soitec

INVESTOR CONFERENCE

AUTOMOTIVE & INDUSTRIAL

March 2022

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This document contains summary information and should be read in conjunction with the 2020-2021 Universal Registration Document, which was filed on July 5, 2021 with the French stock market authority (Autorité des Marchés Financiers, or AMF) under number D.21 0681. The French version of the 2020-2021 Universal Registration Document and an English courtesy translation for information purposes are both available for consultation on the Company’s website (www.soitec.com).

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AGENDA

#01 SOITEC AT A GLANCE

#02 AUTOMOTIVE & INDUSTRIAL

#03 SmartSiC™

01

SOITEC AT A GLANCE

SOITEC DESIGNS SEMICONDUCTOR MATERIALS
TO MAKE THE WORLD

MORE
CONNECTED

MORE
ENERGY EFFICIENT

MORE
INTELLIGENT

FOCUSING ON 3 STRATEGIC MARKETS
TO EXPAND OUR PRODUCT PORTFOLIO

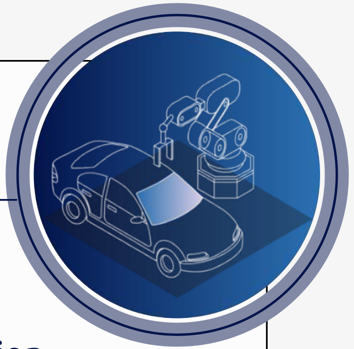
MOBILE COMMUNICATIONS

MAIN DRIVERS

- 5G mmW
- 5G sub-6 GHz
- Mobile infrastructure
- Wi-Fi 6

SOITEC PRODUCTS

RF-SOI
FD-SOI
POI
GaN



AUTOMOTIVE & INDUSTRIAL

MAIN DRIVERS

- Autonomous cars
- Vehicle electrification
- Infotainment
- Industry 4.0

SOITEC PRODUCTS

Power-SOI
FD-SOI
SiC
GaN

SMART DEVICES

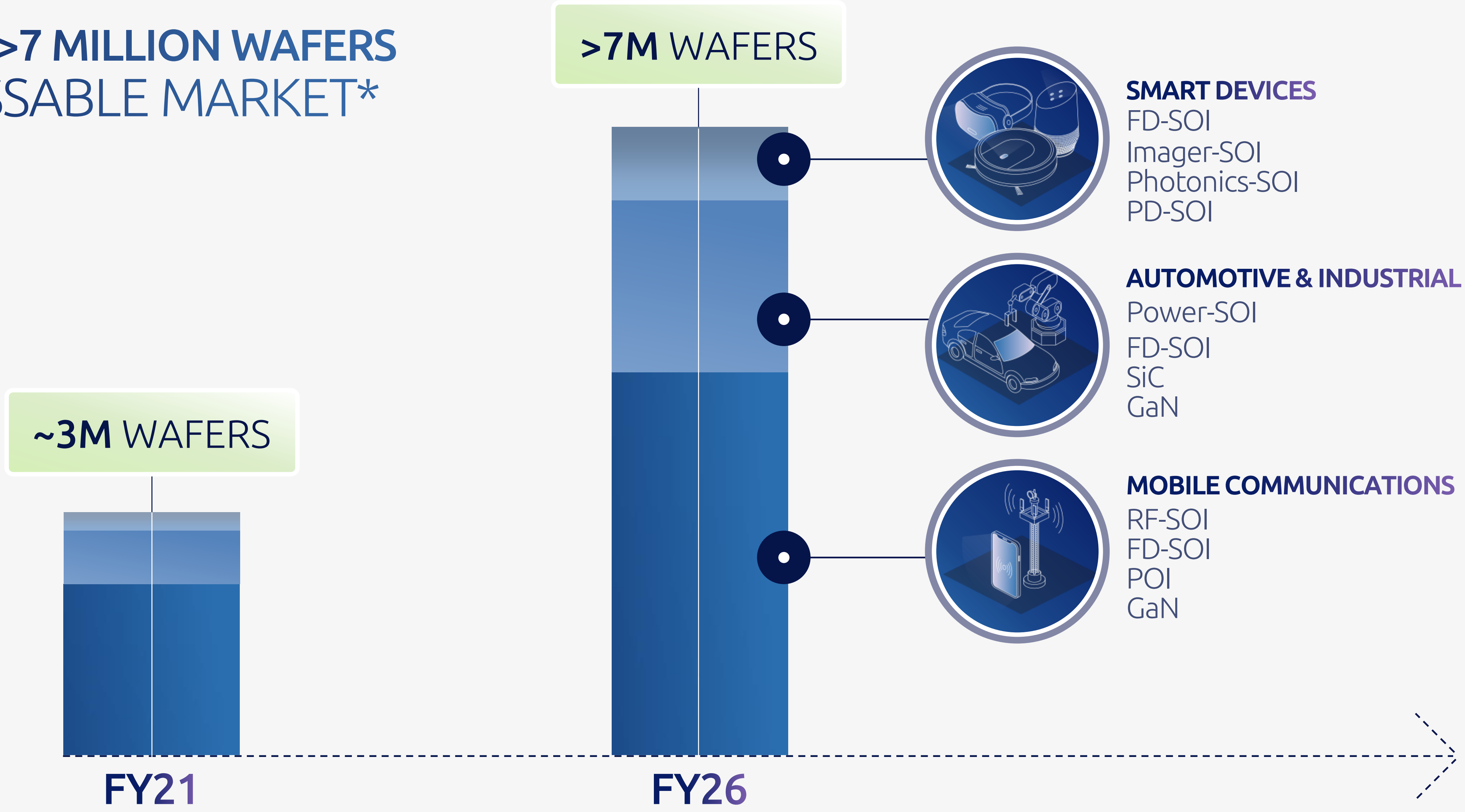
MAIN DRIVERS

- Edge computing
- 3D sensing & Healthcare
- Smart home & Smart cities
- Data centers

SOITEC PRODUCTS

FD-SOI
Imager-SOI
Photonics-SOI
PD-SOI

SERVING >7 MILLION WAFERS ADDRESSABLE MARKET* BY FY26



~3M WAFERS

>7M WAFERS

SMART DEVICES
FD-SOI
Imager-SOI
Photonics-SOI
PD-SOI

AUTOMOTIVE & INDUSTRIAL
Power-SOI
FD-SOI
SiC
GaN

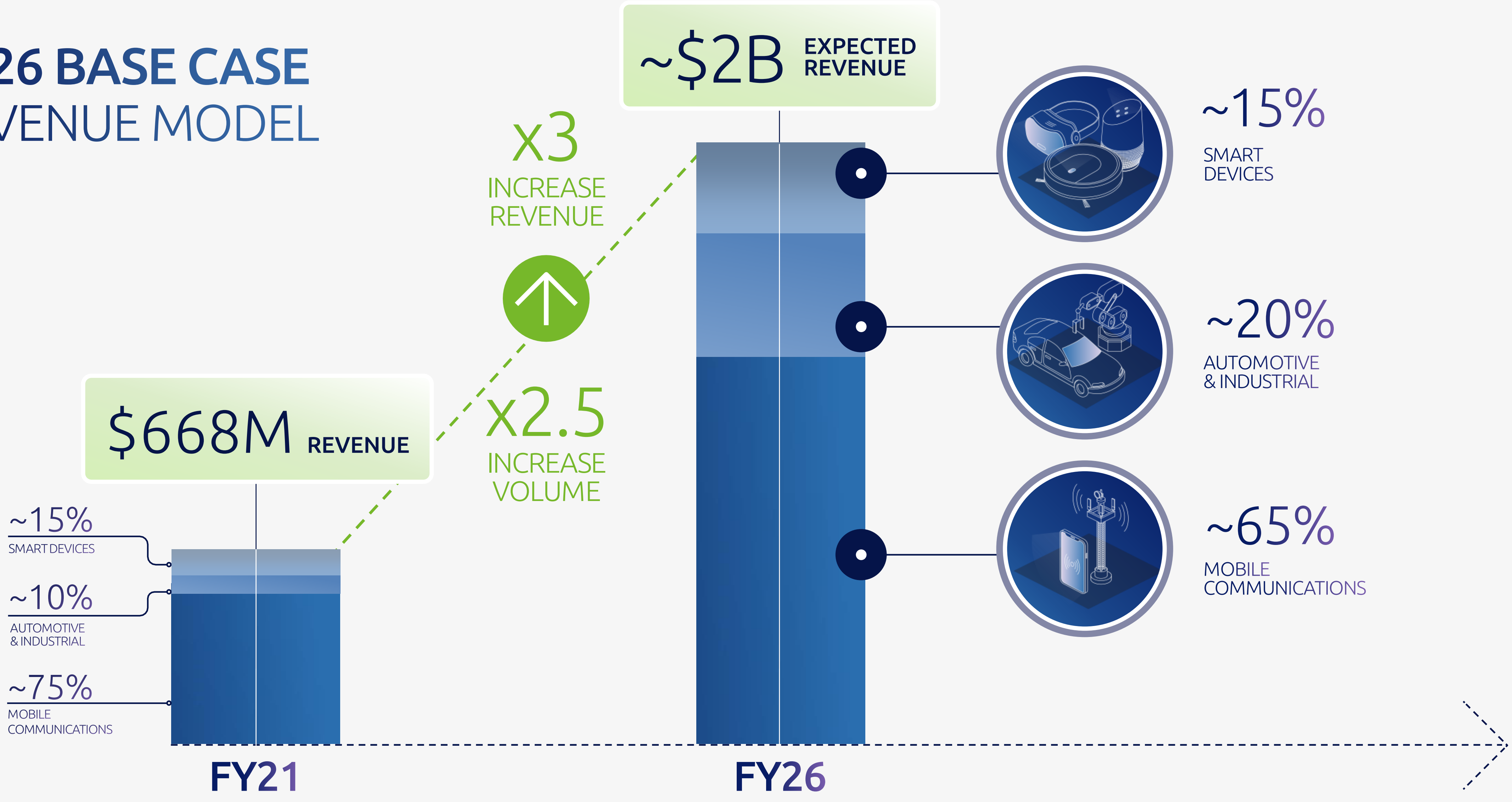
MOBILE COMMUNICATIONS
RF-SOI
FD-SOI
POI
GaN

