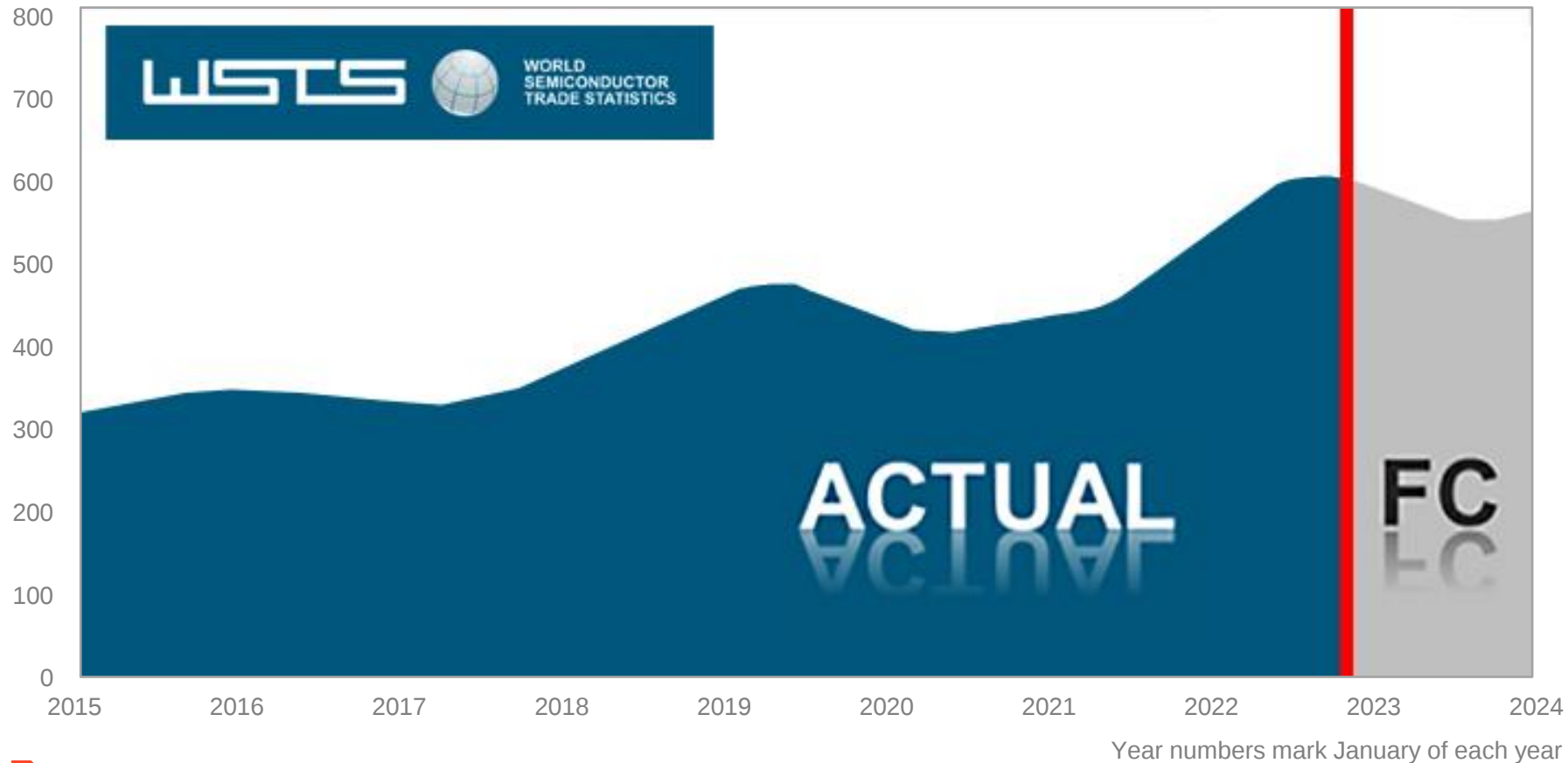


Semicon Europa 2023

