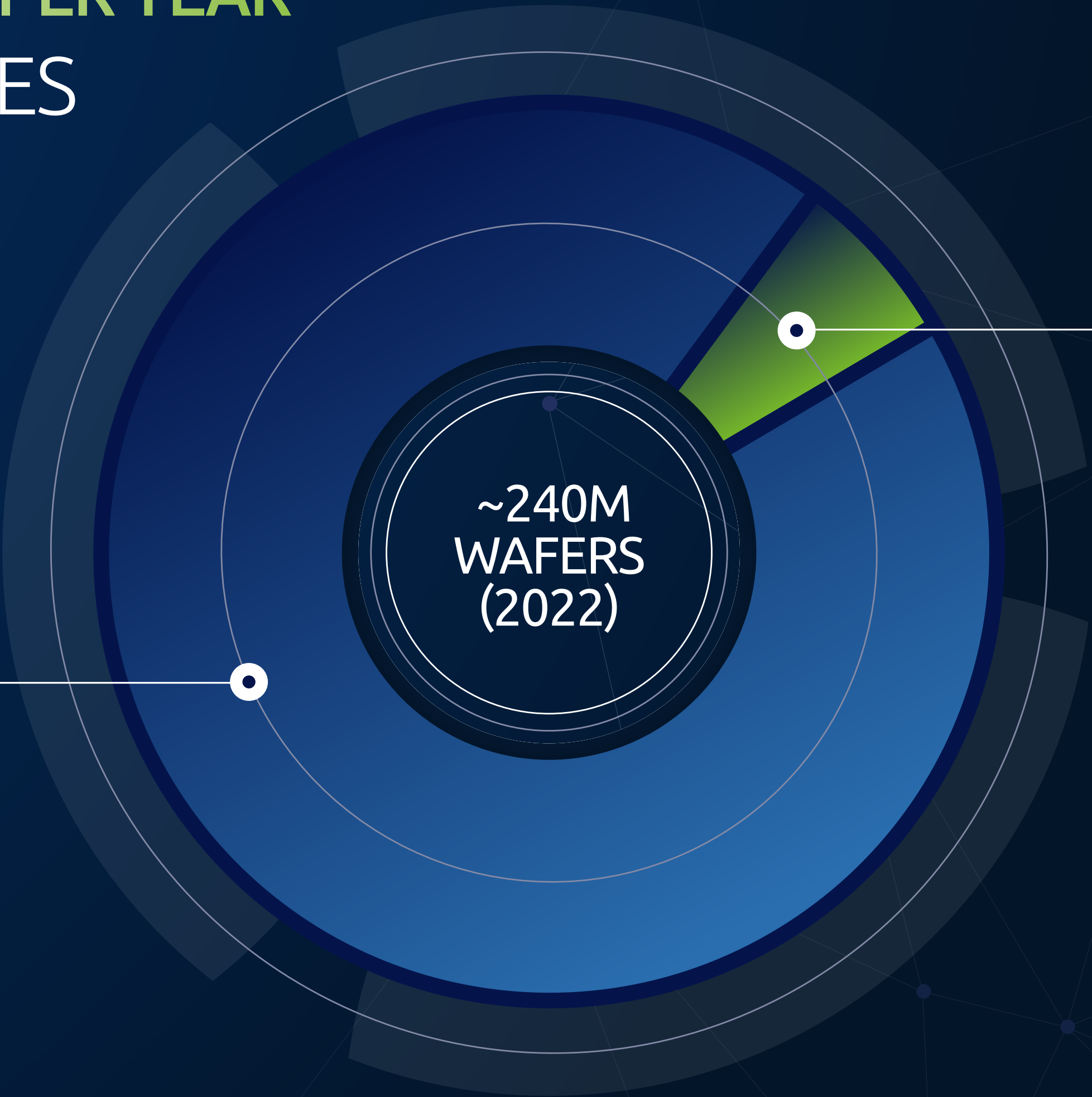
Better performance  
Lower power consumption  
Improved integration  
Lower cost of ownership



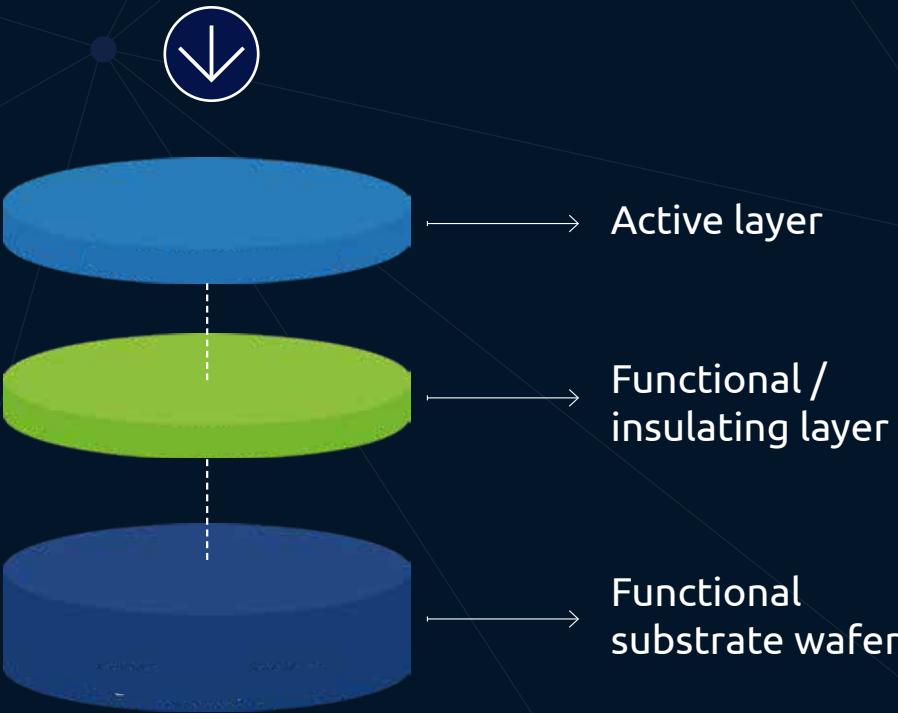
TODAY, THE SEMICONDUCTOR INDUSTRY  
CONSUMES ~240M WAFERS PER YEAR

ENGINEERED SUBSTRATES  
ACCOUNT FOR ~6%

~225M  
Bulk Silicon, Sapphire...



~15M  
Engineered substrates  
(SOI, POI, SiC, GaN...)



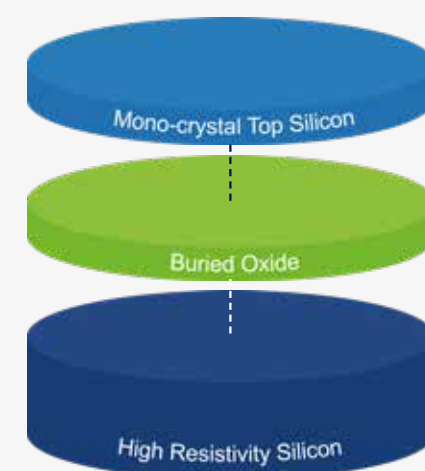
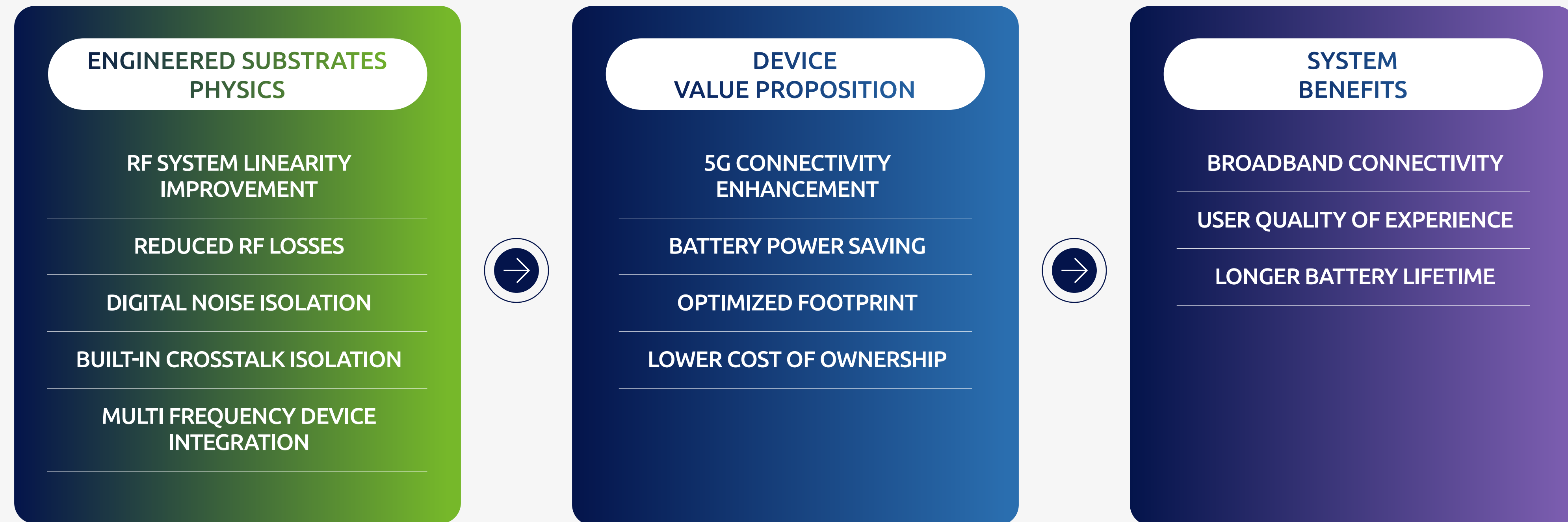
Source: Yole, SEMI, Soitec estimates





# MOBILE COMMUNICATIONS

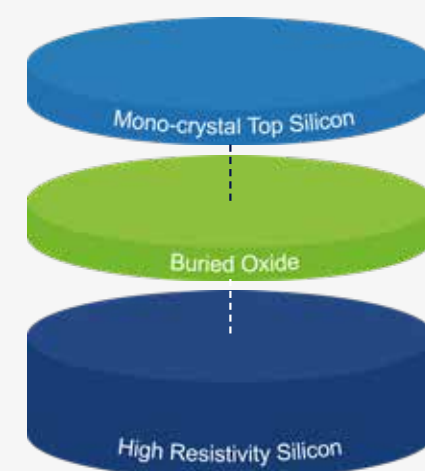
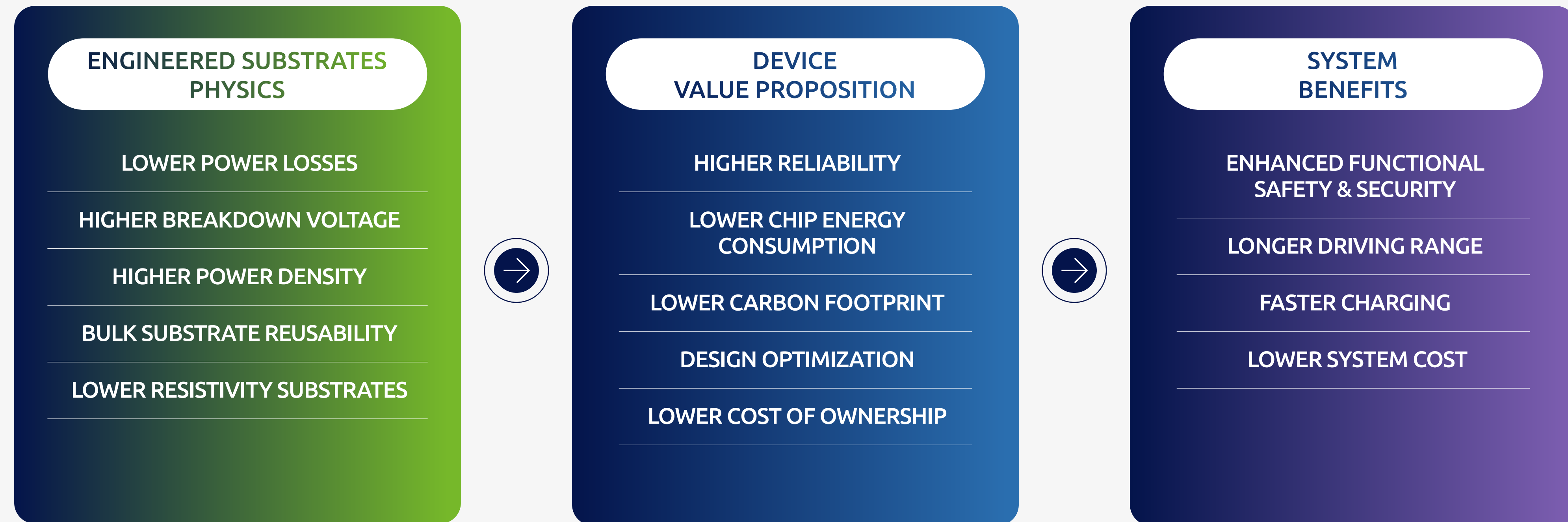
## ENGINEERED SUBSTRATES ENABLE SUPERIOR SEMICONDUCTOR CHIPS BY DESIGN







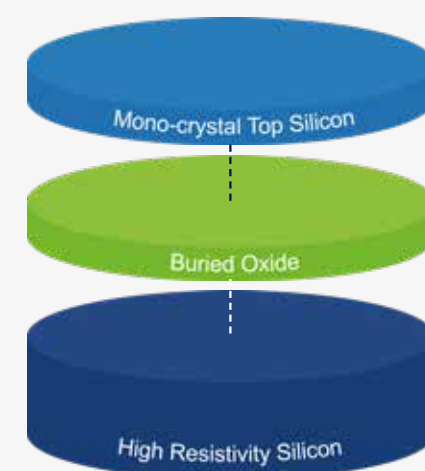
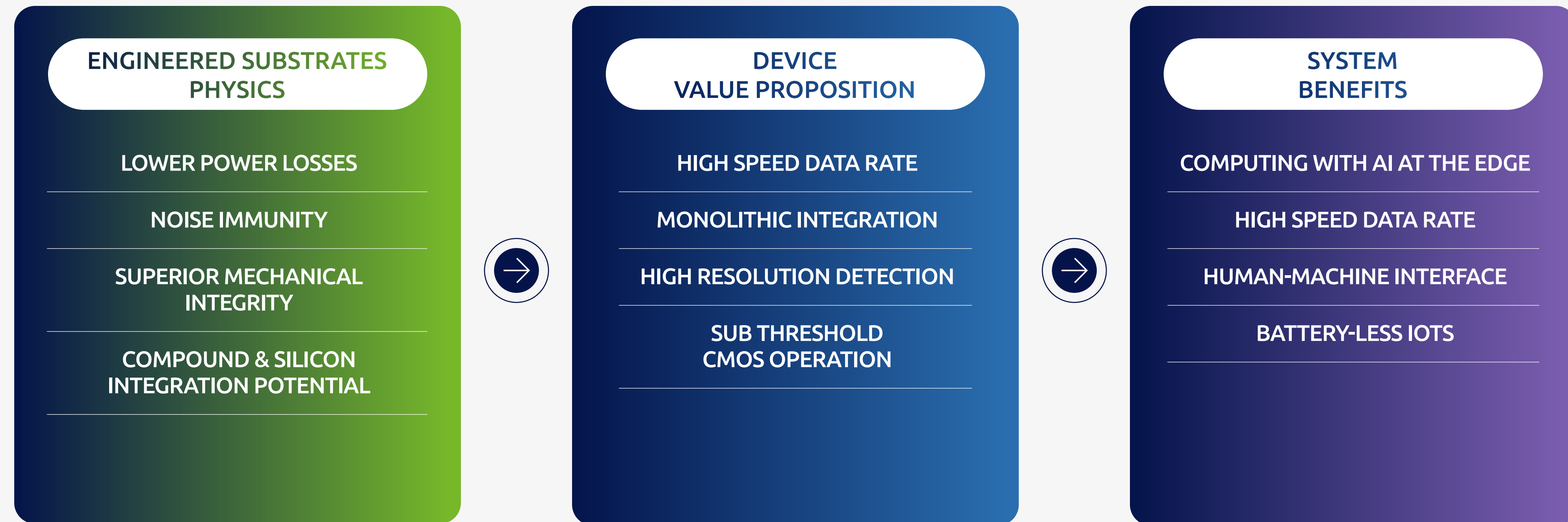
# AUTOMOTIVE & INDUSTRIAL ENGINEERED SUBSTRATES ENABLE SUPERIOR SEMICONDUCTOR CHIPS BY DESIGN





# SMART DEVICES

## ENGINEERED SUBSTRATES ENABLE SUPERIOR SEMICONDUCTOR CHIPS BY DESIGN

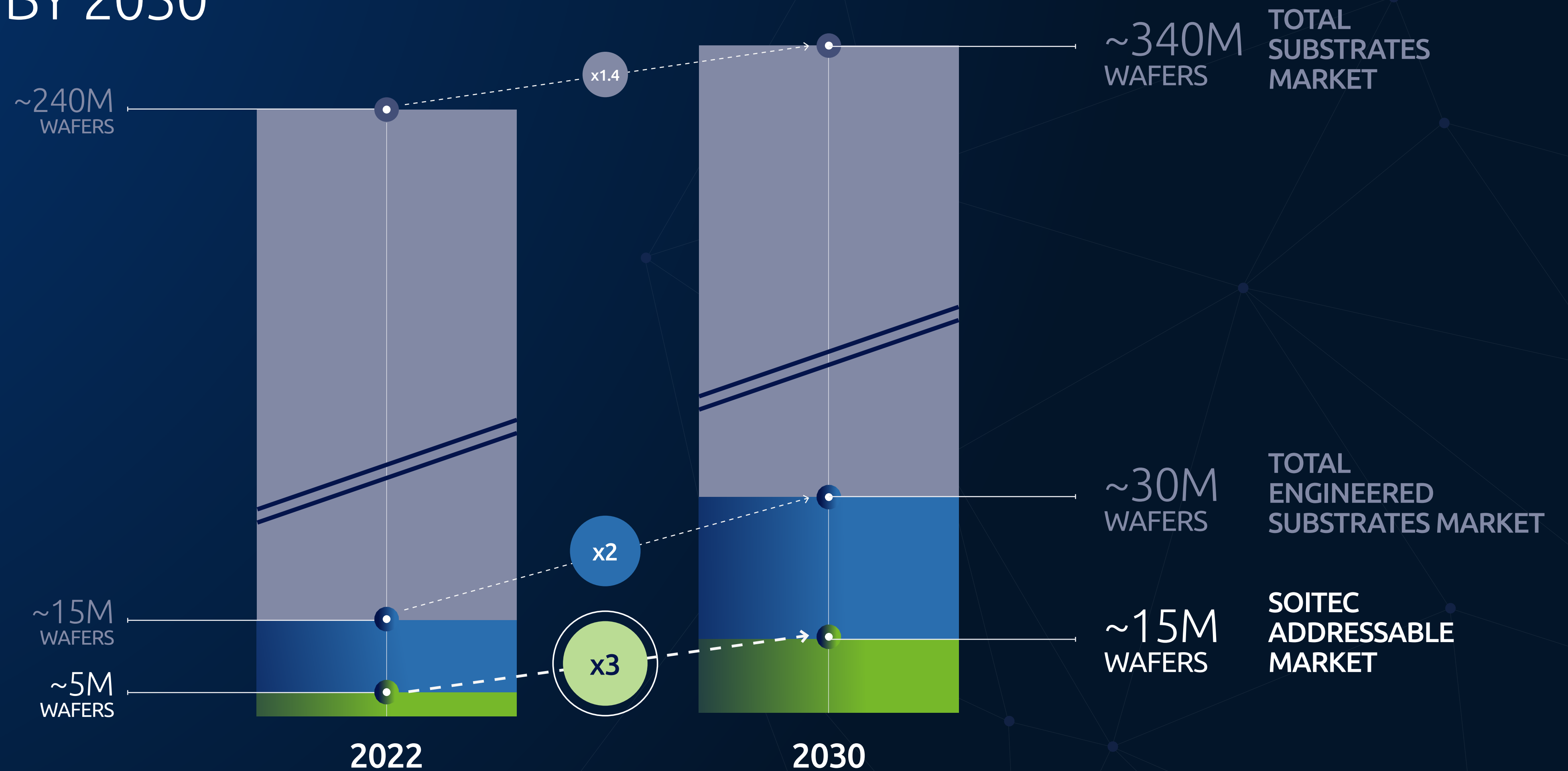




Engineered substrates penetration to  
significantly increase by 2030

Soitec addressable market to triple by 2030  
through expansion into new products  
and new markets

# SOITEC ADDRESSABLE MARKET TO TRIPLE BY 2030

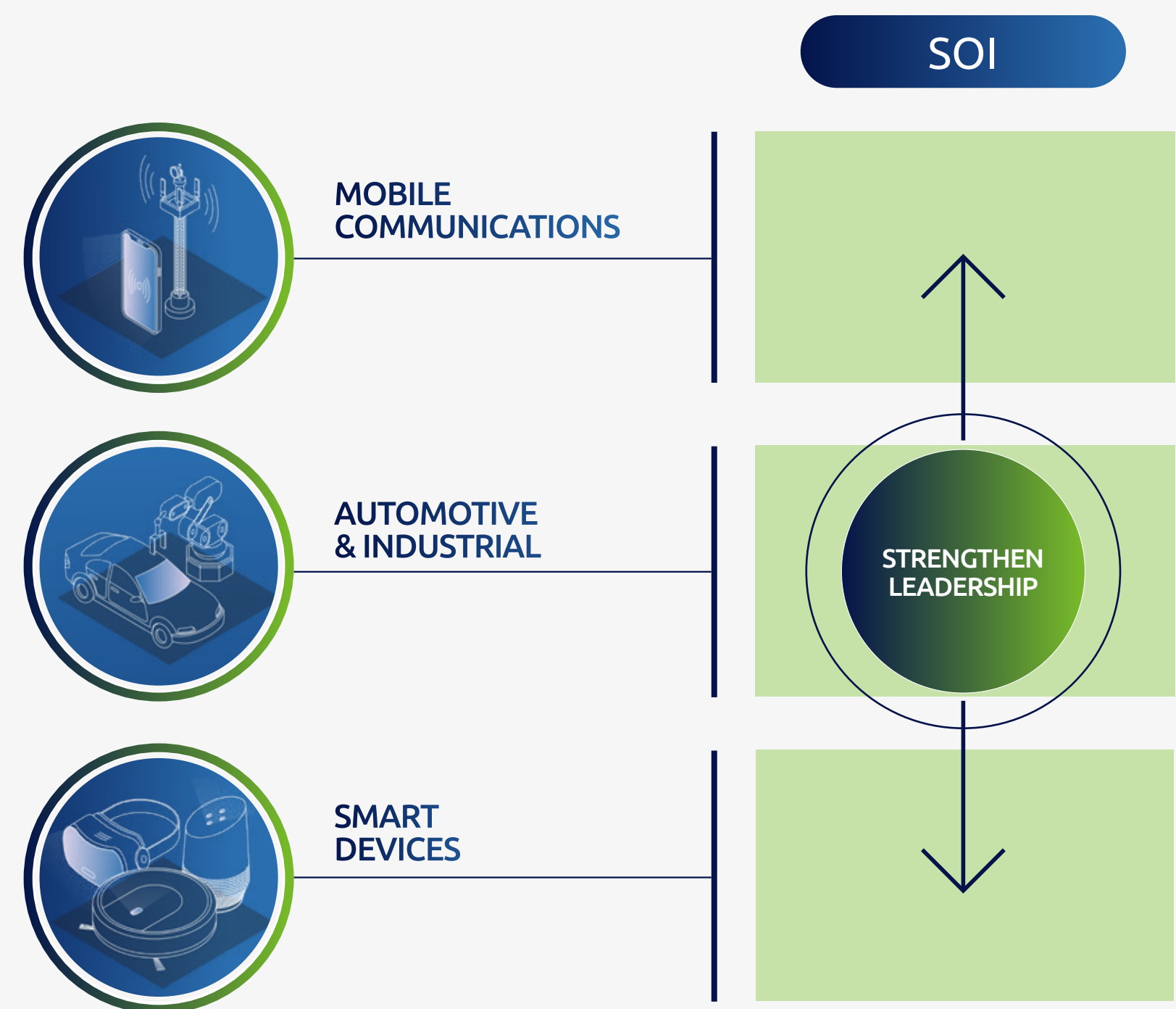


Source: Yole, SEMI, Soitec estimates



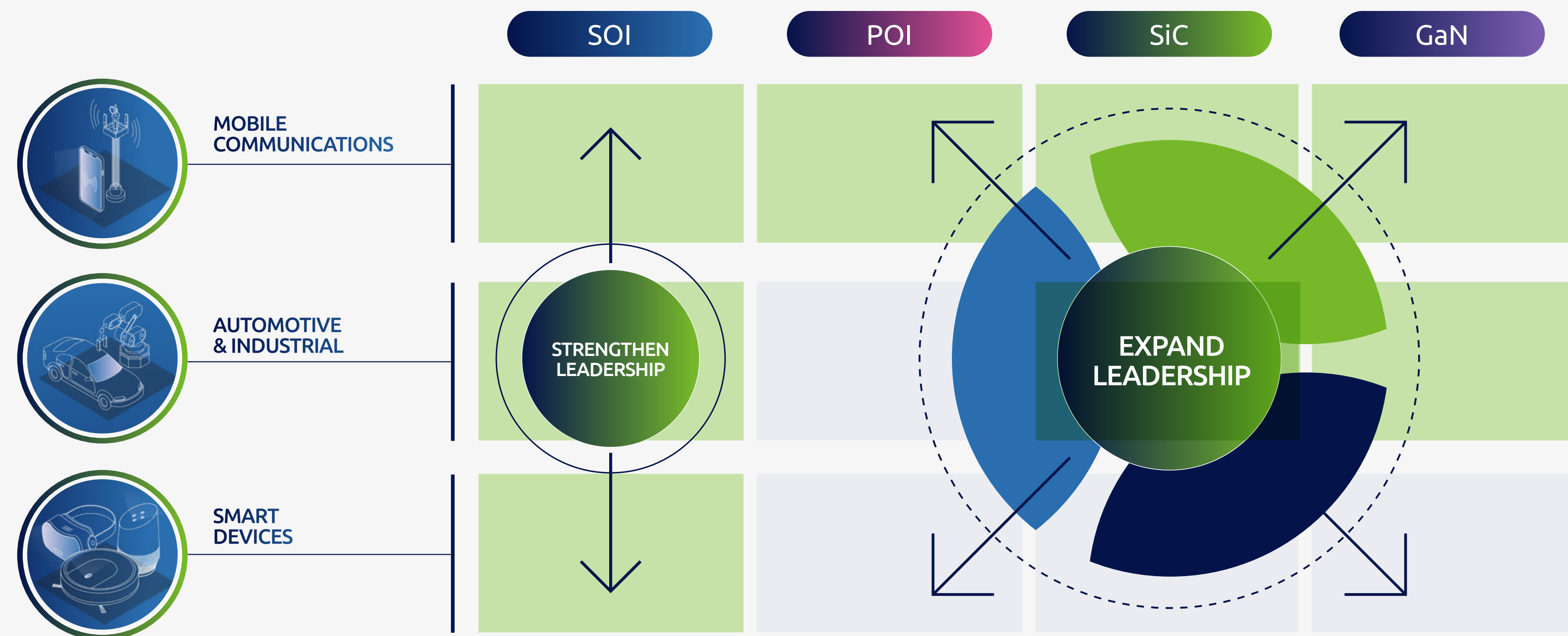
# SOITEC ADDRESSABLE MARKET TO TRIPLE BY 2030

## STRENGTHEN OUR LEADERSHIP IN SOI ACROSS OUR 3 STRATEGIC END MARKETS



# SOITEC ADDRESSABLE MARKET TO TRIPLE BY 2030

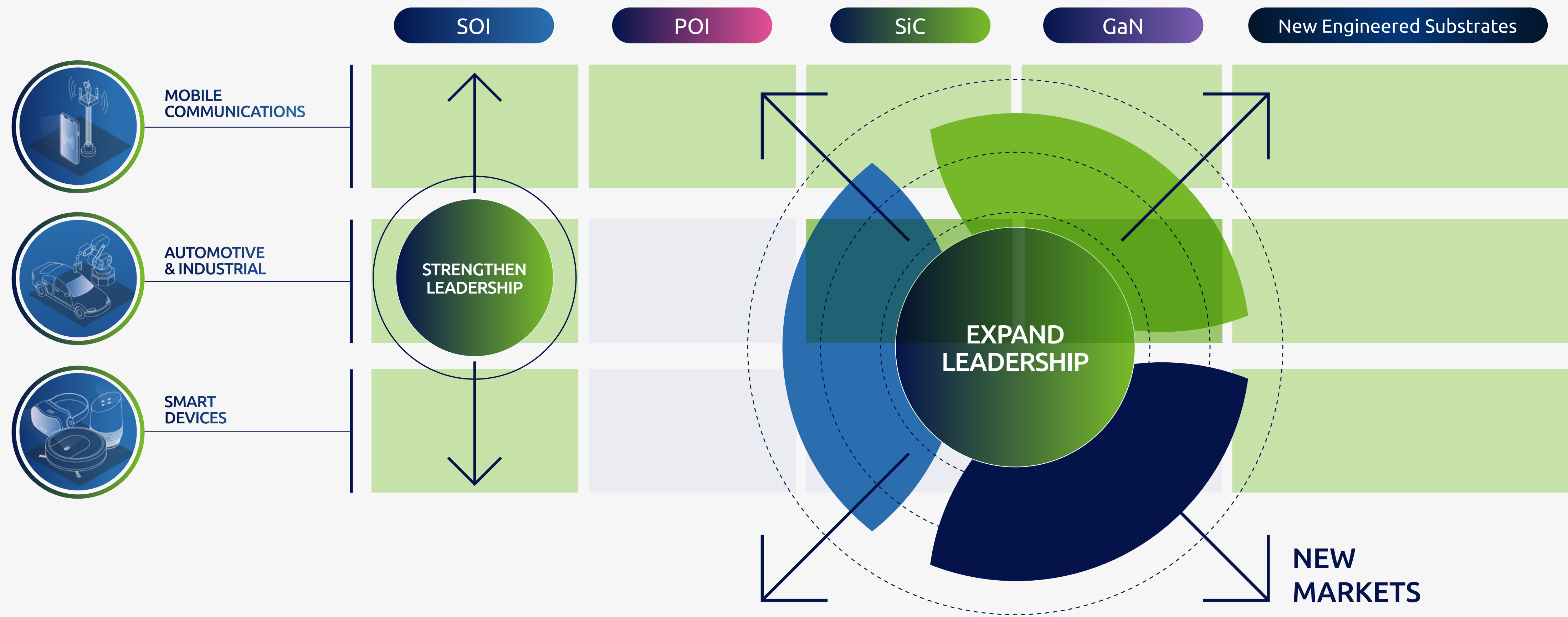
## EXPAND INTO COMPOUND SEMIS IN LINE WITH OUR FY26 ROADMAP





# SOITEC ADDRESSABLE MARKET TO TRIPLE BY 2030

## EXPAND LEADERSHIP WITH NEW ENGINEERED SUBSTRATES AND STRATEGIC PARTNERSHIPS



# STRATEGY KEY MESSAGES

## TECHNOLOGY MEGATRENDS WILL SUSTAIN A MASSIVE DEMAND FOR SEMICONDUCTORS

Semiconductor content will continue to increase in consumer/industrial applications

## SEMICONDUCTOR DEVICES WILL REQUIRE MORE ENGINEERED SUBSTRATES TO ENABLE

Better performance  
Lower power consumption  
Improved integration  
Lower cost of ownership

## ENGINEERED SUBSTRATES PENETRATION TO SIGNIFICANTLY INCREASE BY 2030

Soitec addressable market to triple by 2030 through expansion into new products and new markets



# INNOVATION

Christophe Maleville

# INNOVATION KEY MESSAGES

SOITEC INNOVATION ROADMAP  
LEVERAGING MATERIALS SCIENCE TO  
DELIVER VALUE AT SYSTEM LEVEL

SOITEC INNOVATION TOOLBOX  
EXPANDING OUR TECHNOLOGY  
PORTFOLIO TO BRING COMPELLING  
PRODUCTS TO MARKET

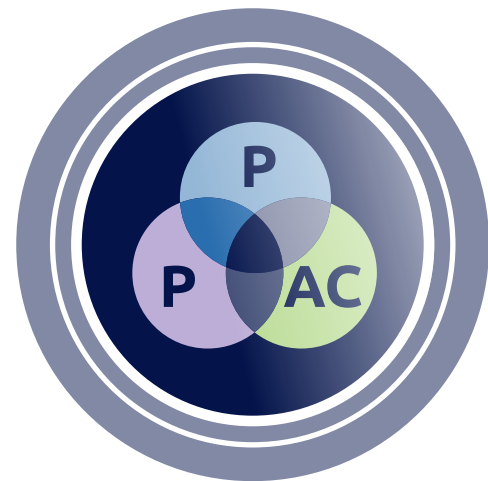
SOITEC INNOVATION MODEL  
SPEED AND STRATEGIC PARTNERSHIPS  
ARE KEY TO GAIN MARKET SHARES



# Soitec Innovation Roadmap Leveraging Materials Science to deliver value at system level

# KEY CONTRIBUTORS TO ENABLE GROWTH

## NEW INNOVATION STANDARDS



PPAC



TIME TO MARKET



SUSTAINABILITY



Continue Moore’s Law

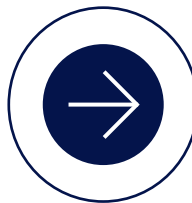
New architectures

New structures / 3D

New materials

New ways to shrink

Advanced packaging



**soitec**  
ENGINEERED  
SUBSTRATES





# LEVERAGING MATERIALS SCIENCE TO ENABLE UNIQUE APPLICATIONS

## Leverage MATERIALS INTRINSIC PROPERTIES

- Electronic
- Photonic
- Piezoelectric
- Electromagnetic

## Develop TECHNOLOGY SOLUTIONS

- Smart Cut™
- Interface engineering
- 3D layer stacking
- Epitaxy
- Tiling
- 2.5D/3D
- Surface smoothing
- Smart Cut™ on cavity

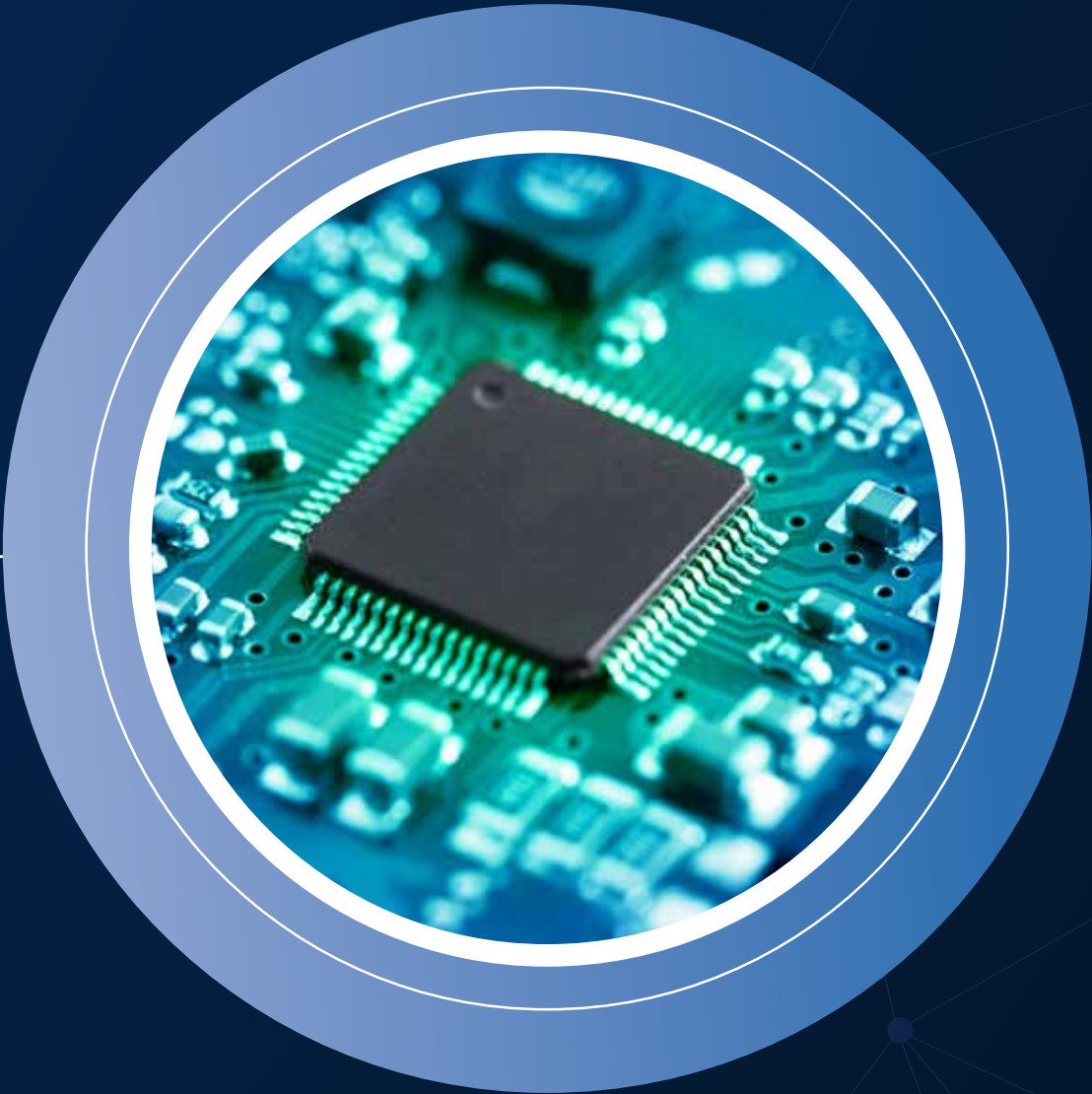
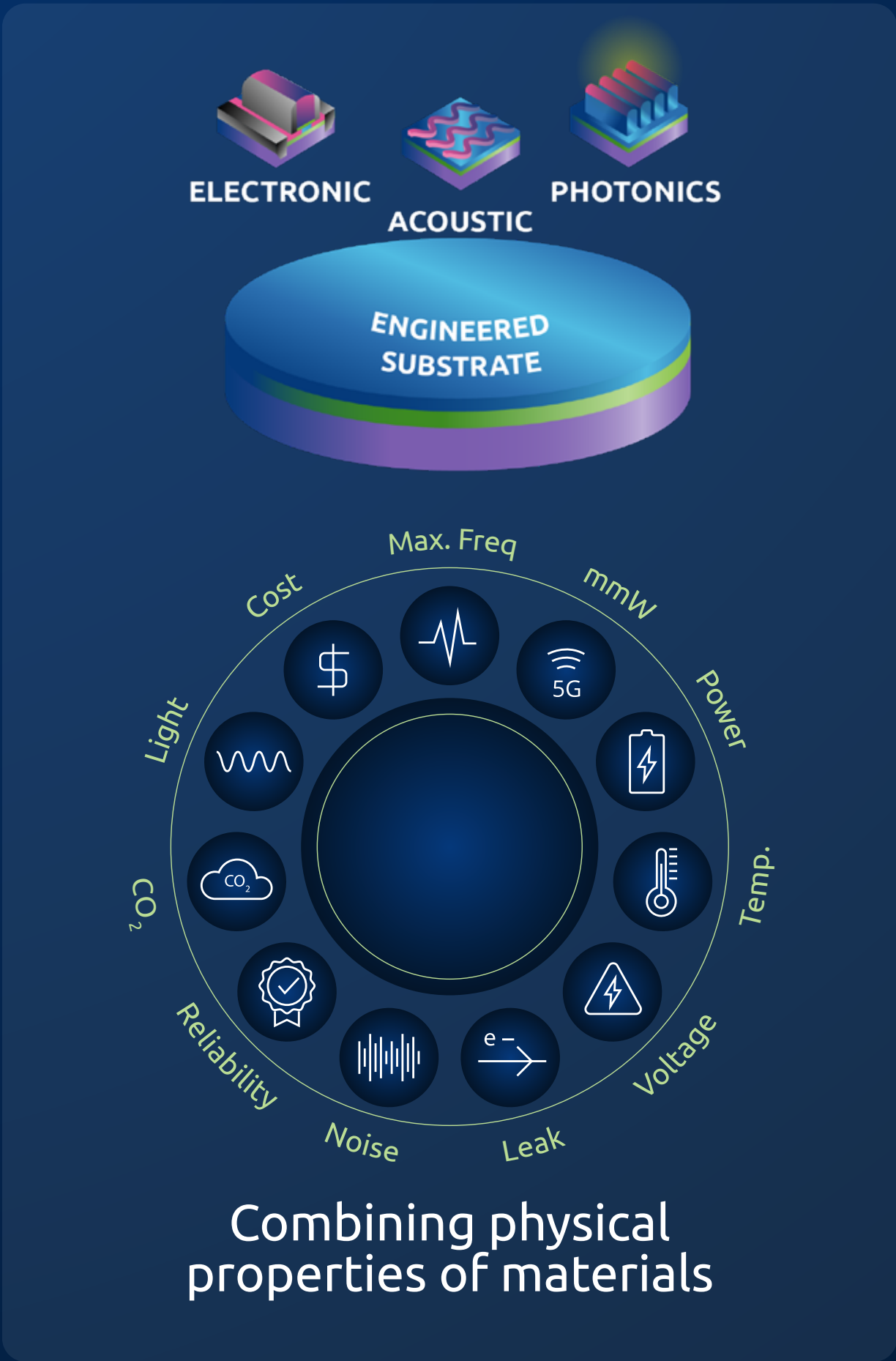
## Design ENGINEERED SUBSTRATES

- SOI product portfolio
- Anything-on-Anything  
(active layer on substrate)

## Enable NEW PROPERTIES, ENHANCED PERFORMANCE, IMPROVED ENERGY CONSUMPTION

- Connectivity
- Low power computing
- Energy efficiency
- Electric Vehicles
- Quantum computing
- 3D integration
- Data rate & bandwidth

# ENGINEERED SUBSTRATES CREATE VALUE AT THE SYSTEM LEVEL



**CONNECT**  
Data rate,  
power efficiency



**COMPUTE**  
Energy efficiency  
performance, data rate  
with Photonics

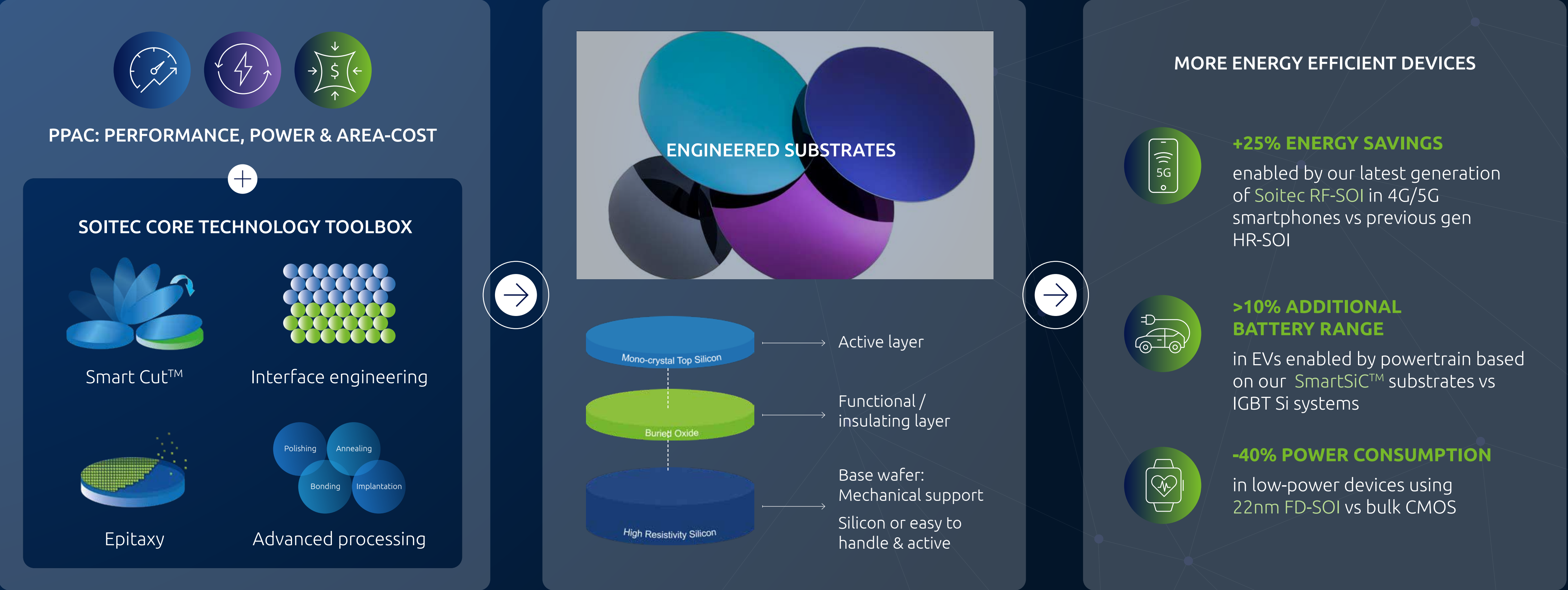


**SENSE**  
3D imaging,  
health sensors

**POWER**  
Power density,  
higher efficiency

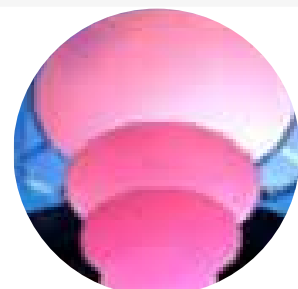



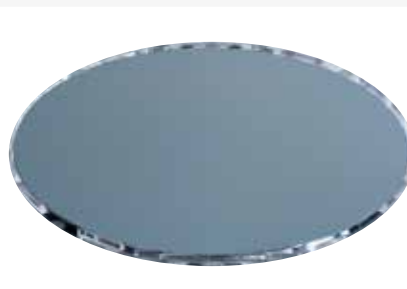


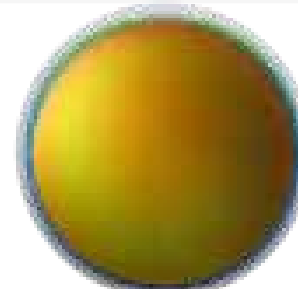









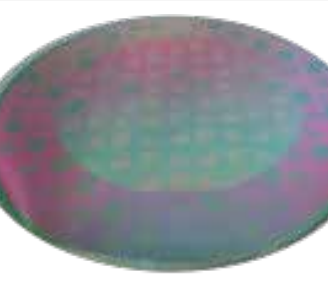


# SOITEC INNOVATES TO DESIGN ENGINEERED SUBSTRATES DELIVERING ENERGY EFFICIENCY GAINS AT THE DEVICE LEVEL



# ANYTHING-ON-ANYTHING - SOITEC INNOVATION DNA

## BEST ACTIVE LAYER(S) ON FUNCTIONAL SUBSTRATE

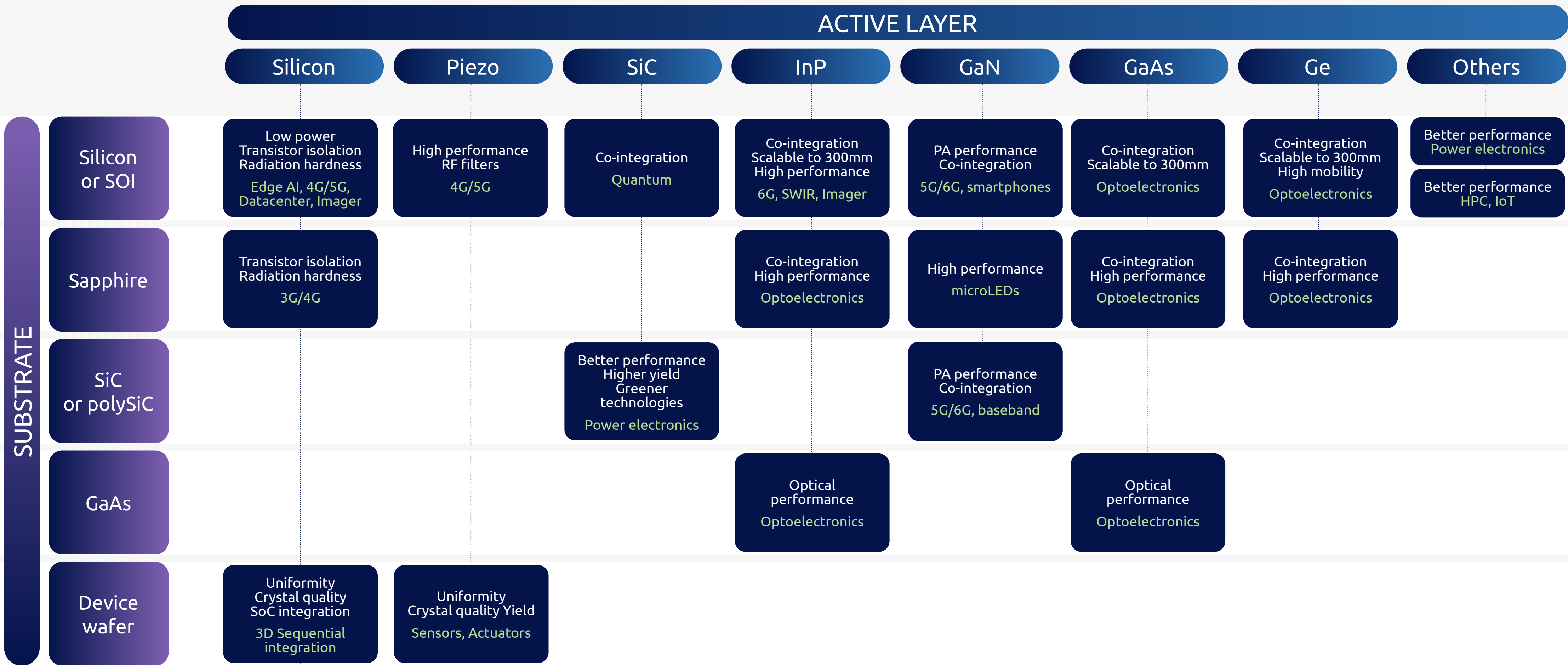
		ACTIVE LAYER							
		Silicon	Piezo	SiC	InP	GaN	GaAs	Ge	Others
SUBSTRATE	Silicon or SOI								<div>Diamond</div> <div>GaOx</div> <div>2D materials</div>
	Sapphire								
	SiC or polySiC								
	GaAs								
	Device wafer								