FY21

FY26

*Engineered substrates market opportunity

FY26 BASE CASE REVENUE MODEL



DELIVERING ON OUR ESG COMMITMENTS
SHARING VALUE CREATION WITH ALL STAKEHOLDERS

Our corporate purpose voted in July 2021 perpetuates our engagements towards sustainability and all our stakeholders

Soitec is taking action for the United Nations Sustainable Development Goals

GROUP PRIORITIES

GROWTH
Expand and protect the core business

PROFITABILITY
Protect into adjacent markets

PEOPLE
Adjust the operating model

SUSTAINABILITY
Support our value creation strategy

02

AUTOMOTIVE & INDUSTRIAL

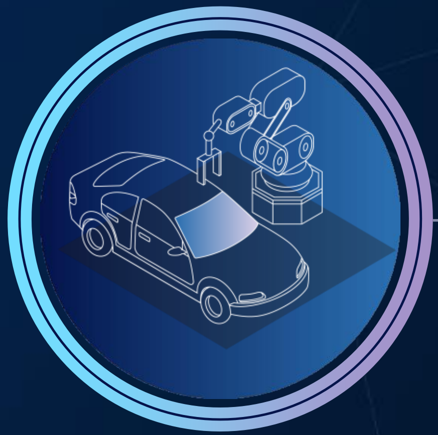
SOITEC PRODUCTS PORTFOLIO
AUTOMOTIVE & INDUSTRIAL

APPLICATIONS

- Autonomous driving systems
- Connected car
- Vehicle electrification
- Industry 4.0