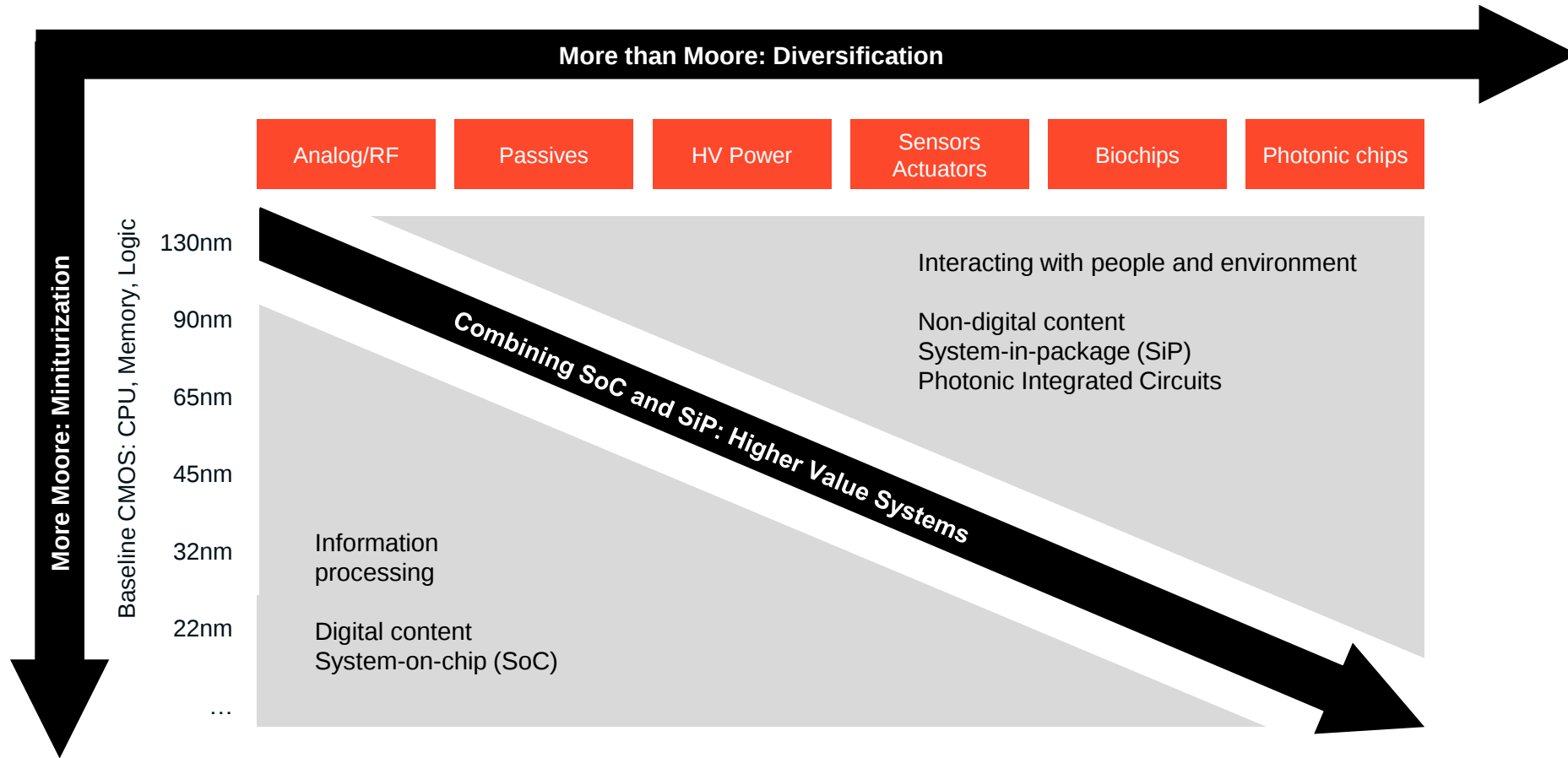
Photonics: a new semiconductor opportunity