# ANYTHING-ON-ANYTHING - SOITEC INNOVATION DNA

## ENABLING NEW PROPERTIES FOR SPECIFIC APPLICATIONS

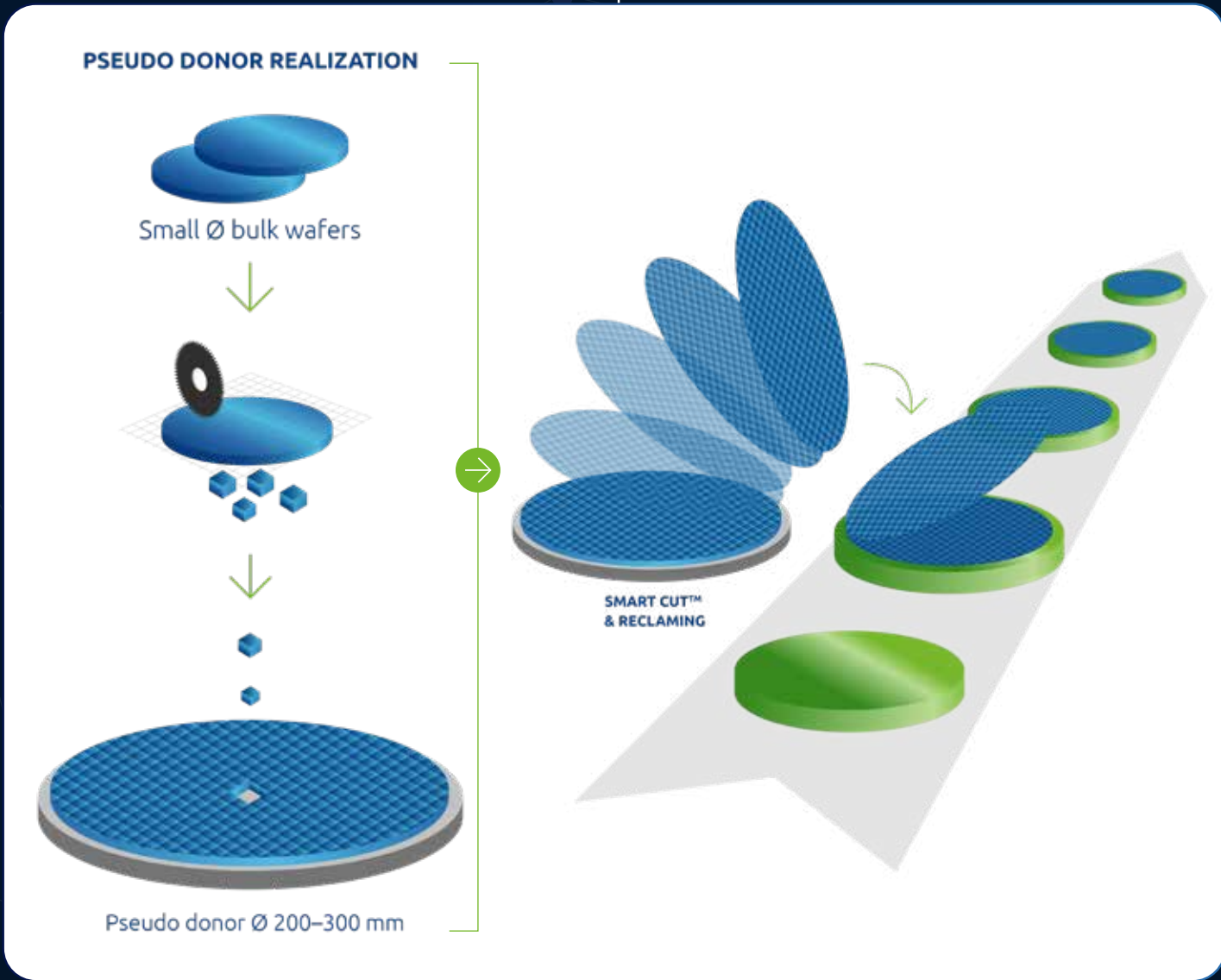
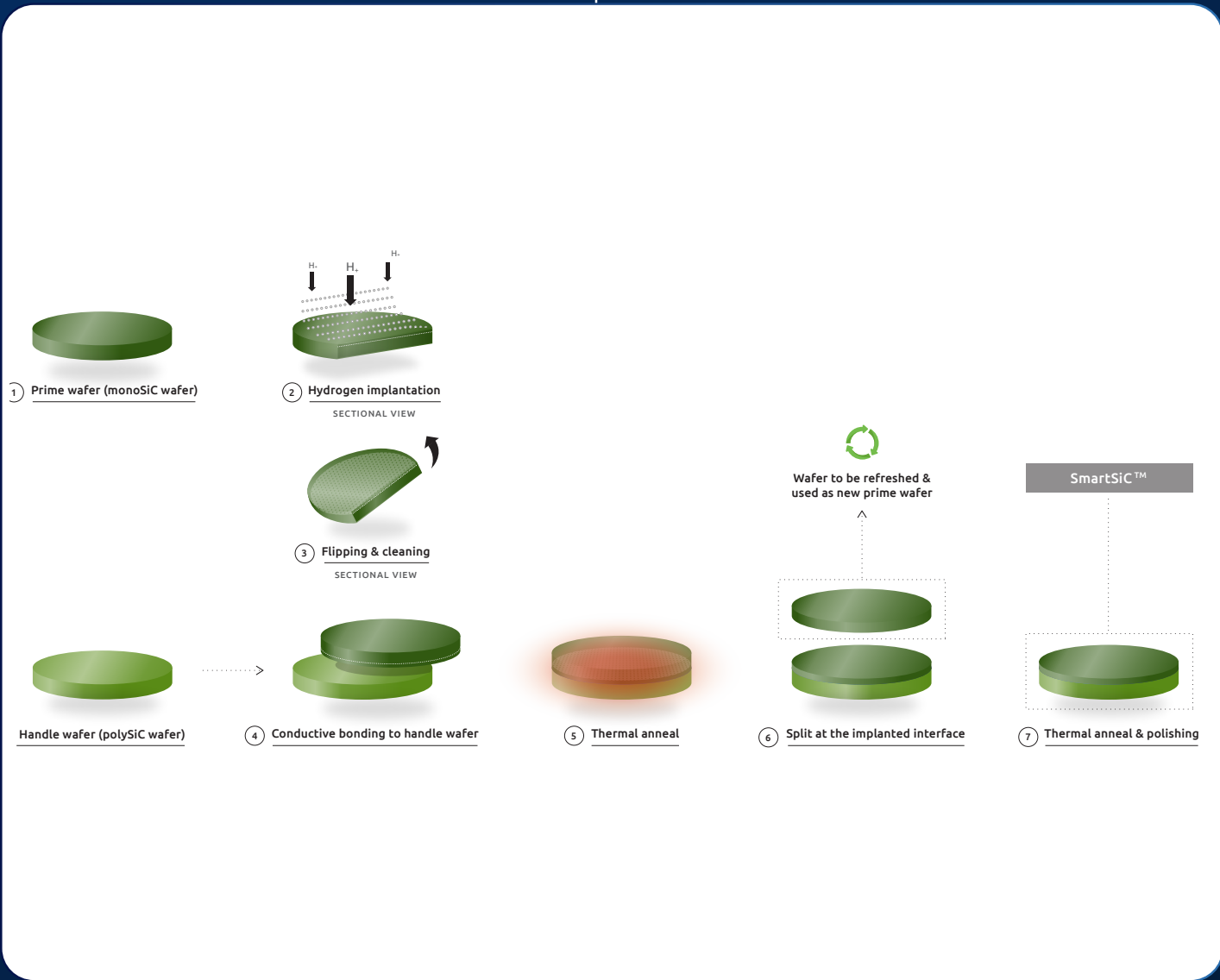


# DEPLOYING ANYTHING-ON-ANYTHING TO EXPAND INTO NEW MATERIALS

**SmartSiC™**  
EXPANDING TO  
OTHER SUBSTRATES

**Smart Cut™**  
“InP-on-Anything”  
COMBINING ANY KIND OF SUBSTRATES

**Tiling InP-on-Si**  
SCALING TO 8-12”





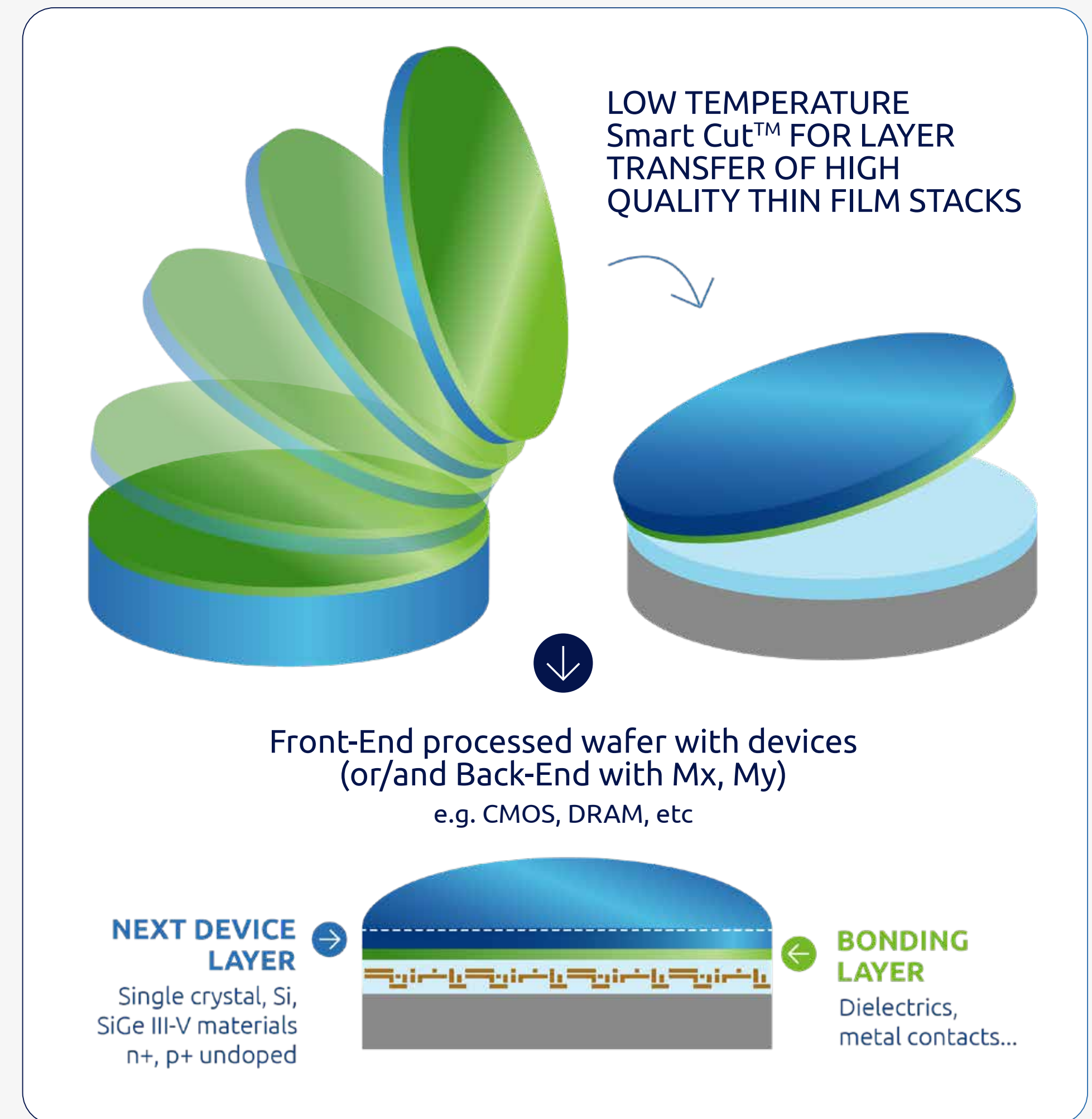
# TOWARD HIGH DENSITY 3D DEVICE STACKING / 3D LAYER STACKING

## 3D INTEGRATION BENEFITS

- Higher performance and density
- Higher functionality
- Smaller form factor
- Cost reduction

## 3D SEQUENTIAL ADDS FURTHER VALUE

- Front-End device integration
- Very dense device integration by nm alignment



# Soitec Innovation Toolbox

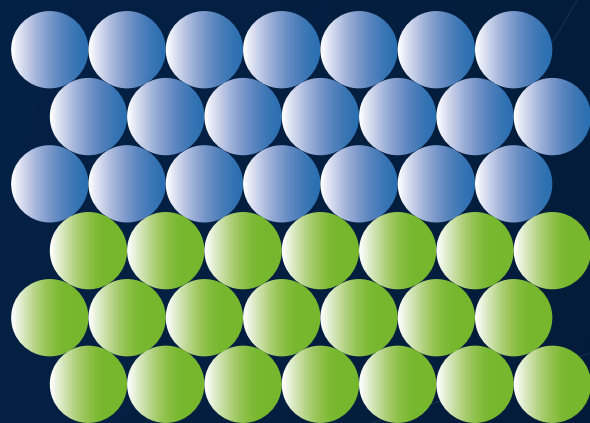
## Expanding our technology portfolio to bring compelling products to market



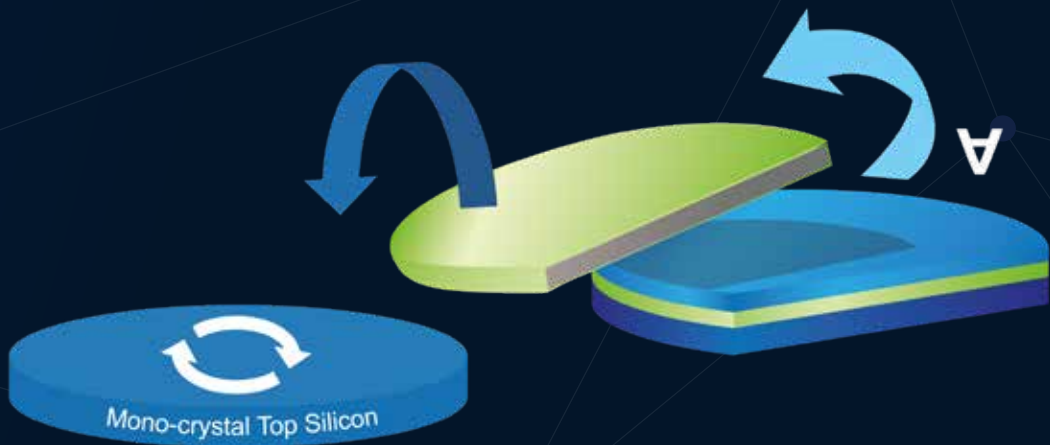
# SOITEC CORE TECHNOLOGY TOOLBOX



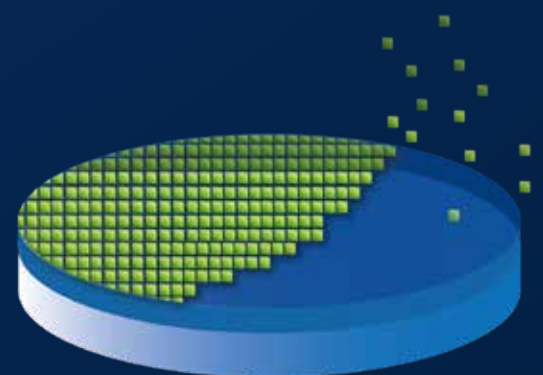
Smart Cut™



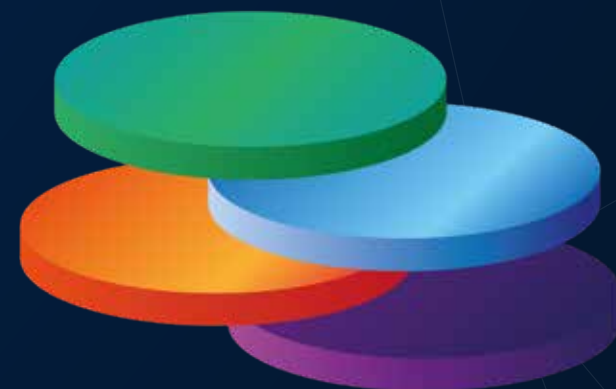
Interface Engineering



Refresh - Repolish



Epitaxy



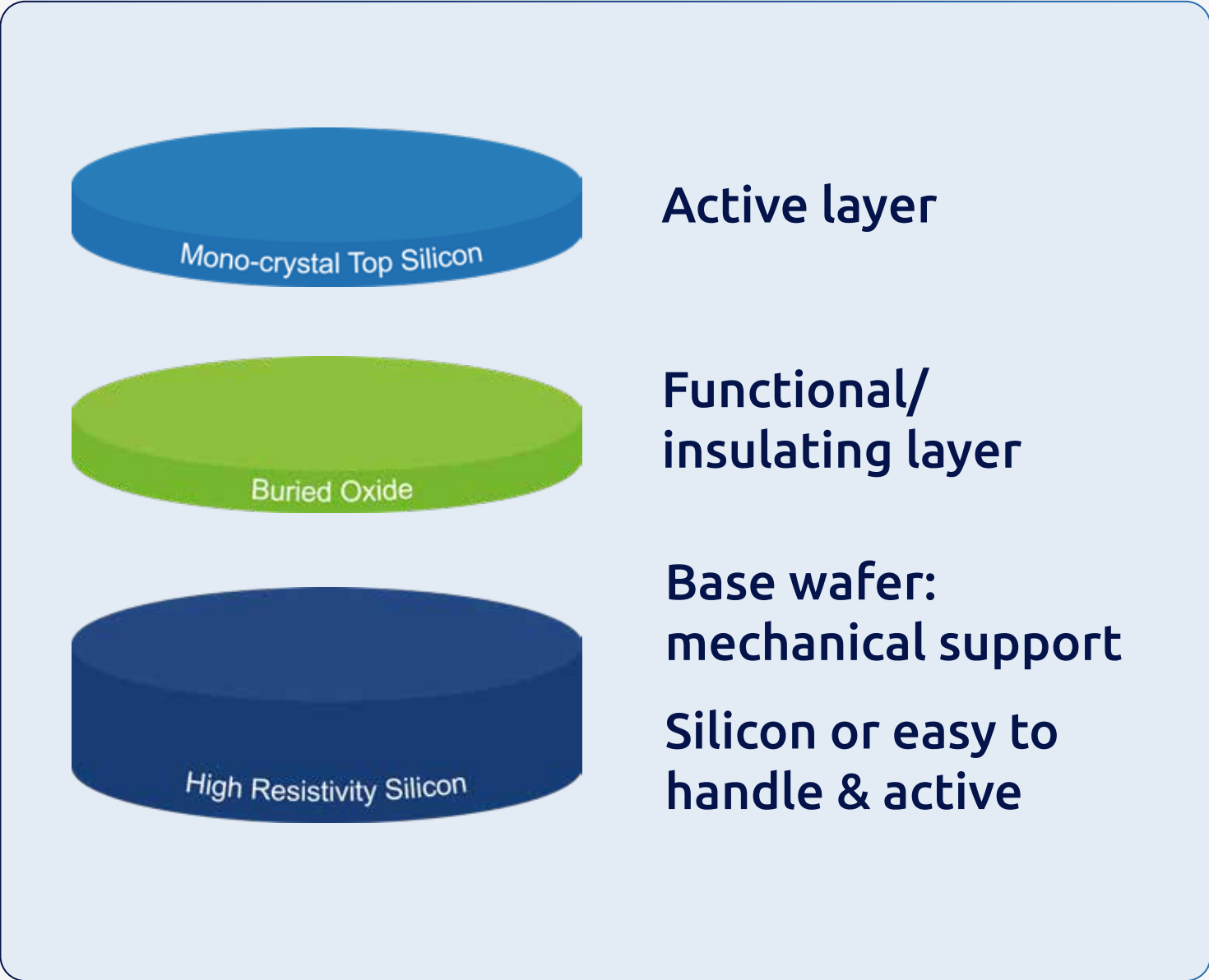
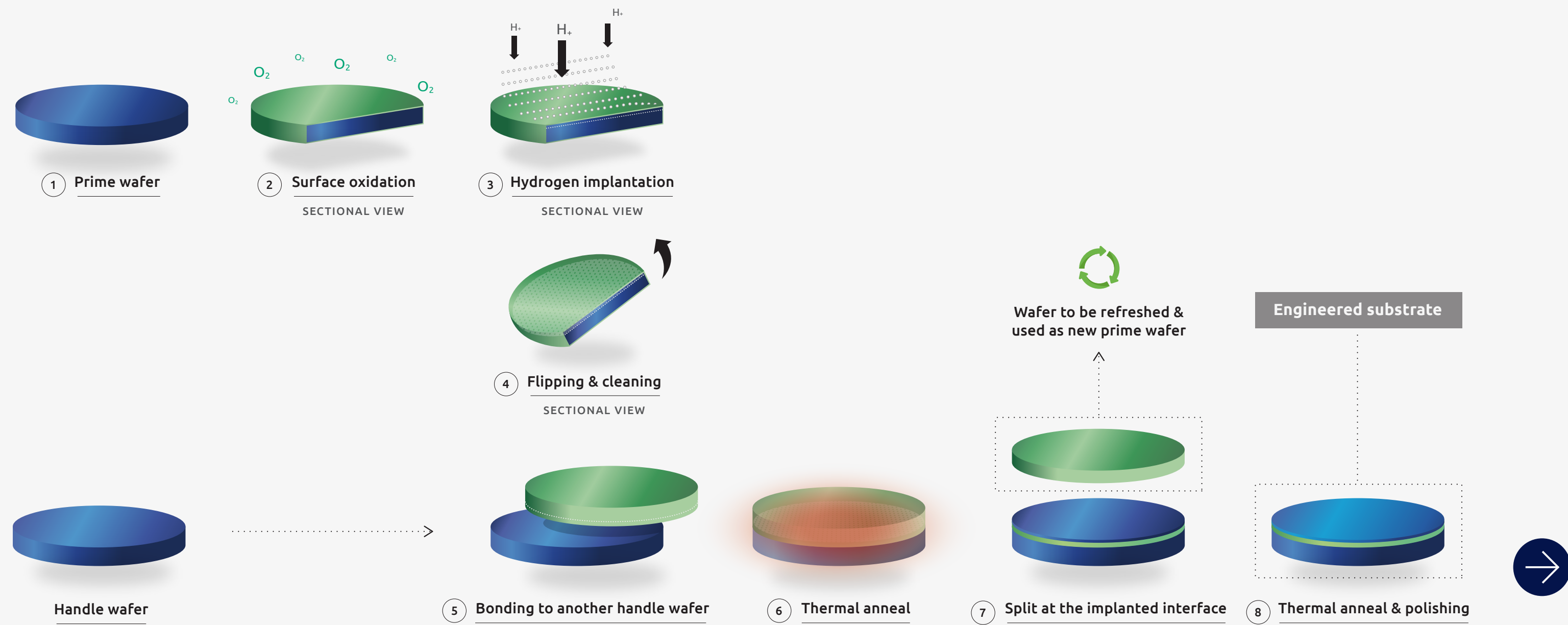
Materials Expertise



Advanced Processing

# THE SMART CUT™ PROCESS

CONTINUING SIGNIFICANT INNOVATION EFFORT  
TO DELIVER BREAKTHROUGH PRODUCTS



## TECHNOLOGY

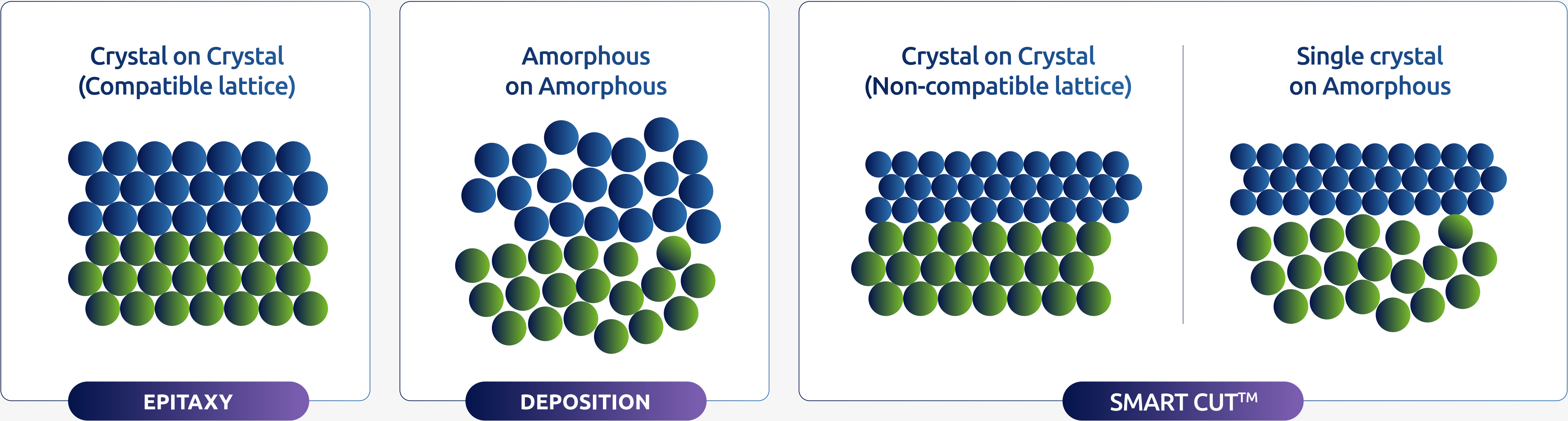
- Industrial manufacturability of SOI – high yield
- Drastic improvement in uniformity & quality
- Re-use of donor wafer increases cost efficiency
- Flexibility of material integration
- Unprecedented (best-in-class) thickness control





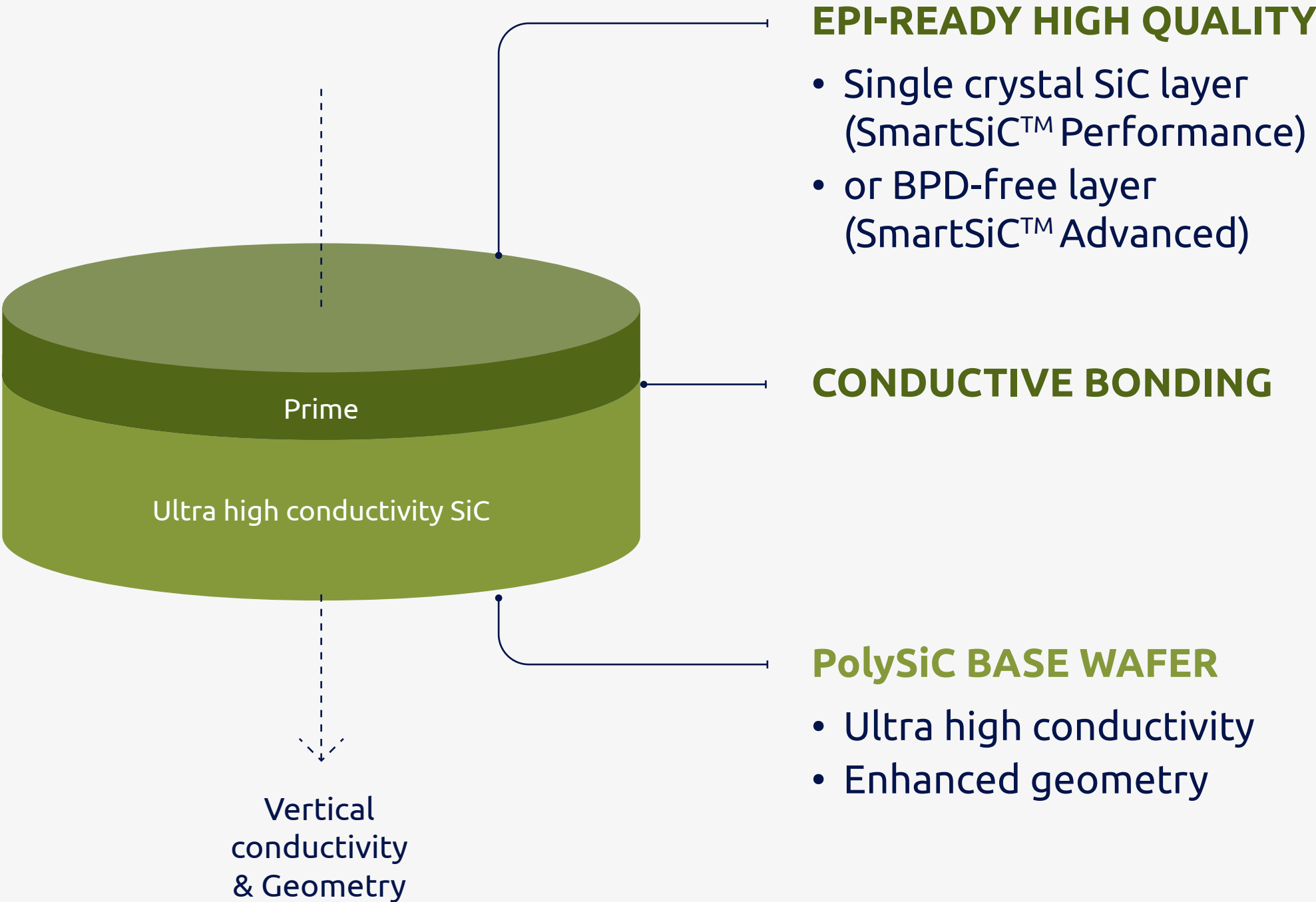
# WE OPEN NEW POSSIBILITIES

## SMART CUT™ ENABLES HETEROGENEOUS MATERIAL COMBINATIONS TO DEPLOY ANYTHING-ON-ANYTHING ROADMAP



# SmartSiC™

## UNRIVALED VALUE PROPOSITION TO ENABLE EV ADOPTION



### UNPARALLELLED VALUE PROPOSITION

- **40,000 Tons of CO<sub>2</sub> reduction** for each 1 million wafers vs SiC
- 200mm scalability to **accelerate SiC adoption** by 2 years through 10x re-usability
- Enabling new generations of SiC devices thanks to an **improvement of  $R_{DS(on)}$  of up to 20%**
- **Reducing CAPEX & OPEX** for device manufacturers

**>10x**  
MONO-SiC WAFER  
RE-USABILITY

**~8x**  
POLY-SiC WAFER  
BETTER CONDUCTIVITY



# SmartGaN

## SOITEC SOLUTION FOR FUTURE RF & POWER DEVICES

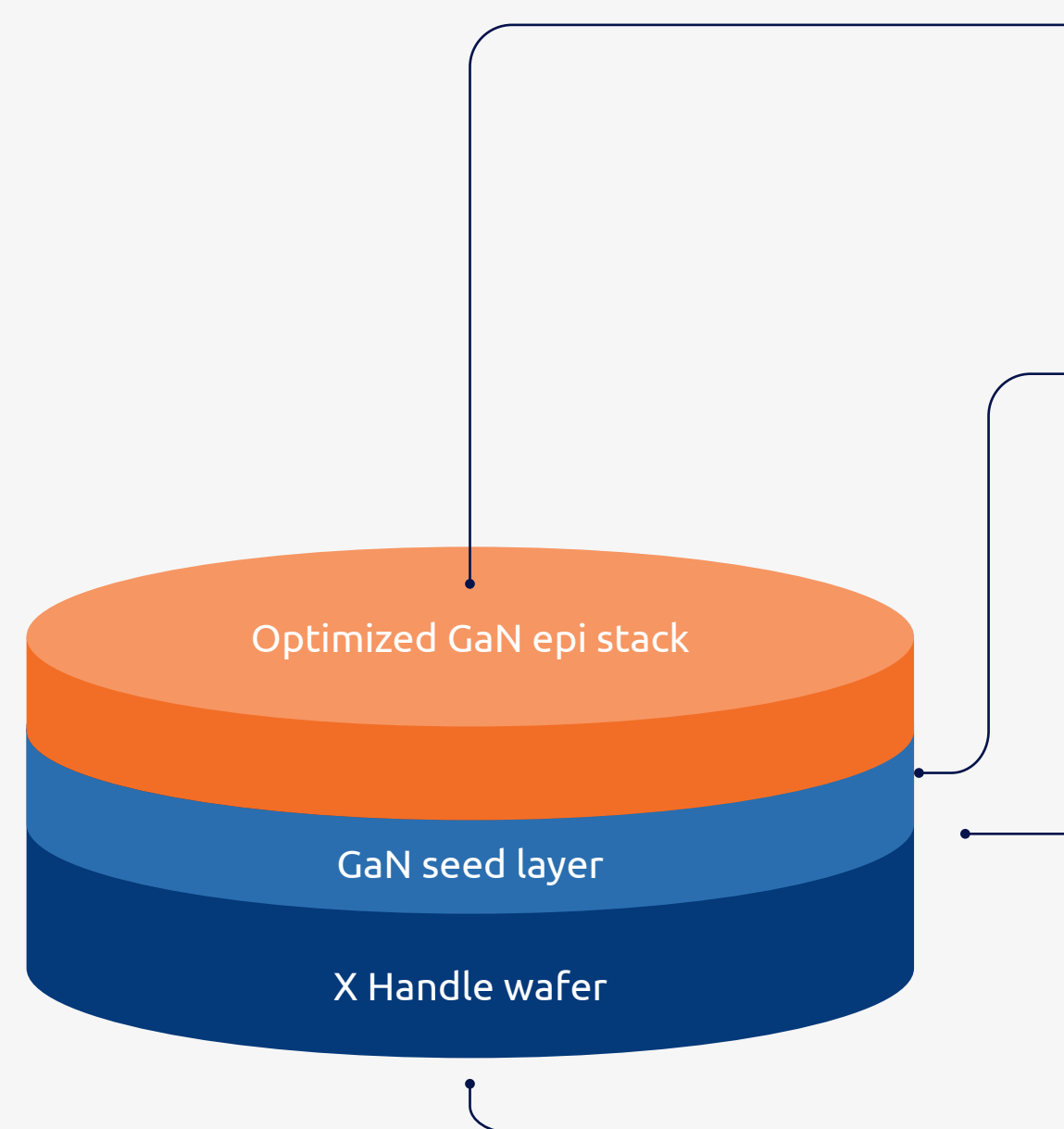
### VALUE PROPOSITION

#### RF: NEXT GENERATION OF GaN DEVICES FOR INFRASTRUCTURE AND SMALL CELLS, HANDSET

- Enables best in class RF performance (buffer-free)
- PA Integration with Switch
- Cost-effective

#### POWER: NEXT GENERATION OF GaN DEVICES FOR AUTOMOTIVE AND INDUSTRIAL

- Enables very thick GaN epi stack (buffer-free)
- Best trade-off up to 1200V devices
- Excellent thermal and electrical conductivity
- Compatible with advanced packaging



#### OPTIMIZED GaN EPI STACK

- For lateral HEMT devices (RF or Power)
- For vertical Power devices

#### GaN SEED LAYER

- Buffer-free GaN
- Epi ready (homoepitaxy)
- Fabricated using layer transfer technology

#### BONDING INTERFACE

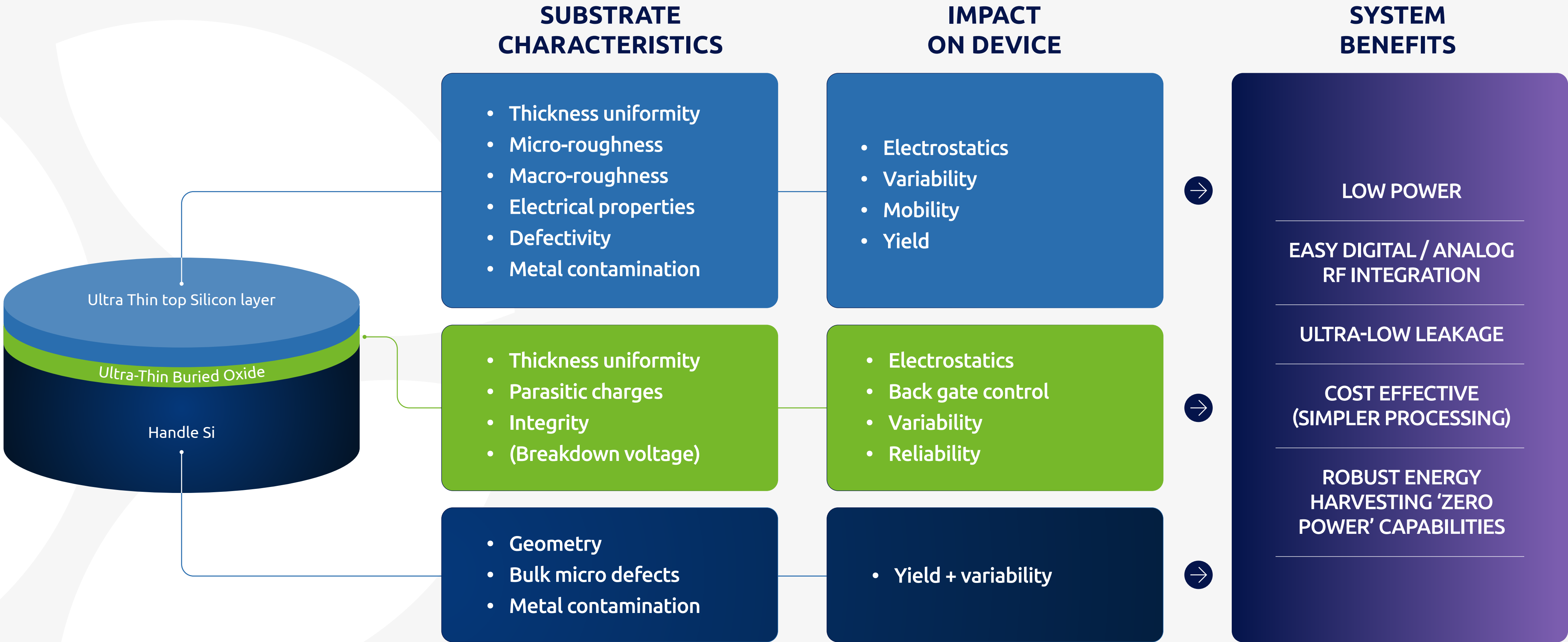
- Customized per application (electrical isolation or conductive)

#### X HANDLE WAFER

- Customized per application (silicon or non-silicon options)
- Thermally conductive material
- 200mm wafer size, compatible with CMOS fab
- Cost effective (scalable to very large volumes)

# ACTIVE DEVICE LAYER MANAGEMENT - FD-SOI

## PERFORMANCE ALREADY EMBEDDED IN THE SUBSTRATE

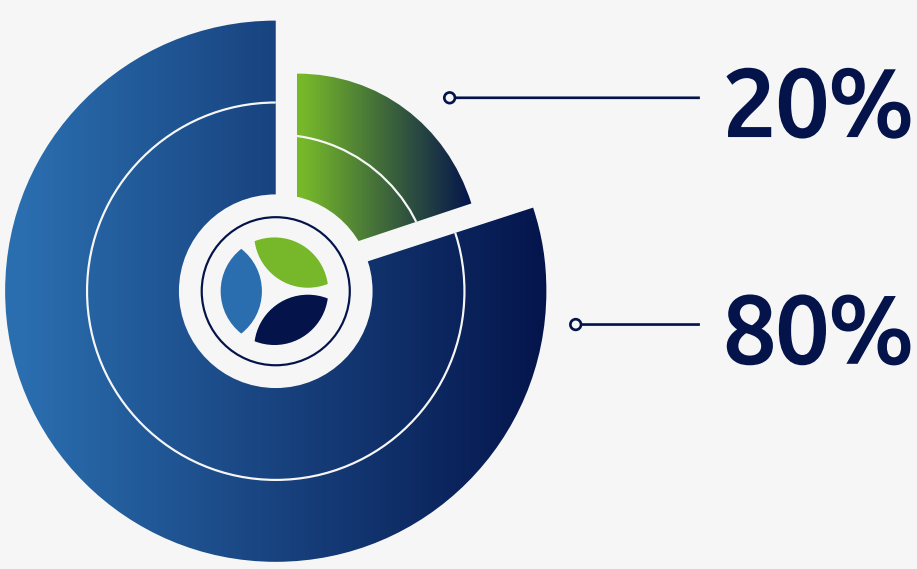




# Soitec Innovation Model

Speed and strategic partnerships  
are key to gain market shares

# BALANCING SHORT TERM INNOVATION AND FUTURE OPPORTUNITIES



2023

2027

2030

PRODUCTS UNDER DEVELOPMENT TO SUPPORT OUR BP

TECHNOLOGIES AND PRODUCTS INCUBATION

Addressing short and medium-term differentiations for our customers

## INCREMENTAL INNOVATION

SOI next generation	POI next generation
SmartSiC™	GaN
SOI for MEMS	

To support future opportunities and growth

## DISRUPTIVE INNOVATION

- Tiling for large diameters
- InP - photonics, 6G
- Compound integration
- 2.5D / 3D
- Materials science





# SUBSTRATE INNOVATION CENTER

## UNIQUE CAPABILITIES FOR INNOVATIVE SUBSTRATE TECHNOLOGIES



© Andréa Aubert / CEA

Pilot Line at CEA-Leti for early prototyping of new substrate technologies  
(focus on lead time and quality)



### INFRASTRUCTURE

- On-site dedicated engineers from Soitec
- World-class material characterization lab and metrology
- Large choice of equipment / toolset
- Comprehensive materials science & engineering
- Collaboration with strategic equipment suppliers

### PROGRAMS

- SmartSiC™
- New generation FD-SOI and RF-SOI
- 300mm InP-on-Si
- Low temperature Smart Cut™ for 3D integration



# PARTNERING WITH LEADING INNOVATION PLATFORMS TO DEVELOP THE NEXT GENERATION OF ENERGY-EFFICIENT TECHNOLOGIES

TRANSFORM

**BUILDING A EUROPEAN SiC VALUE  
CHAIN FOR SUSTAINABLE E-MOBILITY**



**7 EU COUNTRIES  
33 PARTNERS**

Demonstrate SmartSiC™ added value  
for greener e-mobility

Innovation accelerator through  
Pilot line approach

Market adoption vector  
through full value chain approach

Secure a European SiC value chain for  
a sustainable and sovereign economy





# SPEED IS OF THE ESSENCE

## UNIQUE CAPABILITIES TO ACCELERATE TIME-TO-MARKET



### OUTPACE

Innovate faster than others to strengthen and expand competitive edge

### DECIDE

Fast and systematized decision making on technology development

### MONITOR

Speed as an indicator of quality and success of our innovation process

### INTEGRATE

Speed as a key to integration between Innovation & Production

## SmartSiC™ RECORD LAB-TO-FAB TIMING INCLUDING MOST ADVANCED DEVICE VALIDATION

### First time

Right first time for new substrate proof of value (advanced device)

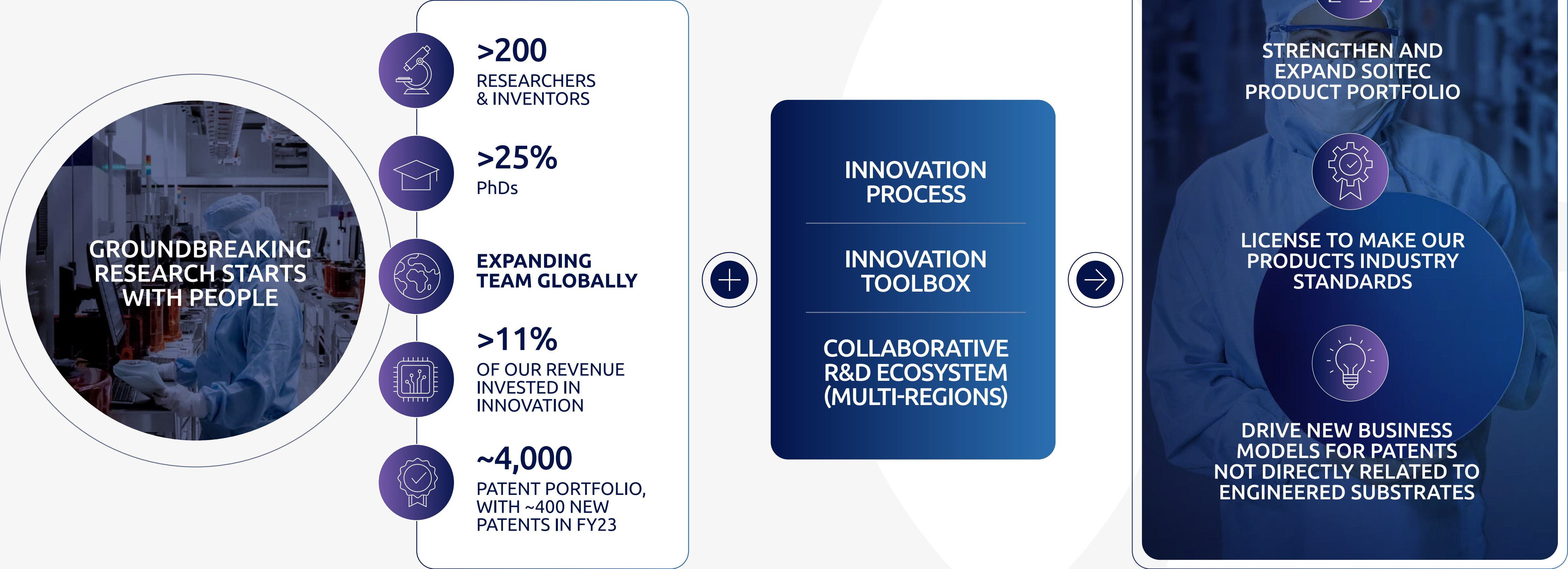
### ‘Lab-to-fab’

Pilot lines supporting disruptive new technologies  
Tool of Record definition and protocol shipments

### 4-years

From first wafer to industrialisation / commercialisation / licensing

# INNOVATION MODEL TO EXPAND SOITEC LEADERSHIP





# INNOVATION KEY MESSAGES

## SOITEC INNOVATION ROADMAP

### LEVERAGING MATERIALS SCIENCE TO DELIVER VALUE AT SYSTEM LEVEL

- Innovation is a key growth enabler
- Engineered substrates deliver value at system level
- By design, our products are at the heart of energy efficiency
- Anything-on-Anything, the engine to expand into new markets: taking the best out of each layer to address tomorrow's challenges

## SOITEC INNOVATION TOOLBOX

### EXPANDING OUR TECHNOLOGY PORTFOLIO TO BRING COMPELLING PRODUCTS TO MARKET

- A comprehensive toolbox to open new possibilities and create cutting-edge materials
- Smart Cut: the essence of Soitec Innovation approach, to push the boundaries of materials science
- SmartSiC™ and SmartGaN: 2 new compelling products

## SOITEC INNOVATION MODEL

### SPEED AND STRATEGIC PARTNERSHIPS ARE KEY TO GAIN MARKET SHARES

- Strengthening our products leadership and investing in disruptive innovation
- Building a network of leading innovation platforms across the value chain
- Speed is of the essence to intercept market opportunities

# MOBILE COMMUNICATIONS

Jean-Marc Le Meil





# GROWTH DRIVERS MOBILE COMMUNICATIONS

## 5G Sub-6GHz

### Advancing 5G for a connected society

- 5G penetration ongoing, from ~50% of smartphones in 2022 to ~60% in 2023
- 5G Sub-6GHz drives large increases in RF Content (>x2 vs 4G)
- New wave of 5G products offering critical support for driving assistance, XR, IoT and many others

## 5G mmWave

### Essential to secure network capacity in busy areas requiring high data-rate

- ~15% of 5G smartphones to support mmWave in 2023
- Last mile fiber complement (FWA)
- AR/VR everywhere
- 5G smart factory & private networks

## WI-FI 6, 6E & 7 / UWB

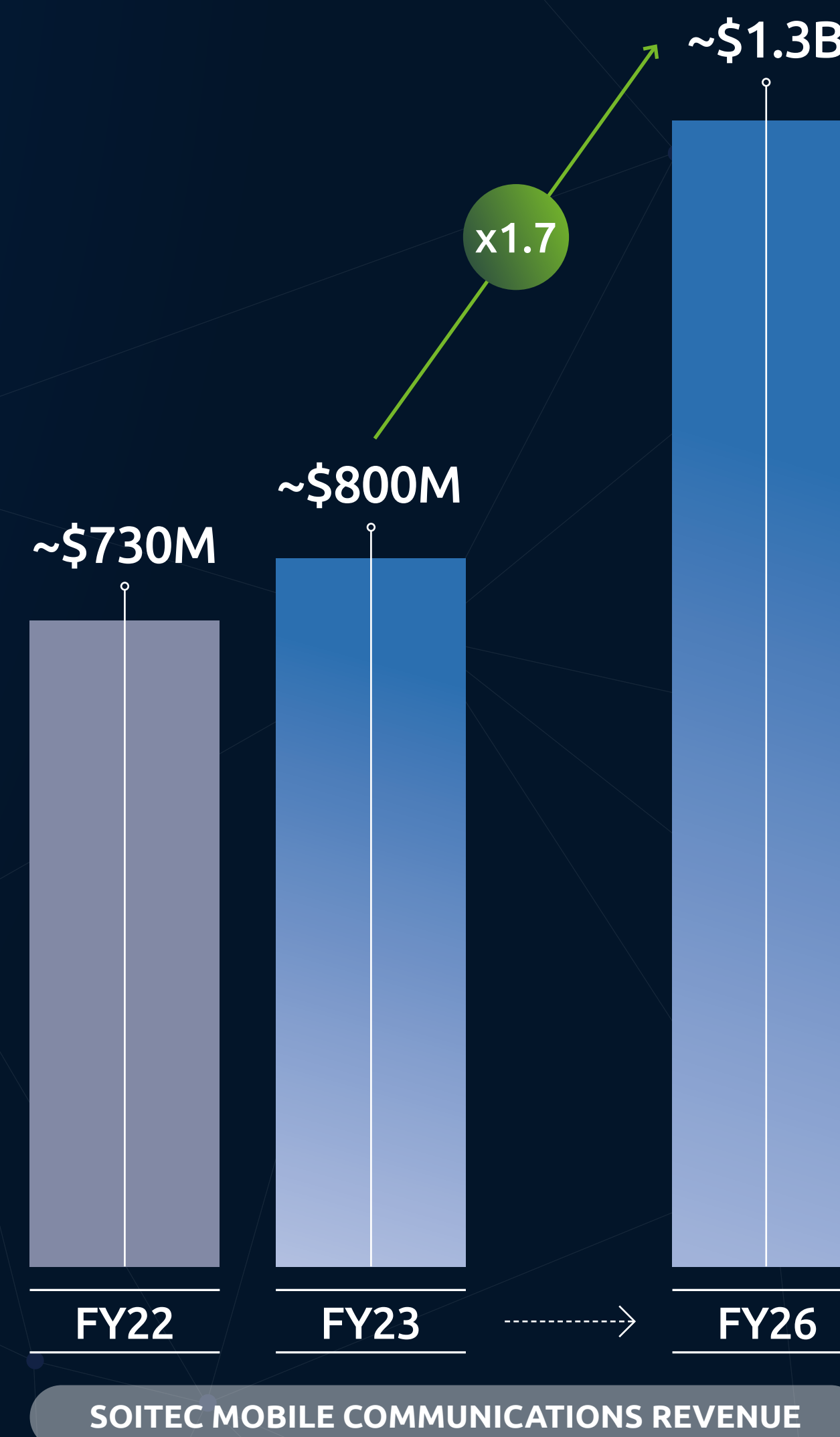
### Quality, security, low latency and reliability for a multitude of connected objects