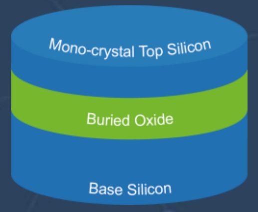
SOITEC PRODUCTS ENABLE

- Autonomous driving
- Infotainment
- Vehicle electrification



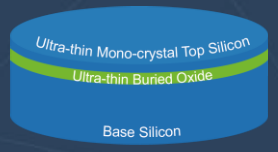
Power-SOI

Power management ICs, In-vehicle networking & gate drivers



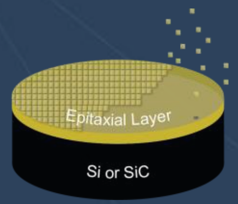
FD-SOI

MCUs, ADAS-Radars
ADAS-Vision



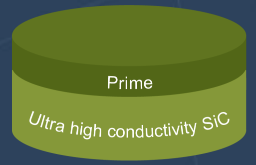
GaN

DC-DC 48V converters

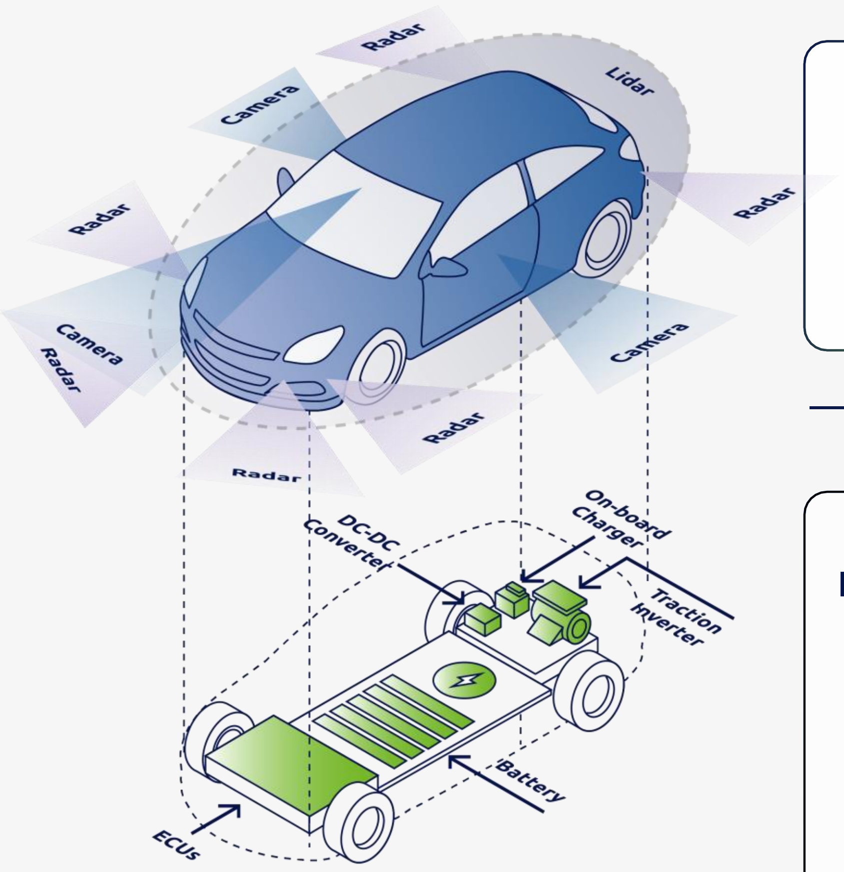


SmartSiC™

Automotive electrification



AUTOMOTIVE MEGATRENDS
DRIVE INNOVATION FROM SYSTEMS TO SUBSTRATES



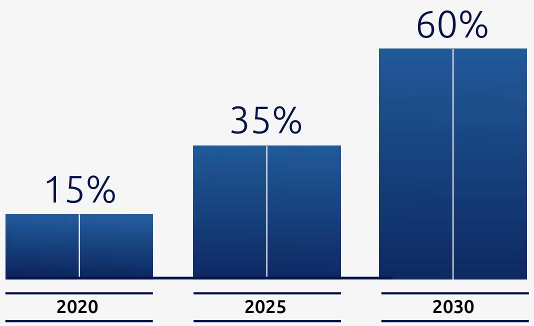
DIGITALISATION

Fusion processor

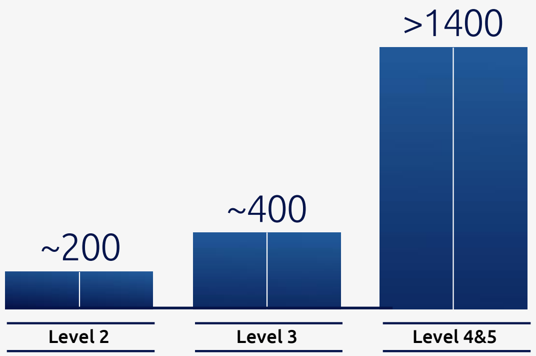
Radar processor

Image sensor

Domain controller



Autonomous cars level 2 & above (%)



ADAS semiconductor content ($)

ELECTRIFICATION

SiC Diode

SiC MOSFET

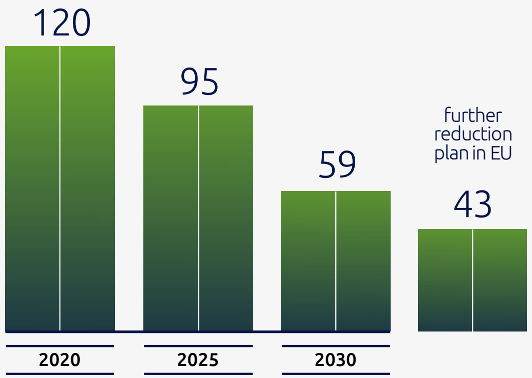
GaN MOSFET

PMIC

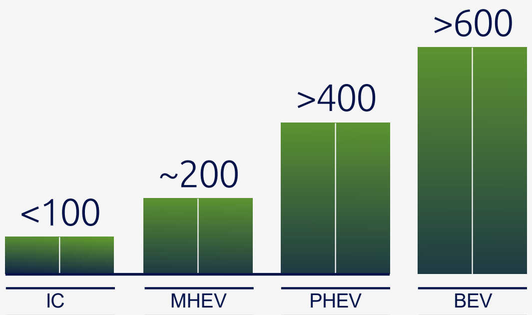
BMS

Gate drivers

Smart actuator



CO_2 emission regulation (gCO_2/km)

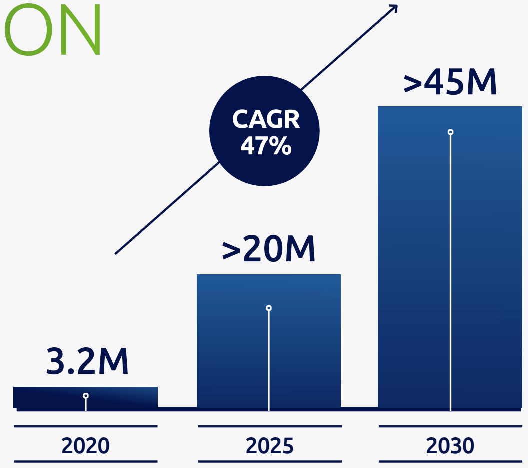


Power semiconductor content ($)

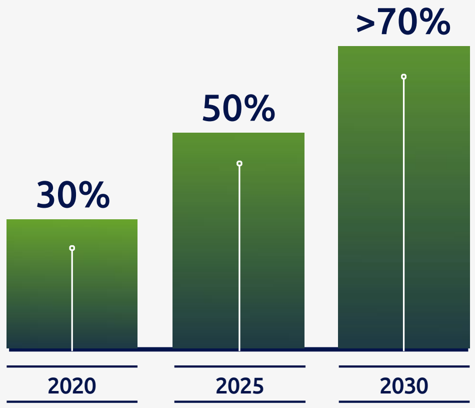
Source: Soitec estimates, Infineon, NXP, IHS, The International Council on Clean Transportation (ICCT) 2020

ONCE-IN-A CENTURY TRANSFORMATION IN AUTOMOTIVE MARKET

		AUTO SEMI OPPORTUNITIES 2025
C Connected	**27M** Sales of 5G enabled vehicles in 2026[1]	TELEMATIC AND INFOTAINMENT SEMI **$15B CAGR 10%**
A Autonomous	**10M** Sales of L3 and above vehicles in 2030[2]	AUTONOMOUS SEMI **$16B CAGR 25%**
S Shared	**40M** Global shared fleet in 2030[3]	CONSOLIDATED WITH CONNECTED
E Electric	**45M** Global EV sales in 2030 (>50% market share)[4]	EV POWER SEMI **$8B CAGR 30%**