Market growth in semicon

Global semiconductor billings (billion US\$) – 12MMA



Next-generation chip technology goes beyond CMOS



Opening the door to new applications and markets



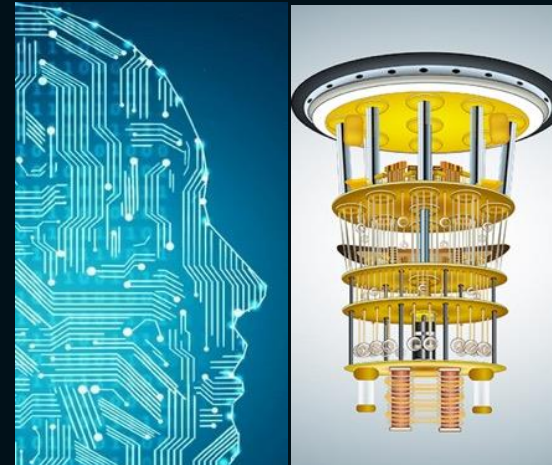
Now

Datacom and 5G+



Emerging

Continuum-of-Care
Food and Agriculture
Infrastructure & Transportation

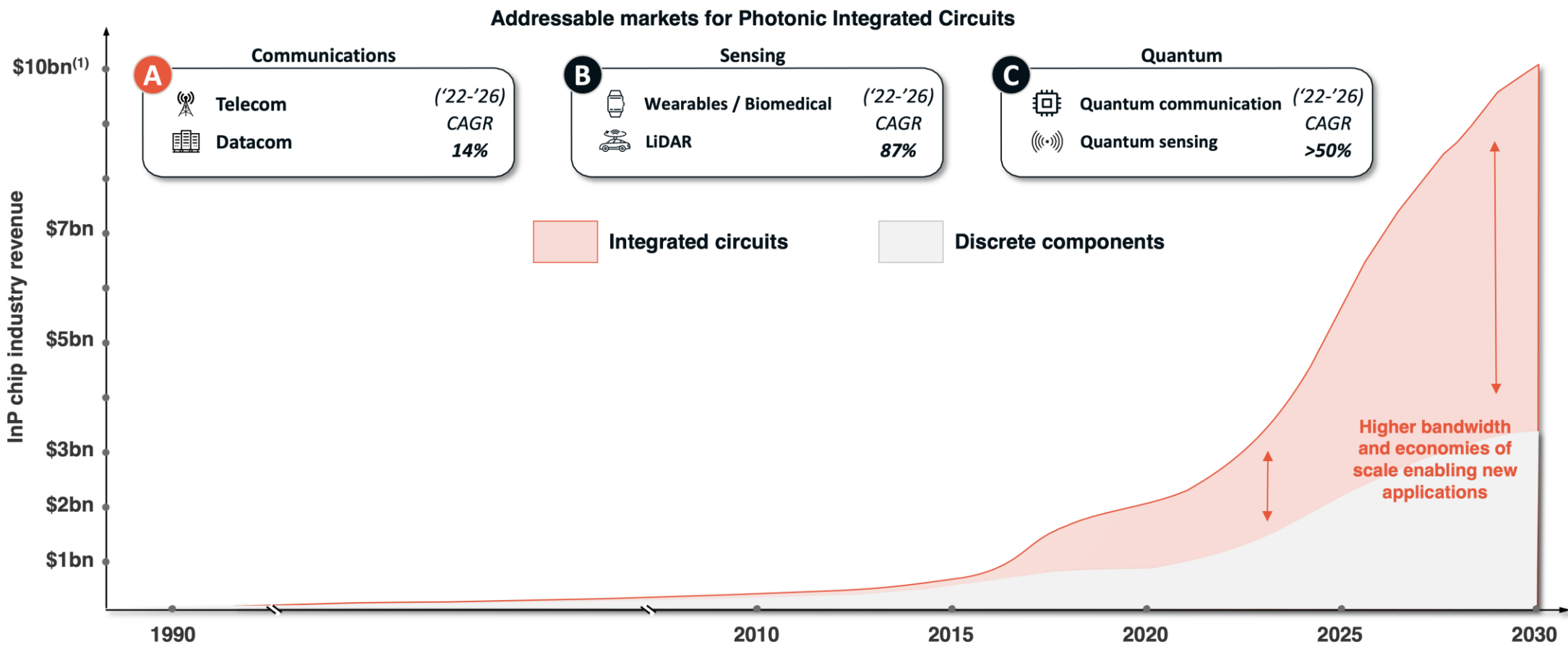


Future

AI
Neuromorphic
Quantum



The PIC market is growing rapidly creating opportunity for Europe



Sources: InP Wafer, Epiwafer and Device Market 2021: Photonics and RF Applications report, Yole Développement, 2021, IDC.
(1) Management Estimates.

Strong European for a world-class industry

240^M

National Photonics Agenda (NL) 2018

1,1^B

National Growth Fund (NL) 2022

43^B

EU Chips Act & IPCEI 2022



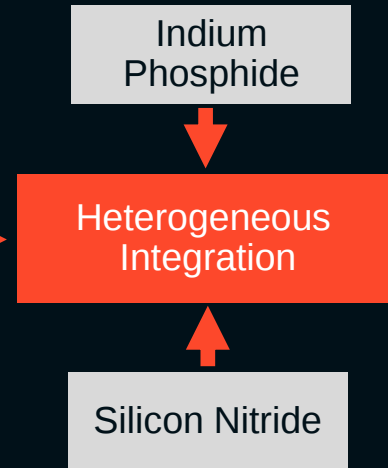
The system of the future will consist of multiple technologies