- Ever-increasing number of connected objects in the smart-home
- ~x2 growth in mobile Wi-Fi 6/6E/7 in 2025 (vs2022)
- Complementing 5G in demanding commercial and industrial scenarios

## INFRASTRUCTURE

### Accelerated worldwide deployment ensuring efficient scalability

- Power efficient, compact form-factor & weight 5G massive MIMO
- Continuous mmWave coverage expansion with network cost optimization - smart repeaters





# 5G

## THE NEW ENGINE BEHIND OUR CONNECTED SOCIETY



**Public networks**  
Enhanced Mobile  
communications



**XR (VR/AR/MR)**  
Remote working and training,  
virtual fitting, entertainment



**Smart transportation**  
Connected, safer and  
autonomous vehicles



**Fixed Wireless Access (FWA)**  
Ultra high-speed connection in  
areas with no access to fiber



**Industry 4.0**  
Factories, warehouses,  
predictive maintenance



**Massive IoT**  
Wearables, transportation,  
smart sensors



**Private 5G networks**  
Tailored 5G connection for  
enterprise individual safer networks

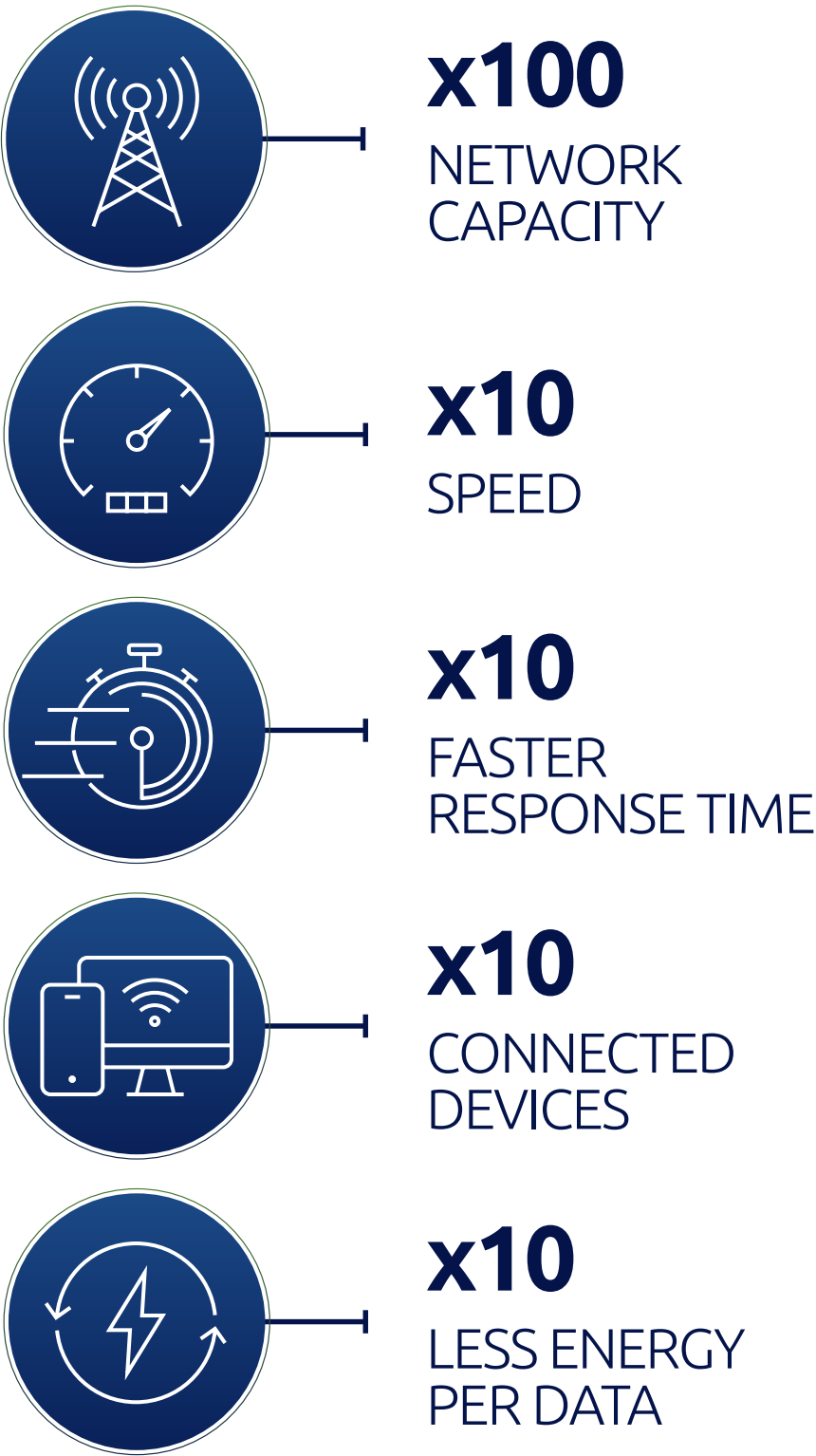


**Non-Terrestrial Networks (NTN)**  
Interoperable and standardized  
wireless experience worldwide



# 5G IS TRANSFORMING THE WORLD

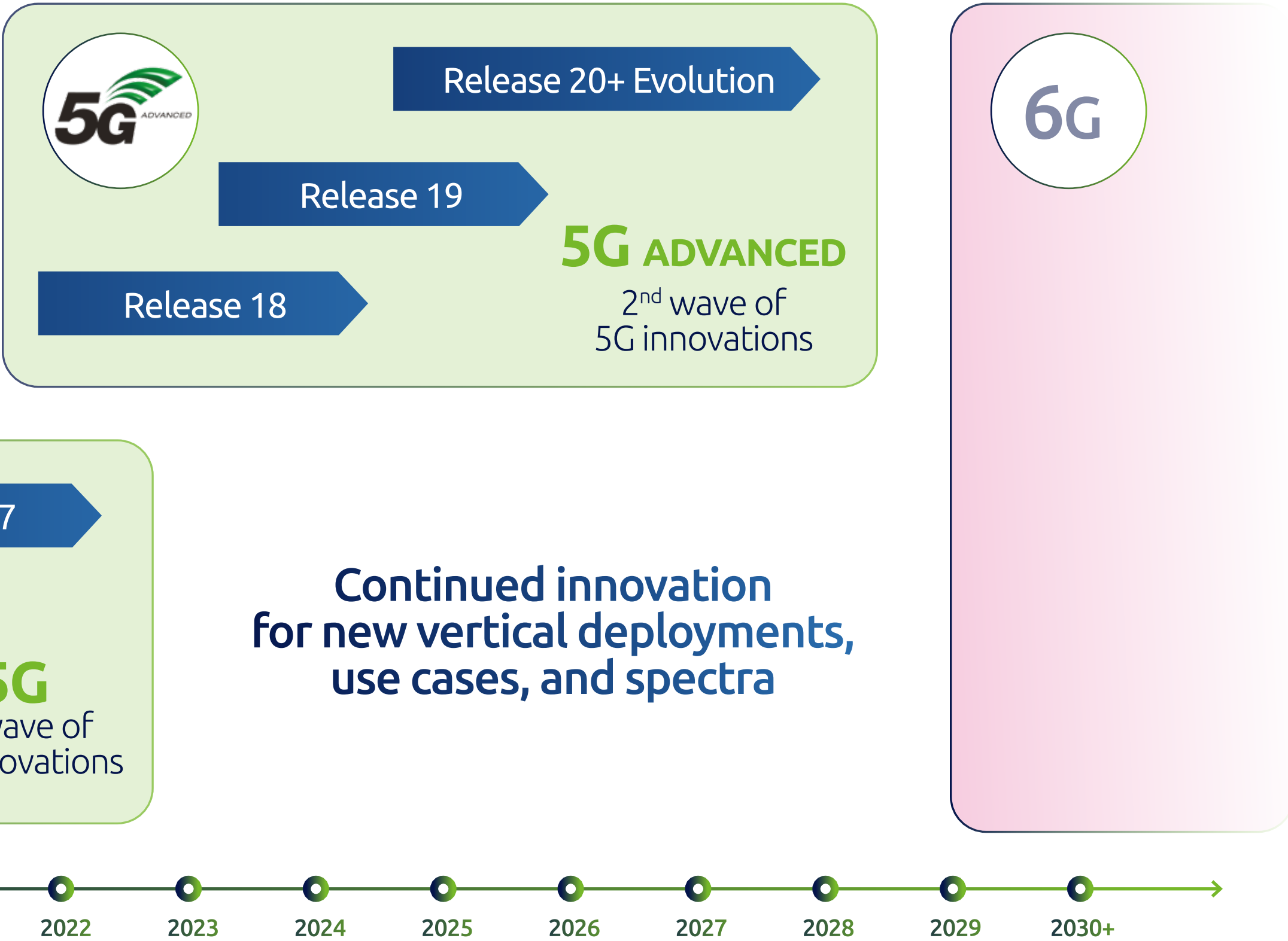
## 5G PERFORMANCE vs 4G



## MOVING TO AN ALL CONNECTED 5G WORLD

### 5G ROADMAP EXTENDS FOR 10+ YEARS

Driving innovation to enhance smartphones and transform other industries



Source: Qualcomm, Ericsson



# 5G THE X-FACTOR



**x10**

MOBILE DATA  
TRAFFIC 2020-2028

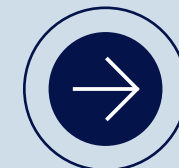


**x2**  
ANTENNAS

**x2**  
MAX  
FREQUENCY

**x2**  
BANDWIDTH

**x4**  
FREQUENCY  
COMBINATION



**Sub-6GHz**



**mmWave**

**NEW**  
28, 39, ...GHz

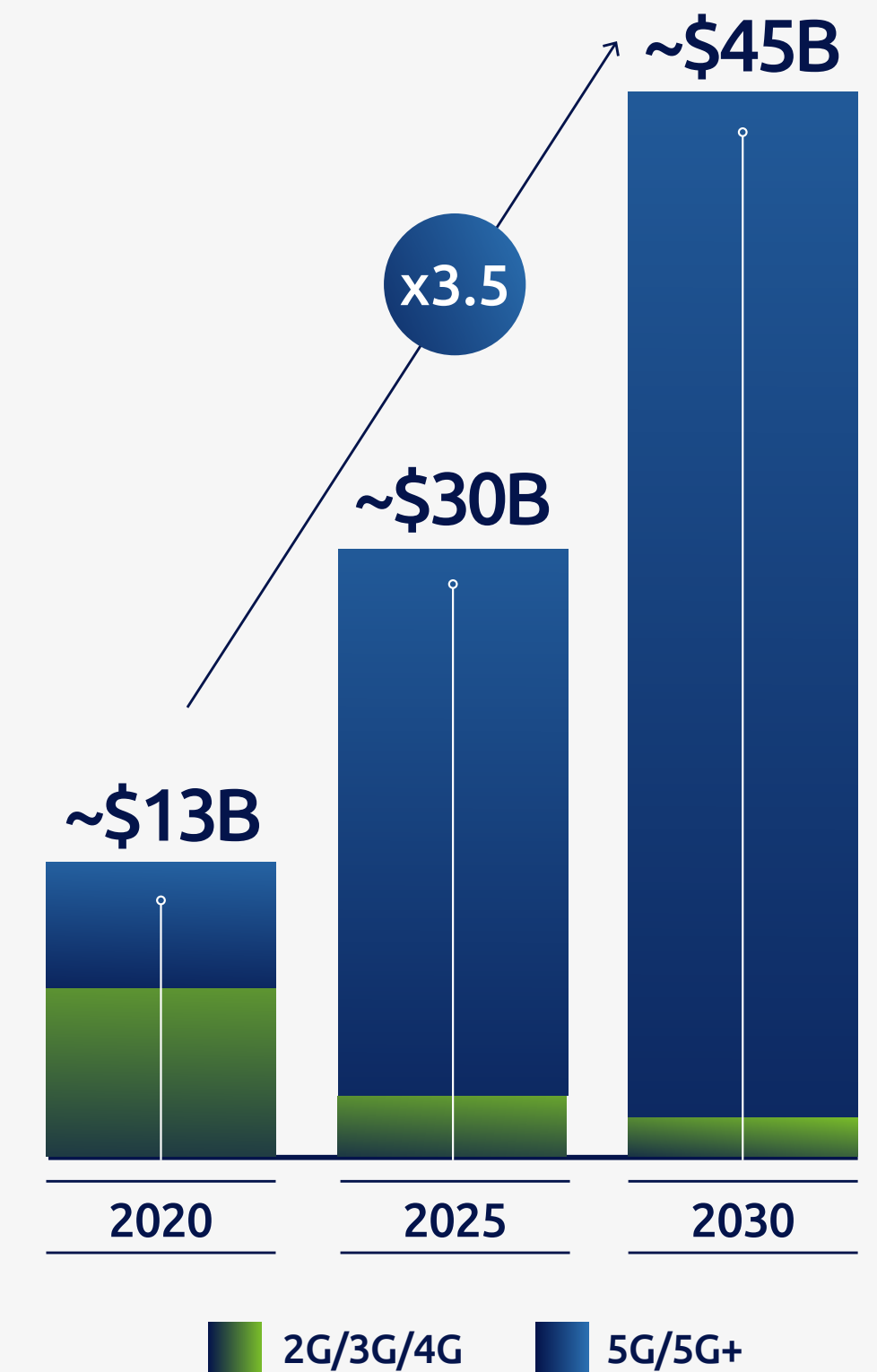
**x2**  
LNA - Switch - Tuner  
**Continuous  
improvement**

**x1.2**  
Filters  
**Need for  
integration**



**NEW**  
Active Antenna  
In Package  
**Need for  
disruption**

MOBILE  
FRONT-END-MODULE  
SEMICONDUCTOR MARKET



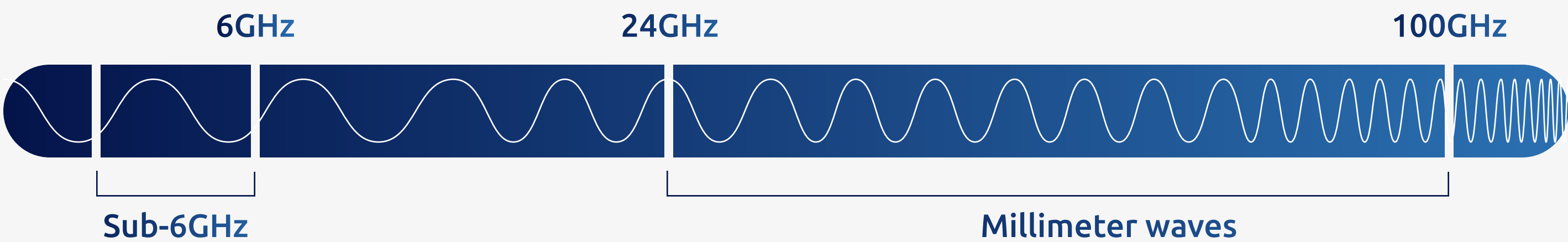
Source: Soitec estimates, Ericsson Mobility Report 2022  
Note: x factors are on average 5G vs 4G phones, Yole



# 5G mmWave

## EXPANDING 5G BOUNDARIES

25x MORE BANDWIDTH THAN 4G



HIGH DATA RATES AND LOW LATENCY FOR NEW USE CASES



Crowded area capacity



Last-mile fiber complement



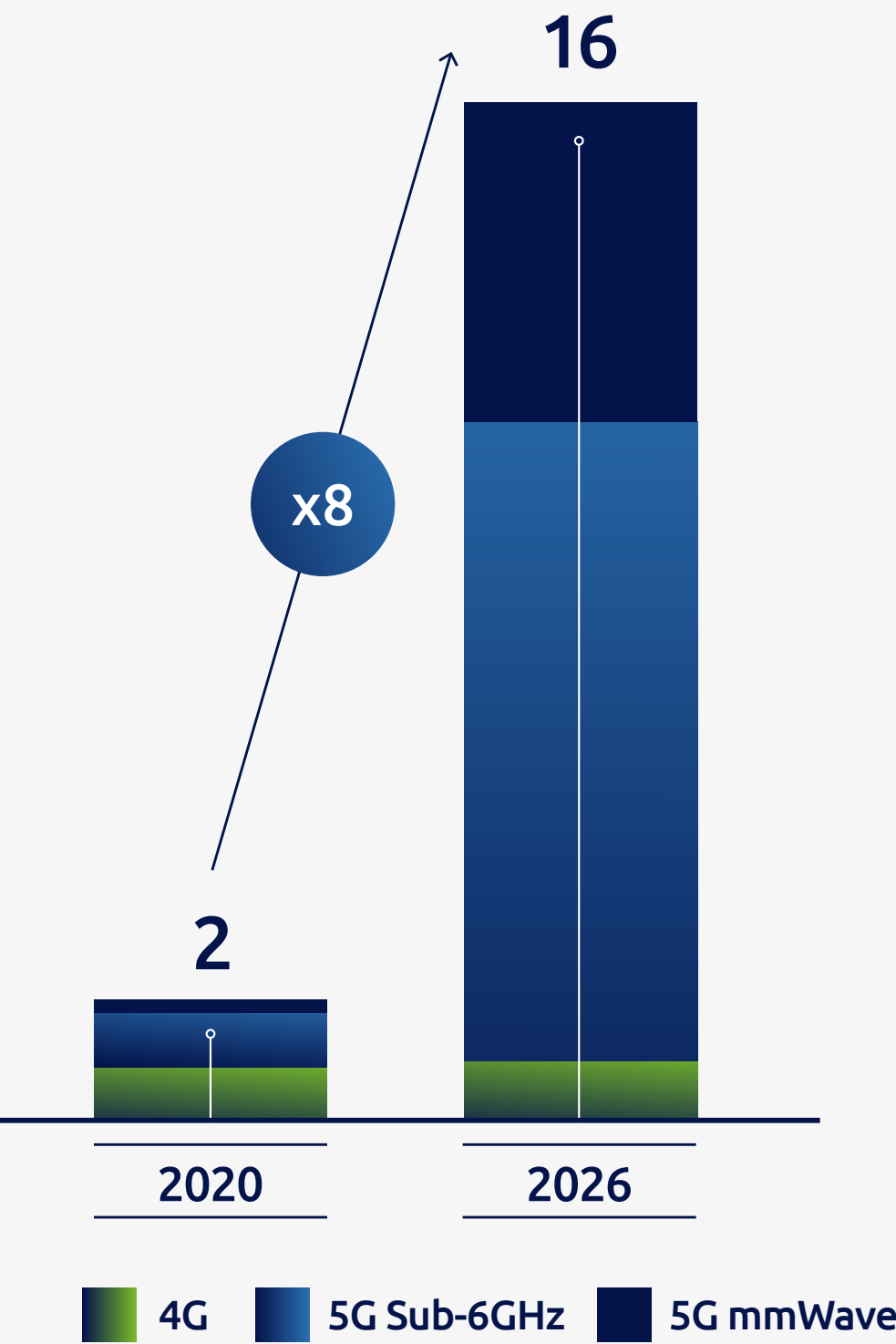
AR / VR everywhere



5G Smart Factory

5G mmWave  
REQUIRED TO ADDRESS  
GROWING DATA TRAFFIC

US Mobile network capacity (EByte/month)



Source: Mobile Experts



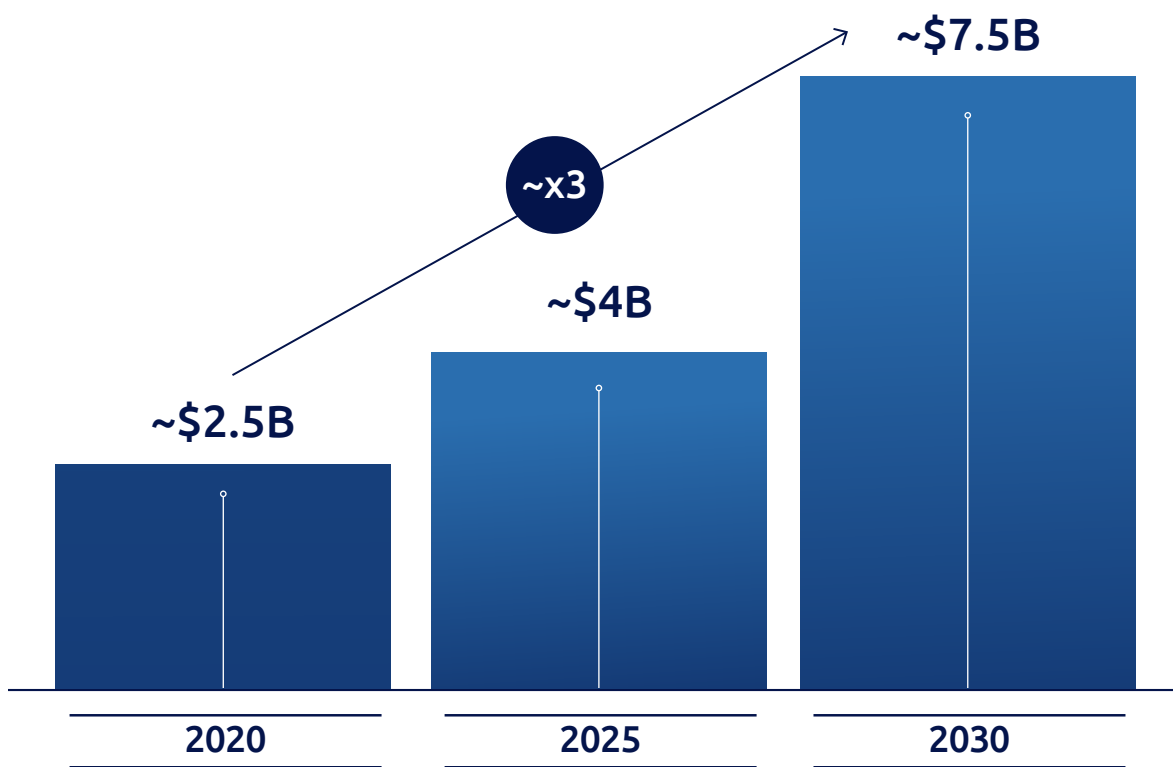
# 5G

## SIGNIFICANT GROWTH DRIVERS BEYOND MOBILE

### WI-FI 6, 6E & 7 / UWB

WI-FI 7 TRANSITION TO FASTER CONNECTIVITY

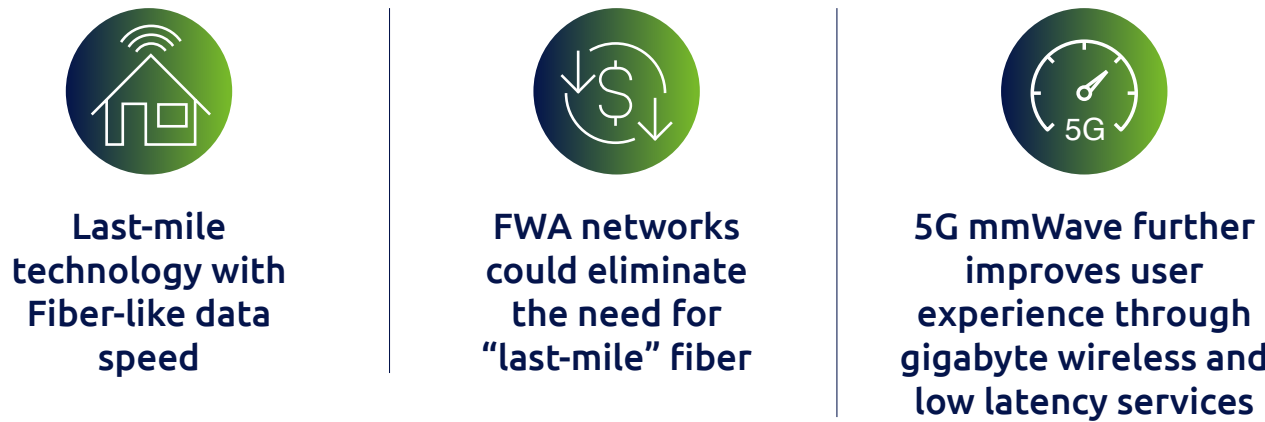
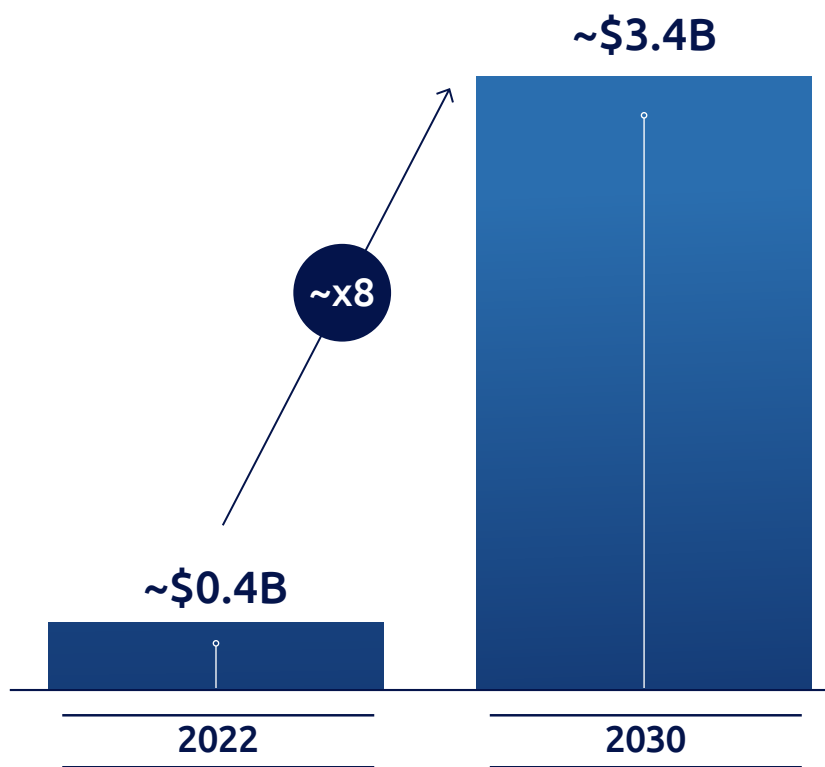
#### WI-FI FRONT-END-MODULE SEMICONDUCTOR MARKET



### FIXED WIRELESS ACCESS

LAST-MILE TECHNOLOGY WITH FIBER-LIKE DATA SPEED

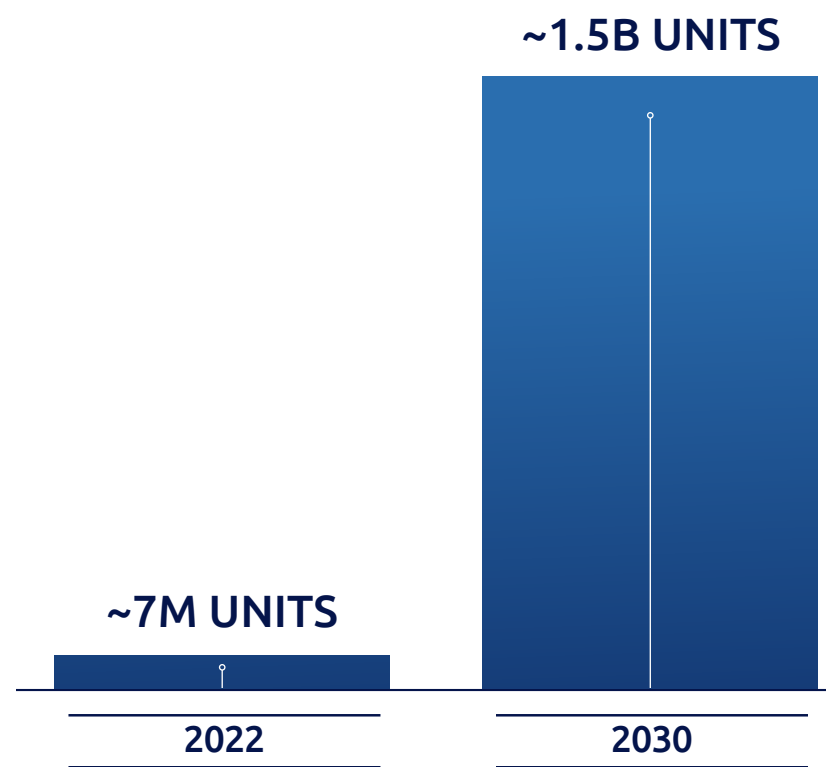
#### FIXED WIRELESS ACCESS FRONT-END-MODULE SEMICONDUCTOR MARKET



### 5G ADVANCED

UNLOCKING NEW GROWTH OPPORTUNITIES

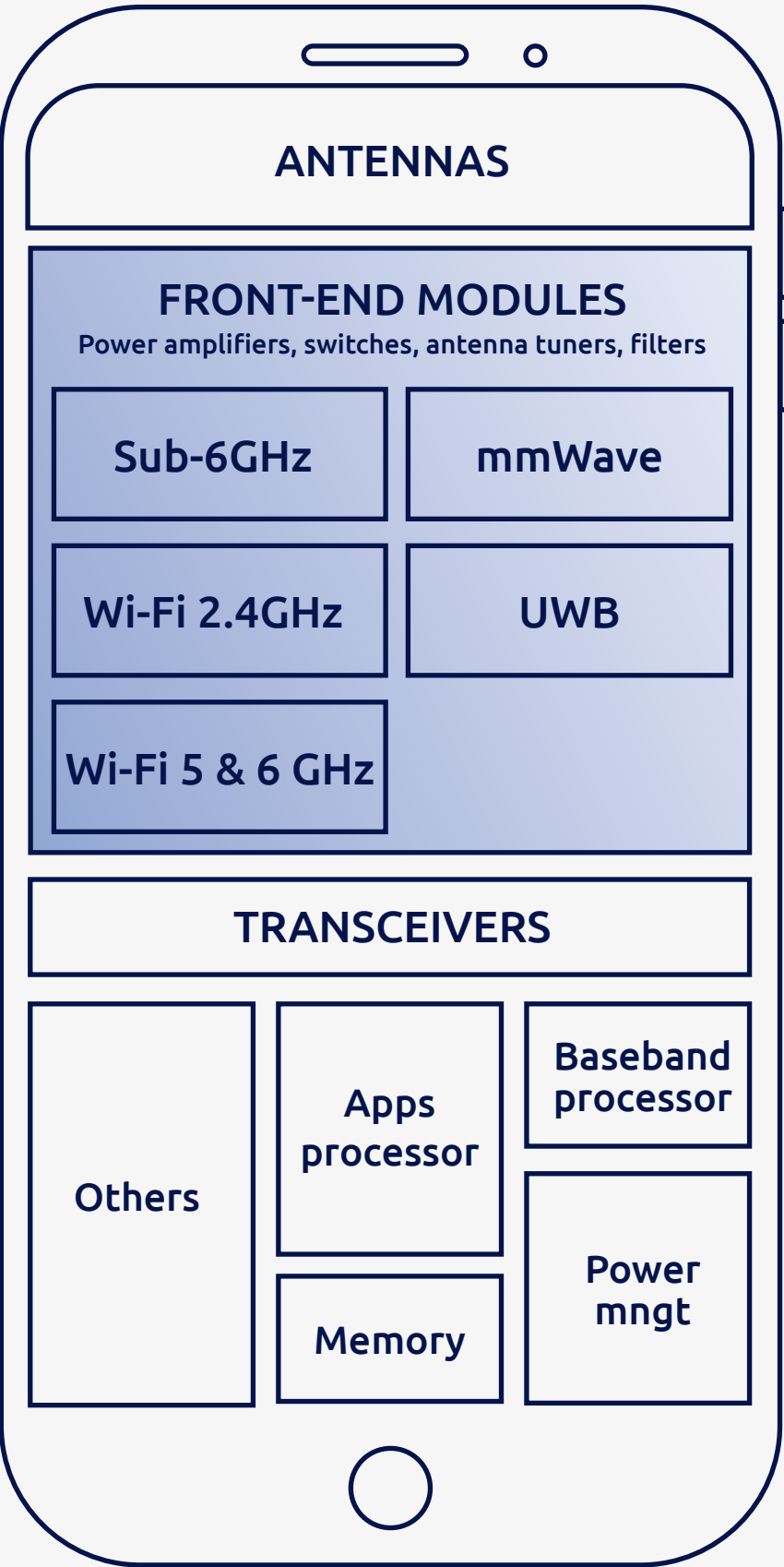
#### NUMBER OF 5G CONNECTED CONSUMER DEVICES BEYOND SMARTPHONE





# SOITEC PRODUCT PORTFOLIO ENABLES BEST-IN-CLASS CONNECTIVITY

## A COMPREHENSIVE OFFER FOR Sub-6GHz & mmWave FRONT-END MODULES



	4G / 5G Sub-6GHz	5G mmWave	Wi-Fi & UWB
POWER AMPLIFIER (PA)	■	■ ■	■
LOW NOISE AMPLIFIER (LNA)	■	■ ■	■
SWITCH	■	■	■
ANTENNA TUNER (AT)	■	□	□
FILTER	■	□	■
ENVELOPE TRACKER (ET)	■	□	□
PHASE SHIFTER	□	■ ■	■
SYSTEM ON CHIP (SoC)	□	■	■
INTEGRATED FRONT-END	□	■	■

■ Connect RF-SOI

■ Connect FD-SOI

■ Connect POI

■ Connect RF-GaN

**Connect RF-SOI**  
For highly efficient mobile communications

**Connect FD-SOI**  
Integrated technology

**Connect POI**  
High performance 5G filters

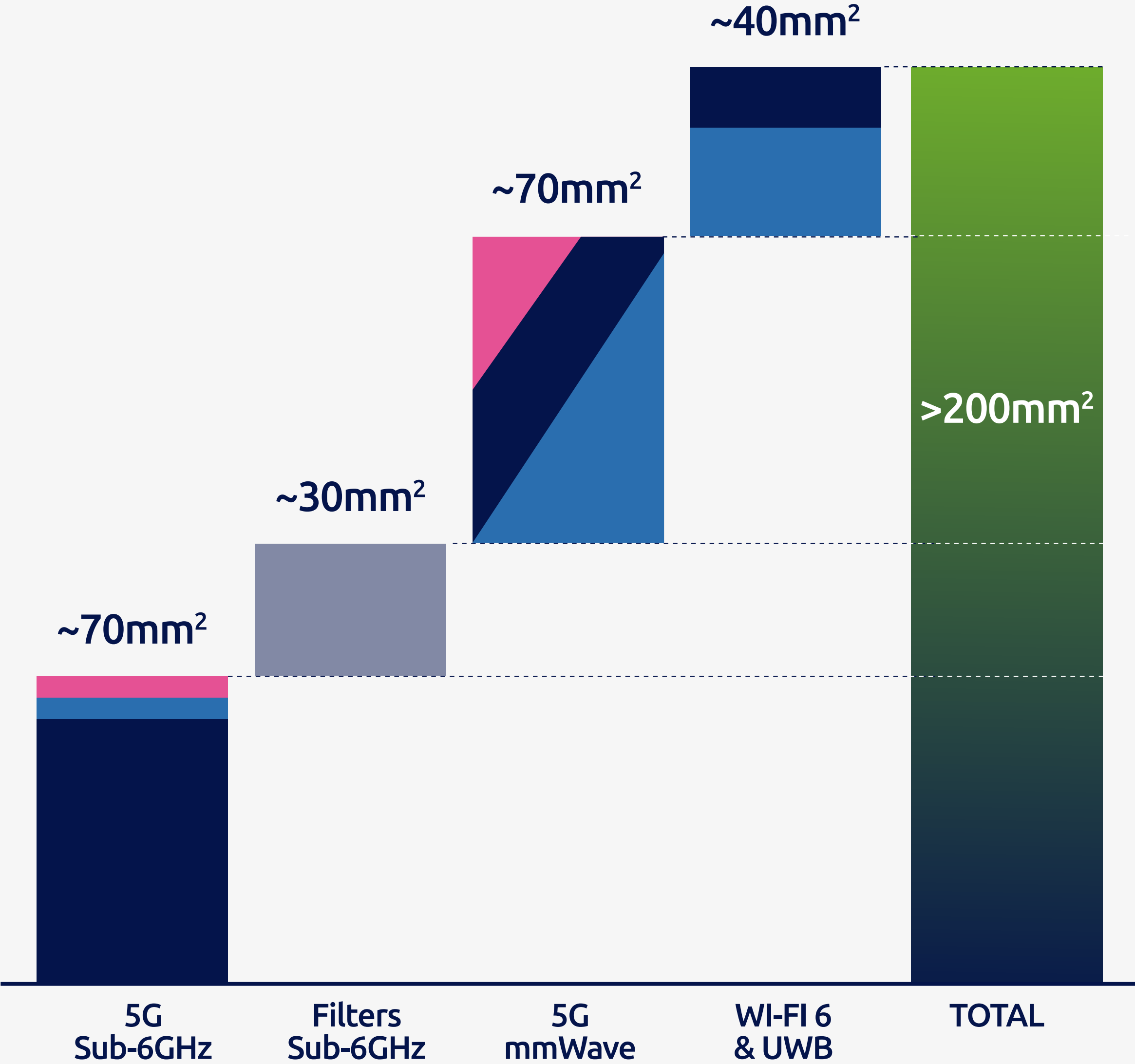
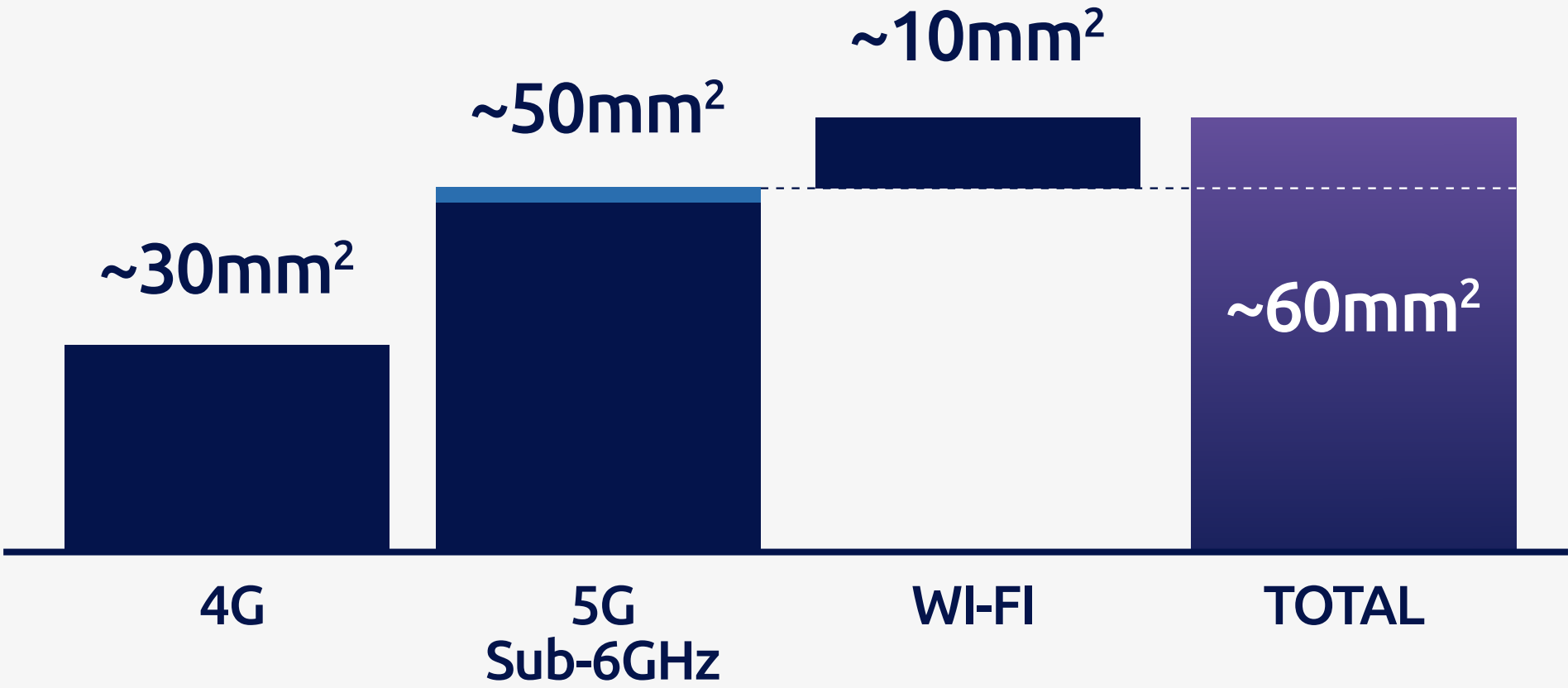
**Connect RF-GaN**  
High-performance power amplifiers



# MOBILE CONTENT OPPORTUNITY IN THE NEXT THREE YEARS IN mm<sup>2</sup>

High-end smartphones

- Connect RF-SOI
- Connect FD-SOI
- Connect POI
- Connect RF-GaN



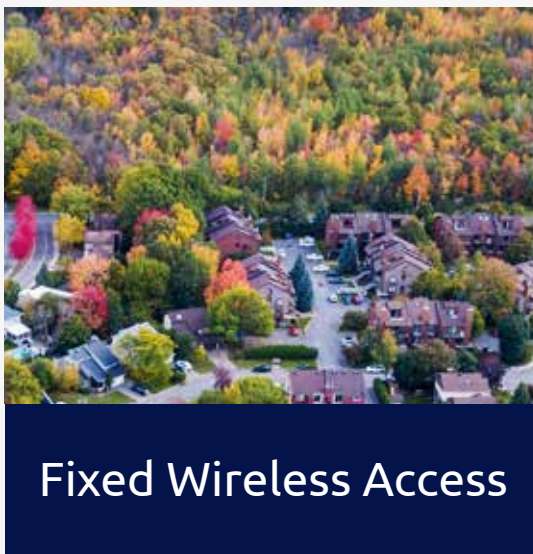


# MOBILE PRODUCT PORTFOLIO

## CONNECT RF-SOI

Connect RF-SOI embedded in 100% of 5G smartphones

### CONNECT RF-SOI IS TARGETING NEW 5G VERTICALS



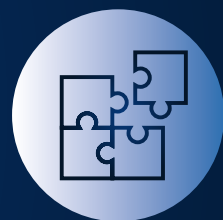
### OUR RF-SOI SUBSTRATE ENABLES



5G CONNECTIVITY  
ENHANCEMENT



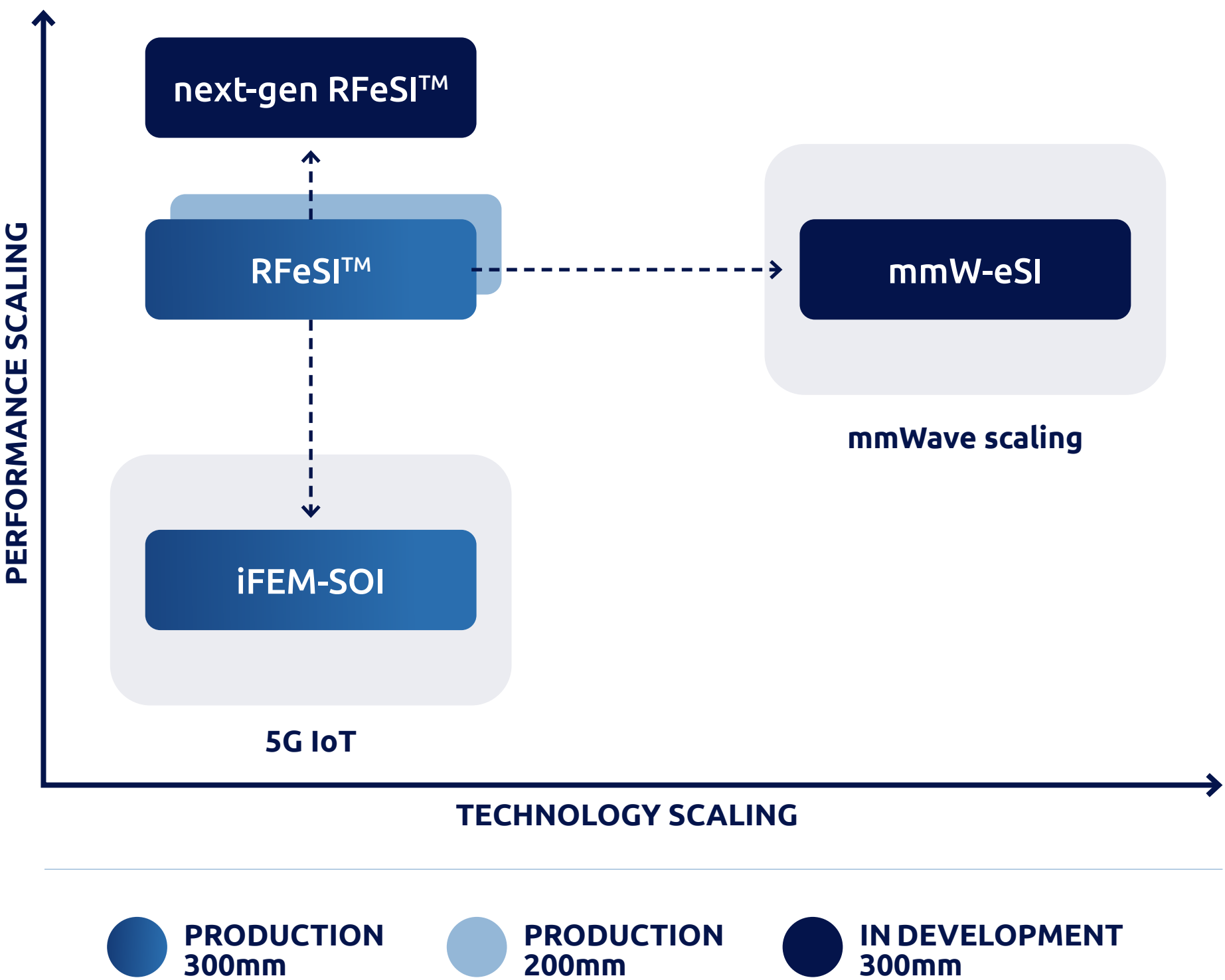
BATTERY  
POWER SAVING



OPTIMIZED FOOTPRINT  
WITH RFFE INTEGRATION



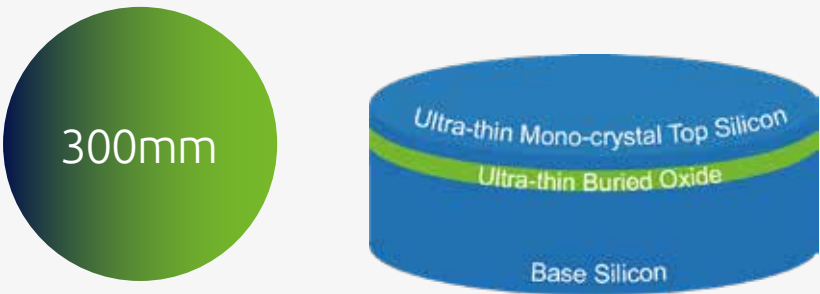
### CONNECT RF-SOI ROADMAP




# MOBILE PRODUCT PORTFOLIO


## CONNECT FD-SOI

FD-SOI for mmWave endorsed by major RF players







Google Pixel 6  
Google Pixel 6 Pro



Google Pixel 7  
Google Pixel 7 Pro




Motorola Edge  
(2022)