GLOBAL EV SALES (MILLION UNITS)



SiC BASED EV POWERTRAIN (%)

SiC IS KEY TO ADDRESS THE CHALLENGES OF EV ADOPTION

- Weight
- Reliability
- Thermal conductivity
- Range anxiety
- Charging time
- Cost

(1) v.s. 2020: Zero 5G vehicles; (2) v.s. 2020: Zero L3+ vehicles; (3) v.s. 2020: 19m global shared fleet; (4) v.s. 2020: 3.2m EV sales: 4.2% market share Sources: Soitec estimates, LMC, IHS, NXP, IFX 2019 / CAGR (2019~2025), IEA 2021, Exawatt, Yole.

POWERTRAIN – A CRITICAL COMPONENT OF THE EV MARKET

Beyond added value at the system level, SiC will also tackle cost

POWERTRAIN COST: ~10,000€

Electric motor

- Electric motors
- e-transmission

~1,100€

Battery pack & modules

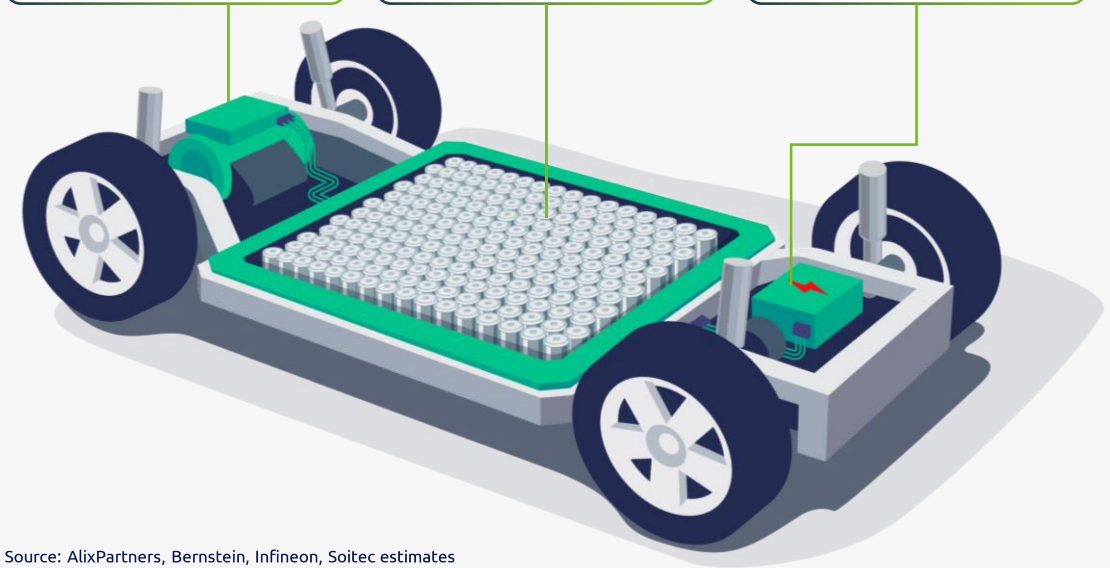
- Battery pack
- Modules and cells
- BMS