Samsung Galaxy A53

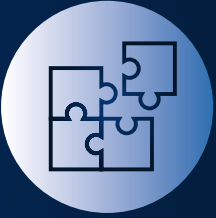
OUR FD-SOI SUBSTRATE ENABLES



HIGH QUALITY & EXTENDED  
5G mmWave LINK

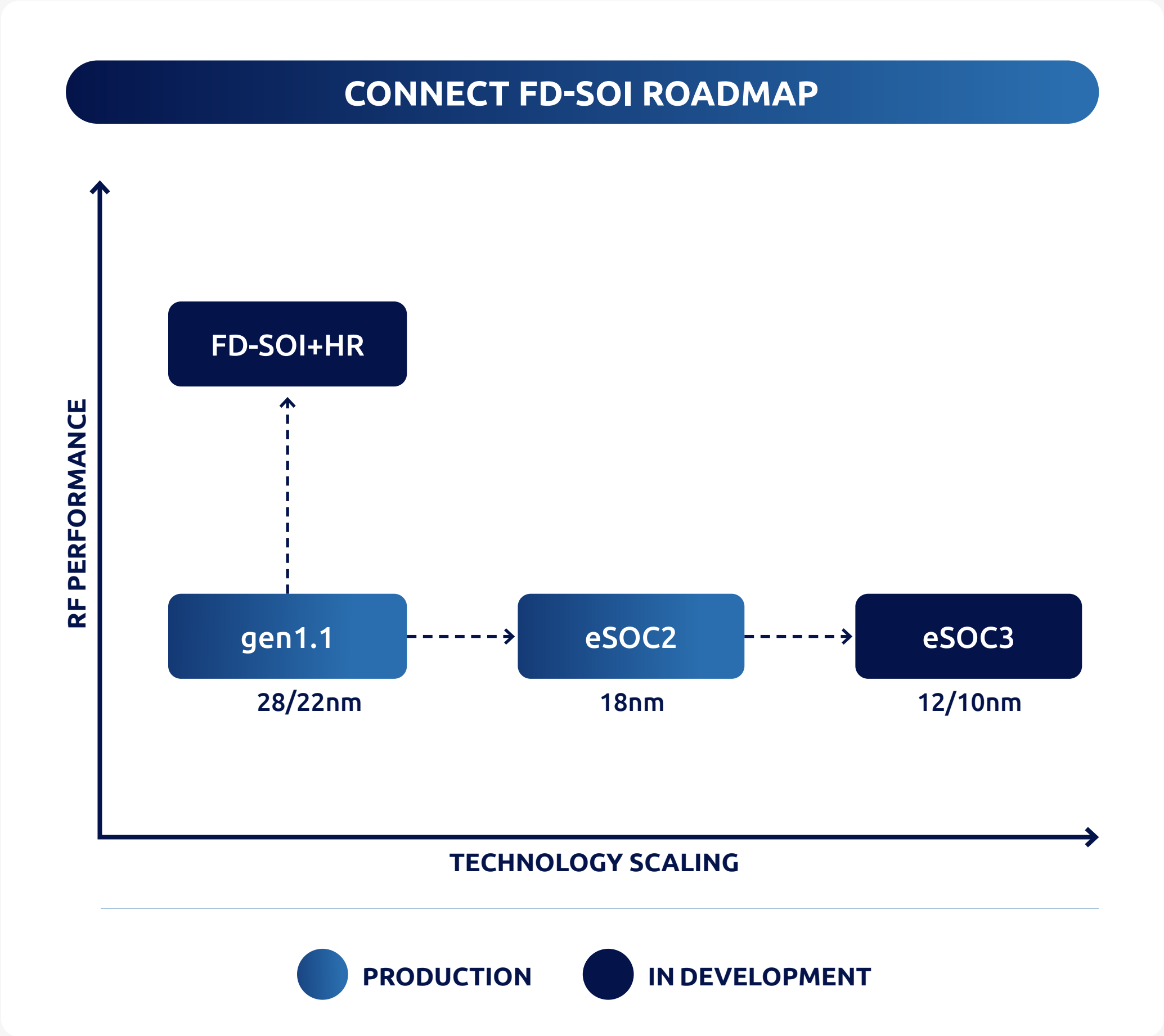


>10% BATTERY  
POWER SAVING



OPTIMIZED FOOTPRINT  
WITH DIGITAL SCALING

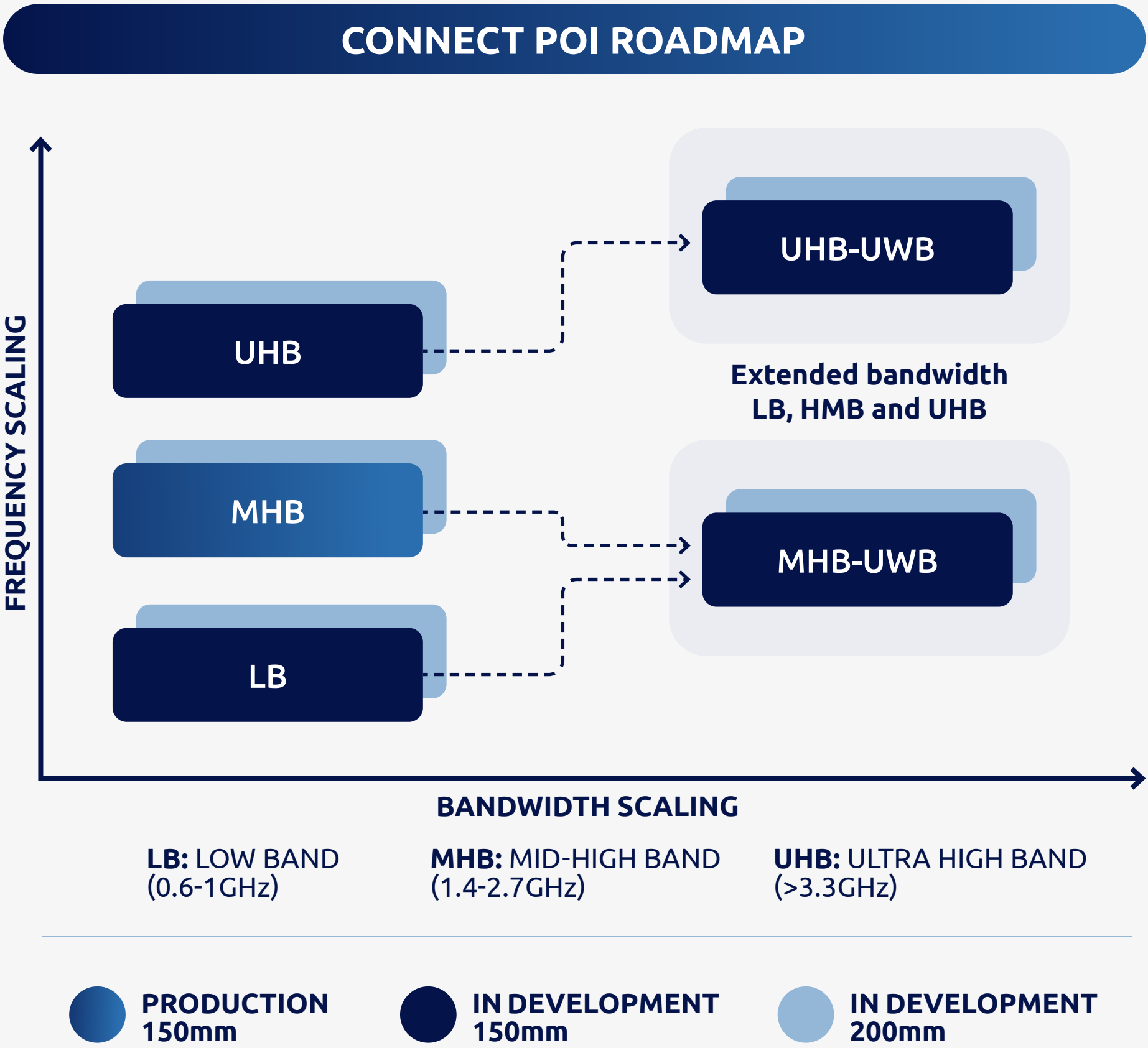
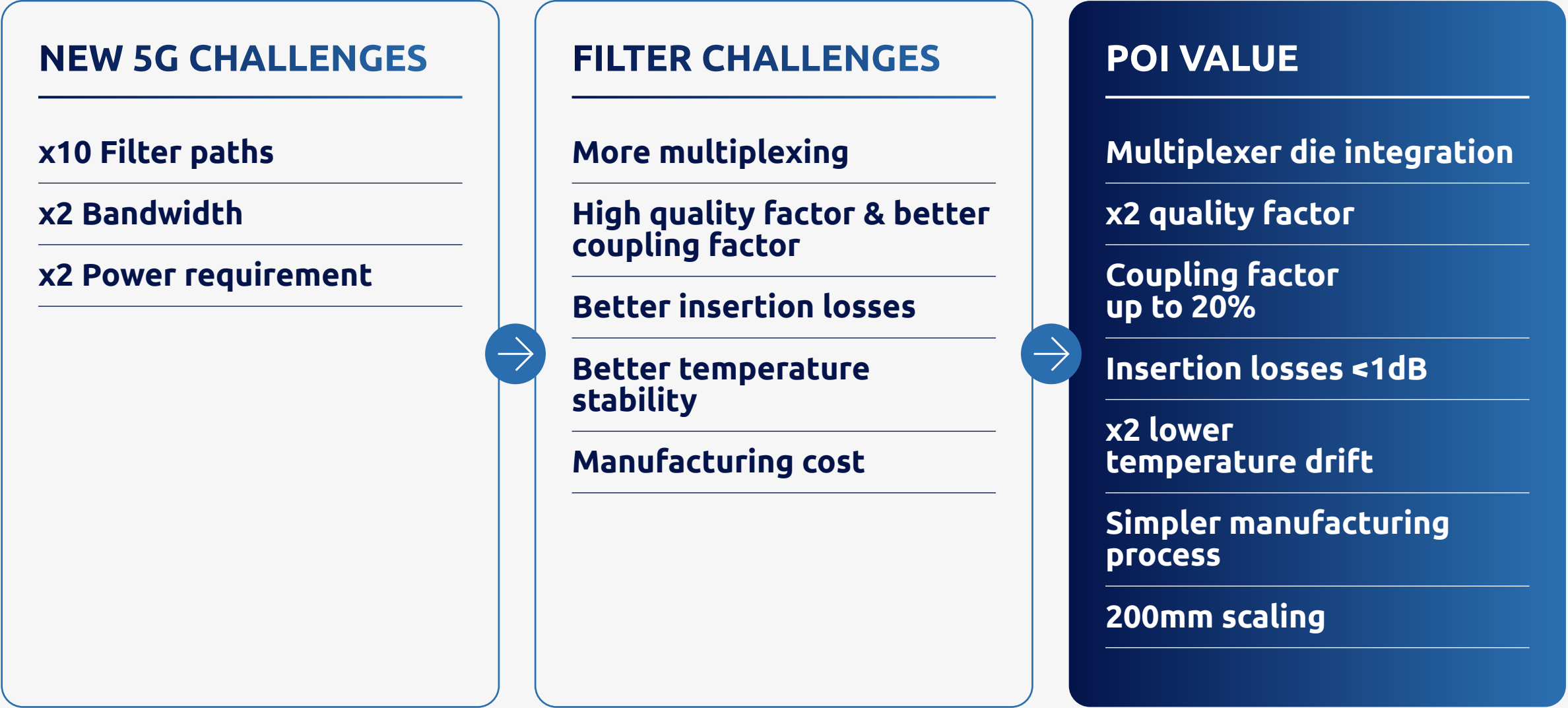
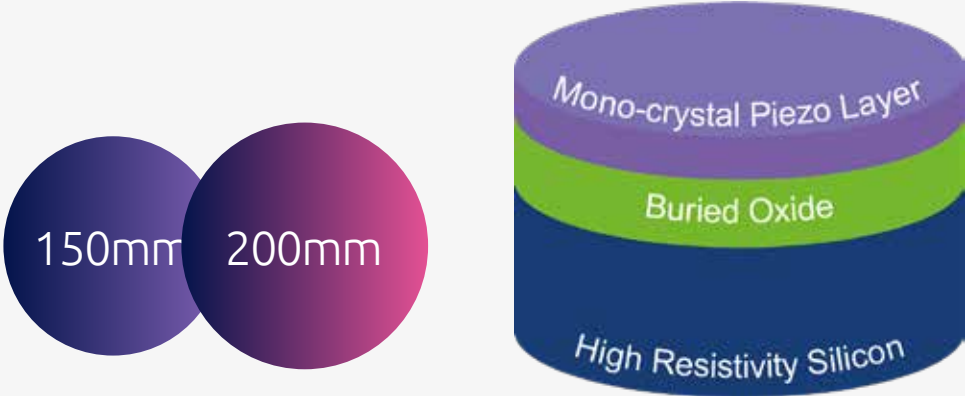
Images source: store.google.com, motorola.com, samsung.com





# MOBILE PRODUCT PORTFOLIO

## CONNECT POI



# MOBILE PRODUCT PORTFOLIO

## CONNECT RF-GaN



**GaN** technology is a standard for RF power amplifiers in 5G MIMO base stations

**GaN-on-Silicon** is penetrating 5G base station market for 5G radio cost reduction



**GaN** technology will meet new 5G mobile requirements with new power class devices and new 5G bands

### SOITEC CONNECT RF-GaN SOLUTION FOR MOBILE AND INFRASTRUCTURE

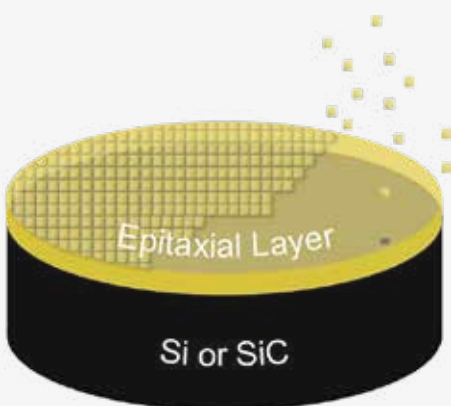
Unique expertise to capture **GaN-on-Si** long-term trend for **Mobile and Infrastructure**

Strong experience to serve high volume manufacturing markets

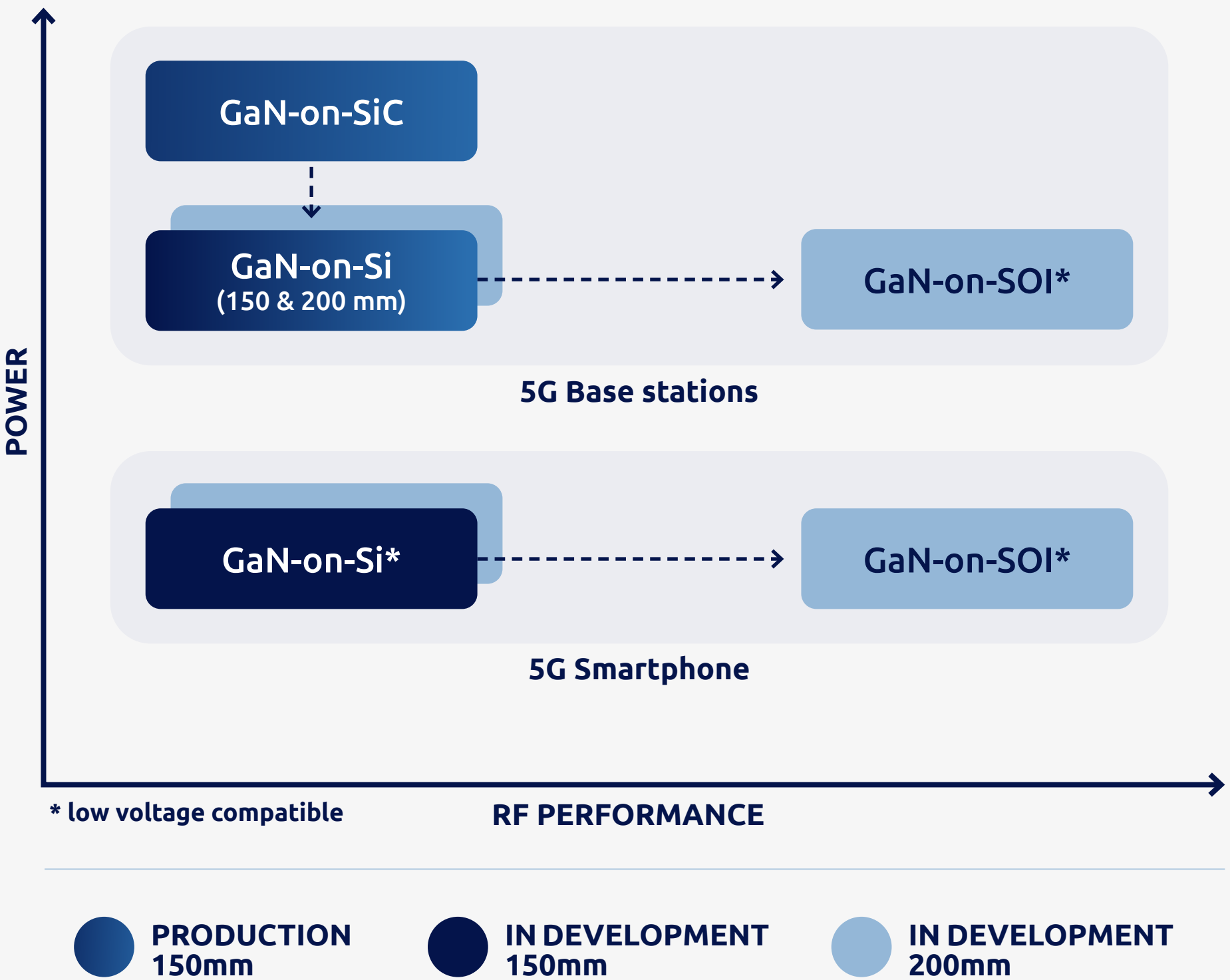
Long-term roadmap to meet higher RF performances with **GaN-on-SOI**

150mm

200mm



### CONNECT RF-GaN ROADMAP





# MOBILE COMMUNICATIONS

## KEY MESSAGES

### 5G, 5G ADVANCED AND mmWave ARE THE ENGINES OF MOBILE COMMUNICATION GROWTH

- 5G penetration progressing with ~60% smartphones supporting 5G in 2023
- Mobile content opportunity x2 in the next 3 years for Soitec Product Portfolio
- Leveraging a new wave of 5G penetration beyond smartphones, connecting everything and everywhere

### MORE ROBUST, EFFICIENT AND COMPACT WI-FI CONNECTIVITY SYSTEM

- Wi-Fi 6E and next gen Wi-Fi 7 will offer better user connectivity experience
- Connect RF-SOI makes Wi-Fi connection seamless, with improved battery efficiency and with full die integration
- Connect FD-SOI leverages SoC digital scaling and RF integration benefits combined with integrated Bluetooth and Wi-Fi capabilities

### DEPLOYING SCALABLE PRODUCT ROADMAPS

- Extend Connect SOI portfolio to new 5G verticals
- Extend Connect POI to penetrate the Filter market through all band segments from LB to UHB
- Extend Connect RF-GaN from infrastructure to Mobile with 200mm technology scalability

# AUTOMOTIVE & INDUSTRIAL

Emmanuel Sabonnadière





# GROWTH DRIVERS AUTOMOTIVE & INDUSTRIAL

## AUTOMOTIVE – In vehicle

Car increasingly becoming a connected hub

- In-vehicle Networking
- In-vehicle Sensors & Actuators
- Power Management IC (PMIC)
- System Basis Chip (SBC)
- Multimedia application processor
- Class D audio amplifier

## AUTOMOTIVE – Edge computing

Improving automation features to improve functional safety

- Front, Rear, Edge & imaging radars
- MCU / MPU
- Vision / Data Fusion Processor
- LiDARs
- Zonal / Edge Computing
- Airbag / Braking system

## AUTOMOTIVE – Powertrain

Accelerating Electric Vehicle adoption

- Powertrain / Traction inverter
- On-Board Charger
- Battery Management System
- DC-DC converter

## INDUSTRIAL – Industry 4.0

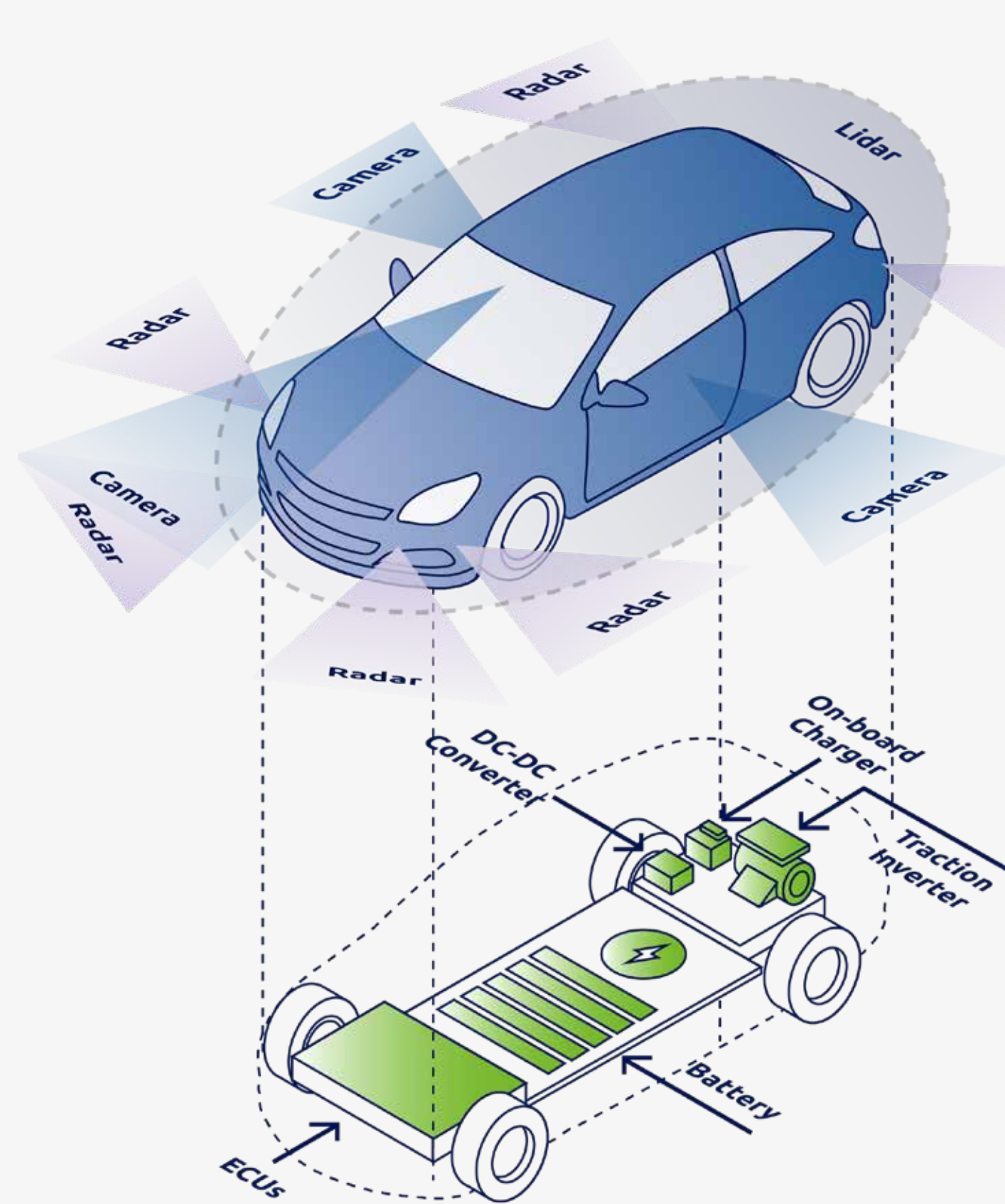
Enabling factories of the future with more safety, automation and efficiency

- Solar field DC/AC stations
- Motor drive & gate driver
- Power converter
- PMICs & SBCs
- Low CO<sub>2</sub> footprint power devices



# AUTOMOTIVE MEGATRENDS

## DRIVE INNOVATION FROM SYSTEMS TO SUBSTRATES

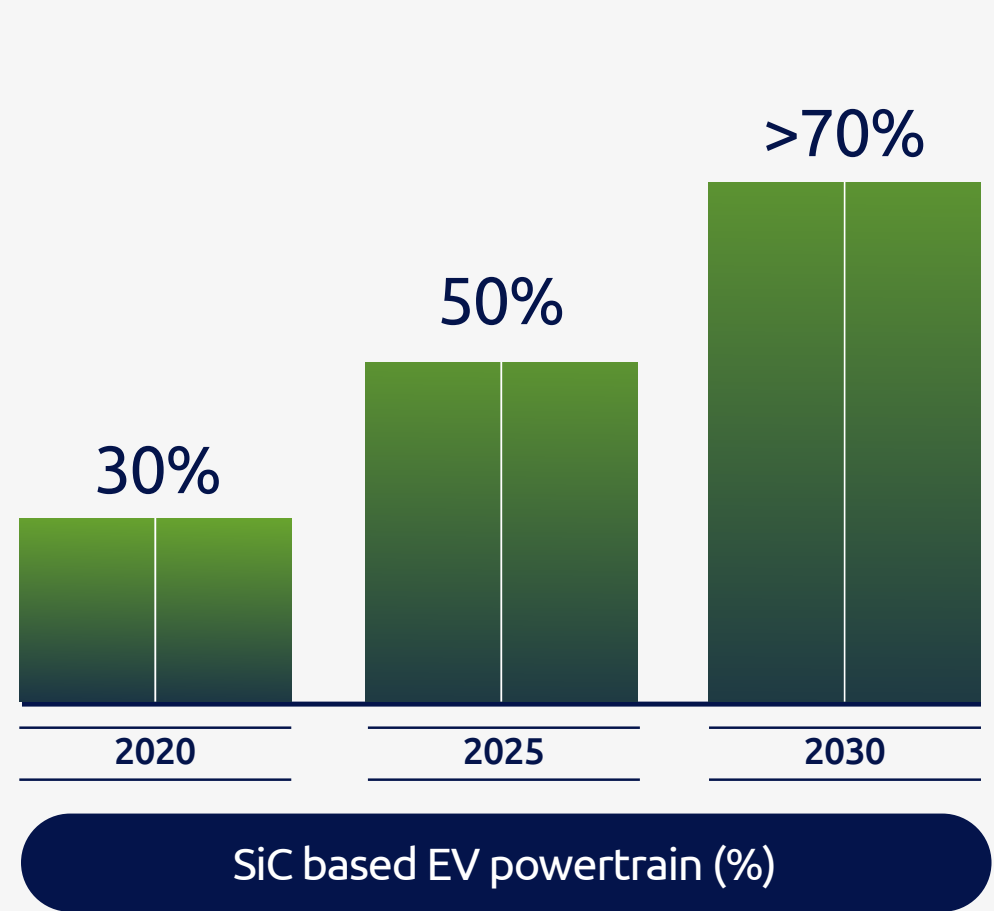
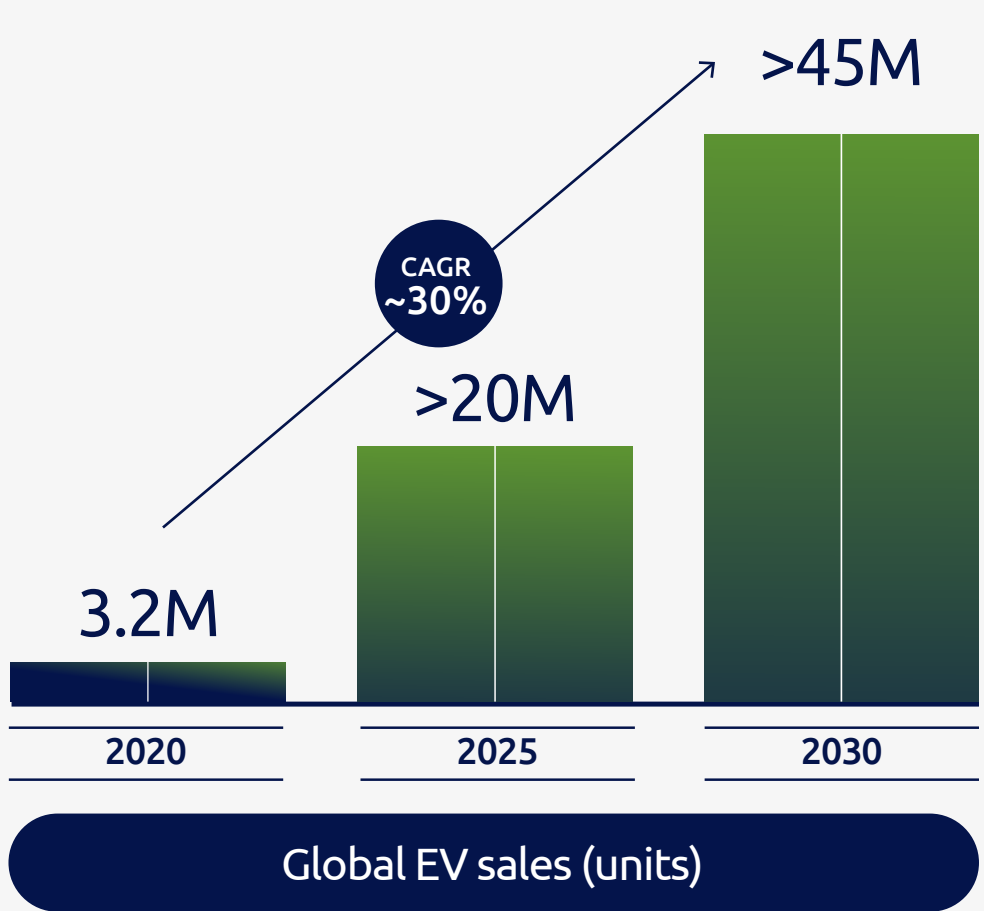
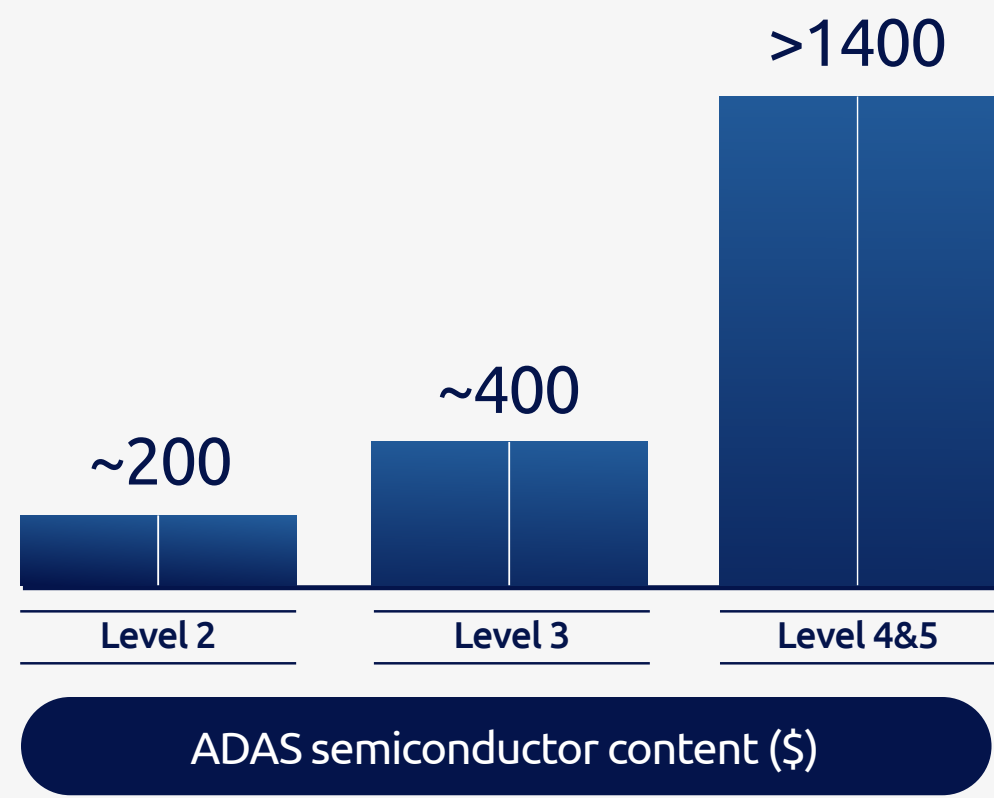
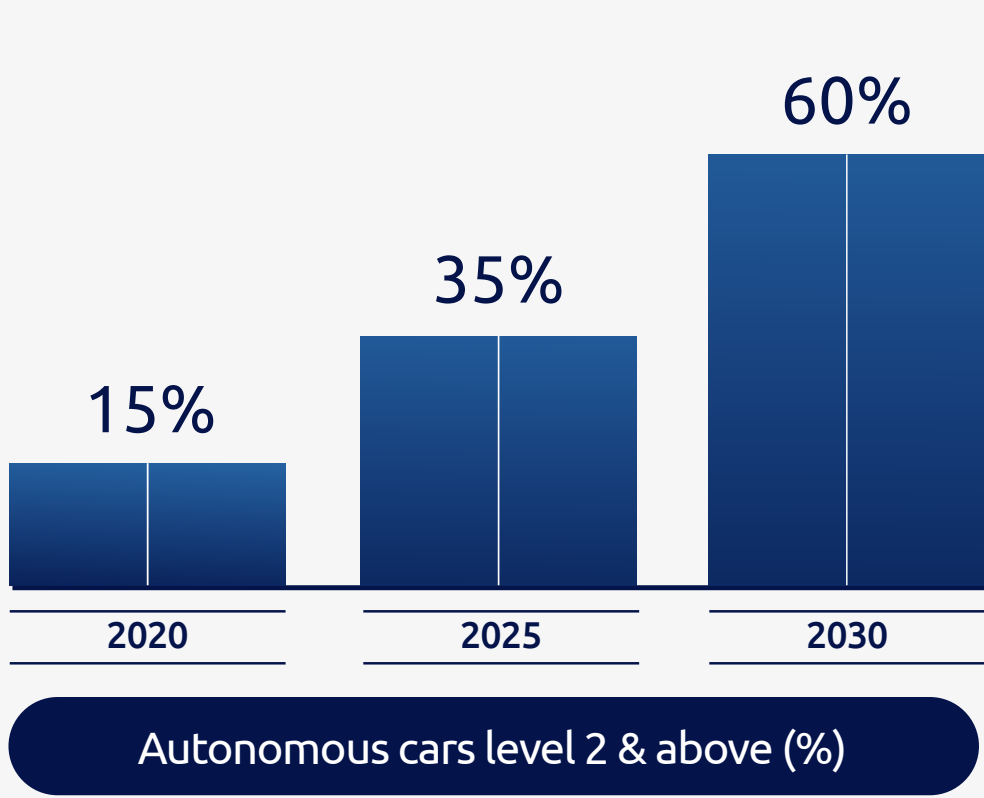


### ADAS

- Fusion processor
- Radar processor
- Image sensor
- Domain controller

### ELECTRIFICATION

- SiC Diode
- SiC MOSFET
- GaN MOSFET
- PMIC
- BMS
- Gate drivers
- Smart actuator



Source: Soitec estimates, Infineon, NXP, IHS, The International Council on Clean Transportation (ICCT) 2020





# POWERTRAIN – A CRITICAL COMPONENT OF THE EV MARKET

## SiC ADDS VALUE AT SYSTEM LEVEL AND ENABLES COST REDUCTION

POWERTRAIN COST: ~\$10,000

**ELECTRIC MOTOR**

- Electric motors
- e-transmission

~\$1,100 ↘

**BATTERY PACK & MODULES**

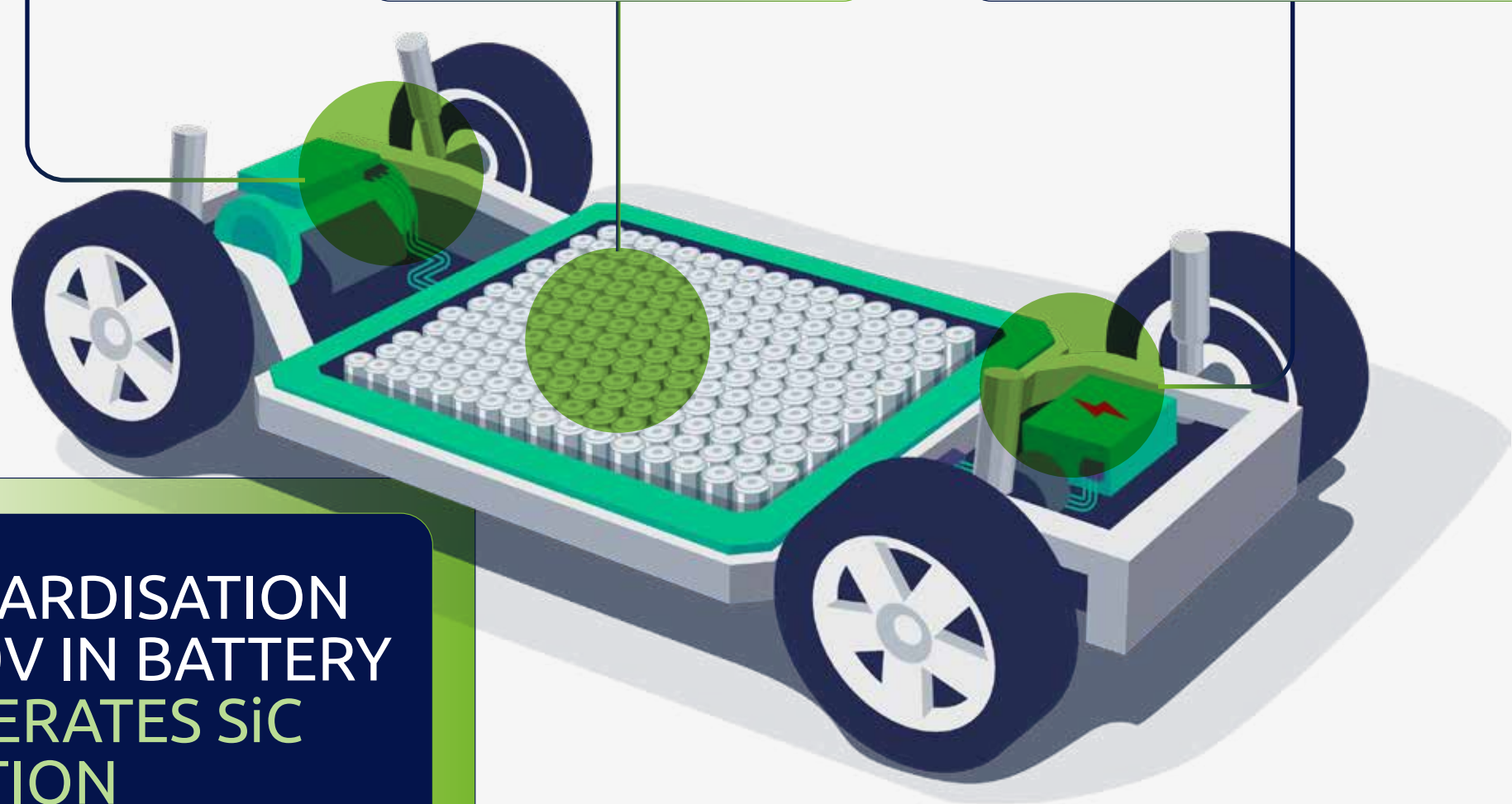
- Battery pack
- Modules and cells
- BMS

~\$8,000 ↘

**POWER ELECTRONICS**

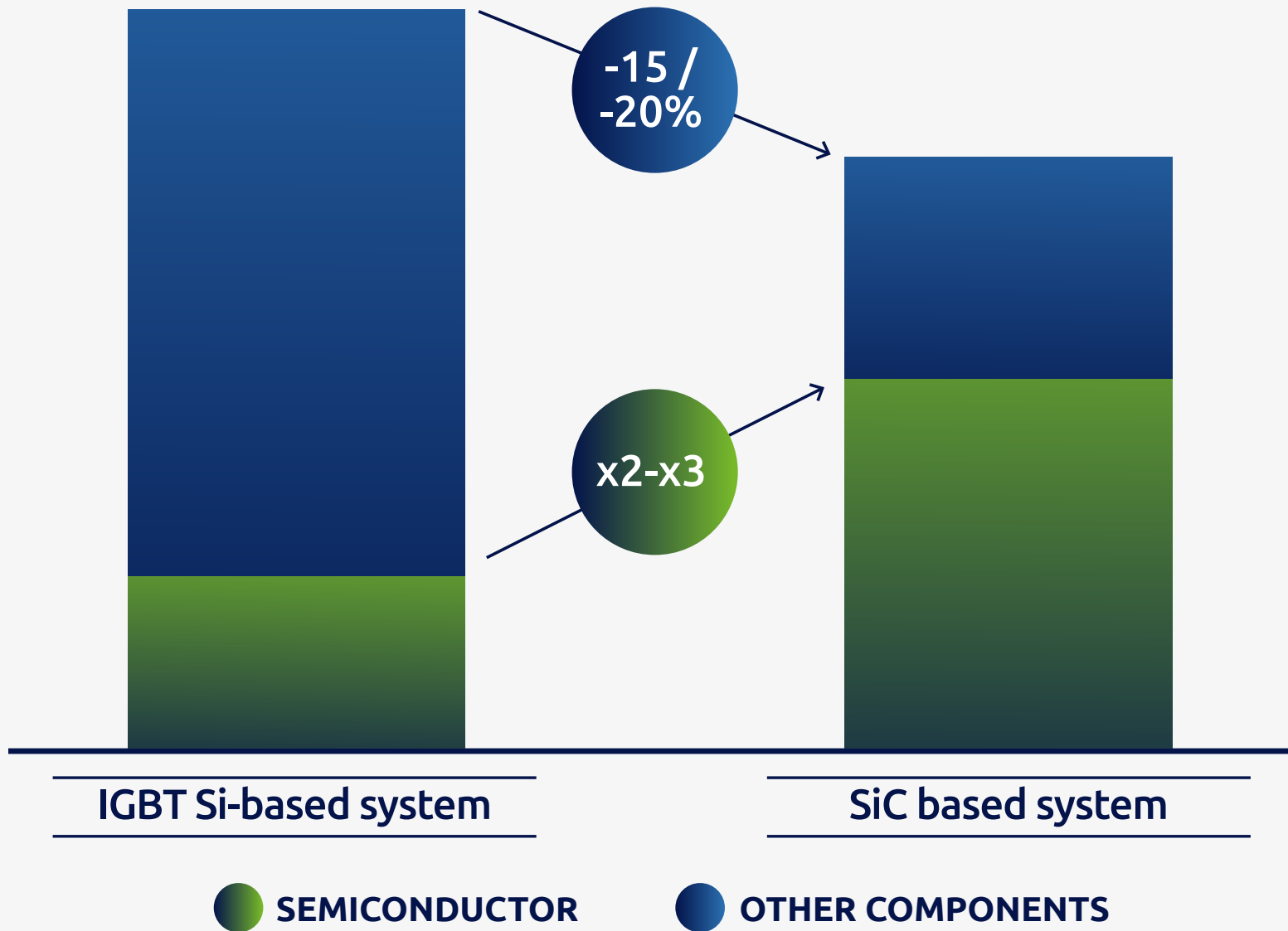
- E-drive / inverter (DC/AC)
- DC/DC Converter
- On-board charger (AC/DC)

~\$1,500 →



STANDARDISATION  
OF 800V IN BATTERY  
ACCELERATES SiC  
ADOPTION

TOTAL SYSTEM COST – 15-20% REDUCTION

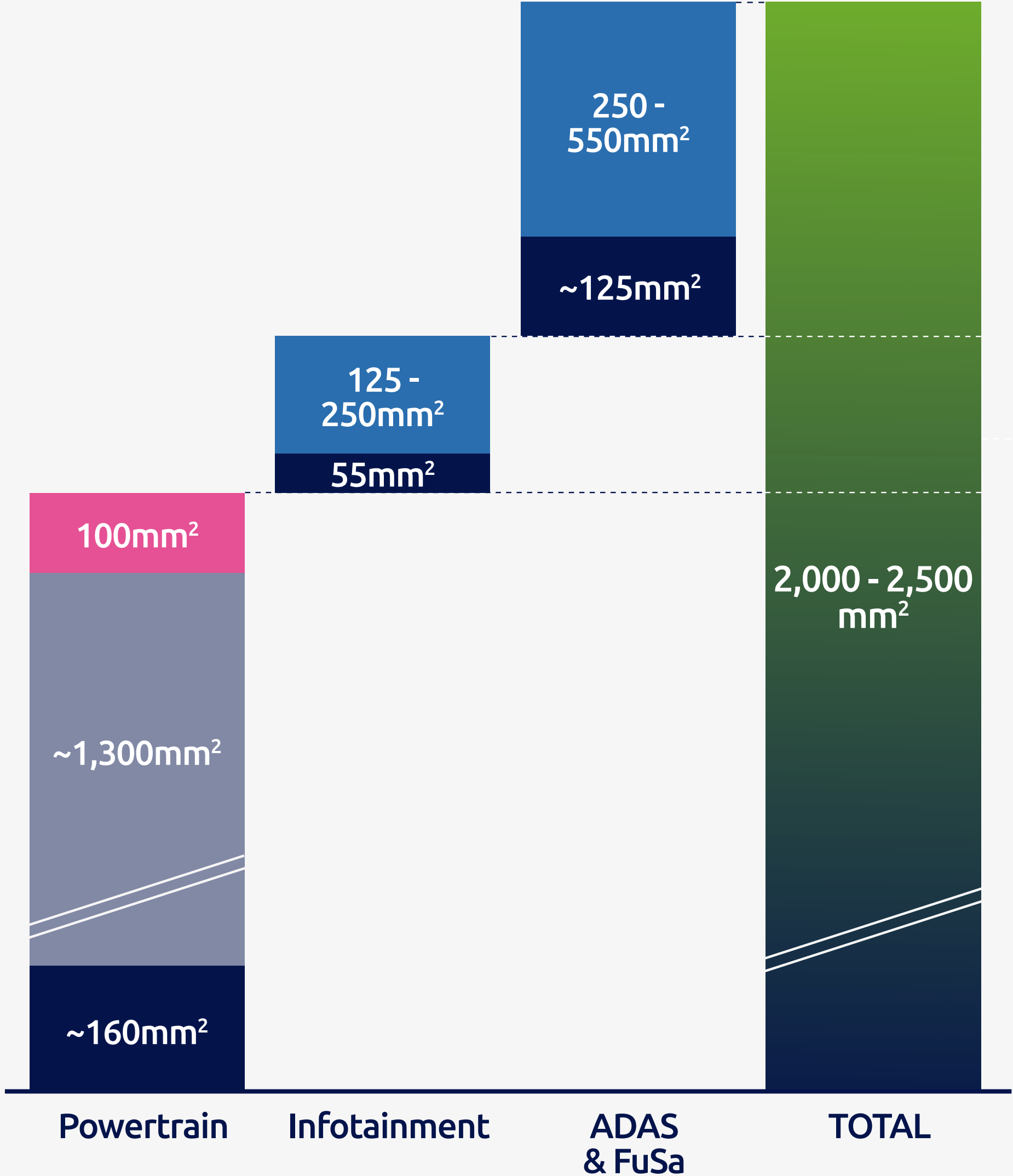
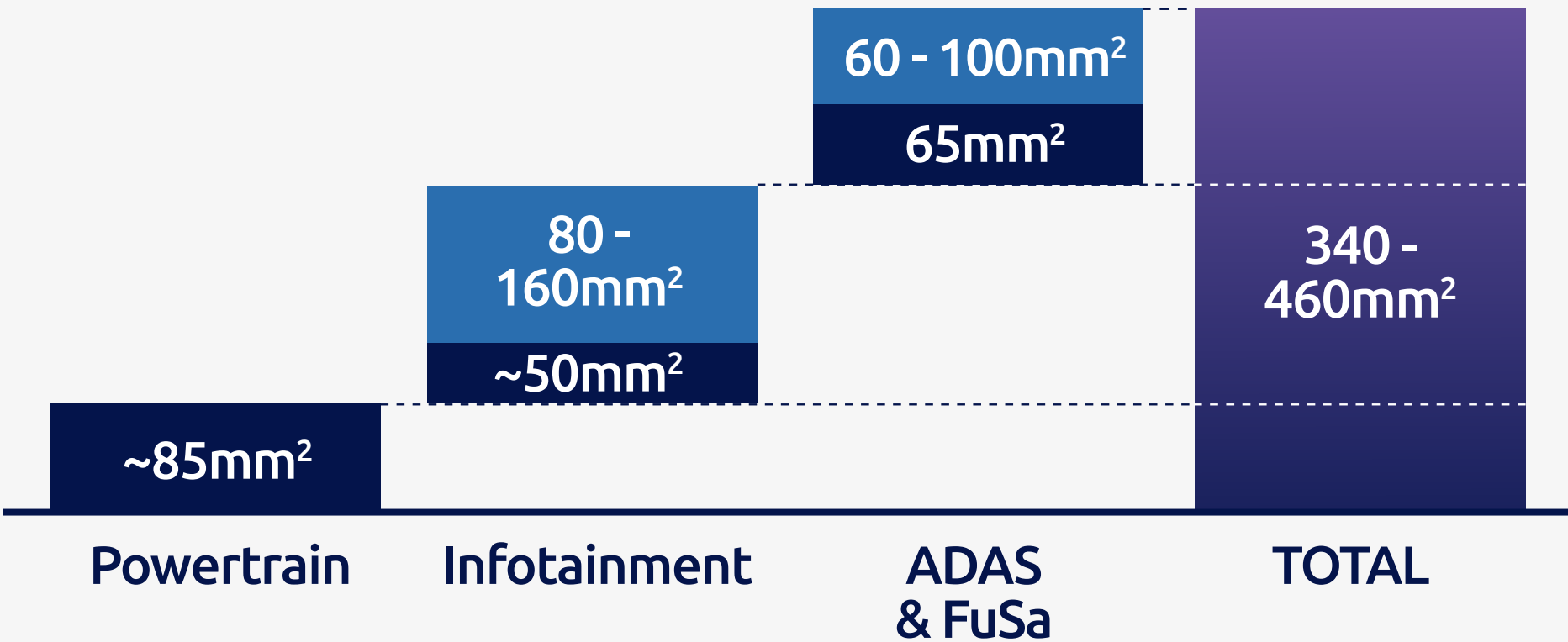


Shorter charge time 800V	~50% FASTER
Increased battery range	~5-10% LONGER
Reduced system / battery cost	~\$500-\$1,000



# AUTOMOTIVE CONTENT OPPORTUNITY IN THE NEXT THREE YEARS IN mm<sup>2</sup>

- Auto Power-SOI
- Auto FD-SOI
- Auto SmartSiC™
- Auto Power-GaN



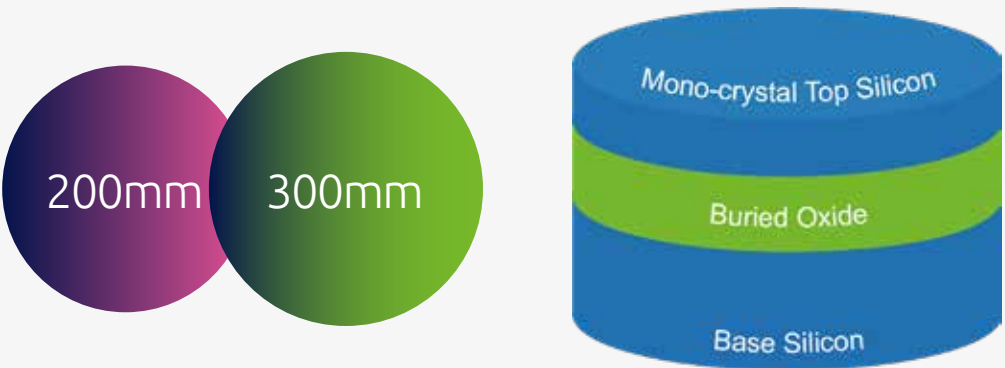
FY21

TOWARD FY26



# AUTOMOTIVE & INDUSTRIAL PRODUCT PORTFOLIO

## AUTO POWER-SOI



### AUTO POWER-SOI FOR IVN, PMIC, SBC, BMS & GATE DRIVERS



#### AUTO POWER-SOI ENABLES SUPERIOR PERFORMANCE OVER BULK SILICON

EFFICIENT

>10%

SYSTEM COST  
REDUCTION & EFFICIENCY  
IMPROVEMENT

SAFER

HIGHER

ROBUSTNESS,  
NOISE IMMUNITY  
AND OPERATING  
TEMPERATURE

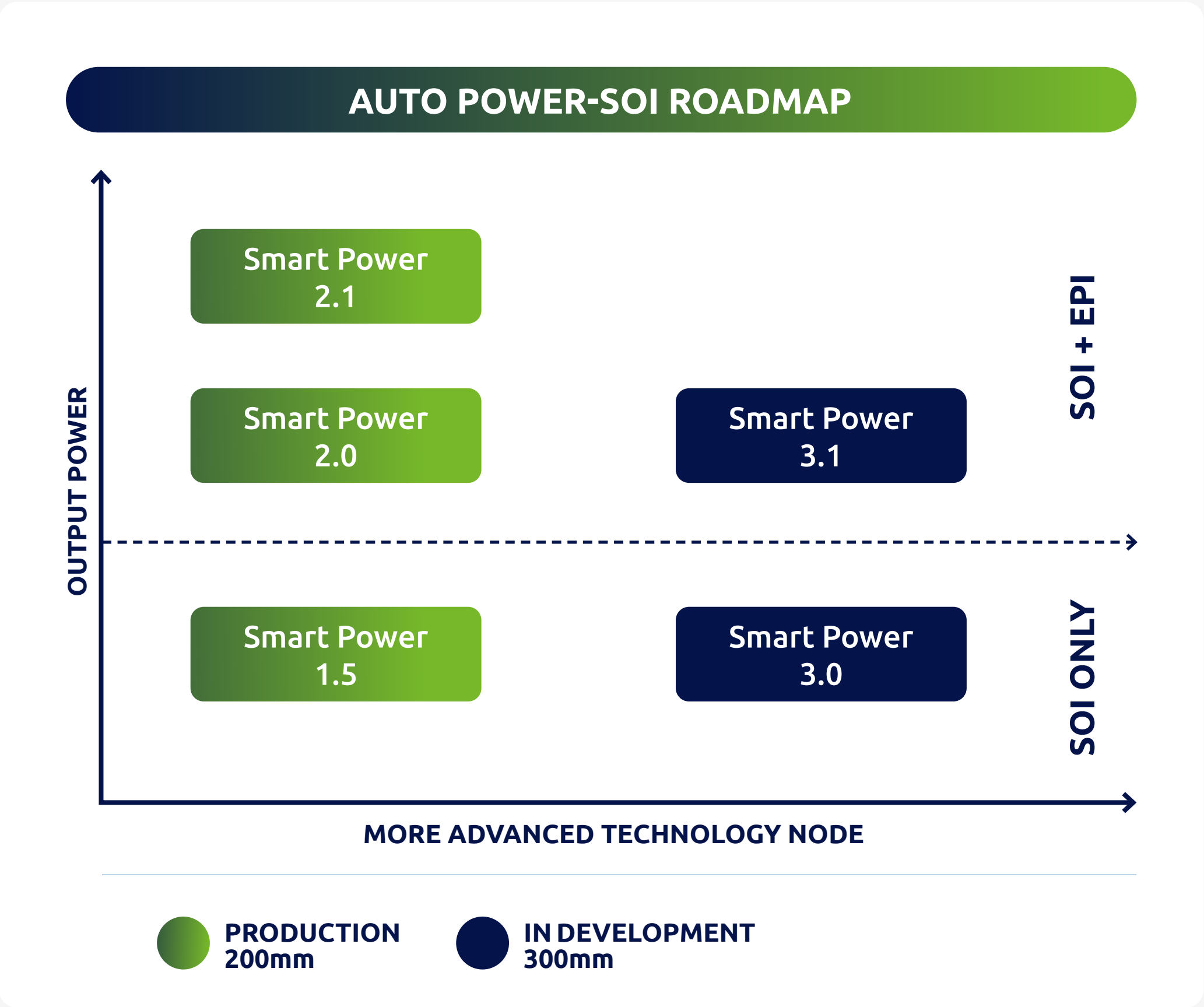
BETTER

> 40x

SMALLER  
ISOLATION AREA

> 50%

DIE SIZE REDUCTION



# AUTOMOTIVE & INDUSTRIAL PRODUCT PORTFOLIO

## AUTO FD-SOI



AUTO FD-SOI EMPOWERS THE FUTURE OF AUTOMOTIVE AND INDUSTRIAL SMART DEVICES



### AUTO FD-SOI ENABLES SUPERIOR PERFORMANCE OVER BULK SILICON AND FINFET

SAVING POWER

~30%

GREENHOUSE GASES  
EMISSION REDUCTION

SAVING LIVES

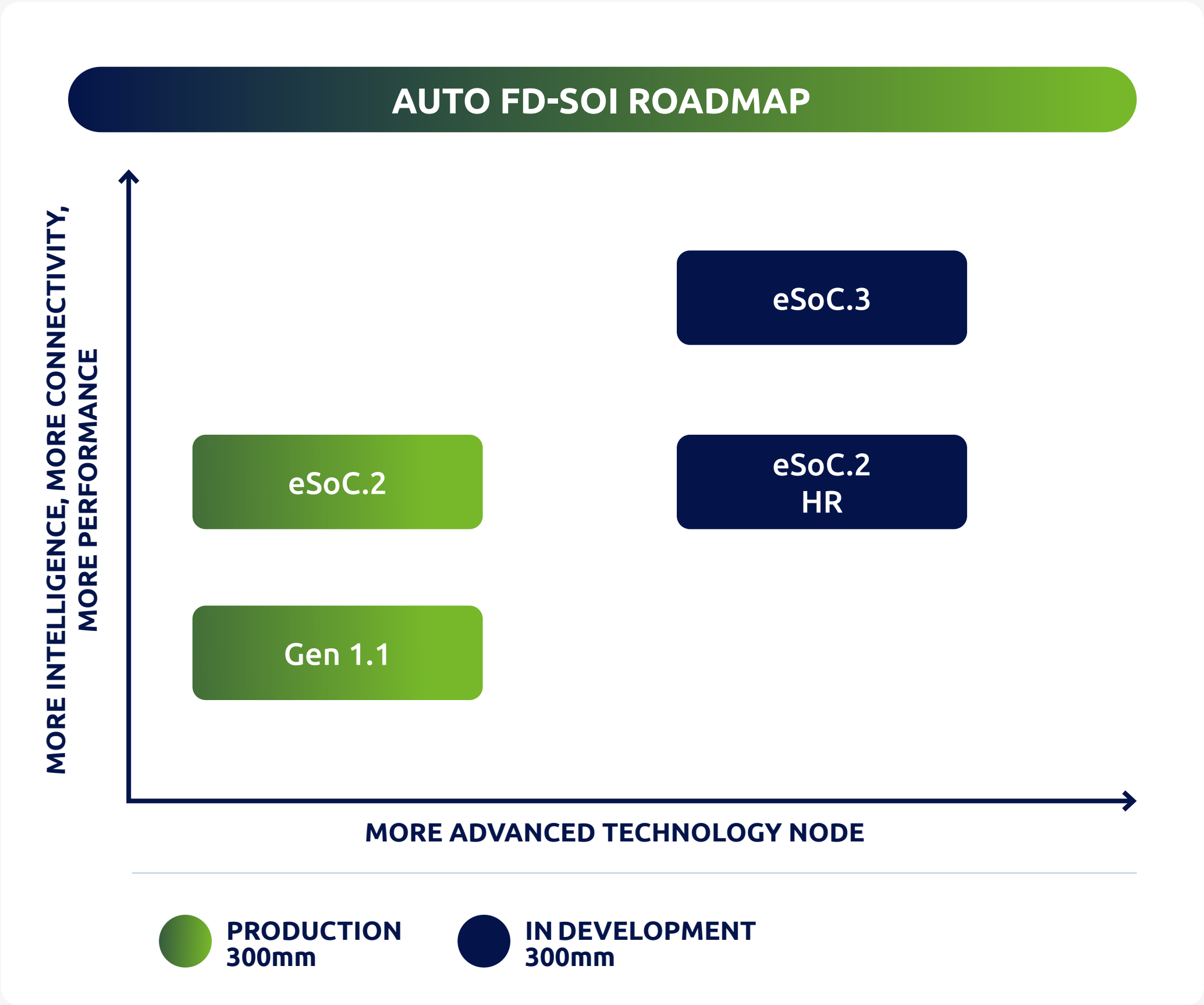
~50%

HIGHER DETECTION  
RANGE IN RADARS

SAVING COST

~50%

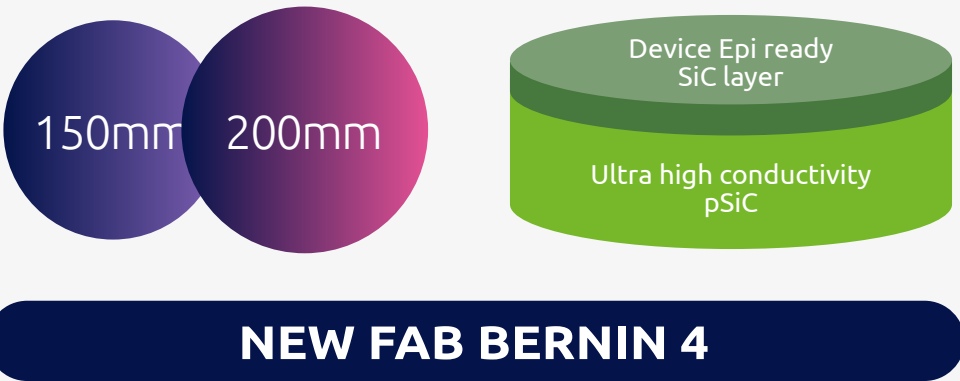
DIE SIZE  
REDUCTION





# AUTOMOTIVE & INDUSTRIAL PRODUCT PORTFOLIO

## AUTO SmartSiC™



### AUTO SmartSiC™, A DISRUPTIVE SOLUTION FOR LARGER SiC ADOPTION



Powertrain



Charging infrastructure



Renewable energies

### AUTO SMARTSIC™, A NEW PARADIGM FOR DEVICE PERFORMANCE AND PRODUCTIVITY

GREENER

~70%

LOWER CO<sub>2</sub> FOOTPRINT  
THAN STANDARD SiC  
WAFERS

FASTER

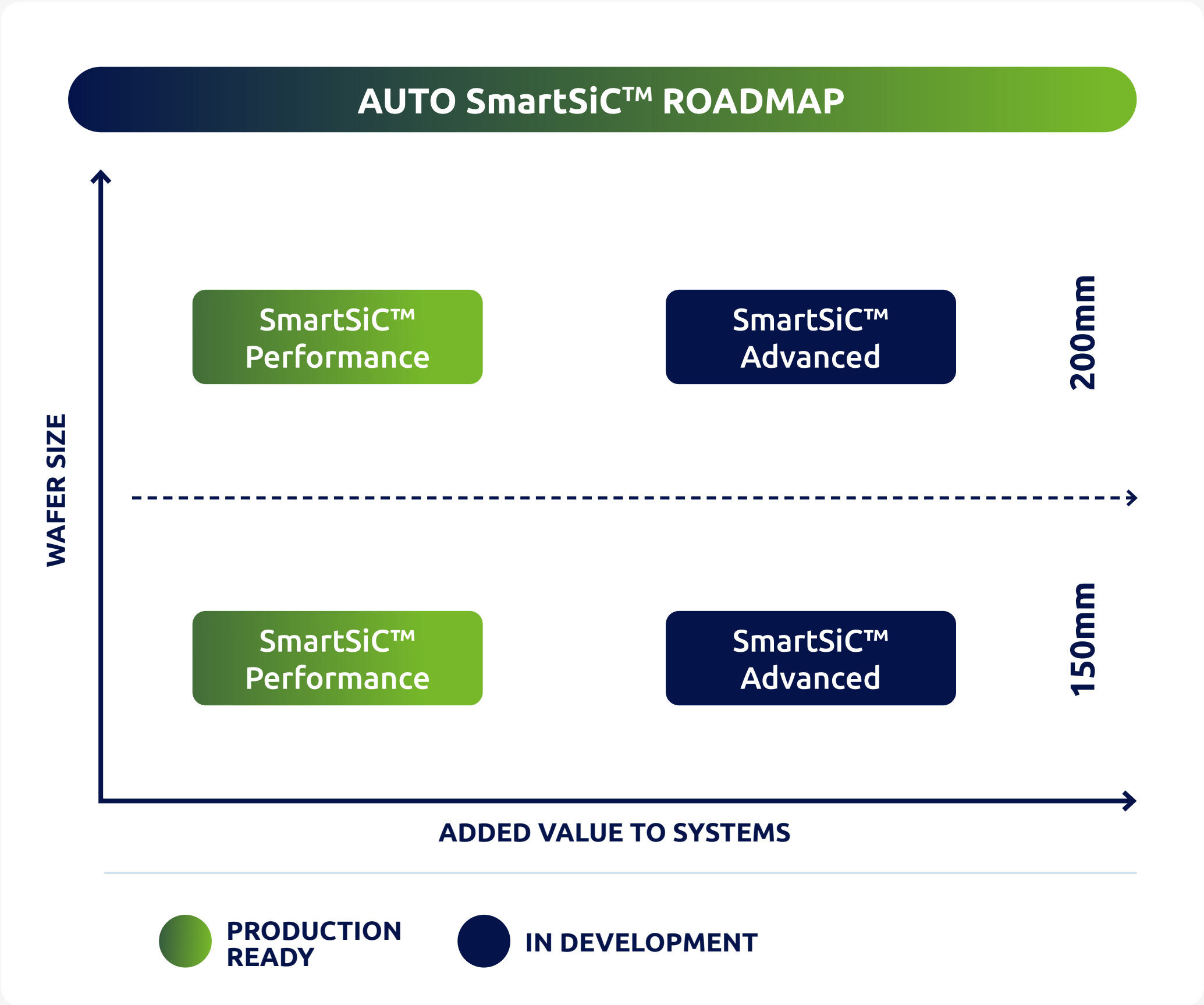
2 YEARS

ACCELERATION OF MASS  
DEPLOYMENT OF 200MM  
SiC WAFERS

BETTER

UP TO 20%

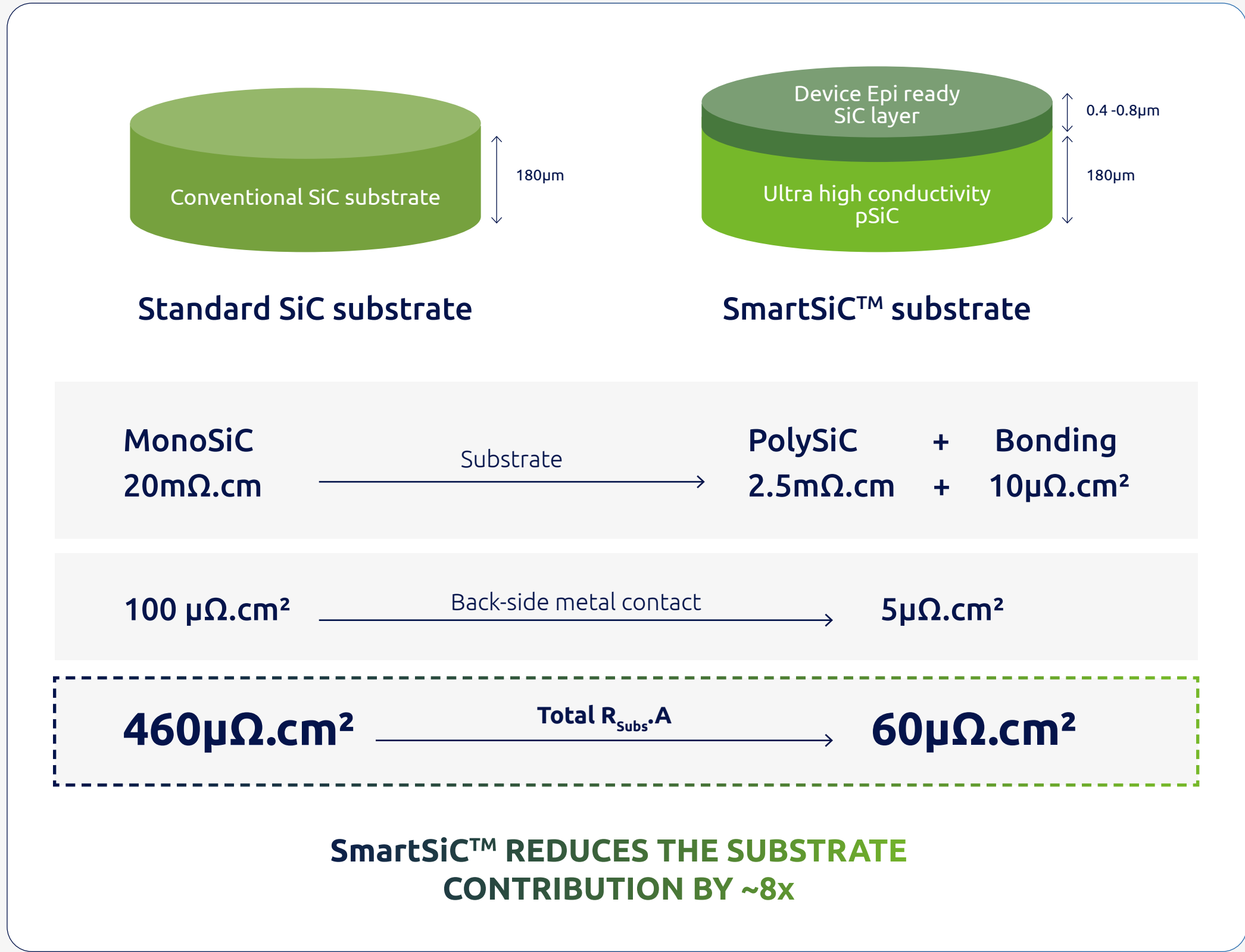
HIGHER POWER DENSITY,  
ENABLING MORE  
COMPACT, LIGHTER AND  
LESS COSTLY SYSTEMS



# SmartSiC™ ENGINEERED SUBSTRATE

## DRIVING SIGNIFICANT PERFORMANCE GAIN AT DEVICE LEVEL

Lower  $R_{DSon} \cdot A$



SmartSiC™ gains the equivalent to one-generation device improvements

MOSFET 1200V		A	B	C	D
Generation (release year)		3 (2022)	3 (2021)	2 (2022)	4 (2022)
MOSFET design		Planar	Planar	Trench	Trench
Back-grinding Thickness (in μm)		180	180	110	150
SmartSiC™	Gain (*) vs SiC	14.9%	14.9%	11.2%	14%

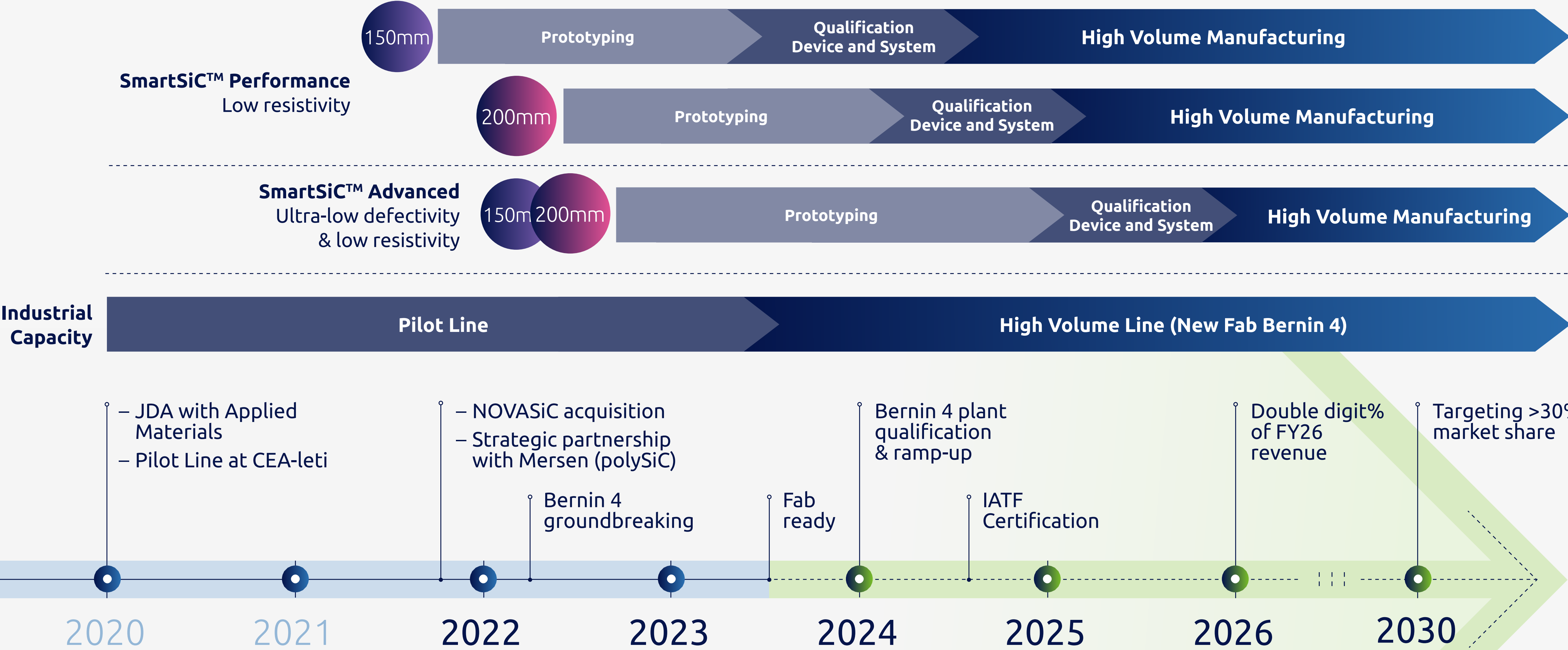
ADDITIONAL GAINS OF SmartSiC™ ON BETTER FLATNESS  
AND EASIER BACK-GRINDING PROCESS  
+  
GAINS ON CAPEX AVOIDANCE

\* Soitec estimates based on publicly available information





# SmartSiC™ ROADMAP



# AUTOMOTIVE & INDUSTRIAL KEY MESSAGES

## AUTOMOTIVE & INDUSTRIAL DIVISION EXPECTED TO TRIPLE ITS REVENUE BY FY26

- We leverage 2 main trends, Digitalization & Electrification of the car
- The automotive semiconductor content opportunity is expected to x4 between FY21 and FY26
- SmartSiC™ expected to generate around 50% of the division revenue by FY26

## A DYNAMIC AND ATTRACTIVE PRODUCT PORTFOLIO

- Power-SOI, a critical product to enable greater performance and support an increasing number of functional safety features
- FD-SOI is now a reality in the automotive industry, addressing the blossoming market of radars / LiDARs, the transition to Zonal Architectures and enabling AI for mobility

## SMARTSiC™, AN INDUSTRY GAME CHANGER

- Silicon Carbide is positioning itself as the new standard for EV powertrain and an asset to accelerate the transition to EV
- SmartSiC™: Greener, Faster, Better. Value Creation & Performance demonstrated
- First customer in Qualification; SmartSiC™ in cars expected by end of CY24
- On track with our roadmap, ready for 1st production in Sept 2023, at our new Fab Bernin 4. Ramp-up in FY25



# SMART DEVICES

Michael Reiha



# GROWTH DRIVERS SMART DEVICES

## SMART COMPUTE

Extending AI toward Edge Computing

- Neural Network accelerators
- Always-on wearable devices
- Industry 4.0 sensors and robots
- Network flow processors

## SMART SENSE

Capture data in all environments

- Smart hearables / Voice recognition
- 3D image sensors / Facial recognition
- LiDARs / 3D sensing
- Environmental sensors

## SMART NETWORK

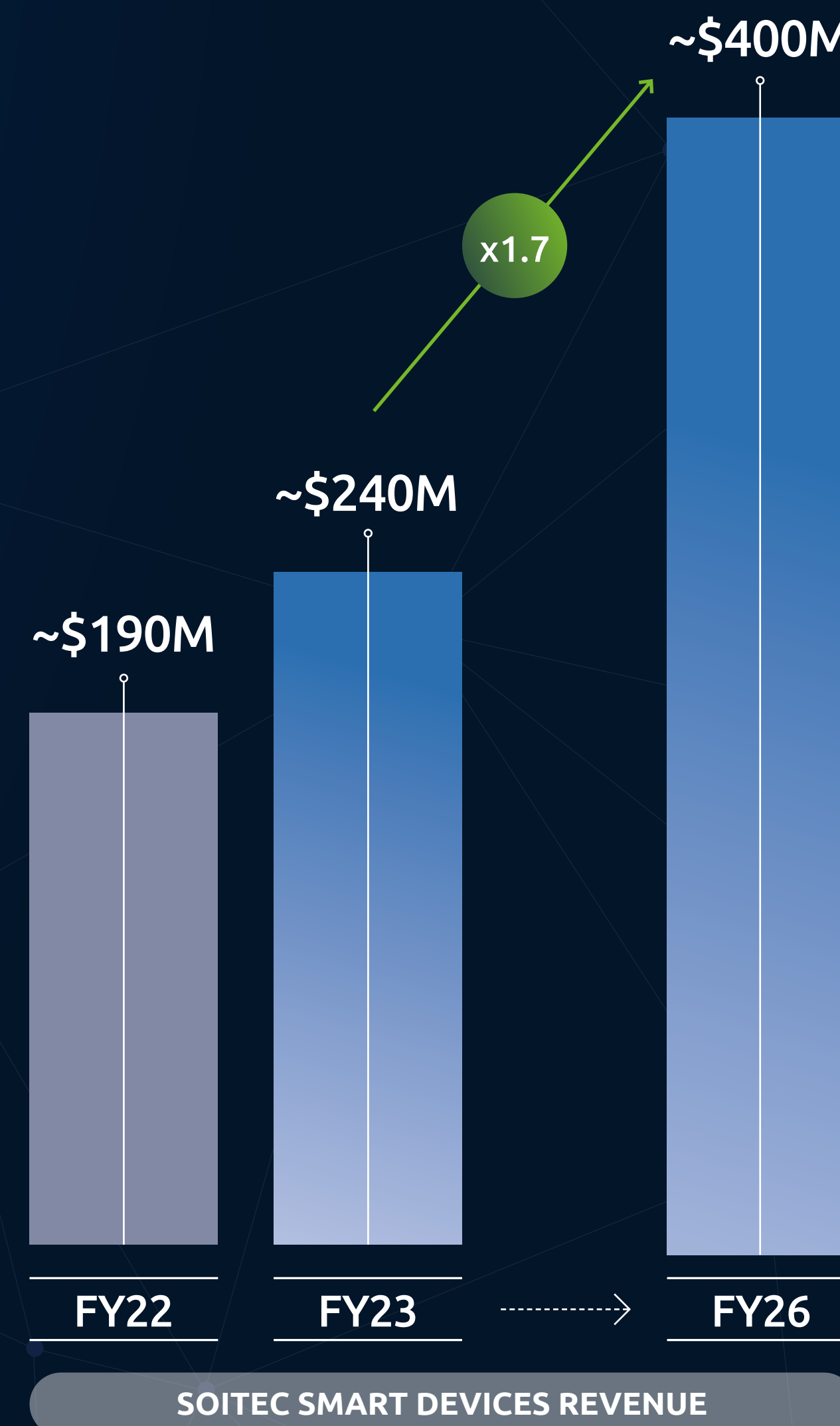
Integrated connections at higher speed

- Pluggable optical transceivers
- Network switch ASICs
- Fiber-To-The-Home
- Co-Packaged Optical I/O
- AI / ML interconnects

## AREAS FOR DISRUPTIONS

Targeting the next growth drivers

- *Where Network meets Cloud*
- Connectivity Standards Alliance (Matter)
- Quantum computing
- Edge security
- Sustainable agriculture

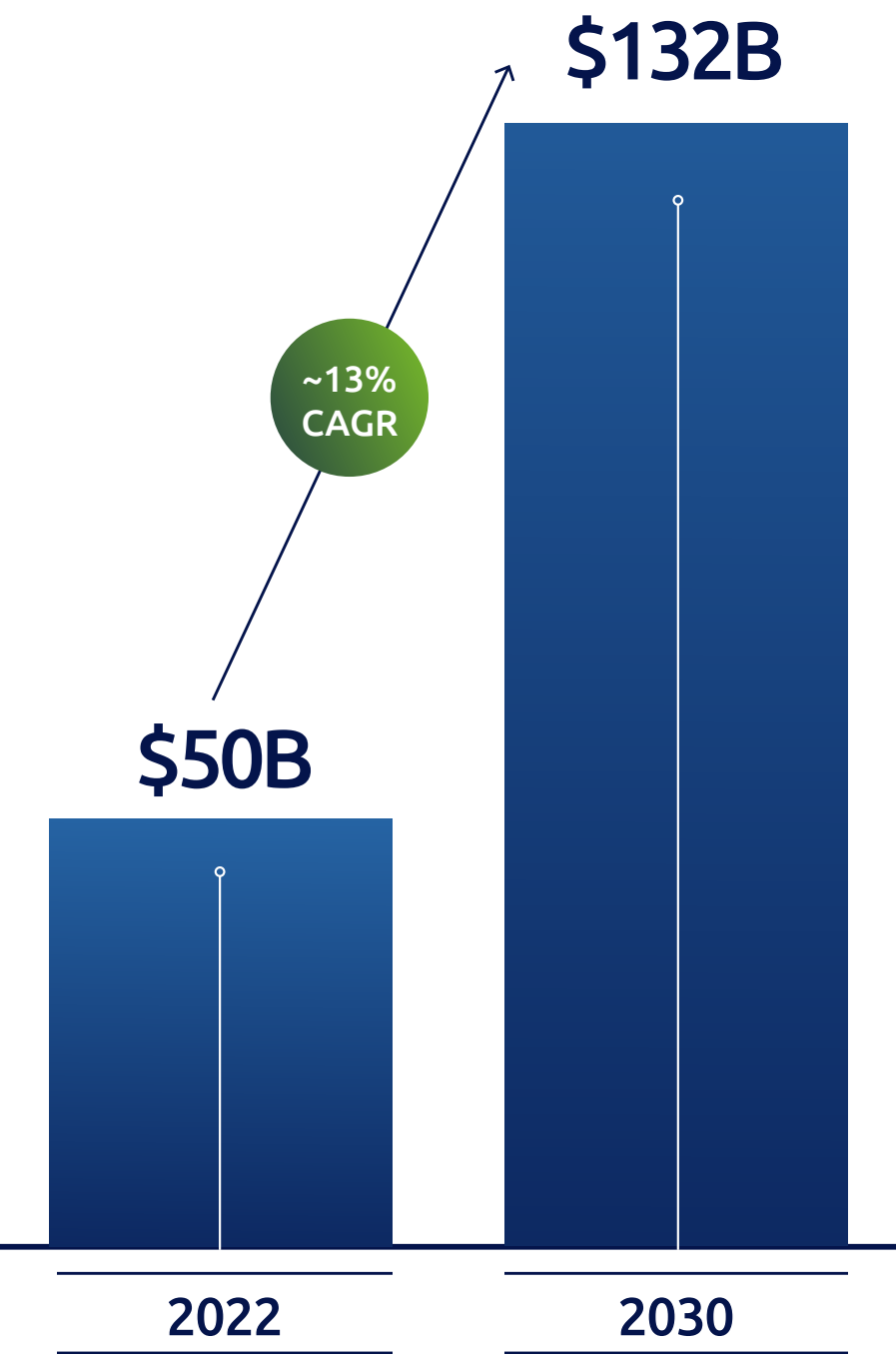




# SMART SENSE PERCEPTION AT THE EDGE



CMOS IMAGE SENSOR HEARABLE MARKET  
TO GROW ~13% CAGR OVER 2022-2027



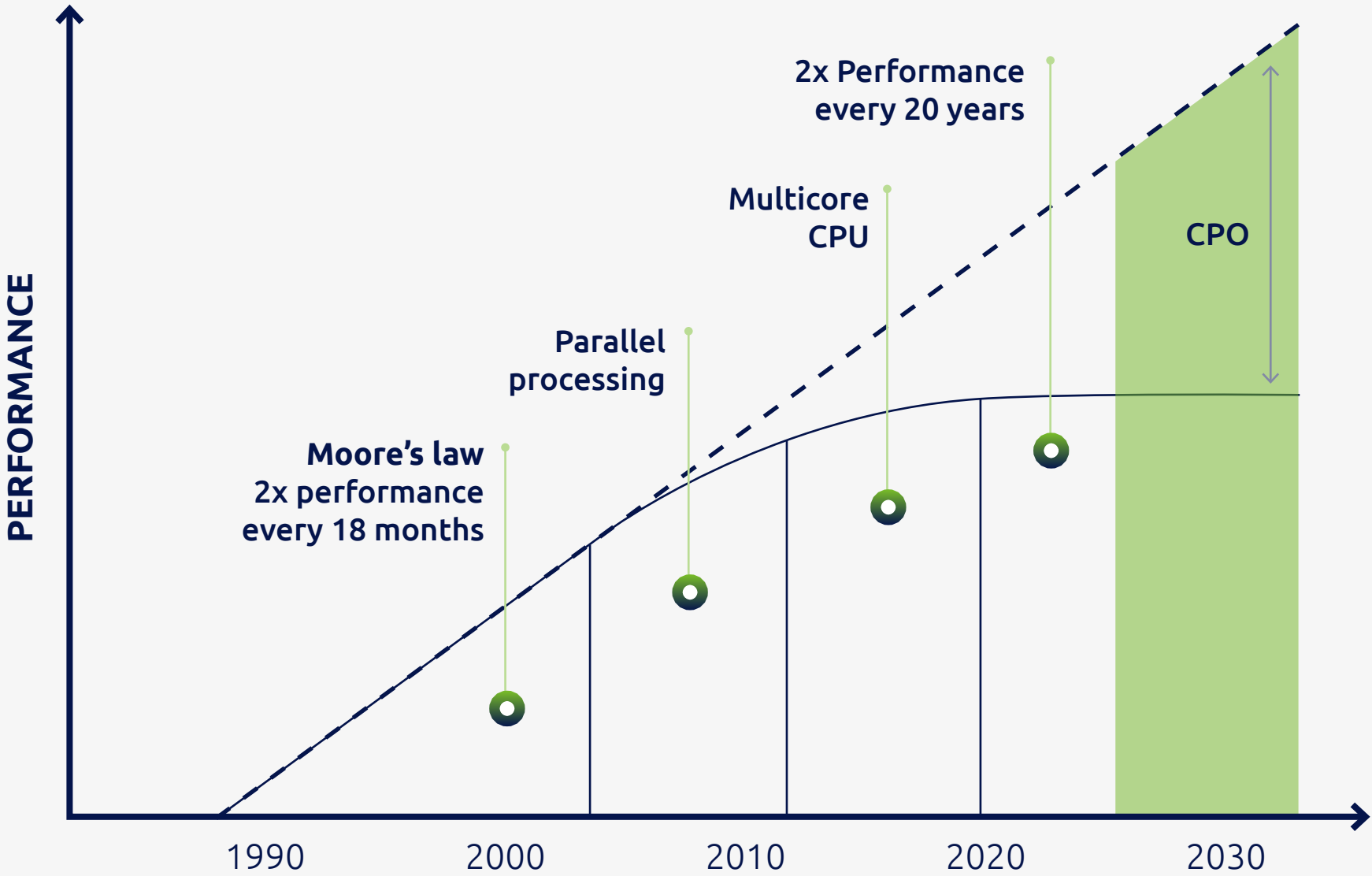
Source: ReportLinker, VerifiedMarketResearch



# SMART NETWORK

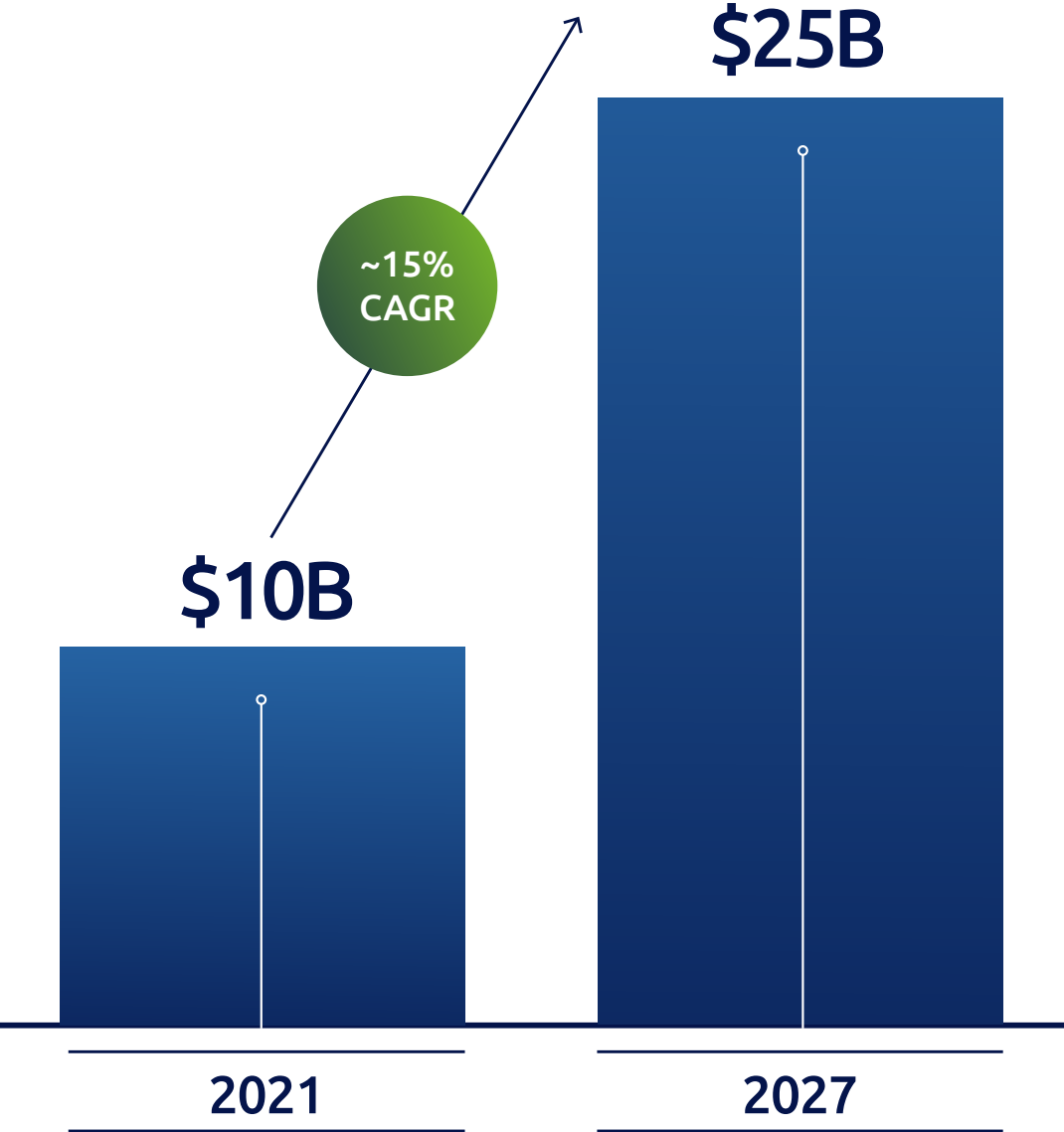
## SILICON PHOTONICS FOR DATACOM AND TELECOM

### CO-PACKAGED OPTICS (CPO) AS A MEANS TO EMULATE MOORE'S LAW



Source: Broadcom

### OPTICAL TRANSCEIVER MARKET GROWING ~15% CAGR OVER 2021-2027



Source: Yole

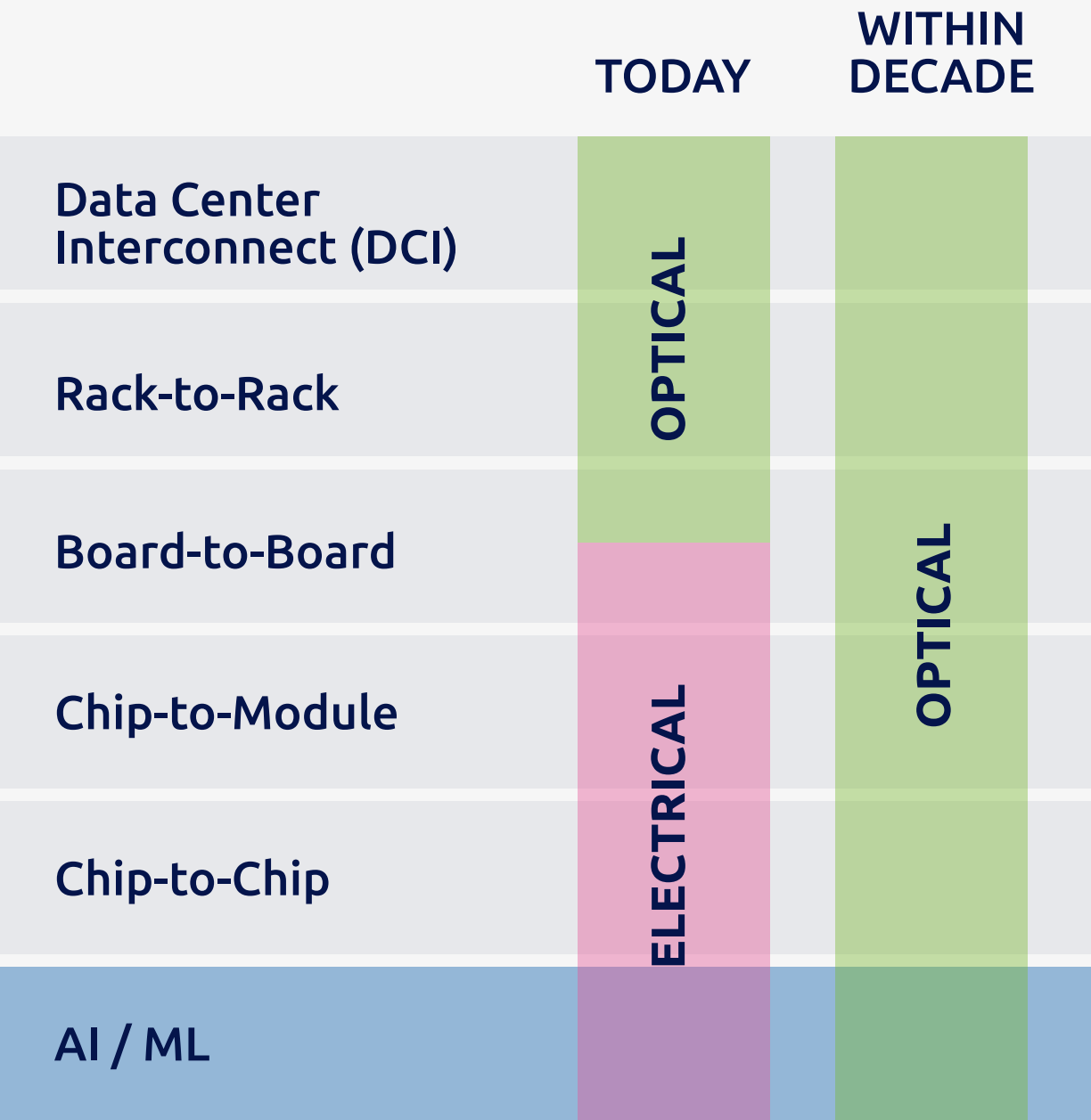




# SMART NETWORK

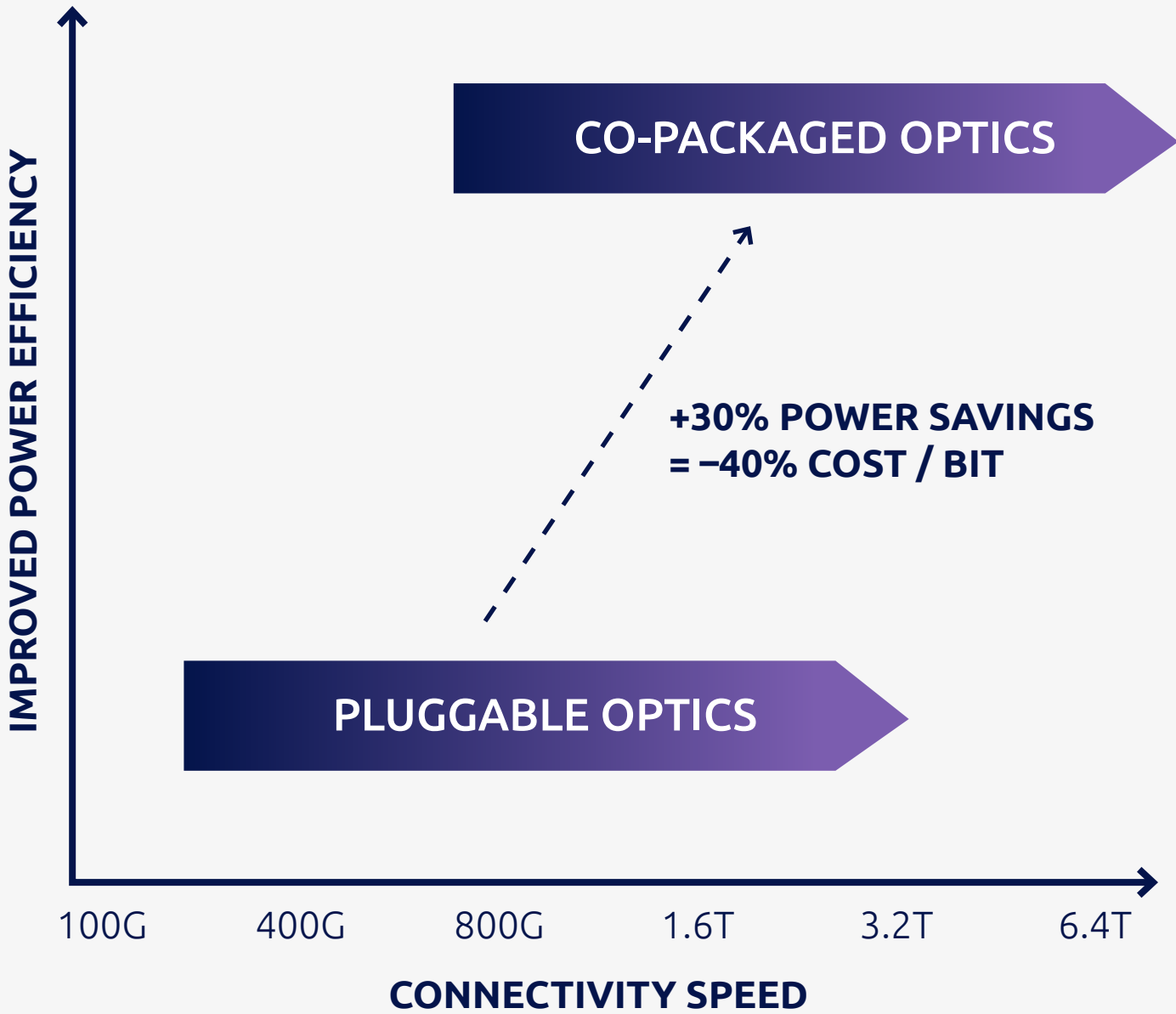
## AI / ML ENABLEMENT AS A NETWORK SOLUTION