~8,000€

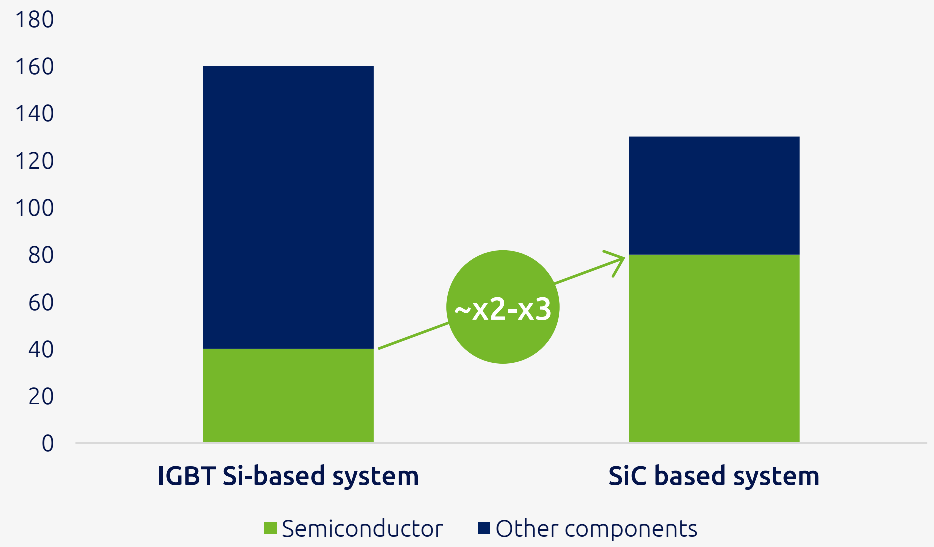
Power electronics

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

~1,500€



TOTAL SYSTEM COST – 15-20% REDUCTION



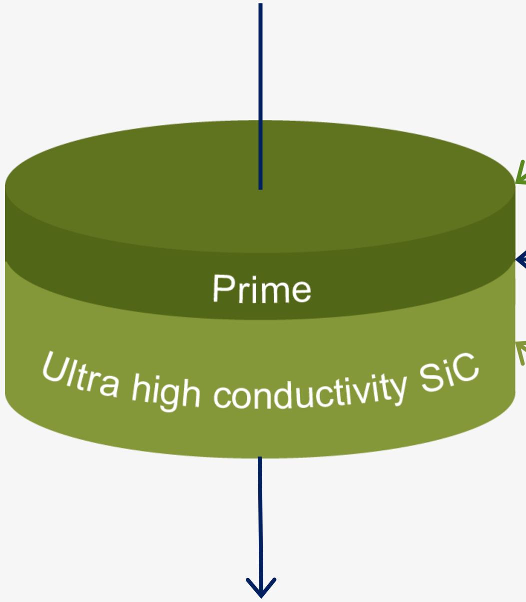
Shorter charge time 800V	~50% faster
Increase battery range	~5% – 10% longer
Reduce system / battery costs	~$500 – $1,000

Source: AlixPartners, Bernstein, Infineon, Soitec estimates

03 SmartSiC™

SmartSiC™ SUBSTRATES & VALUE PROPOSITION

SmartSiC™ is a new generation substrate with ultra low resistivity and better usage of monoSiC, benefitting from the re-usability



Thick C-face donor monoSiC (SmartSiC™-Performance) or by epitaxy (SmartSiC™-Advanced) & Refresh multiple times

Conductive bonding (metal free)

PolySiC base wafer:
- **Ultra low resistivity**
- **Enhanced geometry**

Vertical conductivity & Geometry

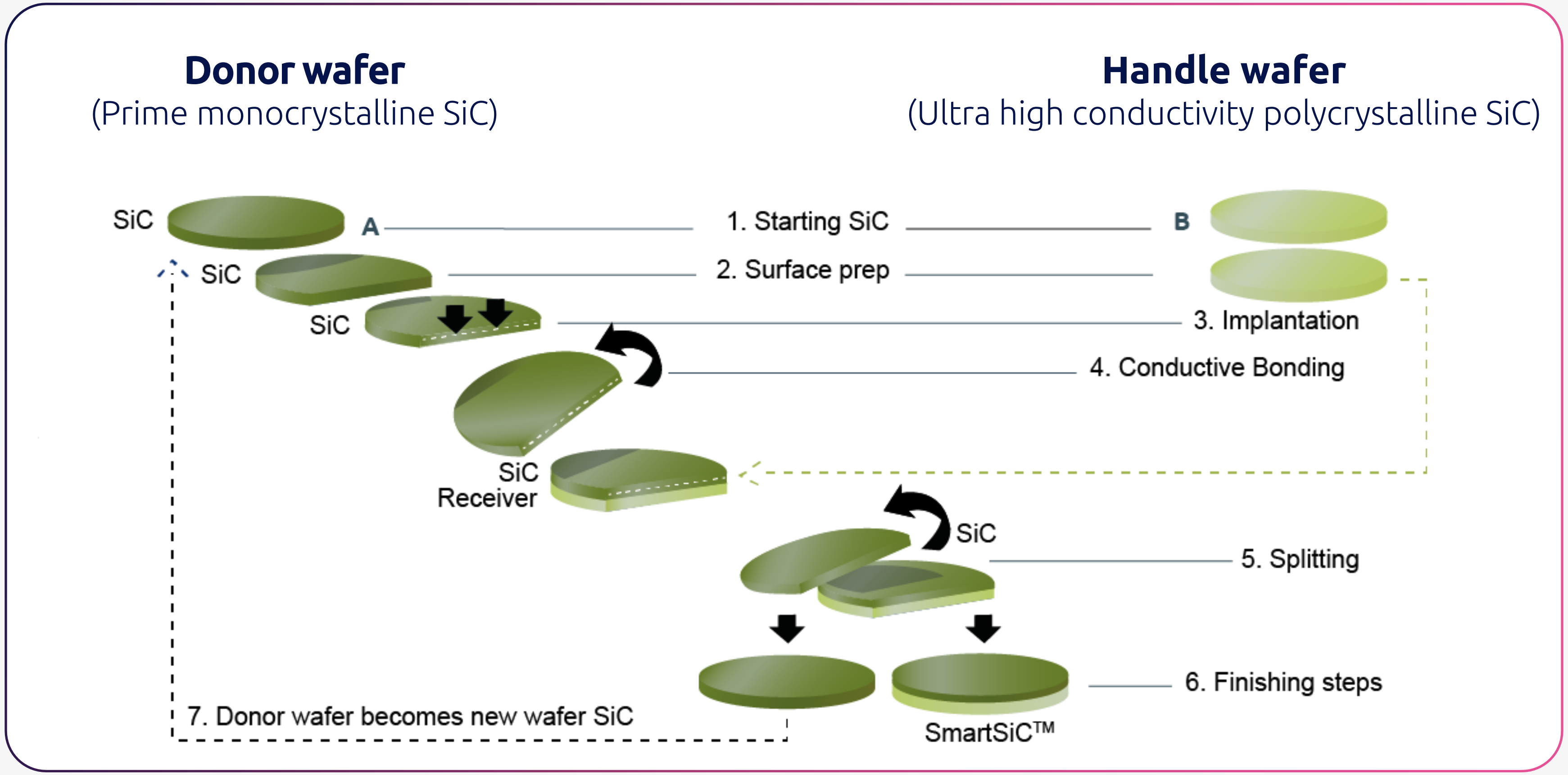
Reducing Capex & Opex for device manufacturers