CURRENT AI / ML INFRASTRUCTURE IS BANDWIDTH x DISTANCE LIMITED

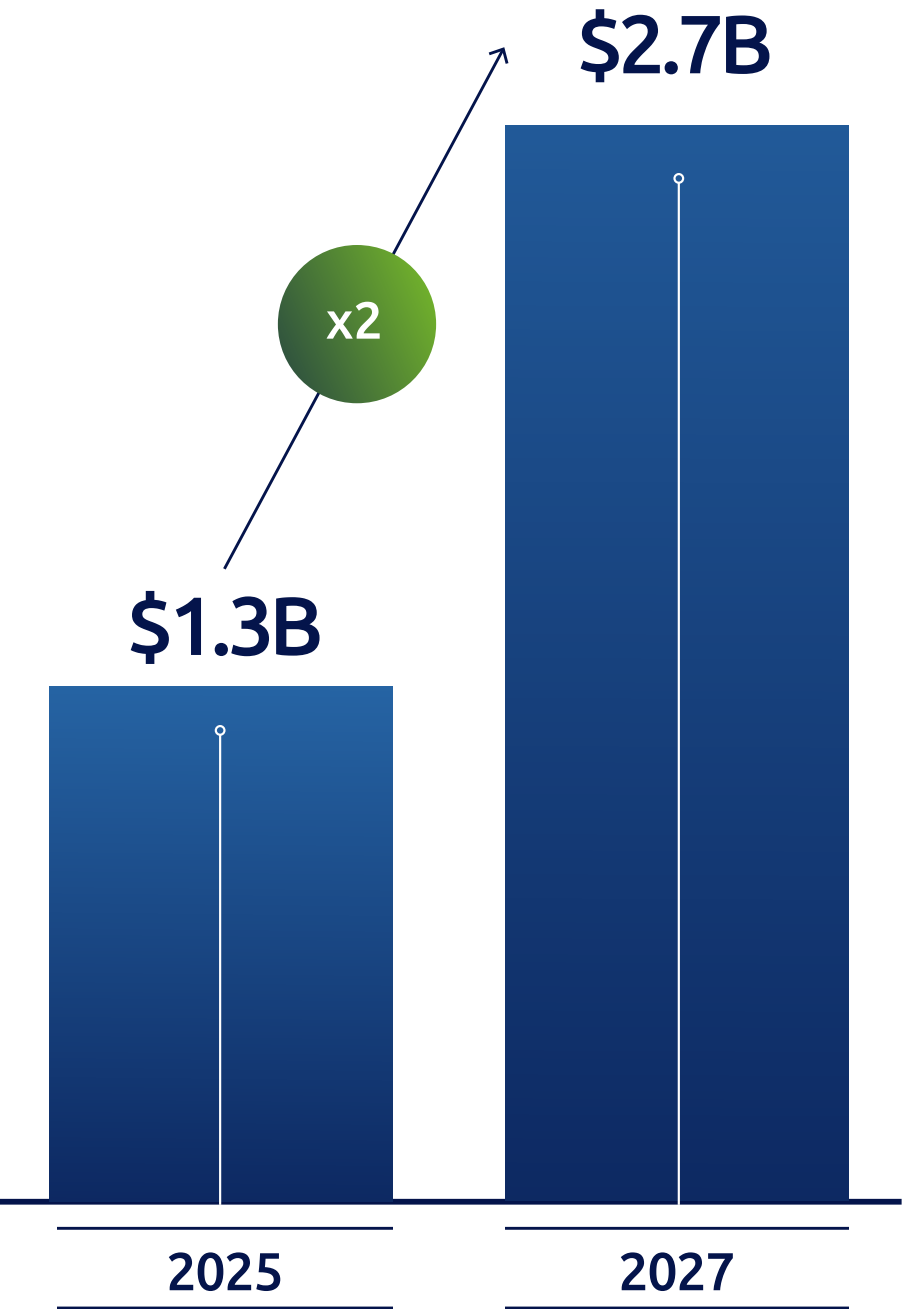


Source: Yole & Soitec

FUTURE AI / ML INFRASTRUCTURE AS A MULTI-LAYERED NETWORK



CPO MARKET TO DOUBLE OVER 2025-2027

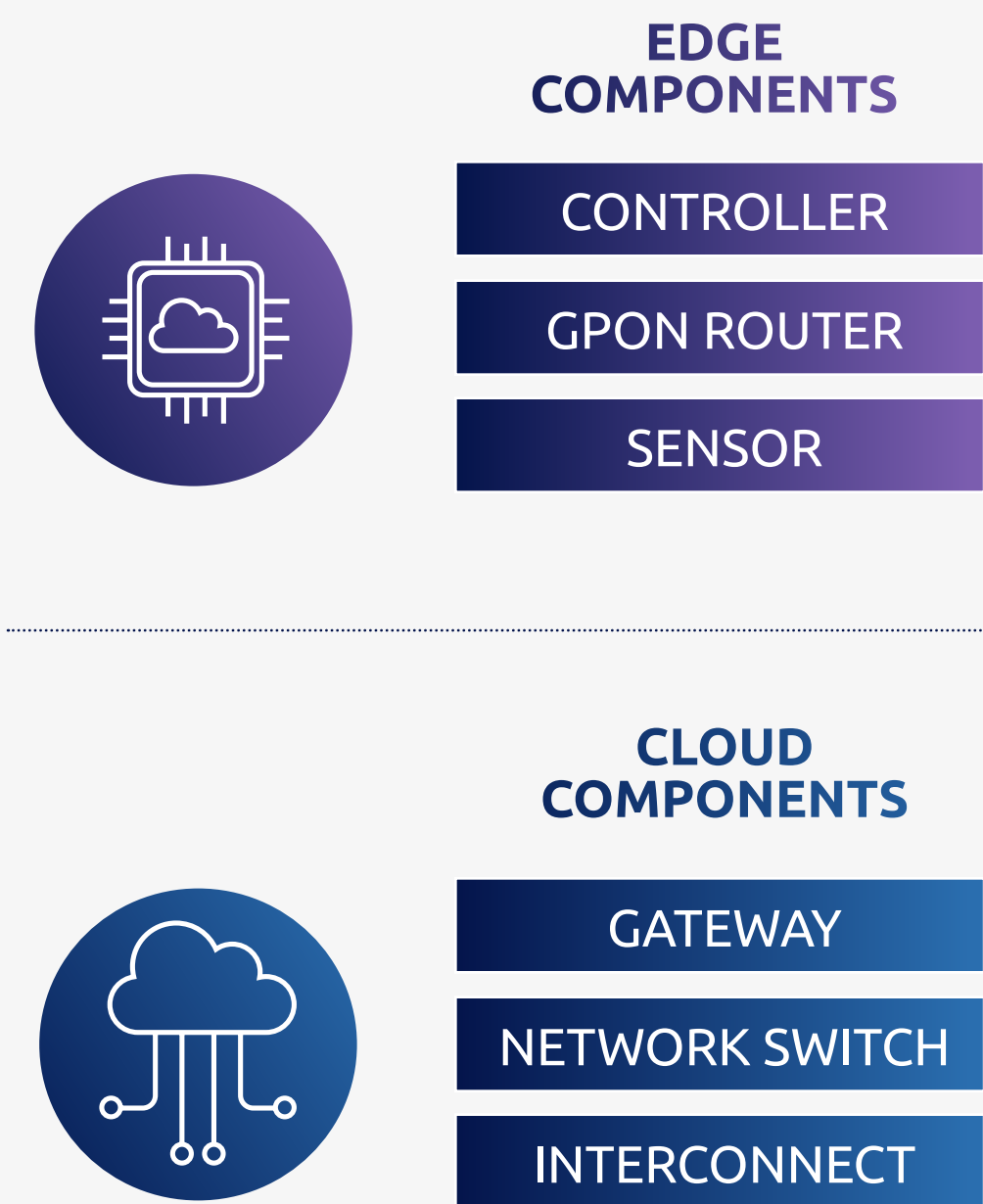


Source: ResearchandMarkets

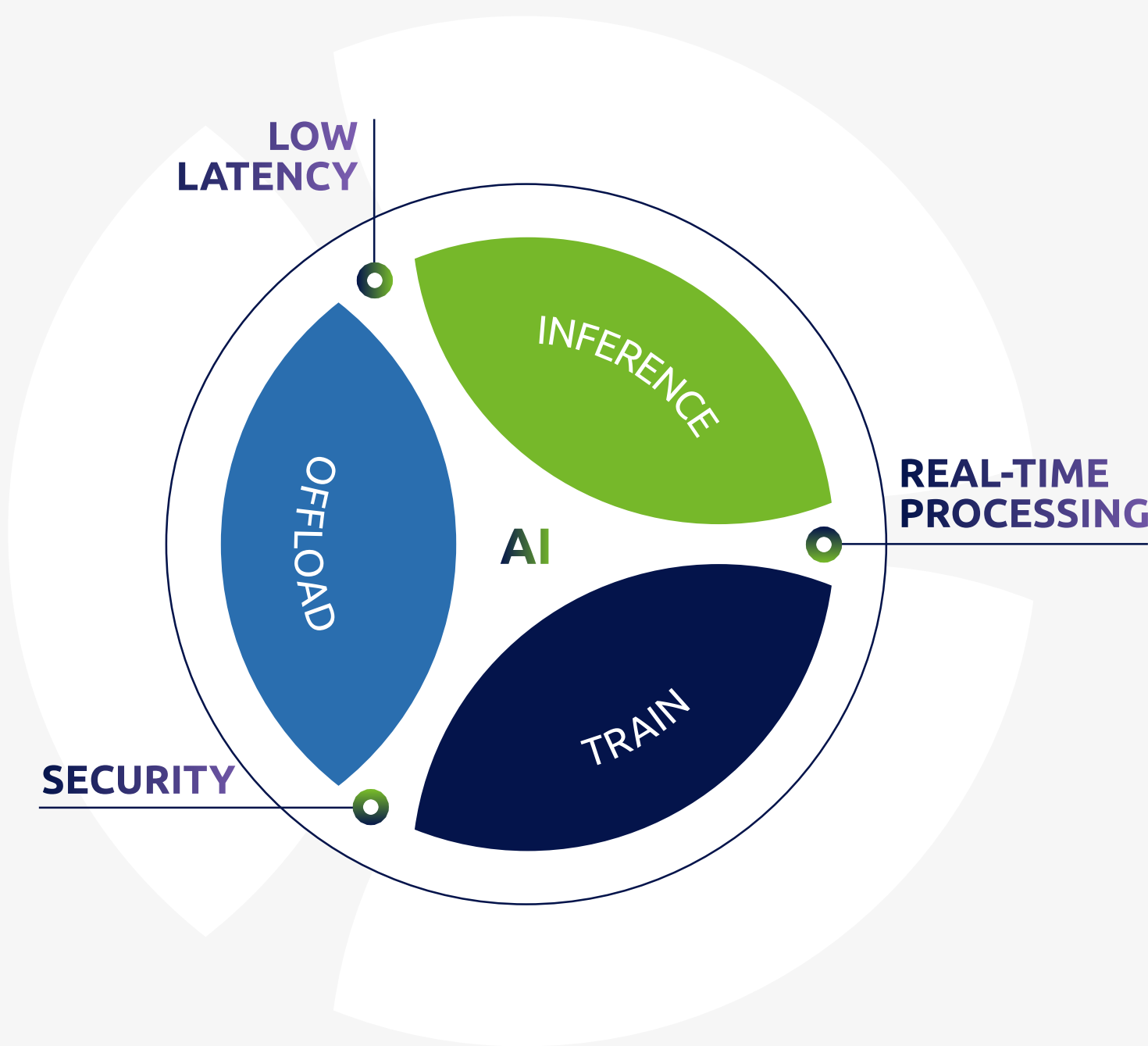


# SMART COMPUTE BRIDGING CLOUD TO THE EDGE

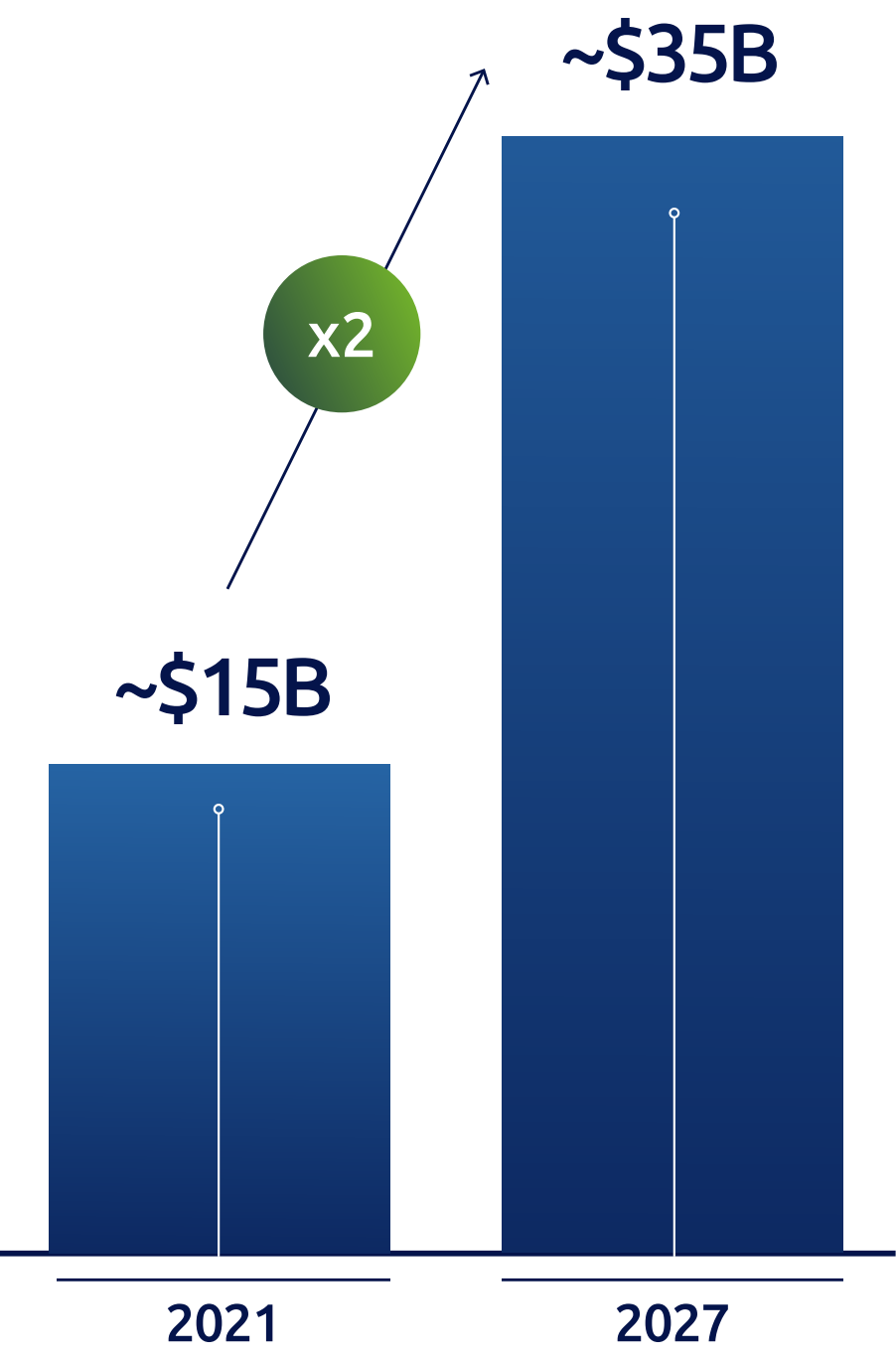
## SOITEC COMPUTING



## WHERE SOITEC MEETS AI




## EDGE AI CHIPSET MARKET SET TO DOUBLE THROUGH 2027



Source: ABI 2022




# SMART DEVICES PRODUCT PORTFOLIO ADDRESSES THE SMART DEVICES PILLARS



Ultra-thin Mono-crystal Top Silicon  
Ultra-thin Buried Oxide  
Base Silicon

**Smart FD-SOI**

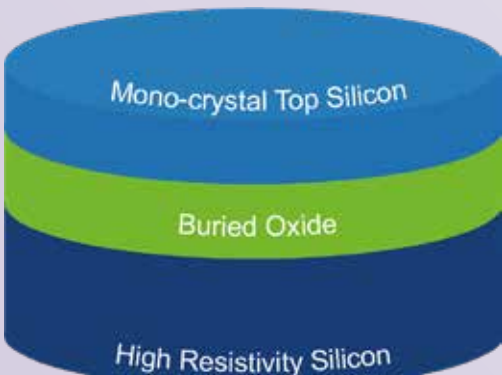
Crossover MCUs, connected MCUs, scalable FPGAs



Mono-crystal Top Silicon  
Thin Buried Oxide  
Base Silicon

**Smart Imager-SOI**


For improved imager performance in NIR



Mono-crystal Top Silicon  
Buried Oxide  
High Resistivity Silicon

**Smart Photonics-SOI**

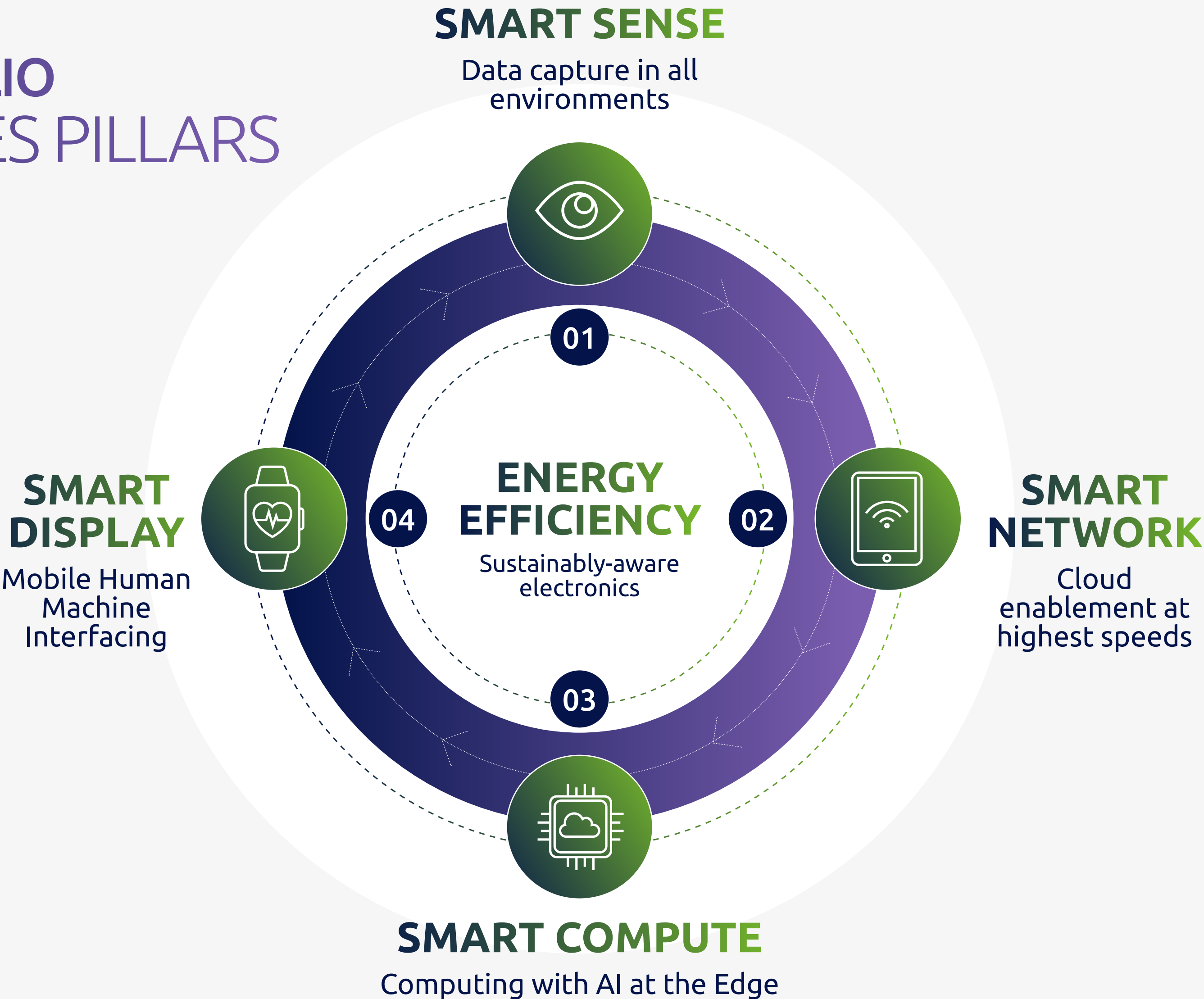
Optical transceivers and Co-Packaged Optics (CPO)



Mono-crystal Top Silicon  
Buried Oxide  
Base Silicon (HR option)

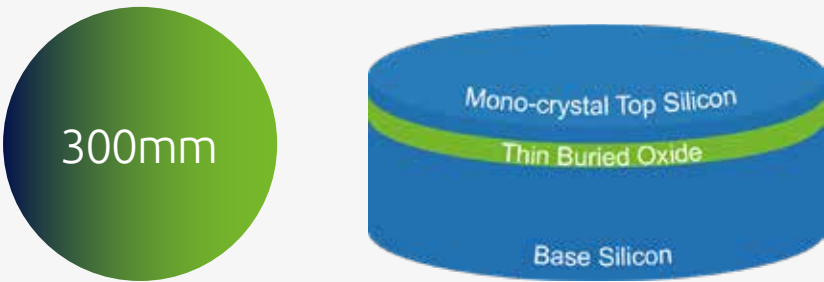
**Smart PD-SOI**

High performance computing



# SMART DEVICES PRODUCT PORTFOLIO

## SMART IMAGER-SOI



### SMART IMAGER-SOI TARGETS 3D STACKING IMAGERS

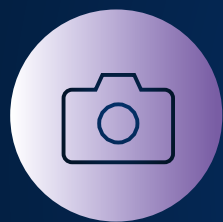


Secure 3D Facial Recognition



Advanced Embedded Image processing

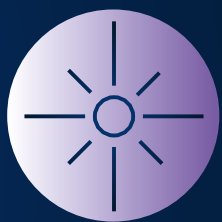
### OUR SMART FD-SOI SUBSTRATE ENABLES



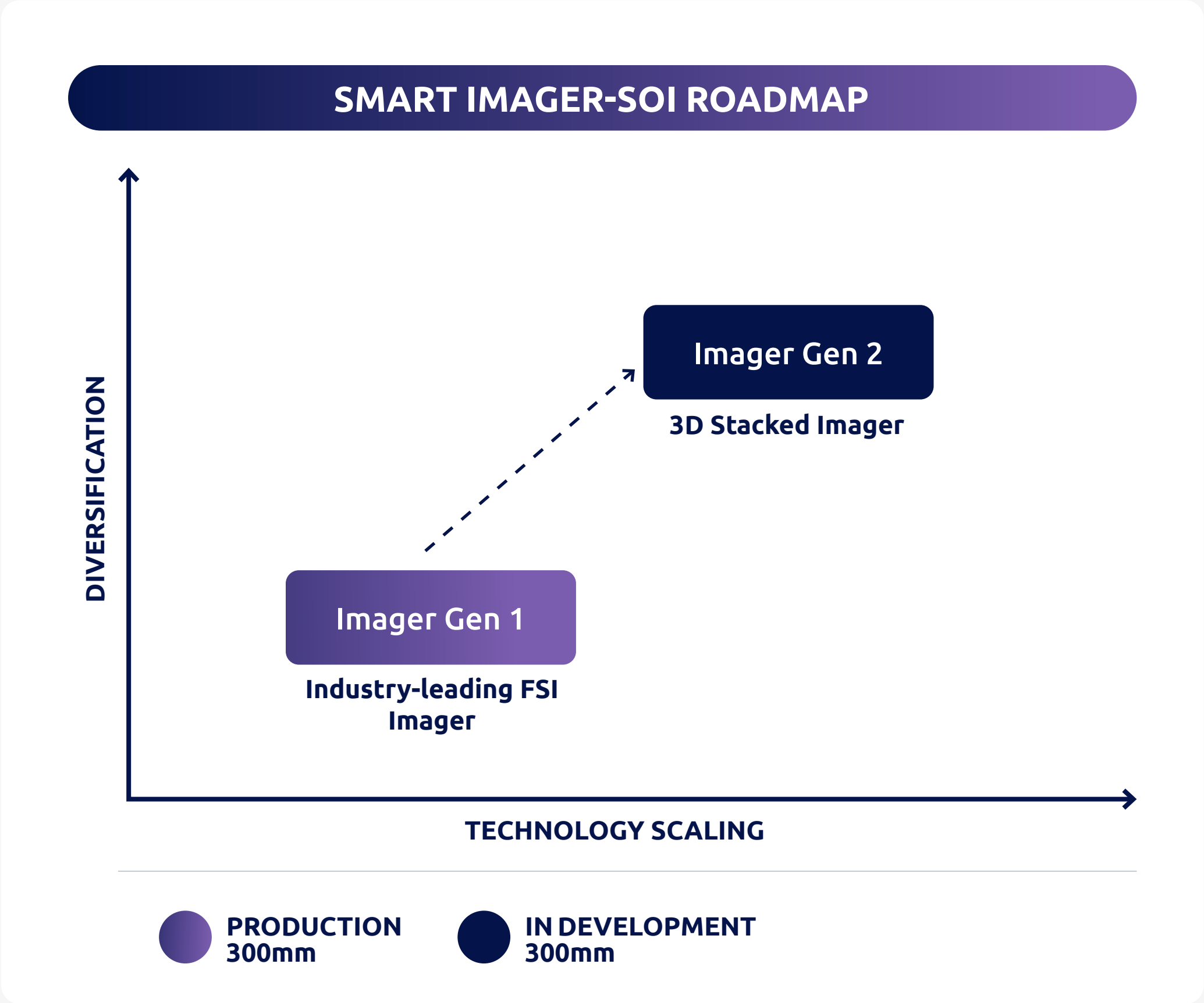
HIGHER RESOLUTION  
FOR SECURITY  
APPLICATION



INCREASE  
ON-CHIP IMAGE  
PROCESSING



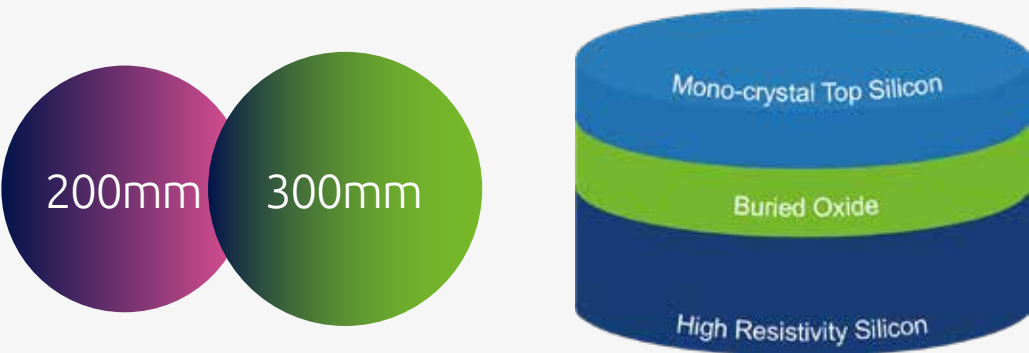
IMPROVE  
DETECTION EFFICIENCY  
AND REDUCE POWER



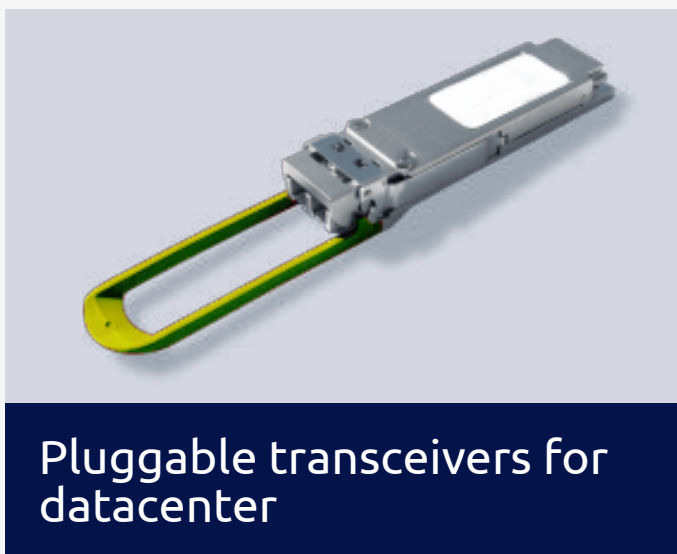


# SMART DEVICES PRODUCT PORTFOLIO

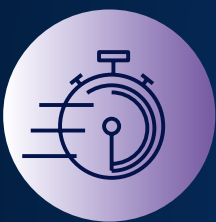
## SMART PHOTONICS-SOI



### SMART PHOTONICS-SOI IS TARGETING ENERGY-EFFICIENT FAST DATA TRANSFER



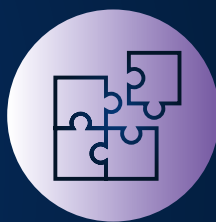
### OUR SMART PHOTONICS-SOI SUBSTRATE ENABLES



FASTER DATA  
TRANSFER RATE

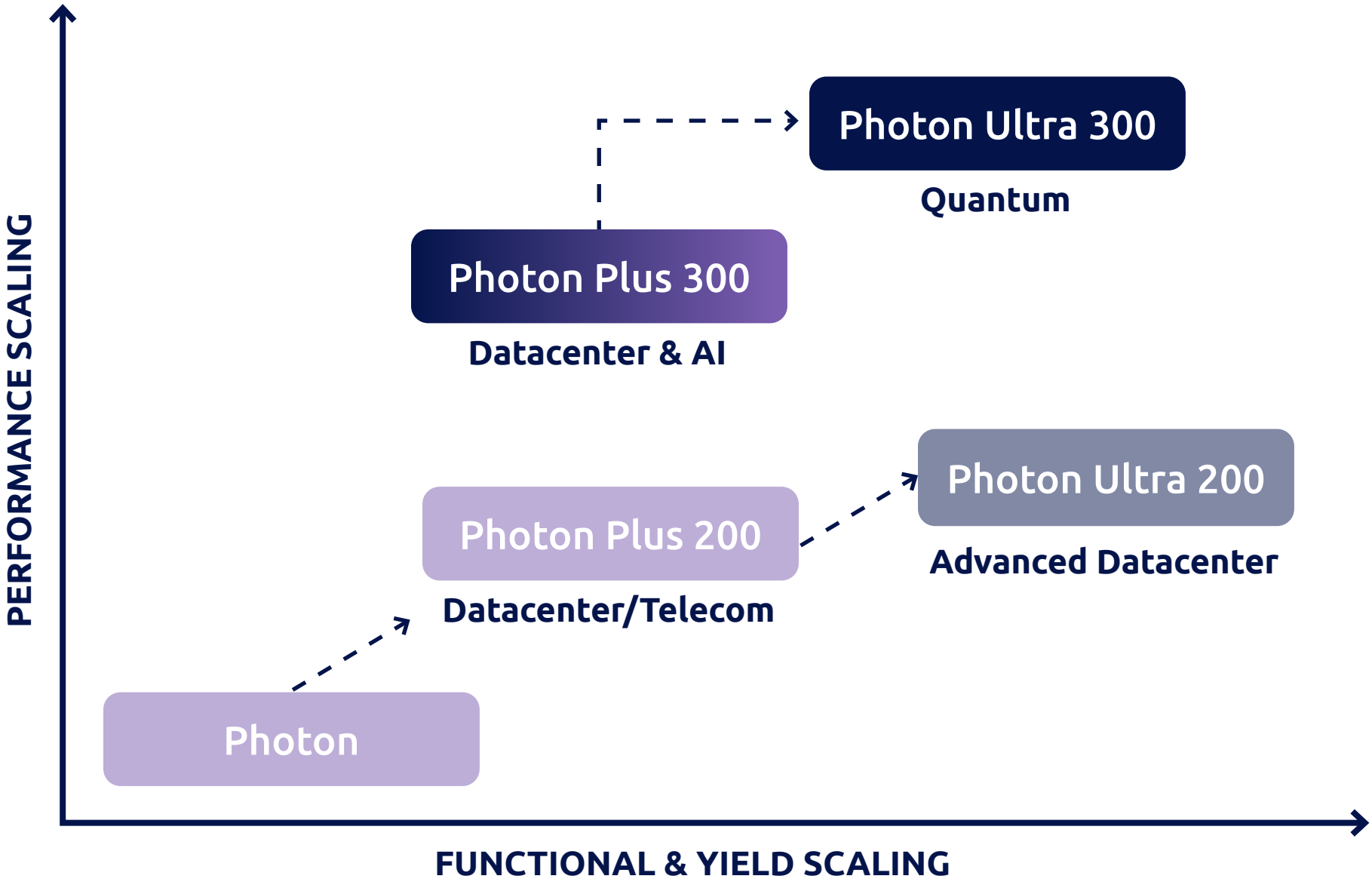


LOWER POWER  
CONSUMPTION



SIMPLER  
PACKAGING

### SMART PHOTONICS-SOI ROADMAP



# SMART DEVICES PRODUCT PORTFOLIO

## SMART FD-SOI



### SMART FD-SOI BENEFITS ALL PORTABLE APPLICATIONS



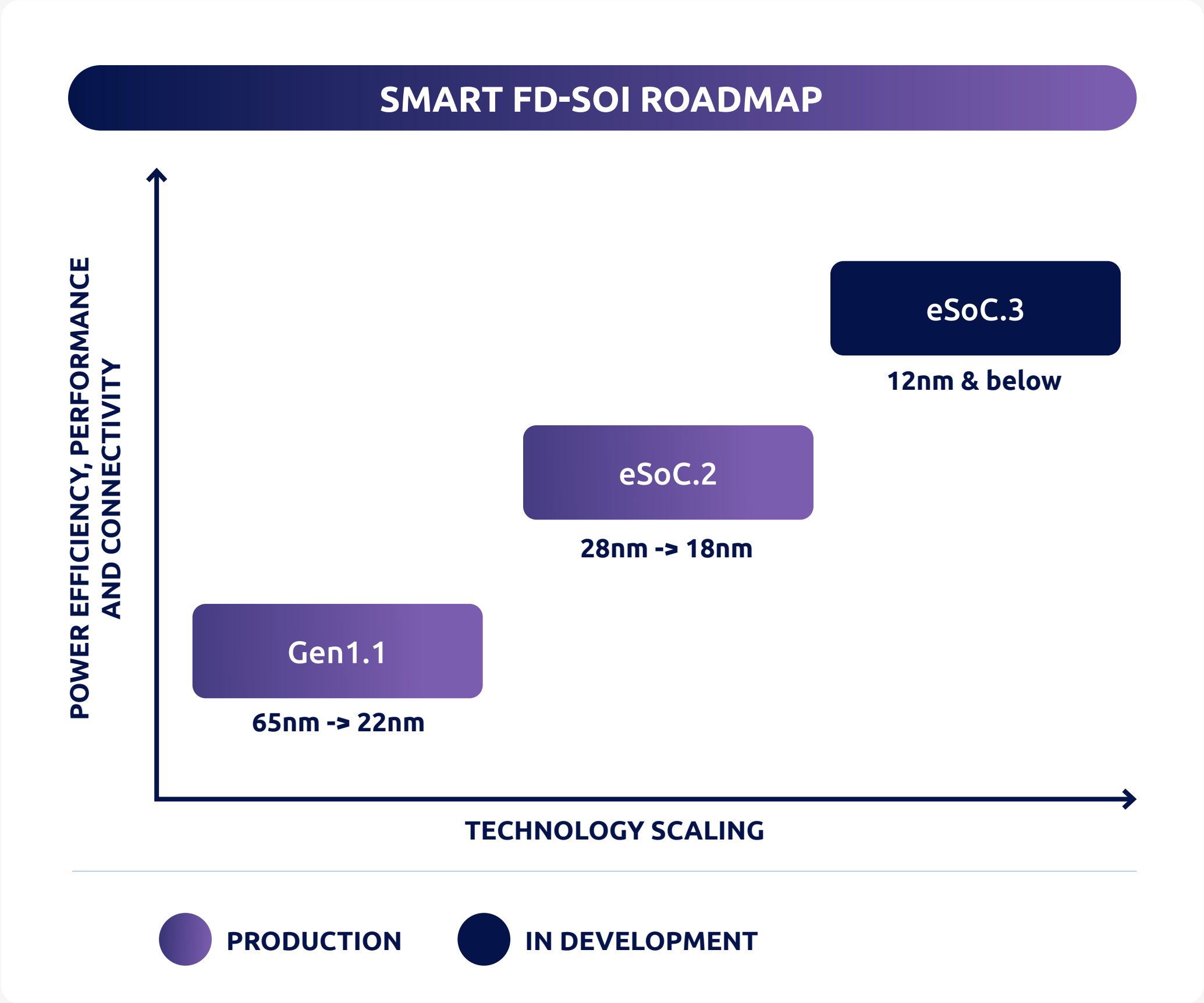
### OUR SMART FD-SOI SUBSTRATE ENABLES

LOWER ACTIVE POWER CONSUMPTION - ALWAYS ON

PERFORMANCE ON DEMAND

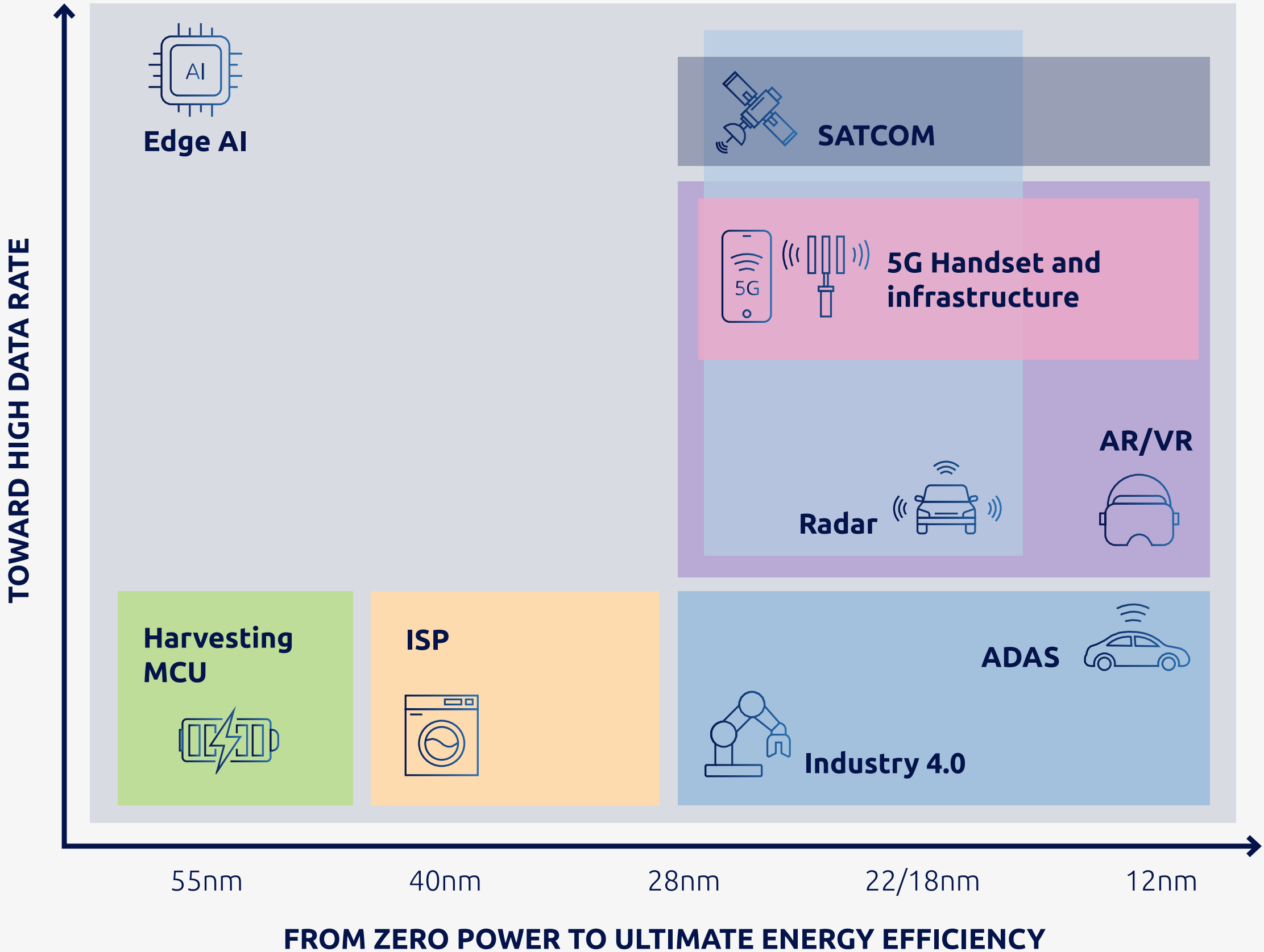
ROBUST ENERGY HARVESTING 'ZERO POWER' CAPABILITIES

LOWEST-COST PROCESSING (INFERENCES-PER-WATT-PER-\$)





# OVERALL FD-SOI MARKET SEGMENTATION



## FD-SOI IS THE ANSWER FOR APPLICATIONS REQUIRING

- Performance-on-demand
- Battery-powered
- Integrated RF
- Embedded NVM memories

## 3 MARKET DRIVERS

- AI MCUs
- 5G
- Automotive

**FD-SOI Edge AI inference hardware  
will support all those segments**

# SMART DEVICES KEY MESSAGES

## EVOLUTION FROM *IN-DEMAND* ENERGY EFFICIENT TECHNOLOGIES

- Smart FD-SOI CAGR of 70% since FY21, leveraging unique, dynamic power management capabilities and an integrated suite of IP
- Smart Photonics-SOI carrying >80% Market Share, servicing 5G Wireless Networks and high-bandwidth access to compute and storage

## TO AN ENABLER OF *SENSE AND COMPUTE* ARCHITECTURES

- Front-Side Illuminating sensors using Smart Imager-SOI to service an approximate 250M Unit end-device market (annually)
- Secure and Scalable Edge Computing with AI-Optimized FPGAs, Wireless MCUs for recognition and Hybrid-core Processors for (AI / ML) Heterogeneous Computing

## TOWARD A *MULTI-GENERATION* CATALYST FOR EMERGING SMART DEVICES

- 3x Generations of Smart FD-SOI bridging a 40% device variability improvement with a Beyond-12nm platform for Edge and Cloud computing markets
- 3x Generations of Smart Photonics-SOI spanning from 30% power reduction targets for AI / ML optical interconnects to 1M+ Qubit General-Purpose Quantum Computers



# OPERATIONS

Cyril Menon

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# OPERATIONS KEY MESSAGES

DEPLOYING A SCALABLE AND  
AGILE INDUSTRIAL MODEL

DELIVERING ON OUR RAMP  
UP AMBITIONS WITH A FOCUS  
ON EFFICIENCY

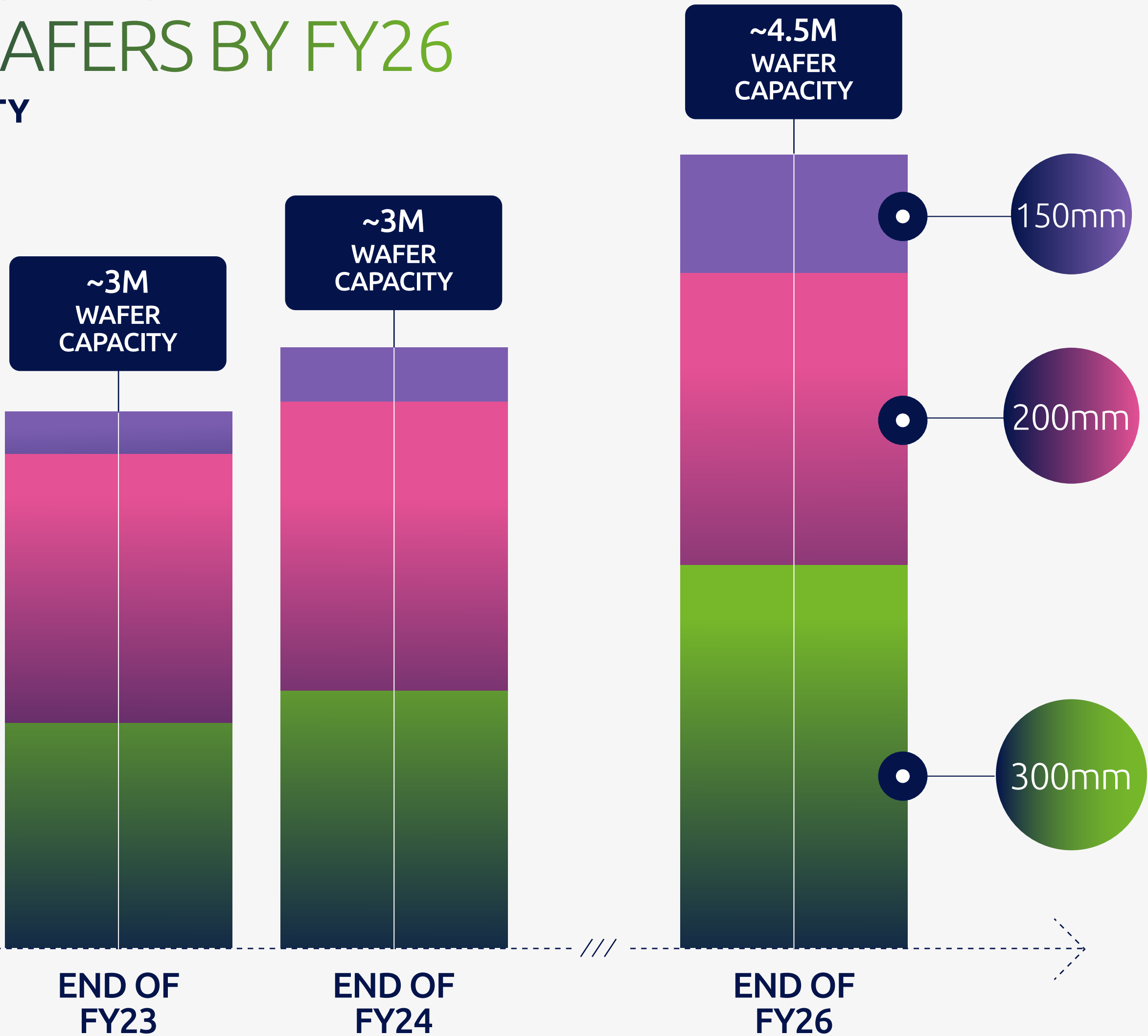
BUILDING AND DRIVING  
A SUSTAINABLE GROWTH MODEL



# Deploying a scalable and agile industrial model

# RAMPING UP CAPACITY TO ~4.5M WAFERS BY FY26

END OF YEAR CAPACITY



## FY23-FY26 CAPACITY

### INCREASING CAPACITY TO FUEL ~20% CAGR REVENUE GROWTH

- Half of FY23-FY26 capacity growth driven by **300mm volumes in Singapore**
- Remaining growth driven by **Compound Semiconductors volumes with synergies across POI & SmartSiC™ in France**





# RAMPING GLOBAL INDUSTRIAL FOOTPRINT TO ADDRESS GROWING DEMAND IN SOI AND COMPOUND ENGINEERED SUBSTRATES



SOITEC BERNIN 1 - SOI 200  
FRANCE

- RF-SOI
- Power-SOI
- Photonics-SOI



SOITEC BERNIN 2 - SOI 300  
FRANCE

- RF-SOI
- FD-SOI
- Photonics-SOI
- Imager-SOI



SOITEC BERNIN 3 - POI  
FRANCE

- POI



SOITEC BERNIN 4 - SmartSiC™  
FRANCE

- SmartSiC™
- 300mm Refresh

Extension under construction

- SOI Wafers
- Compound Wafers

~ 1.45 mwp

200mm SOI capacity reaching limit

- B1: full at 1M
- Simgui: up to 450K

Up to 2.75 mwp

300mm SOI capacity target

- B2: 750K by end of FY25
- PR1: 1M by end of FY25
- PR1A: up to 1M in line with customer demand

Up to 700 kwpy

Ramping capacity for POI in B3

Up to 500 kwpy

Ramping capacity for SmartSiC™ in B4  
First production expected Q3 FY24

Up to 60 kwpy

For Epi capacity in Hasselt



SOITEC PASIR RIS 1 - SOI 300  
SINGAPORE

- RF-SOI
- FD-SOI
- Photonics-SOI
- Refresh



SOITEC PASIR RIS 1A - SOI 300  
SINGAPORE

- RF-SOI
- FD-SOI
- Photonics-SOI
- Refresh

Extension under construction



SIMGUI PARTNERSHIP - SOI 200  
CHINA

- RF-SOI
- Power-SOI



SOITEC BELGIUM - GaN  
BELGIUM

- GaN





# PASIR RIS EXTENSION

## DOUBLING 300mm SOI CAPACITY IN SINGAPORE



### PASIR RIS EXTENSION DOUBLE 300mm PR1 CAPACITY

On track: Ready for Production in CY25  
Designed with efficient principles

- **5,500m<sup>2</sup> state-of-the-art cleanroom able to produce 300mm SOI, Refresh & Epitaxy wafers:** multi-products to enable early production cost absorption and optimize asset utilization
- **Facilities redundancy, industrial synergies** (utilities, warehouse, know-how...)
- **Fully connected through cleanroom linked-bridge to Pasir Ris 1:** No qualification required
- **Industry 4.0, fully automated factory**
  - Overhead transportation System
  - Automated Stocker, Sorter, Packer
  - Advanced Process Control Capabilities
  - Remote Control Room for Operations





# BERNIN 4

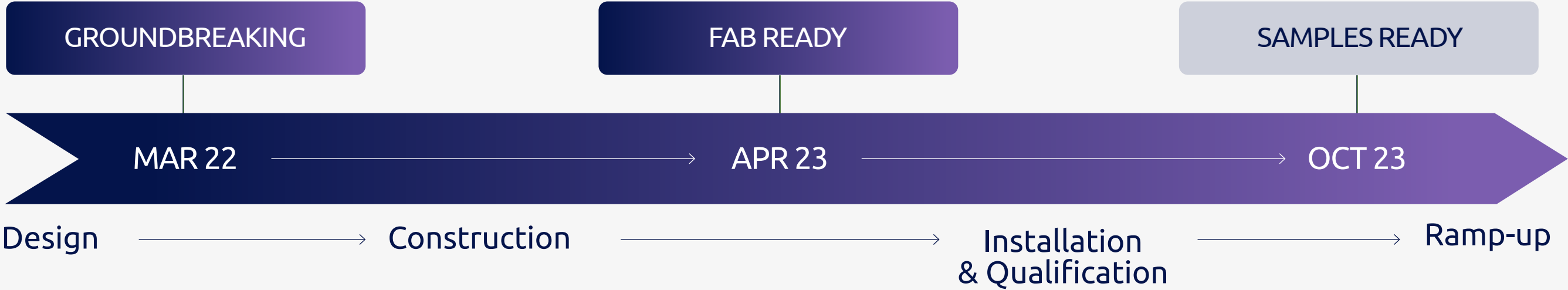
## NEW CLEANROOM FOR SmartSiC™ 500kwp 150/200mm CAPACITY



### BERNIN 4 TRIGGER SmartSiC™ CAPACITY

High flexibility 150-200mm  
Designed with efficient principles

- 2,000m² agile new cleanroom able to produce SmartSiC™ 150/200mm
- 300mm Refresh located in the same building to enable fixed cost absorption as early as CY24
- Facilities redundancy, industrial synergies (utilities, warehouse, know-how...)
- Fully connected with former cleanroom and new logistics platform



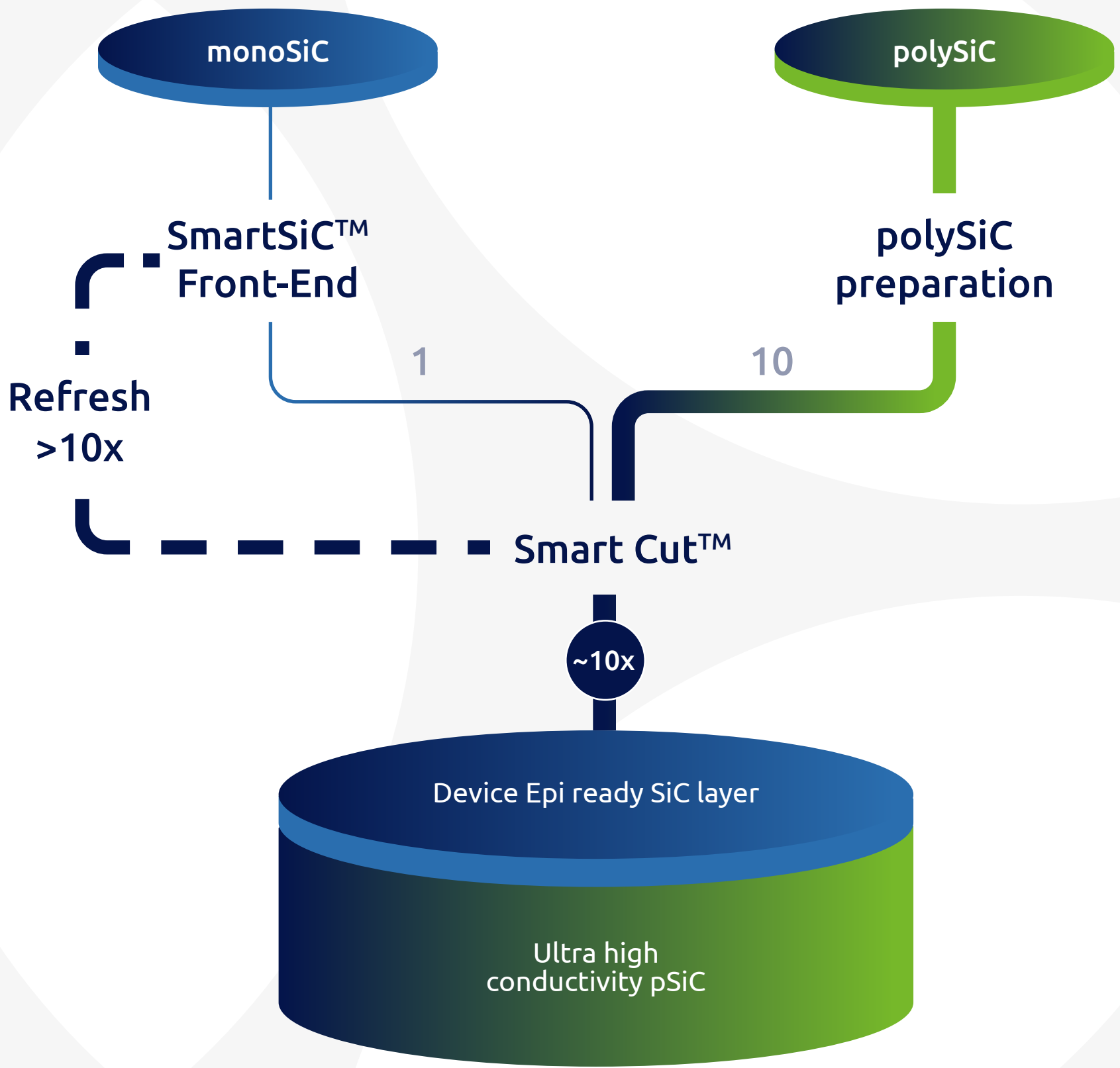


# SUSTAINABLE AND AGILE SUPPLY CHAIN

## monoSiC

### FLEXIBLE SUPPLY MODEL

- Qualification strategy customized to customer requirements
- 3 suppliers already engaged:
  - vertically integrated
  - independent sources
- Suppliers located in different regions



## polySiC

### ECOSYSTEM DRIVEN BY SOITEC

- Suppliers targeted across different regions
  - 1 supplier under LTA
  - 2 suppliers engagement on track with roadmap
  - Others under evaluation
- Strong collaboration with suppliers to design the most efficient polySiC wafers
- High degree of agility between 150mm and 200mm wafers

CO<sub>2</sub> EMISSION SAVING OF MORE THAN 70% COMPARED TO CONVENTIONAL SiC

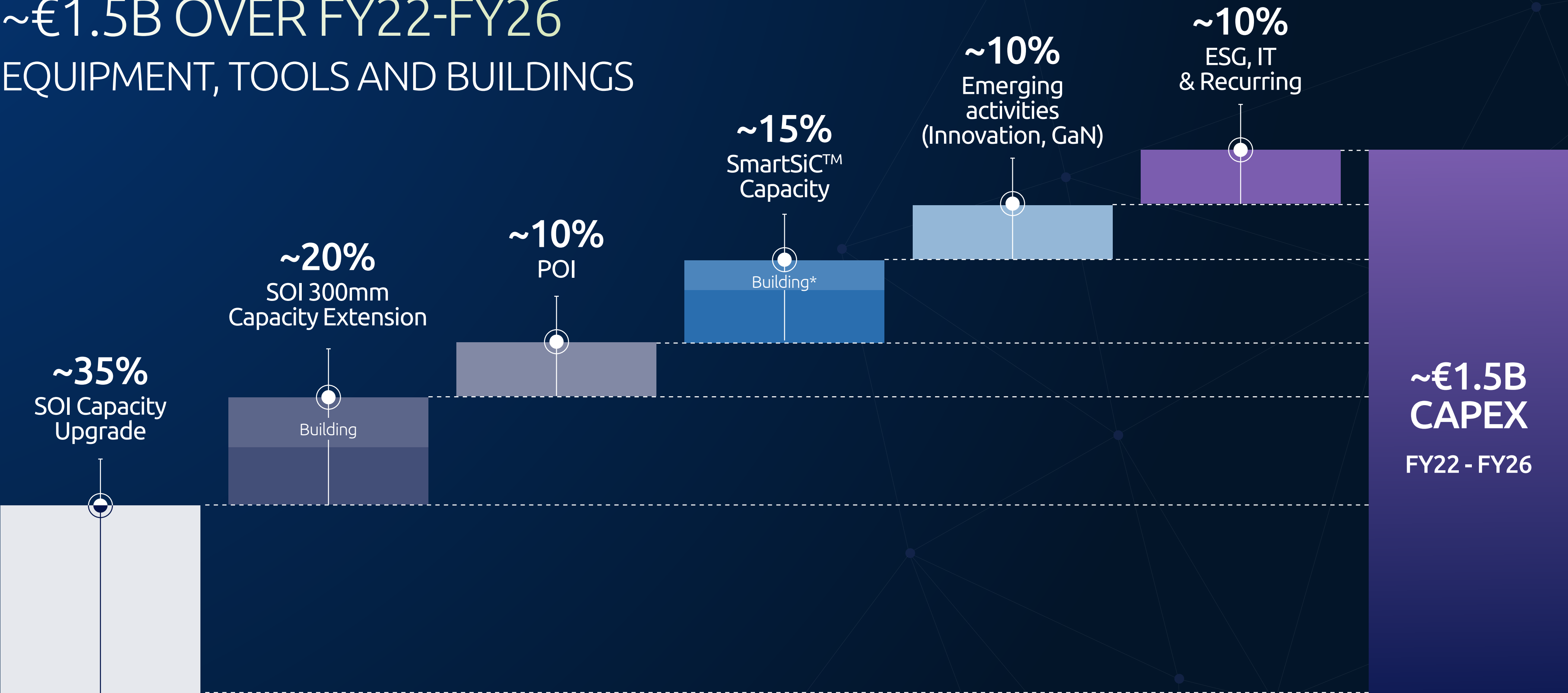




# DEPLOYING CAPEX TO SUSTAIN GROWTH

~€1.5B OVER FY22-FY26

EQUIPMENT, TOOLS AND BUILDINGS



\* Financed through a lease-back

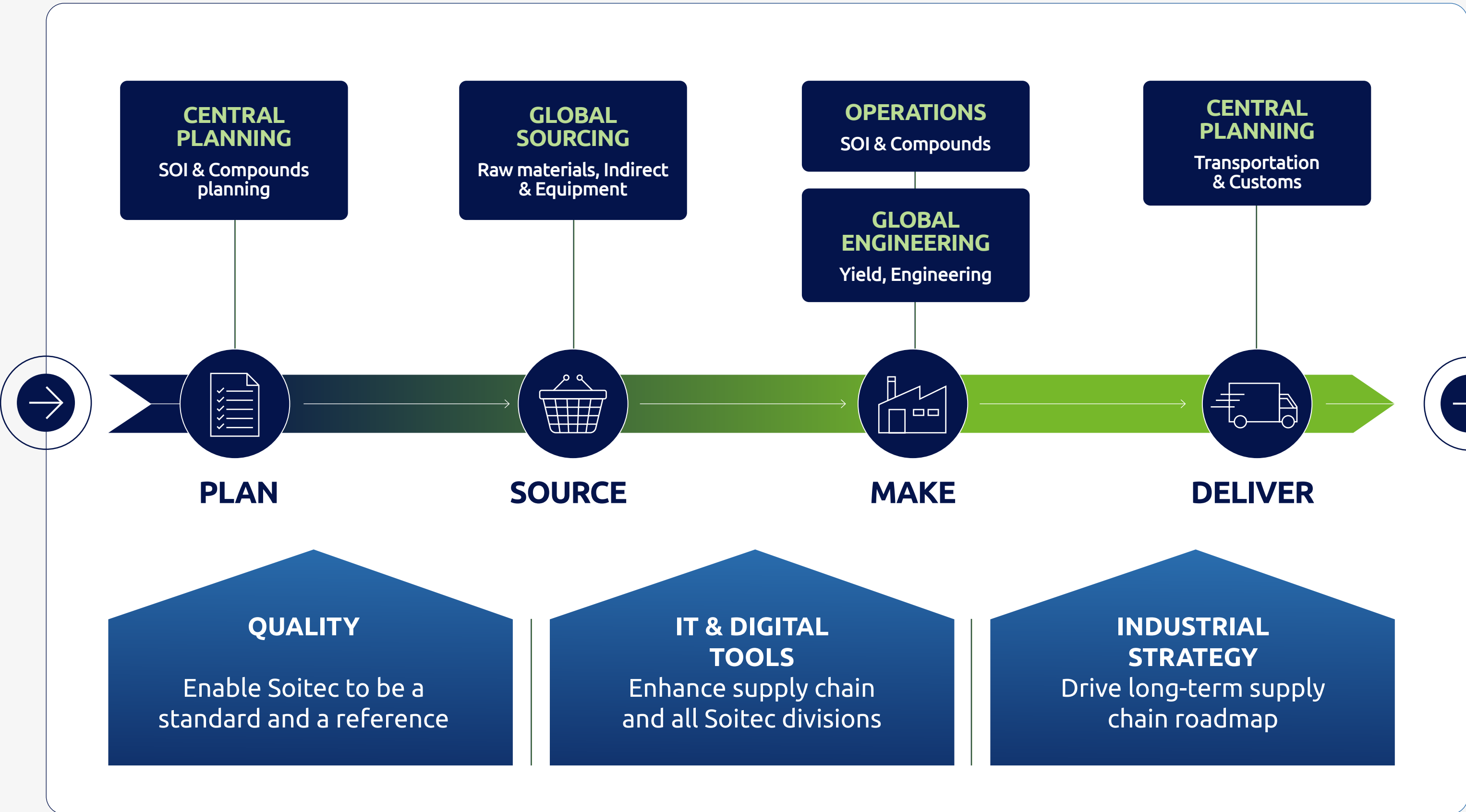
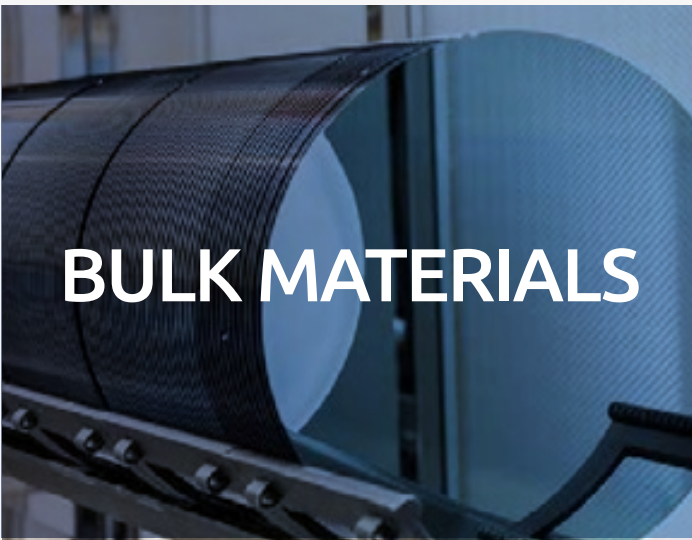


# Delivering on our ramp up ambitions with a focus on efficiency

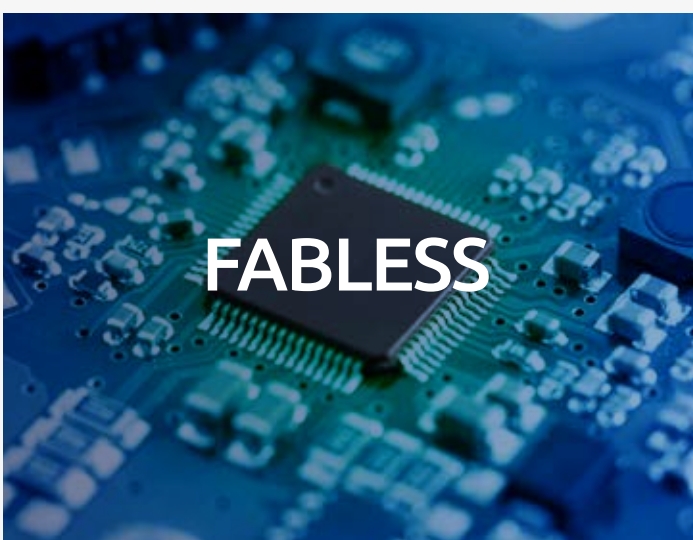
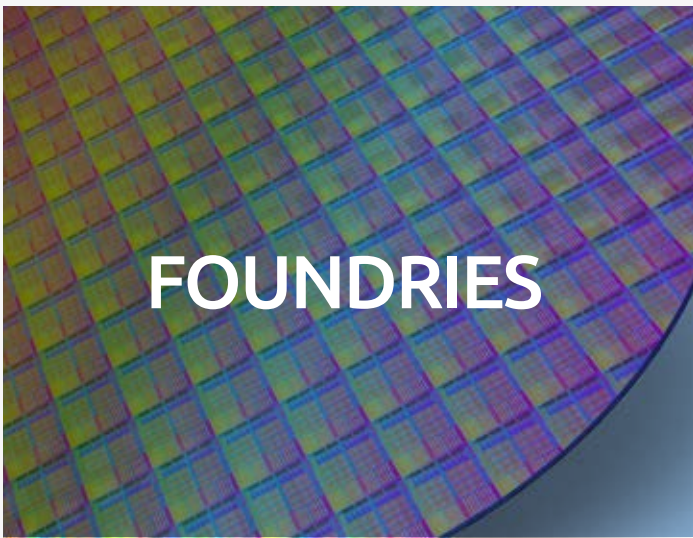


# END-TO-END OPERATIONS ORGANIZATION TO MEET CUSTOMER DEMAND

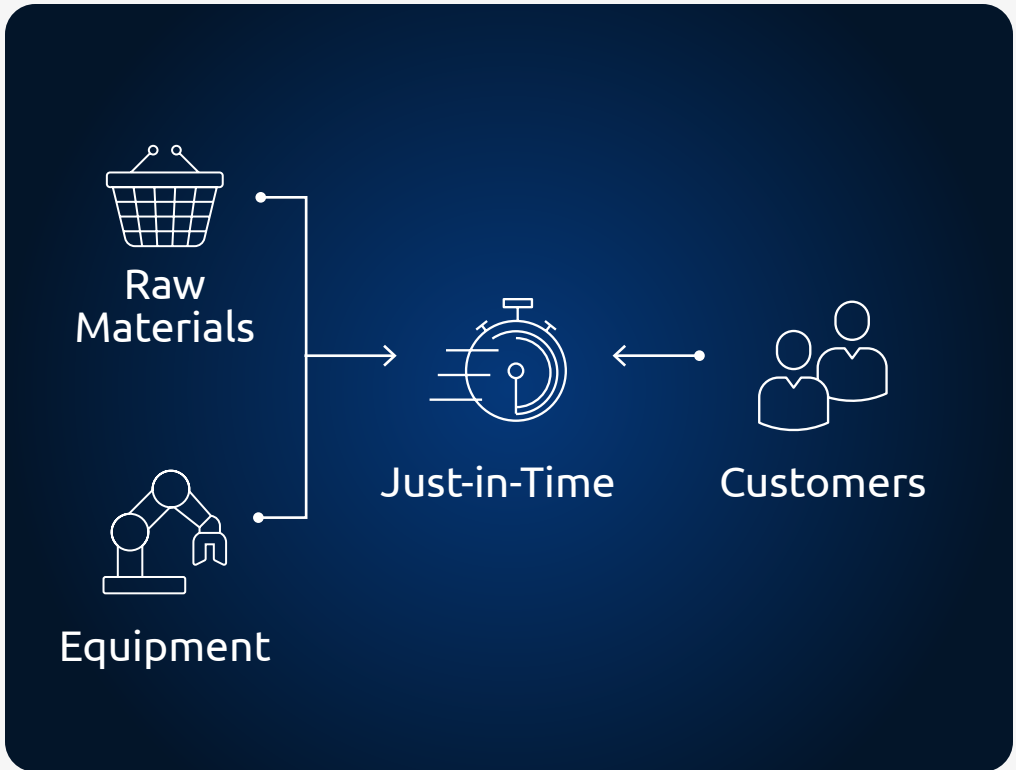
## STATE-OF-THE-ART SUPPLY CHAIN MANAGEMENT



**CUSTOMERS**



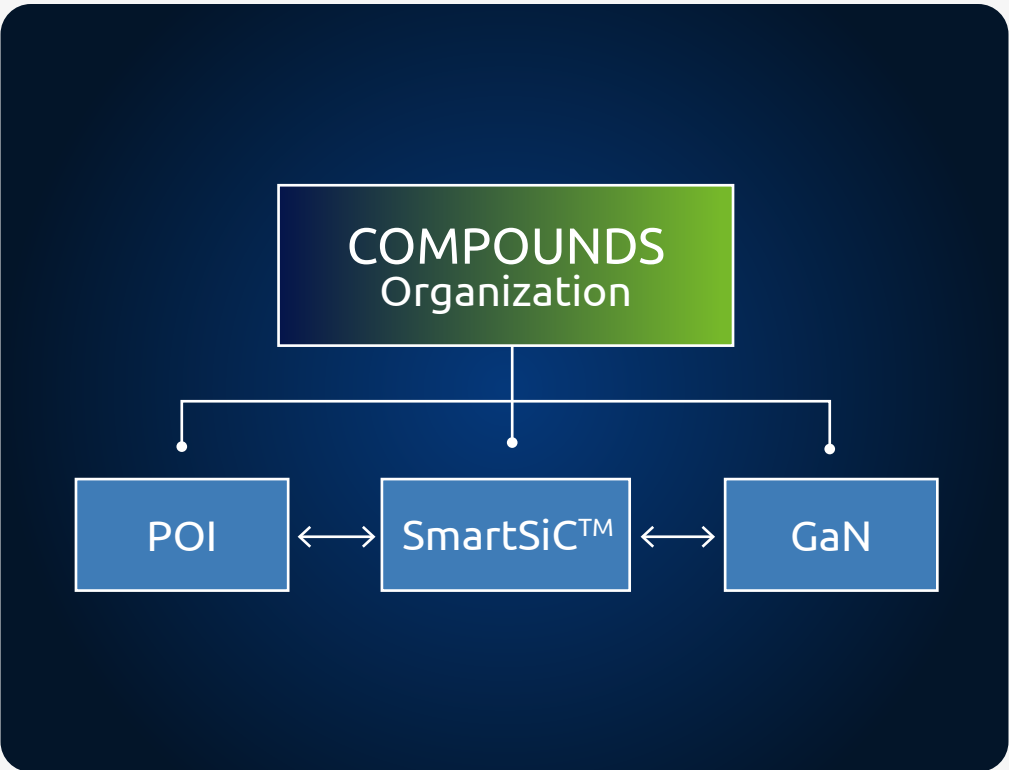
# RAMPING A SCALABLE AND AGILE MODEL



## JUST-IN-TIME SUPPLY CHAIN

### ADAPTING SUPPLY TO CUSTOMER DEMAND

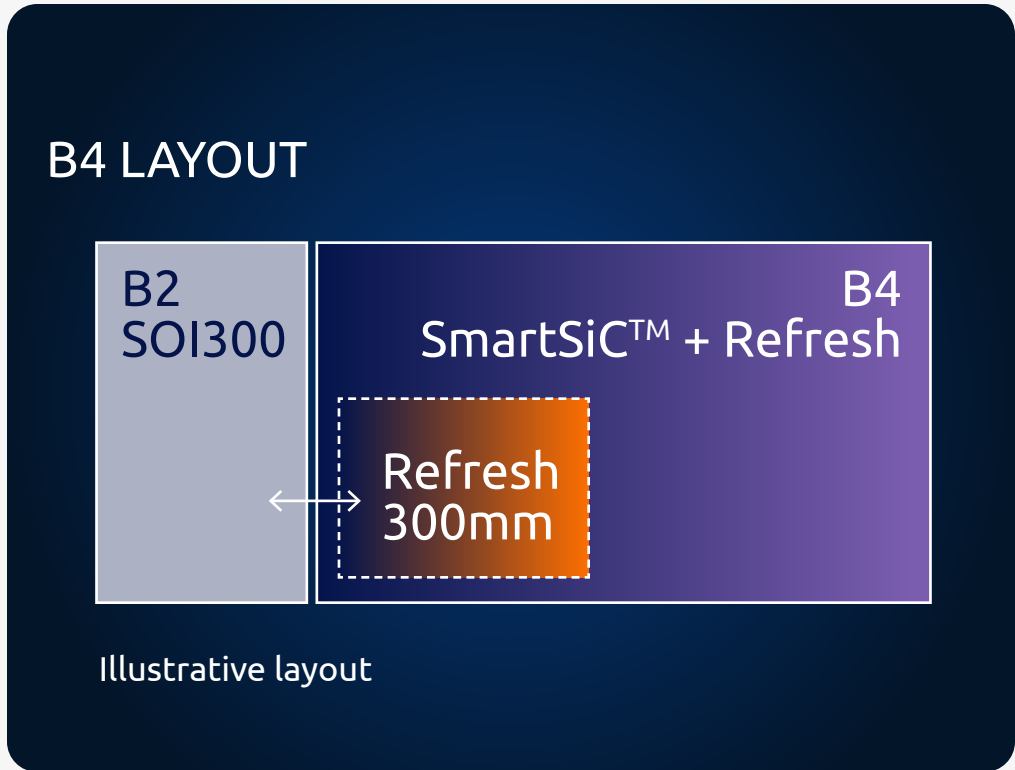
- Piloting equipment installation
- Driving raw material supply implementation



## OPTIMIZE COMPOUND ORGANIZATION

### LEVERAGING ASSET SYNERGIES

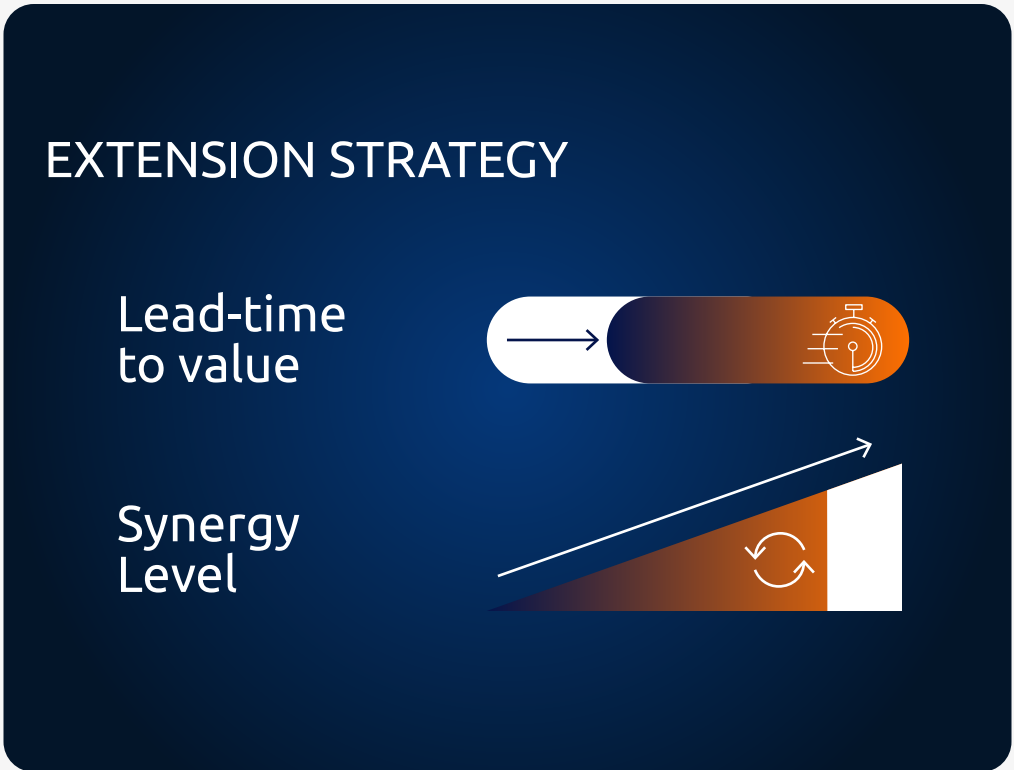
- >50% for POI / SmartSiC™ Tools
- ~90% of tools are bridge 150 / 200mm (both POI and SmartSiC™)
- Global Compounds team



## DEPLOYING AGILE FABS

### ENABLING FIXED COST ABSORPTION

- SmartSiC™ / 300mm SOI refresh
- Ramp-up designed to absorb fixed costs early stage through refresh / epi



## FAB EXTENSIONS

### DELIVERING SYNERGIES & ACCELERATED QUALIFICATION

- Synergies / Leveraging existing footprint
- Faster qualification

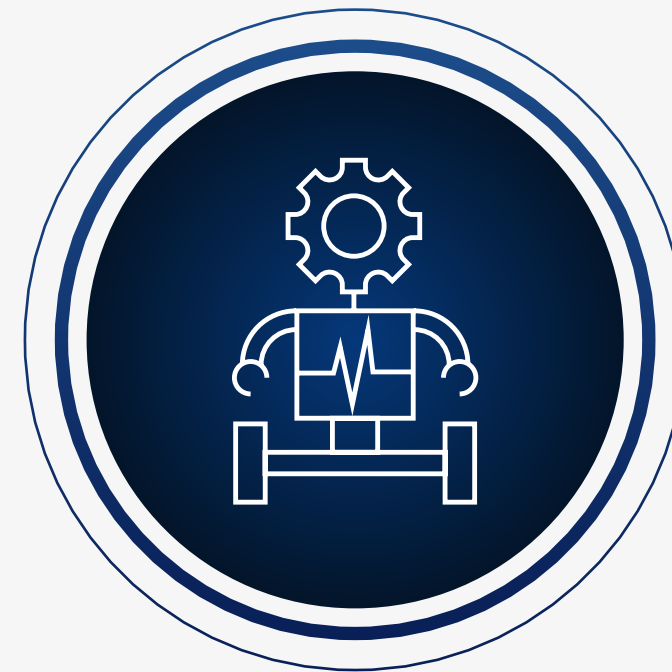


# INDUSTRY 4.0 ROADMAP TO IMPROVE COMPETITIVENESS



## 300mm FABS

- Building Information Modeling (BIM) deployed in PR1 & Bernin
- Automatic transportation
- Auto Packing FY24
- Remote Control Room (WIP, Maintenance, Process)



## 150-200mm FABS

- Bernin 4 improved robotics
- Utilities Digital Twin
- Remote Control Room (WIP, Maintenance, Process)



## "AUGMENTED" QUALITY

- Artificial Intelligence / Machine Learning: Image recognition, defects identification
- Smart Sampling advanced algorithm
- Advanced Process Control (SPC, FDC, R2R)



## SUPPLY EXCELLENCE

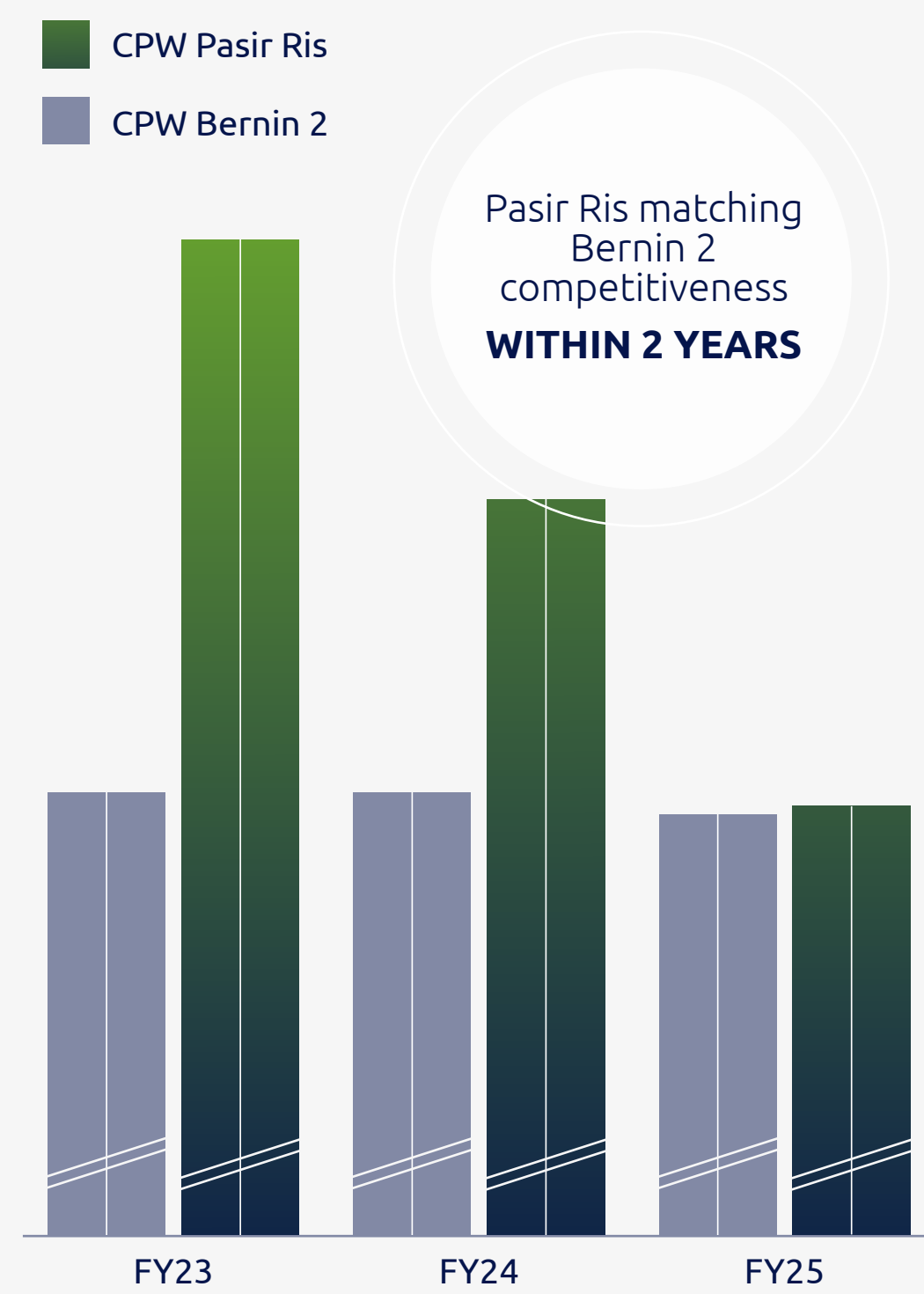
- Deployed state-of-the-art business apps: CRM, S2P
- Deploying SCM in FY24 (including carbon emission model)
- Advanced Scheduling / Dispatching Systems in FY24

# OPERATIONAL EXCELLENCE

## BUILDING ON A SUCCESSFUL RAMP UP TRACK RECORD TO RAMP UP 2 FABS

### SOITEC PASIR RIS, SINGAPORE

Pasir Ris vs Bernin 2 cost per wafer (CPW)

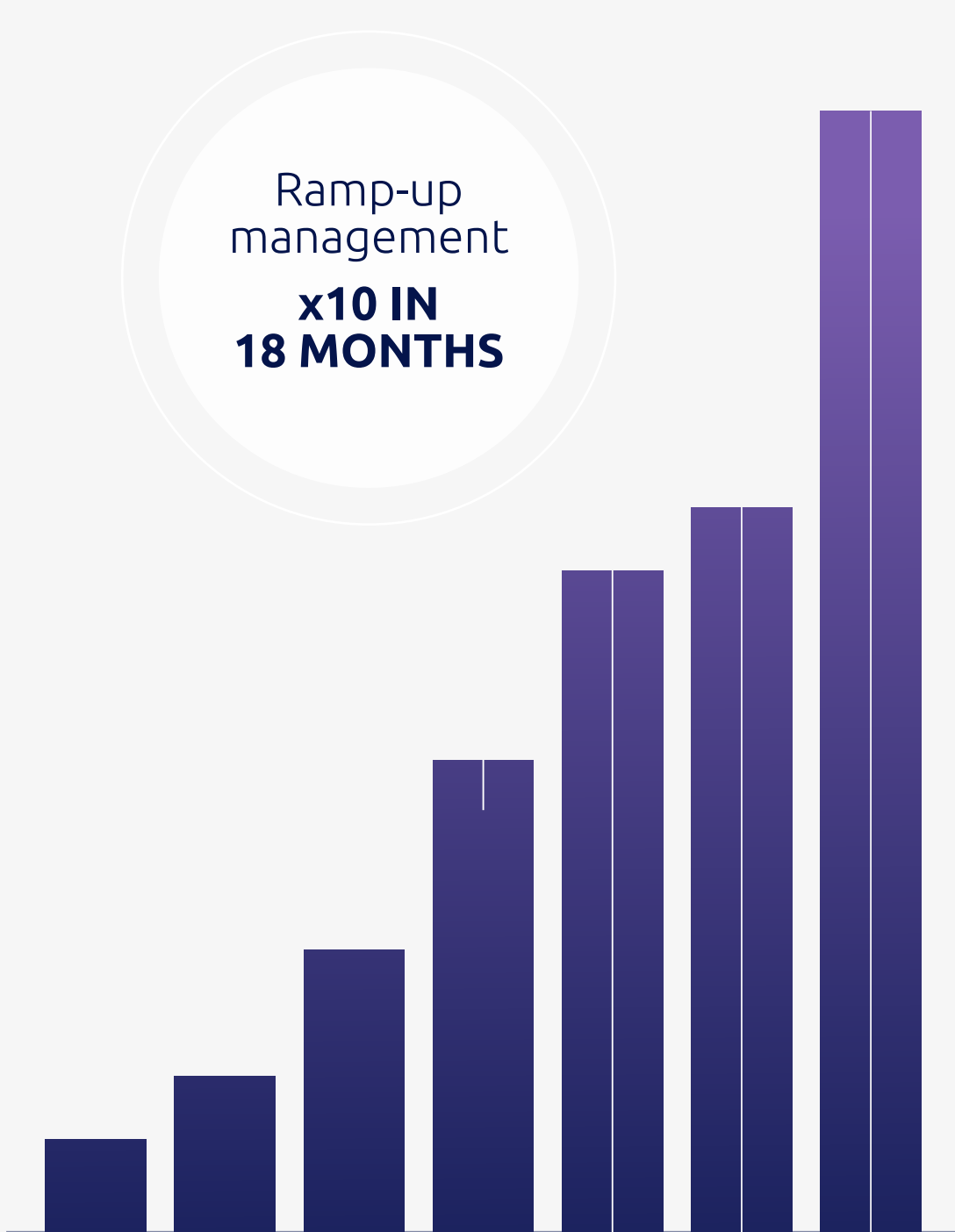


Pasir Ris ramp-up

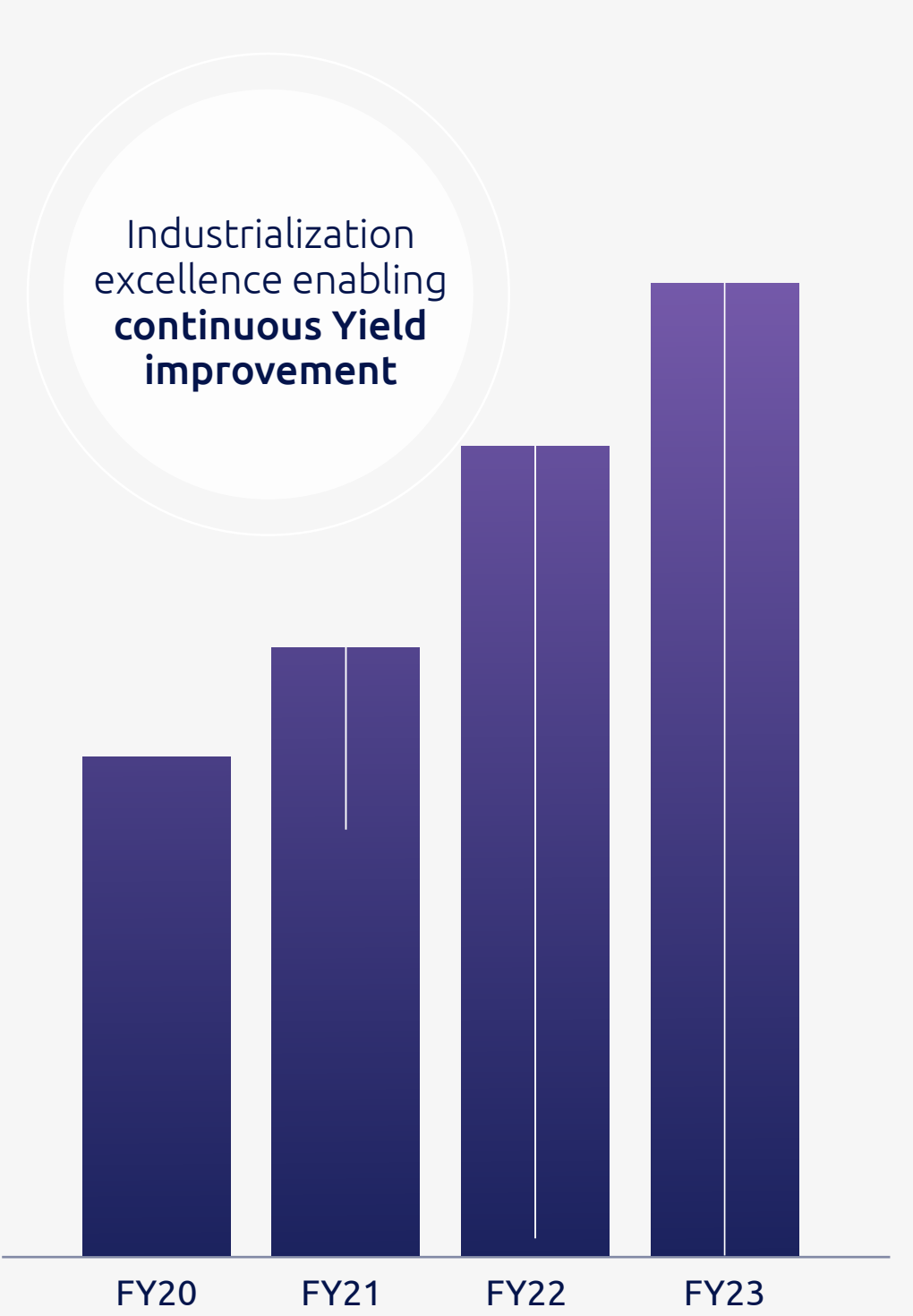


### SOITEC BERNIN 3, FRANCE

Bernin 3 POI ramp-up management



Bernin 3 POI yield ramp-up





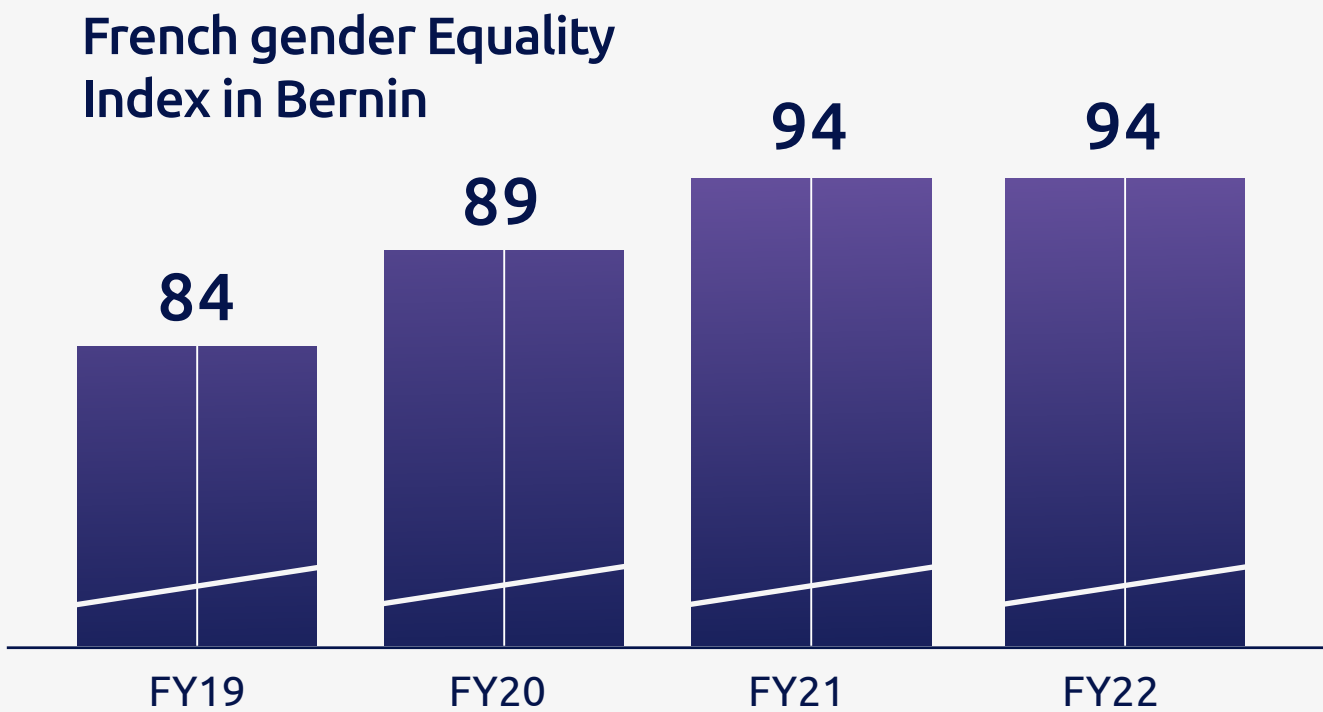
# Building and driving a sustainable growth model

# ATTRACT, GROW AND RETAIN PEOPLE TO DELIVER SUSTAINABLE GROWTH



## MAKING SOITEC AN ATTRACTIVE EMPLOYER TO SUPPORT OUR GROWTH

- French Government label **France Relance #1jeune1solution**
- **Partnerships agreement signed** with Université Grenoble Alpes (UGA) IUT1 University Institute of Technology and Grenoble INP & Bordeaux INP Engineering schools
- **Enhancing young talents induction plans:** twice as much under work-study program from FY21 to FY23 and more than 30% conversion into long-term contracts



## GROW PEOPLE TO CULTIVATE STABILITY AND RETAIN OUR TALENT

- Sector-leading employee stock ownership plan - **100% eligible to join**
- **7.3 years of seniority** on average
- **Low resignation rate:** 8.5% in FY23



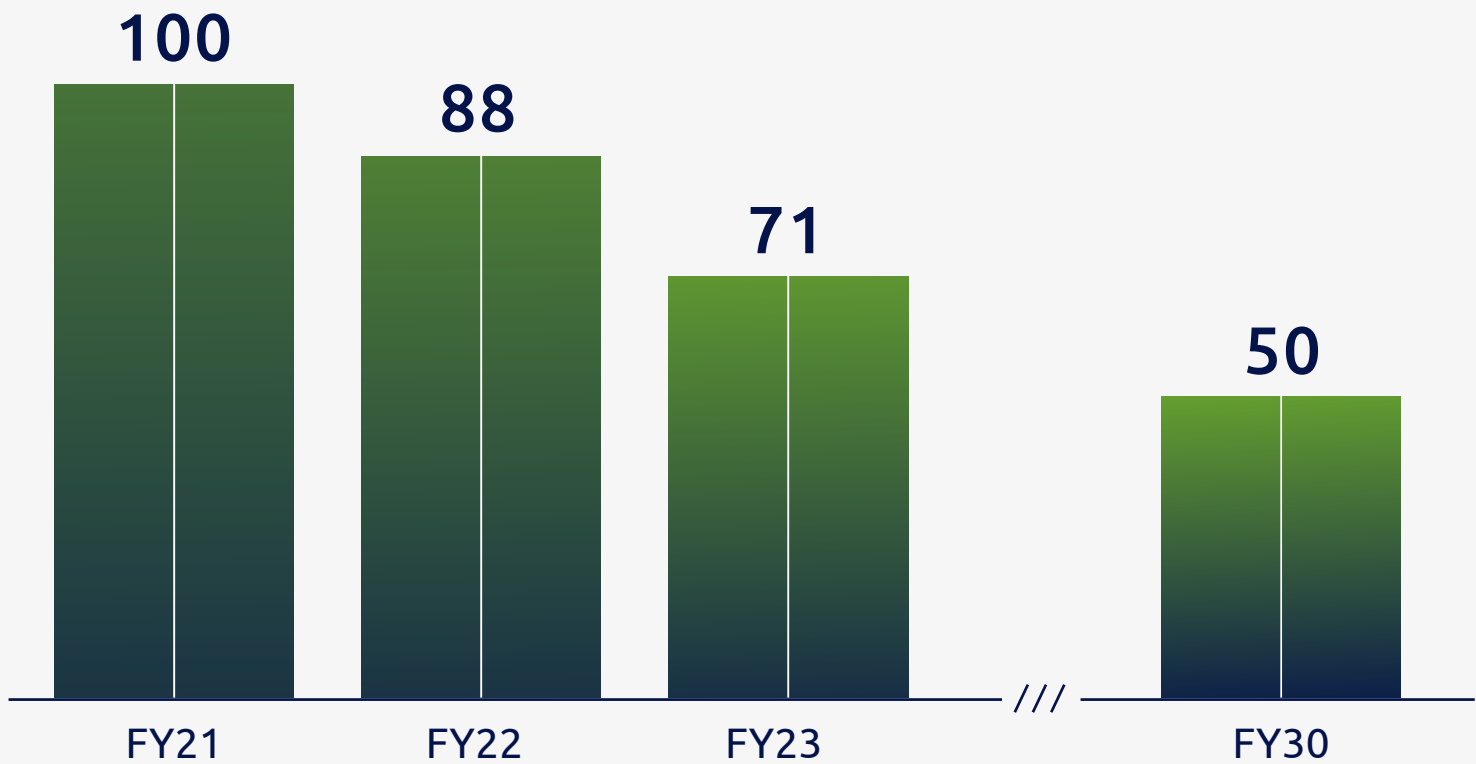
## BUILDING A SAFE AND ATTRACTIVE WORKPLACE

- **72% Quality of Life at work**, +2pts vs FY21
- **Joint working group** (Management, Social Partners, Employees) on **working conditions** in Bernin
- **Low frequency rate of workplace accidents** at 3.1 in FY23



# AS SOITEC GROWS, WE ARE EMBRACING OUR VISION OF SUSTAINABLE FABS

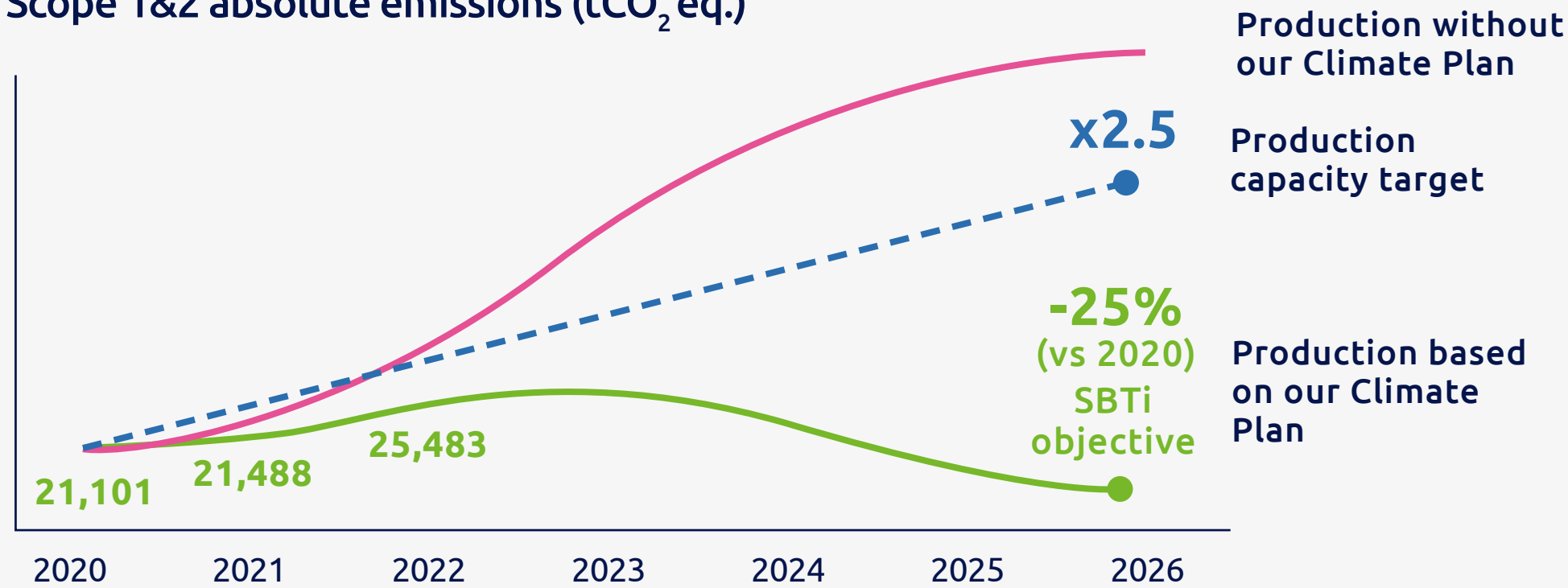
## REDUCING WATER CONSUMPTION & CO<sub>2</sub> EMISSION (SCOPE 1&2)



### DIVIDING BY 2 WATER CONSUMPTION PER mm²

- Reducing water consumption by FY30 thanks to several dozen process changes to **limit water consumption**
- **Increasing water recycling** from 16% (FY22) to 24.4% (FY23) through new loops implementation and continuing to innovate to **further recycle water up to 30%**
- Local initiatives started in the Alps to **globally optimize water cycle**

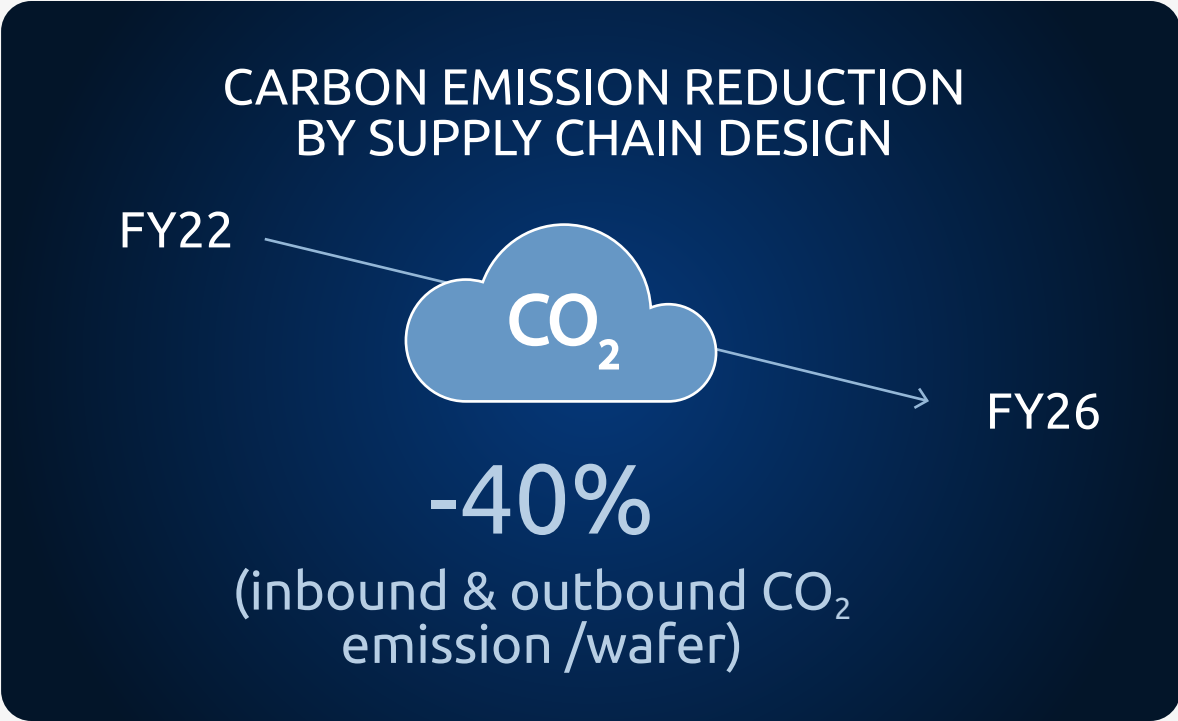
Scope 1&2 absolute emissions (tCO<sub>2</sub> eq.)