~20,000t of CO_2

Energy savings per 500k wafers vs. current SiC technologies

SMART CUT™ PROCESS ADAPTED TO SiC

FULL R&D PILOT LINE RUNNING, ISO 9001 CERTIFICATION GRANTED



PolySiC FOR SmartSiC™
STRATEGIC PARTNERSHIPS TO STRENGTHEN OUR VALUE PROPOSITION

STRATEGIC PARTNERSHIP

Strategic JDA to develop polySiC substrates designed for the Electric Vehicles market

Scope
- Strategic JDA to develop a new range of polySiC substrates for the EV market
- Soitec and Mersen teams will leverage Soitec's Substrate Innovation Center within CEA-Leti to validate progress towards industrialization

Strategic Rationale
- Very low electric resistivity polySiC substrates, in conjunction with SmartCut™ technology, will optimize Power / SiC Power components
- polySiC compatible with SmartCut™ technology and customers specs
- polySiC substrates will enable higher energy efficiency, fostering the development of more energy efficient Electric Vehicles

	Traditional SiC Monocrystalline	SmartSiC™ Polycrystalline
Cost of ownership	High	Low
Electrical performance	Limited by technology	High, enabling ultra high conductivity

BOLT ON ACQUISITION

State of the art wafering and polishing services for high-performance semiconductors and industrial crystals

Strategic Rationale
- Unique expertise to bring critical technology acceleration for SmartSiC™ and internalize polishing capabilities
- Leverage specific know-how to integrate into global SmartSiC™ differentiation
- Leverage customer access with leading SiC bulk & device makers
- Opportunity to accelerate cost of ownership reduction roadmap

NOVASiC Business & Operations
- Polishing Services – key product: 150mm SiC epitaxy reclaim
- Epitaxy, Wafer dicing, Edge grinding, Laser marking, Wire sawing

High precision Polishing → Improved **RE-USABILITY**

Flatness through surface preparation → Lower **DIE SIZE**

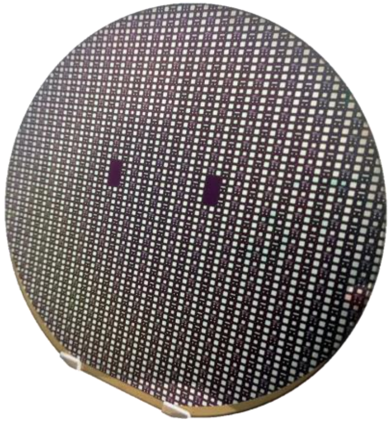
High final surface quality → Higher **YIELD**

SMARTSiC™ ENGINEERED SUBSTRATES IN 150 & 200mm

SAMPLING AND PROTOTYPING PHASE BEFORE QUALIFYING

FROM SiC BULK

TO SMARTSiC™ ENGINEERED SUBSTRATE

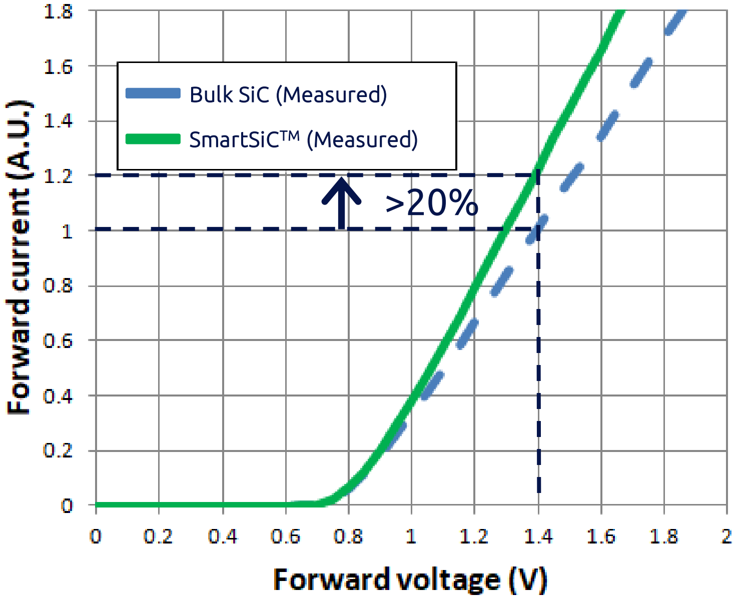


TO POWER ELECTRONICS DEVICES

(DIODES AND MOSFET)