### SCOPE 1 & 2 TARGET

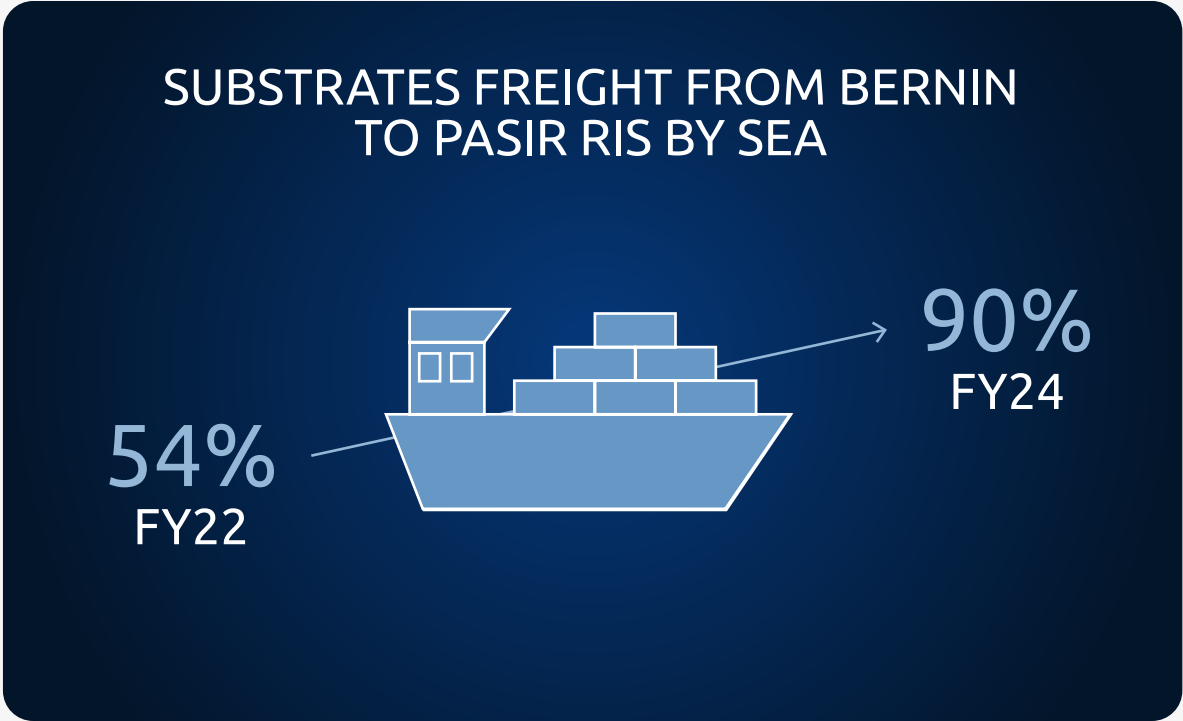
- Since 2015, Bernin output has been multiplied by 3x while **reducing energy consumption by 10%**
- Deploying Bernin Energy Management BKM in Singapore, through **ISO 50001**. After **Bernin being certified in 2015, Singapore certified in 2023**
- **100% Low carbon energy secured** in France until 2025, and around **40% secured in Singapore** starting 2024
- **Solar panels installed** on Singapore site in FY23

# DESIGNING OUR SUPPLY CHAIN TO LIMIT CARBON EMISSIONS (SCOPE 3)



REDUCE TRANSPORTATION NEEDS

- **Model and optimize Soitec carbon emissions** based on our industrial footprint
- Match our asset deployment with **customer location need**
- Make each manufacturing site autonomous to **sustain their own refresh**



MAKING SEA FREIGHT OUR 1<sup>ST</sup> CHOICE

- **Making sea freight a standard** for all our suppliers
- **Accelerate sea freight shipment qualification** to our customers



LEVERAGING OUR SUPPLIERS

- **Qualify low-carbon sources**
- **ESG performance** part of Supplier rating
- Strategic partner committed to **ISO 50001 certification**





# OPERATIONS KEY MESSAGES

## DEPLOYING A SCALABLE AND AGILE INDUSTRIAL MODEL

- Expanding capacity globally from ~3M wafers at the end of FY23 to ~4.5M wafers at the end of FY26
- Bernin 4 on track, cleanroom delivered, first tools move-in enabling first production Q3 FY24
- Pasir Ris extension kicked off, first production CY25
- Deploying ~€1.5B CAPEX to sustain ~20% CAGR FY23-FY26

## DELIVERING ON OUR RAMP UP AMBITIONS WITH A FOCUS ON EFFICIENCY

- Ramping up with scalability and agility
- Industry 4.0 to drive efficiency
- Leveraging our industrial and operational excellence track of record to successfully ramp up 2 new fabs and deliver on our growth prospects

## BUILDING AND DRIVING A SUSTAINABLE GROWTH MODEL

- Attract, grow and retain people to deliver significant growth
- Growing with constrained environmental resources
- Designing our supply chain to limit carbon emissions

# FINANCE

Léa Alzingre

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# FINANCE KEY MESSAGES

PREPARING FOR  
REACCELERATION BEYOND  
FY24 TRANSITION YEAR

OPTIMIZED INVESTMENT CYCLE  
FROM FY24 TO FY26 TO SECURE  
GROWTH EXPANSION

STRONG ACCELERATION  
FOR VALUE CREATION:  
x2 EBITDA IN 3 YEARS

# FY23 FINANCIAL HIGHLIGHTS

## P&L

**€1,089M SALES**

+19% Y/Y Organic Growth

**36.0% EBITDA<sup>(1)</sup> MARGIN**

+0.2pts vs FY22

**€233M NET PROFIT**

+15% vs FY22

**€6.63 EPS**

+11% vs FY22

## CASH FLOW

**€263M OPERATING CASH FLOW<sup>(1)</sup>**

+€8M vs FY22

**€244M CAPEX<sup>(1)(2)</sup>**

+€15M vs FY22

**€34M FREE CASH FLOW<sup>(1)</sup>**

v €42M in FY22

## BALANCE SHEET

**€1.3B EQUITY**

+€262M vs end of March 22

**€788M GROSS CASH POSITION**

+€60M vs end of March 22

**€140M NET CASH POSITION**

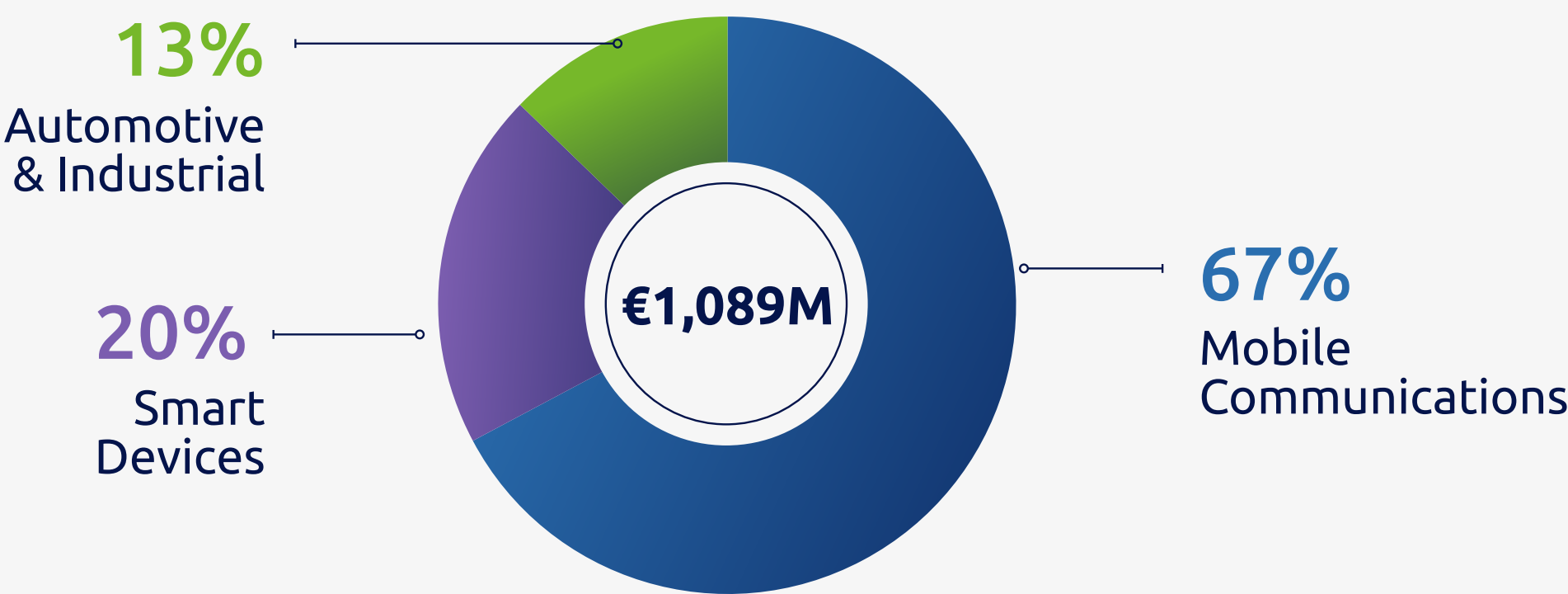
-€2M vs end of March 22

(1) From continuing operations. EBITDA represents operating income (EBIT) before depreciation, amortization, impairment of non-current assets, non-cash items relating to share-based payments, provisions for impairment of current assets and for contingencies and expenses, and disposal gains and losses. EBITDA is not a financial indicator defined by IFRS and may not be comparable to EBITDA as reported by other groups. It represents additional information and should not be considered as a substitute for operating income or net cash generated by operating activities. (2) Cash-out related to investing activities





# SUSTAINED ORGANIC REVENUE GROWTH ACROSS ALL END-MARKETS



€M	FY23	FY22	Change as reported	Change at constant FX and scope
Mobile Communications	731	624	+17%	+10%
Automotive & Industrial	141	74	+89%	+77%
Smart Devices	217	165	+32%	+26%
Total Revenue	1,089	863	+26%	+19%

## MOBILE COMMUNICATIONS

- In the context of global smartphone market slowdown:  
**RF-SOI growth supported by:**
  - Further penetration of 5G in **high-end smartphones** requiring **greater semiconductor content**
  - Long-term **customer agreements**

## AUTOMOTIVE & INDUSTRIAL

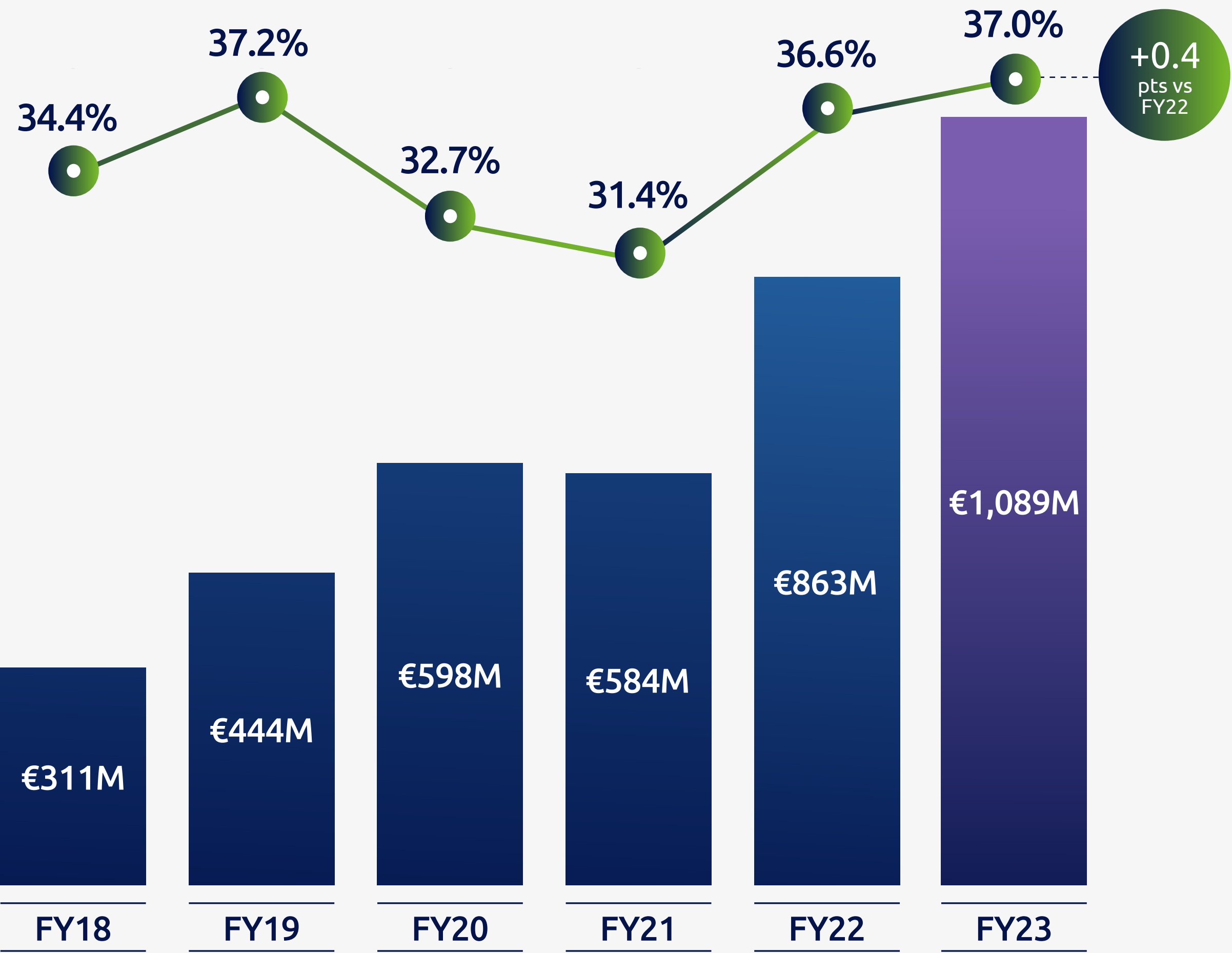
- Demand driven by the **rise in semiconductor content** embedded in new vehicles:
  - **Digitalization:** infotainment, ADAS, functional safety
  - **Electrification:** EV and hybrid engines
- **Sharp growth in FD-SOI** and in **Power-SOI**
- **First revenue generated by SmartSiC™**

## SMART DEVICES

- Demand driven by **more complex sensors, higher connectivity** functionalities and **embedded intelligence:**
  - More powerful / efficient chips for edge AI, datacenters and cloud computing
- **Sharp growth in FD-SOI** for IoT and edge computing devices
  - **Sustained growth in Photonics-SOI** (high-speed connectivity for AI in the cloud) and in **Imager-SOI** (3D imaging)



# GROSS MARGIN FURTHER IMPROVED TO 37.0%



- Gross margin (%)
- Total revenue (€M)

## GROSS MARGIN TAILWINDS

- Strong operating leverage
- Robust industrial performance
- Favorable mix effect

## GROSS MARGIN HEADWINDS

- Inflation:
  - Mainly on bulk material cost, as anticipated, within long-term supply agreement
- Dilutive currency effect due to hedging
- Non-recurring items:
  - Inventory depreciation



# CURRENT OPERATING INCOME INCREASED BY A STRONG 37%

€M	FY23	FY22	Change
Revenue	1,089	863	+26%
Gross profit	402	316	+28%
as a % of revenue	37.0%	36.6%	
Gross R&D expenses before capitalization	(123)	(108)	+14%
as a % of revenue	11.3%	12.5%	
- Gross R&D expenses after capitalization	(95)	(93)	+2%
- Subsidies, income tax credit and other revenue	30	36	-16%
Net R&D expenses	(64)	(57)	+13%
as a % of revenue	5.9%	6.6%	
- Sales and Marketing expenses	(16)	(15)	+6%
- General and Administrative expenses	(55)	(49)	+13%
SG&A expenses	(71)	(64)	+11%
as a % of revenue	6.5%	7.4%	
Current operating income	267	195	+37%
as a % of revenue	24.5%	22.6%	

Current operating margin improved by ~2pts to 24.5% of revenue

- Robust increase in gross profit
- Tight control over operating expenses while continuing to prepare for future growth

Net R&D expenses increased by 13%

- Gross R&D expenses before capitalization increased by €15M to €123M (11.3% of revenue)
- Strong effort to support innovation strategy and product portfolio expansion

SG&A expenses down to 6.5% of revenue

- Moderate increase in SG&A expenses despite higher labor costs due to hirings and inflation



# NET PROFIT RAISED BY 15%

€M	FY23	FY22	Change
<b>Current operating income</b>	<b>267</b>	<b>195</b>	<b>+37%</b>
- Other operating income and expenses	0	10	
<b>Operating income</b>	<b>268</b>	<b>205</b>	<b>+31%</b>
- Financial expenses	(10)	(13)	
- Net foreign exchange gain	1	13	
<b>Net financial result</b>	<b>(10)</b>	<b>(1)</b>	
- Income tax	(26)	(2)	
<b>Net profit from continuing operations</b>	<b>232</b>	<b>202</b>	<b>+15%</b>
- Net profit / (loss) from discontinued operations	1	(0)	
<b>Net profit (Group share)</b>	<b>233</b>	<b>202</b>	<b>+15%</b>
- Basic EPS (in €)	6.63	5.98	+11%
- Diluted EPS (in €)	6.41	5.63	+14%
<b>Number of shares</b>	<b>35,133,150</b>	<b>33,753,666</b>	
<b>Number of diluted shares</b>	<b>37,240,936</b>	<b>37,181,632</b>	

**FY22 benefitted from a €10M non-recurring operating income**  
(reversal of an impairment loss related to Singapore industrial building)

**Net financial result at €(10)M vs €(1)M in FY22**

- Positive impact of OCEANEs 2023 conversion and income related to cash investments
- Offset by FX net result (€1M net forex gain in FY23 vs €13M gain in FY22)

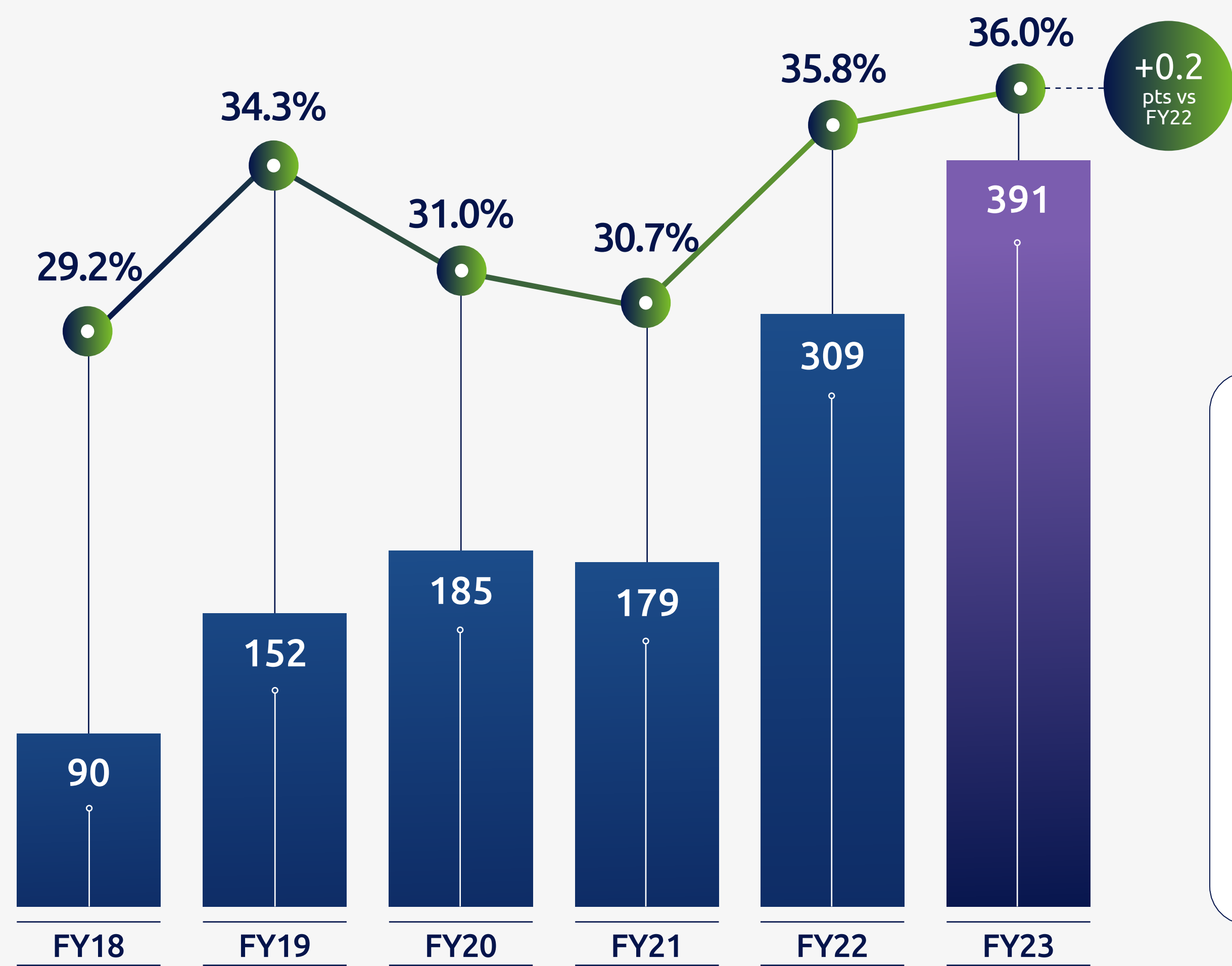
**Effective income tax rate came at 10% of pre-tax profit**

- The Company continued to benefit from tax loss carryforwards
- Favorable non-recurring effects

**Net profit reached €233M, up 15% vs FY22**



# SUSTAINED EBITDA MARGIN AT 36% OF REVENUE



■ EBITDA in €M<sup>(1)</sup>  
● EBITDA margin (%)<sup>(1)</sup>

VERY SOUND PROFITABILITY MAINTAINED

EBITDA MARGIN TAILWINDS

- Operating leverage
- Tight control over operating expenses

EBITDA MARGIN HEADWINDS

- Inflationary impact on bulk material prices
- Dilutive currency effect

(1) From continuing operations. EBITDA represents operating income (EBIT) before depreciation, amortization, impairment of non-current assets, non-cash items relating to share-based payments, provisions for impairment of current assets and for contingencies and expenses, and disposal gains and losses. EBITDA is not a financial indicator defined by IFRS and may not be comparable to EBITDA as reported by other groups. It represents additional information and should not be considered as a substitute for operating income or net cash generated by operating activities



# POSITIVE FREE CASH FLOW WHILE CAPACITY INVESTMENTS FURTHER INCREASED

€M	FY23	FY22
<b>Operating income</b>	<b>268</b>	<b>205</b>
- Depreciation and amortization	106	81
- Other items	18	23
<b>EBITDA<sup>(1)</sup></b>	<b>391</b>	<b>309</b>
Change in working capital	(96)	(52)
- Incl. inventories	(36)	(31)
- Incl. trade receivables	(112)	(48)
- Incl. trade payables	40	15
- Incl. others	11	12
Tax paid	(32)	(2)
<b>Net cash generated by operating activities<sup>(2)</sup></b>	<b>263</b>	<b>255</b>
- Purchases of intangible assets	(42)	(24)
- Purchases of property, plant and equipment	(186)	(181)
- Others	(1)	(8)
<b>Net cash used in Investing activities<sup>(2)</sup></b>	<b>(228)</b>	<b>(213)</b>
<b>Free Cash Flow<sup>(1)</sup></b>	<b>34</b>	<b>42</b>

## OPERATING CASH FLOW SLIGHTLY UP AT €263M

**Improvement in operating cash flow from strong EBITDA** (€391M, up €83M vs FY22) **partially offset by a higher increase in working capital requirement** (+€44M vs FY22)

### €96M negative change in working capital

- €36M increase in inventories and €112M increase in trade receivables mostly reflecting the higher level of activity and fewer downpayments received from customers
- Partially offset by a €40M increase in trade payables

**€32M tax paid vs €2M in FY22**  
(non-recurring adjustments in FY22)

## POSITIVE FREE CASH FLOW AT €34M vs €42M IN FY22

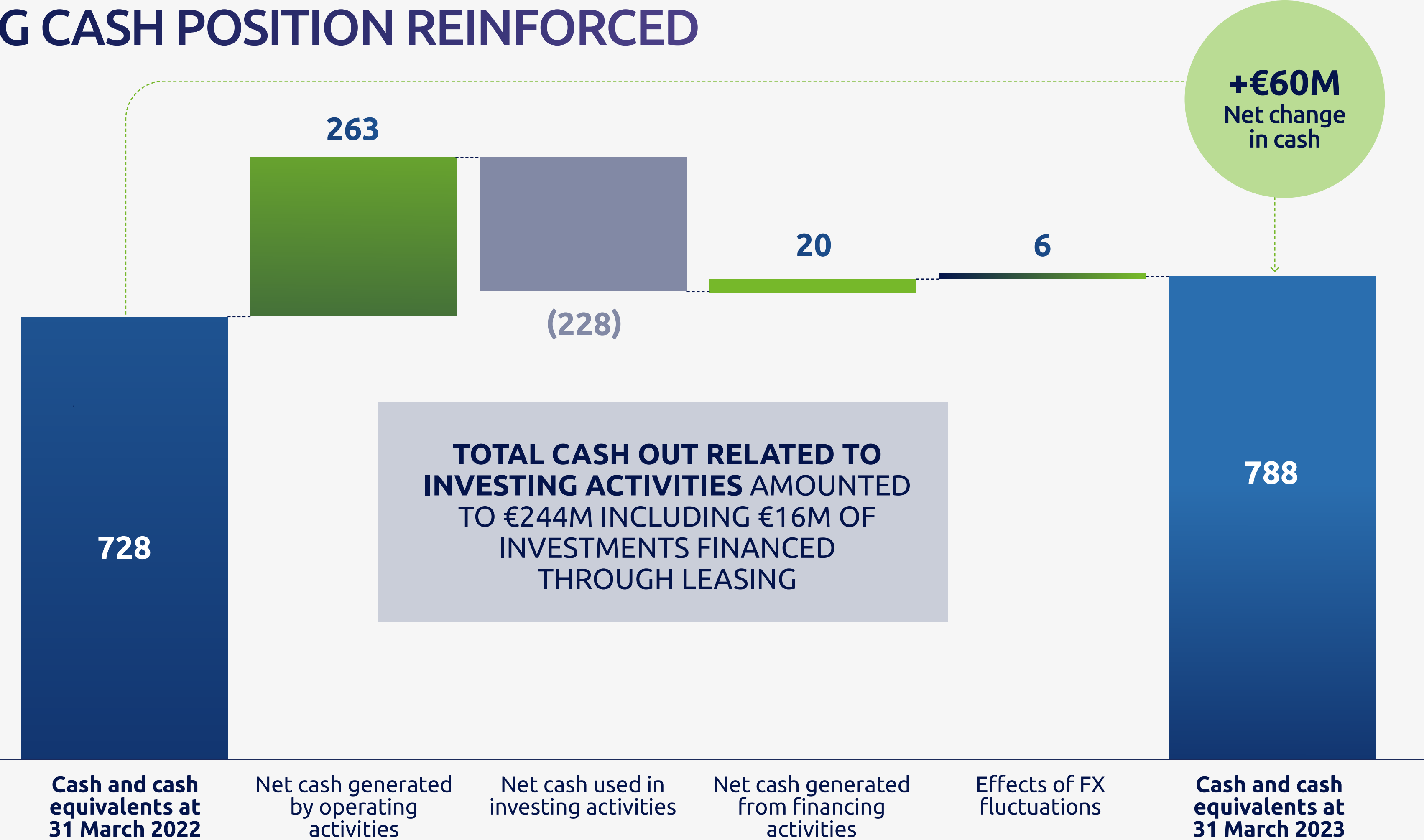
**Investments at €228M** (€244M including tools financed through leasing contracts)

- €28M in capitalized R&D (mainly SmartSiC™)
- €191m related to capacity investments (€155m SOI, €25m Filters, €11m SmartSiC™)

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# STRONG CASH POSITION REINFORCED



Cash inflows and outflows from continuing operations (cash outflow related to discontinued operations was close to zero)



# VERY SOUND BALANCE SHEET MAINTAINED

ASSETS - in €M	31 March 2023	31 March 2022
Intangible assets	128	108
Tangible assets	705	562
Other non-current assets	84	35
Deferred tax assets	67	64
<b>Total non-current assets</b>	<b>985</b>	<b>770</b>
Inventories	175	143
Trade receivables	363	280
Other current assets	109	66
Cash and cash equivalents	788	728
<b>Total current assets</b>	<b>1,435</b>	<b>1,216</b>
<b>Total assets</b>	<b>2,420</b>	<b>1,986</b>

**€143M net increase in tangible assets includes €181M investments related to:**

- Further capacity investment in Singapore 300mm SOI facility
- Capacity investment in Bernin (300mm SOI, POI)
- New leasing contracts for land and administrative buildings

**Other non-current assets mainly include tax research credit receivables and downpayments to suppliers**

LIABILITIES AND EQUITY - in €M	31 March 2023	31 March 2022
<b>Total equity</b>	<b>1,306</b>	<b>1,044</b>
Long-term financial debt	578	518
Provisions and other non-current liabilities	80	79
<b>Total non-current liabilities</b>	<b>659</b>	<b>597</b>
Short-term financial debt	69	68
Trade payables	171	101
Other current liabilities	216	177
<b>Total current liabilities</b>	<b>456</b>	<b>346</b>
<b>Total liabilities and equity</b>	<b>2,420</b>	<b>1,986</b>

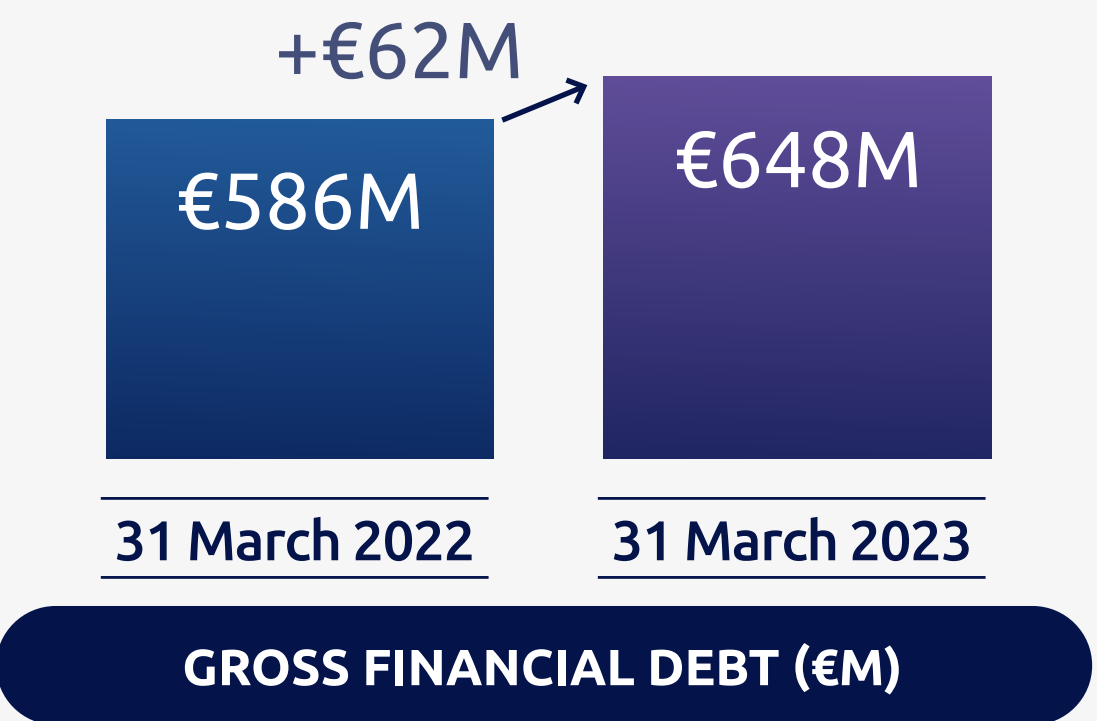
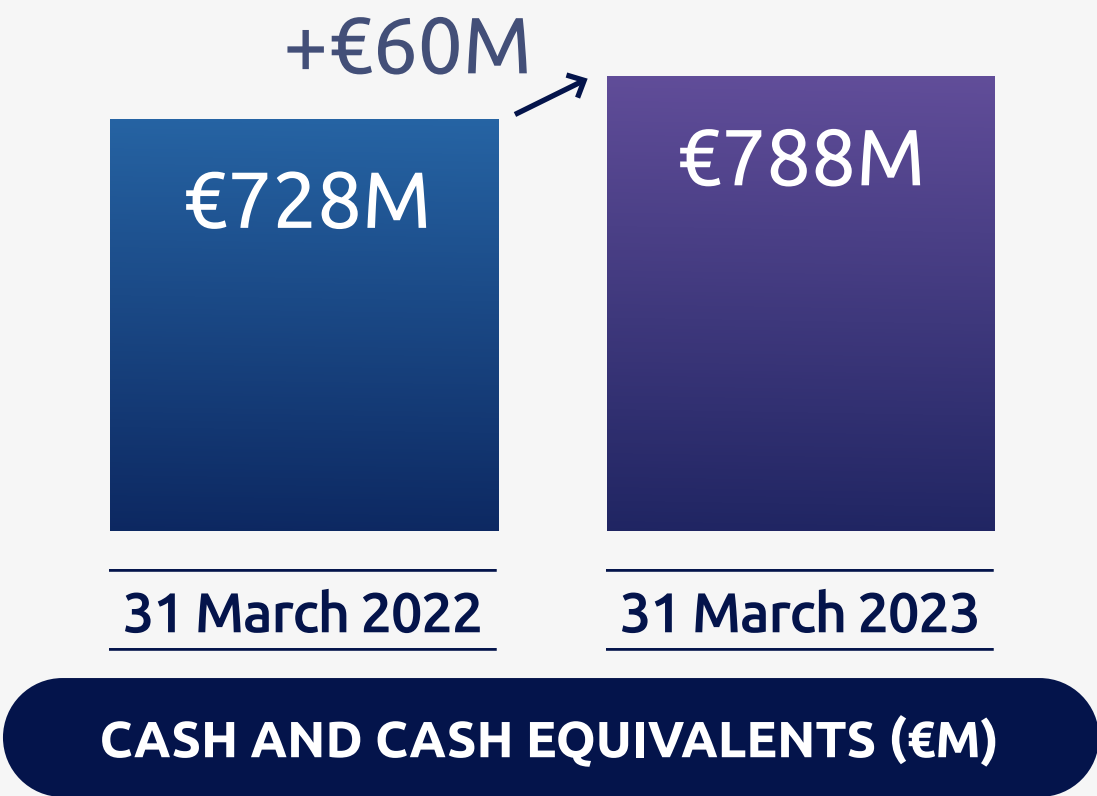
**€62M increase in financial debt mainly reflects:**

- €53M of net drawdowns and new borrowings
- €20M net increase in property leases and leasing contracts
- Partially offset by €17M change in fair value of financial derivatives (FX hedging)





VERY HEALTHY FINANCIAL  
STRUCTURE AHEAD OF  
FUTURE GROWTH PLANS



# FY24 AND BEYOND

## UPDATING OUR FINANCIAL COMMUNICATION CALENDAR



**JULY  
2023**

**Q1'24  
Revenue**



**MID-NOVEMBER  
2023**

**H1'24  
Results**  
*(including  
Q2'24 Revenue)*



**JANUARY  
2024**

**Q3'24  
Revenue**



**2<sup>ND</sup> HALF OF MAY  
2024**

**FY24  
Results**  
*(including  
Q4'24 Revenue)*



# OUTLOOK – FY24 GUIDANCE CONFIRMED

## STABLE REVENUE EXPECTED ON AN ORGANIC BASIS

### FY24 EXPECTED TO MARK A PAUSE IN FAST GROWTH TRAJECTORY TOWARD FY26

- Weaker smartphone market with strong inventory correction expected to weigh on Mobile Communications
- Sustained demand anticipated in both Automotive & Industrial and Smart Devices markets
- H1'24 revenue expected to decline by ~15% on an organic basis
- H2'24 revenue expected up low double digit

## EBITDA MARGIN <sup>(1)</sup> EXPECTED TO REMAIN AT ~36%

### PROFITABILITY MAINTAINED THROUGH STRICT COSTS CONTROL

- Inflation, including bulk price
- Sustained effort in R&D
- Offset by strong cost control
- Solid level of loading of our fabs
- Revenue timing over the year will request tight production management
- €/\$. 1.10 (~40% of net exposure hedged ~1.12)

## CAPITAL EXPENDITURE EXPECTED AT ~€300M

### CAPACITY INVESTMENTS TO SUPPORT STRONG GROWTH THROUGH FY26

#### SOI INVESTMENTS

- 300mm refresh capacity in Bernin 4
- Additional capacity investments at Singapore 300mm SOI existing facility
- Building of Singapore facility extension

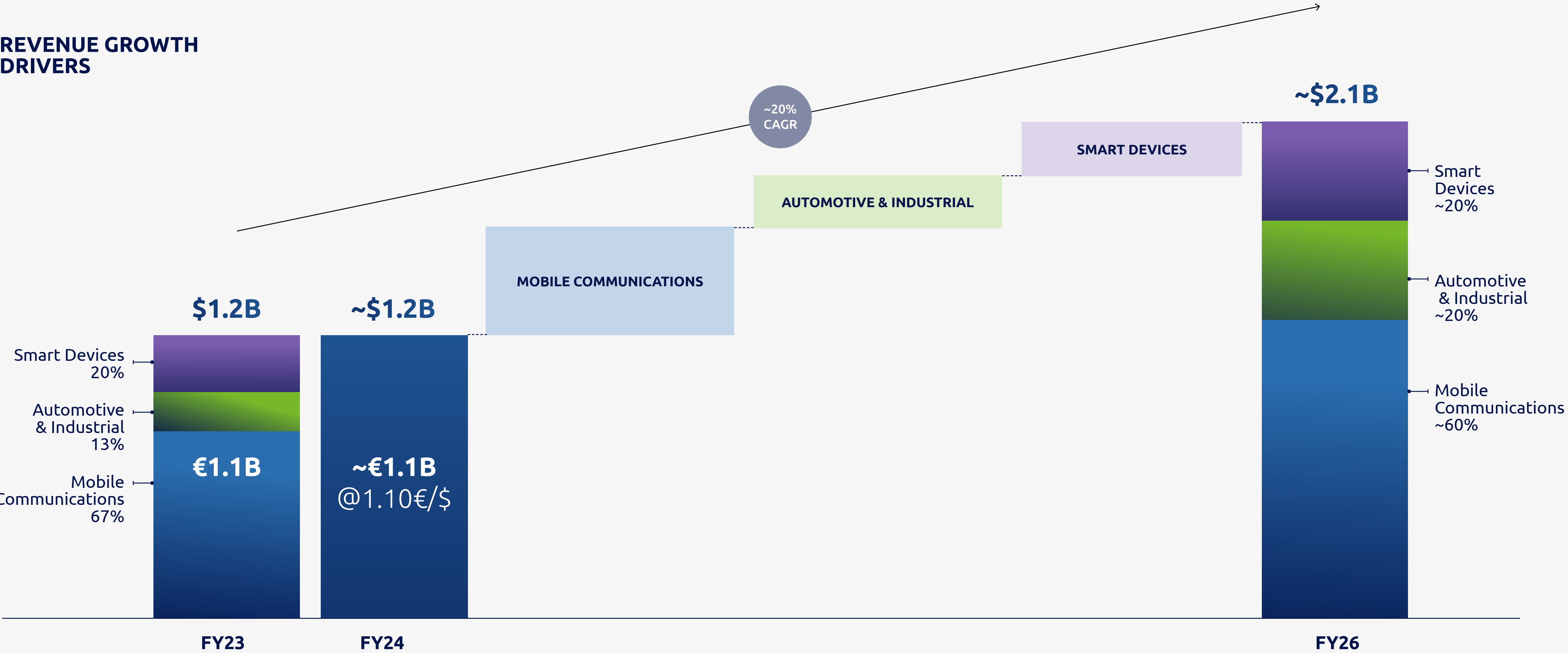
#### OTHER INVESTMENTS

- Further investments in SmartSiC™ tools (150 & 200mm in Bernin 4)
- Ongoing investments in innovation (including capitalized R&D)

(1) EBITDA margin = Electronics EBITDA (EBITDA from continuing operations) / Revenue

# FINANCIAL MODEL - REVENUE TO REACH \$2.1B IN FY26

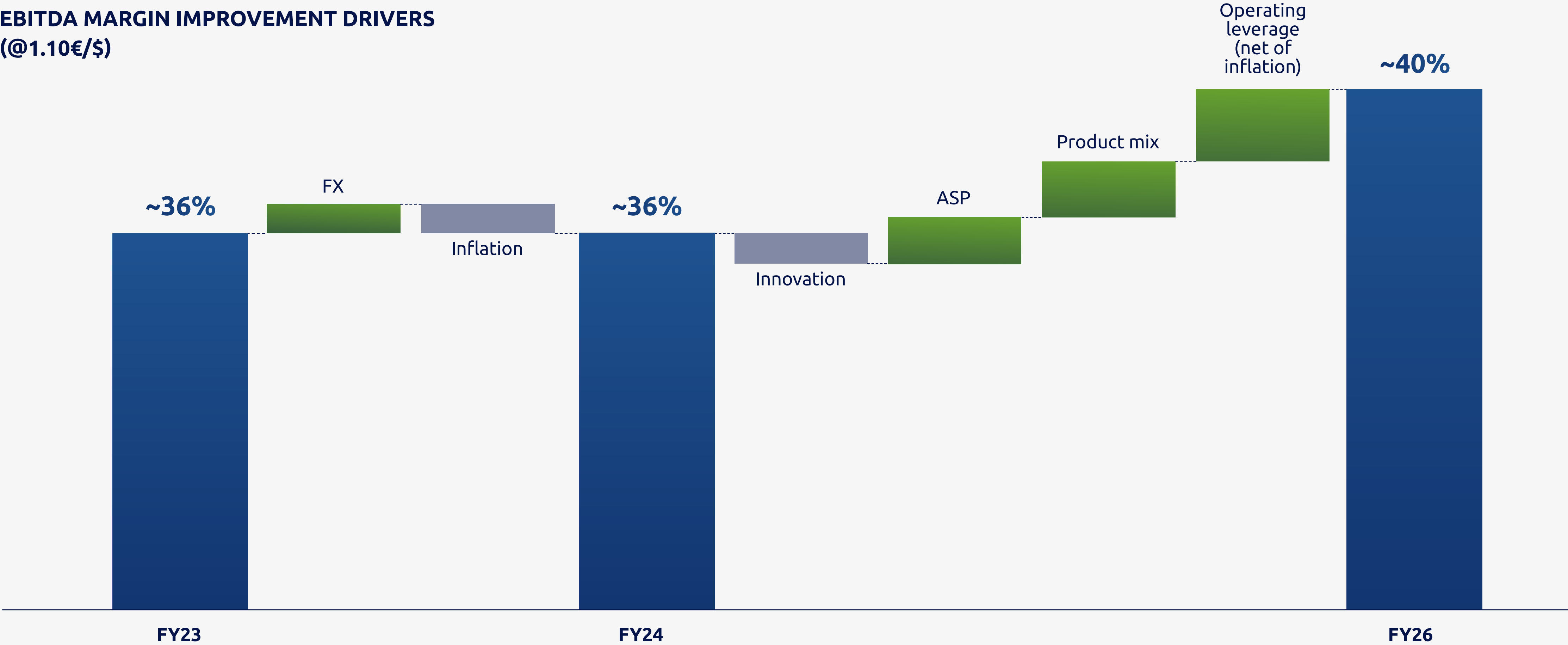
## REVENUE GROWTH DRIVERS





# FINANCIAL MODEL - x2 EBITDA BY FY26

EBITDA MARGIN IMPROVEMENT DRIVERS  
(@1.10€/€)



# FINANCIAL MODEL - CAPITAL ALLOCATION

	FY23 (Actual)	FY24	FY26 (Model)
CAPEX % Revenue <sup>1</sup>	22%	~27%	~20% over FY22-26
ROCE <sup>2</sup> (post-tax)	20%	—————→ ~25%	

## CAPEX

€1.5B CAPEX expected over FY22-FY26 including €1B over FY24-FY26 (incl. €90M for Bernin 4 building financed through lease back)

Rigorous piloting of our CAPEX through post-tax ROCE<sup>2</sup> improvement, from ~20% in FY23 (2x WACC) to ~25% in FY26

## VALUE CREATION DRIVERS

Sufficient cumulative operating cash flows to finance CAPEX

- Strong working capital monitoring and targeted working capital around 30% of revenue in average

Capital allocation priorities:

- CAPEX
- Innovation

Debt

- Loans at variable rate hedged through cap
- Potential partial / full OCEANEs 25 buyback

(1) Excluding Buildings  
(2) Post-tax ROCE: EBIT after tax / (non current assets + working capital)





# FINANCE KEY MESSAGES

## PREPARING FOR REACCELERATION BEYOND FY24 TRANSITION YEAR

- FY23 19% Revenue growth and 36% EBITDA margin in line with commitment
- FY24 plateau demand with flat sales for Soitec
- Strong acceleration in FY25 & FY26 with 20% CAGR

## OPTIMIZED INVESTMENT CYCLE FROM FY24 TO FY26 TO SECURE GROWTH EXPANSION

- ~€1B CAPEX to fully capture growth potential
- Strong focus on return: post-tax ROCE to grow from ~20% to ~25%

## STRONG ACCELERATION FOR VALUE CREATION: x2 EBITDA IN 3 YEARS

- FY26 revenue expected ~\$2.1B
- x2 EBITDA from FY24 to FY26
- Leveraging product added value, higher ASP, operational excellence and operating leverage

# CEO WRAP-UP

Pierre Barnabé

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# CEO KEY MESSAGES



Technology megatrends to fuel **MASSIVE DEMAND** for semiconductors and increased adoption of **ENGINEERED SUBSTRATES**



Deploying our sustainable value creation model to **STRENGTHEN OUR GLOBAL LEADERSHIP** in engineered substrates



**FY26 REVENUE / EBITDA OBJECTIVES ON TRACK**  
**x2 EBITDA in 3 years**

**BEYOND FY26**  
**EXPAND** our sustainable value creation ambitions



CAPITAL MARKETS DAY 2023

THANK YOU