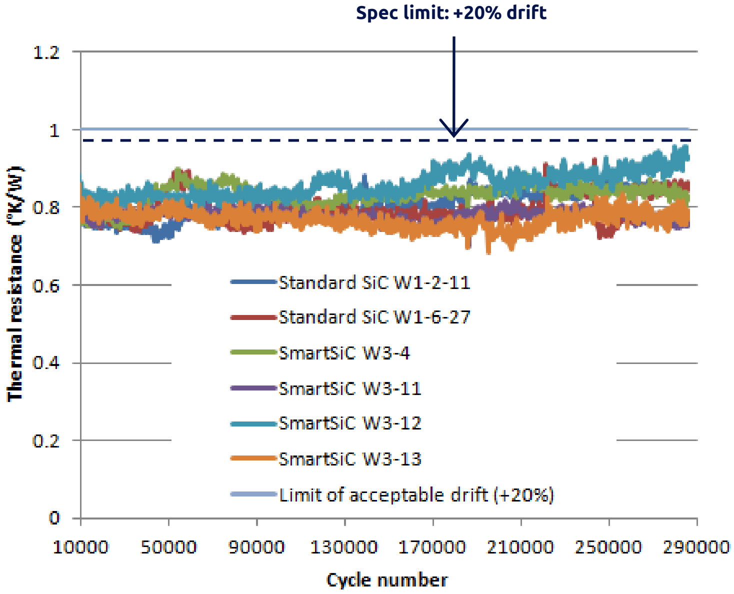
SMARTSiC™ DELIVERS SUPERIOR DEVICE PERFORMANCE

Proven higher amps through diodes



Enabling new designs for die optimization

Proven long-term reliability through vertical Schottky structure



Power cycling test validated after >300,000 cycles

SMARTSiC™ ROADMAP

EXISTING AND FUTURE APPLICATIONS

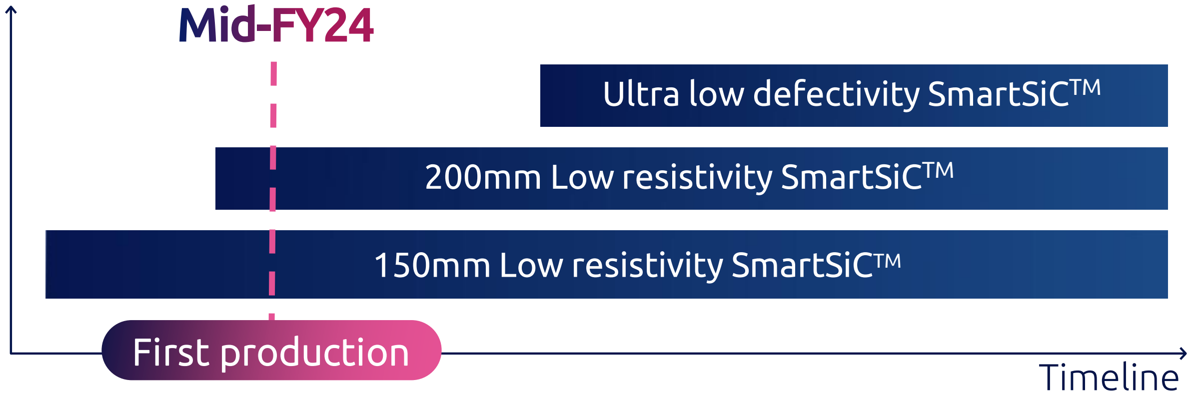
- Traction inverter system (EV's, Railways)
- On-board chargers (EV's)
- DC/DC converter (EV's, Renewables)
- DC/AC Inverters (Renewables, Industry)
- Advanced usage of SiC : Integrated motor drives, solid state breakers…

VALUE PROPOSITION

SmartSiC™ vs SiC: **Greener**, **Faster** and **Better**

- 20,000 Tons of CO2 reduction for each 500,000 wafers vs. SiC
- 200mm scalability to accelerate SiC adoption through 10x re-usability
- Enabling new generation of SiC devices thanks to >7% improvement of resistivity

FAMILY "SMARTSiC™ PRODUCT" ROADMAP FROM FY23



Mid-FY24

Ultra low defectivity SmartSiC™

200mm Low resistivity SmartSiC™

150mm Low resistivity SmartSiC™

First production

Timeline

EXPANDING OUR MANUFACTURING FOOTPRINT IN BERNIN TO PRODUCE HIGH VOLUME SMARTSiC$^{\text{TM}}$ SUBSTRATES

H2 FY24

Plant Qualification

Q3 FY24

First revenue

FY25

Ramp up

FY26

High single digit % of FY26 $2bn expected revenue

150 & 200mm
diameters to be produced in the Fab

March 31st, 2022
Kick-off construction
of Bernin 4 for SmartSiC$^{\text{TM}}$

High single digit %
of Soitec FY26 revenue
generated by SmartSiC$^{\text{TM}}$

Up to 1 million
SmartSiC$^{\text{TM}}$ wafers per year
(Bernin 4 fab potential capacity)

Up to 400
direct new jobs
expected to be created

soitec

soitec

AUTOMOTIVE & INDUSTRIAL

THANK YOU