Silicon Photonics

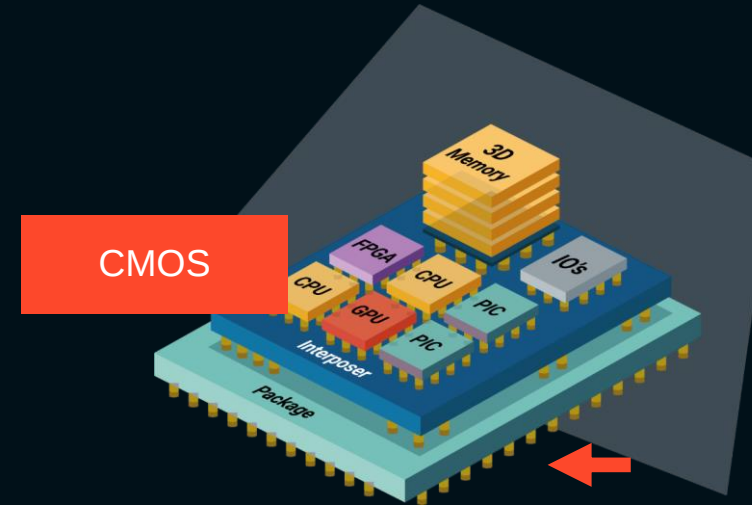


Silicon Photonics

Sensing



Computing



CMOS

Now

Silicon Photonics is becoming a part of the semicon industry.

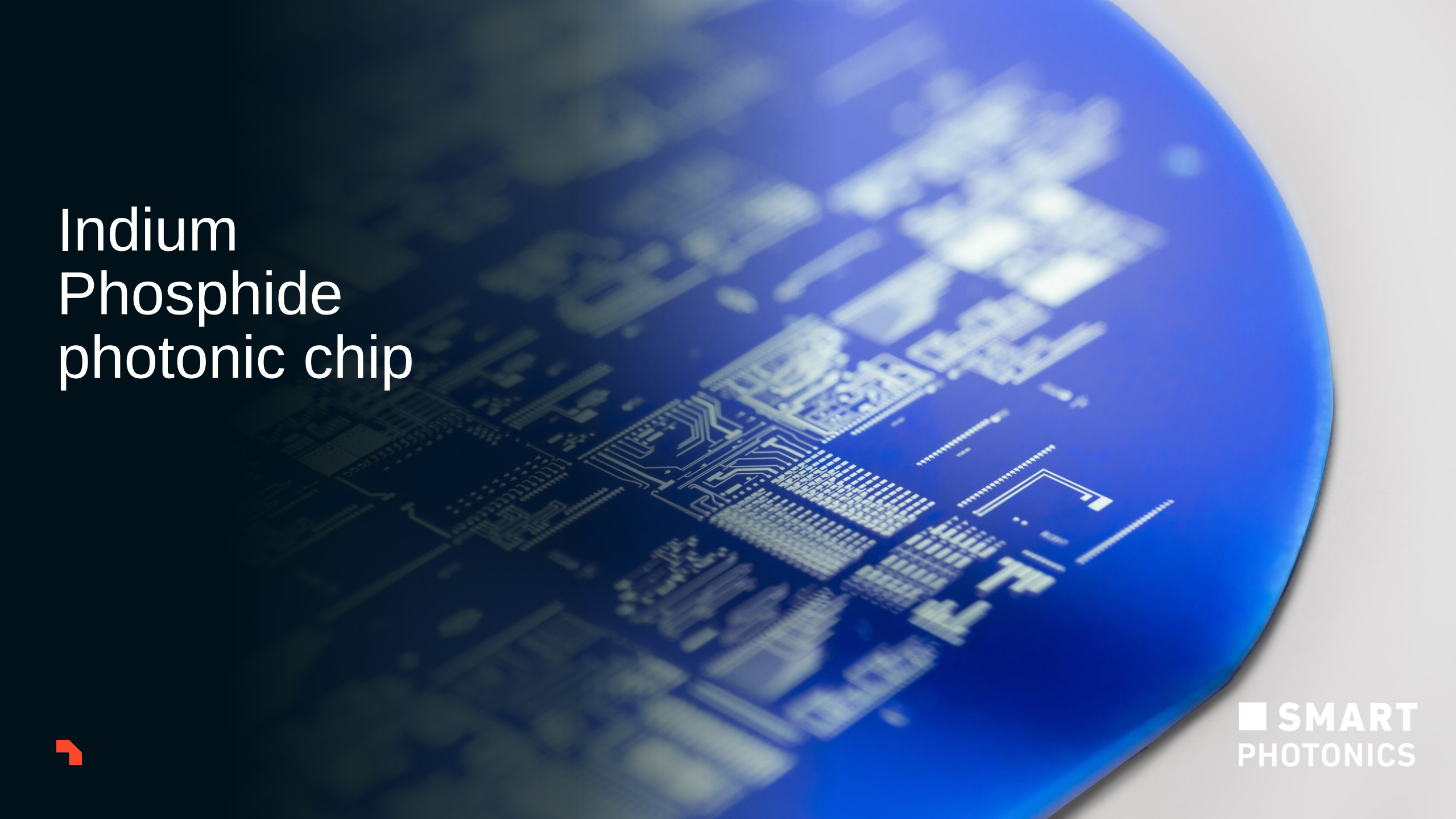
Emerging

Other standards like InP and SiN that enable active components are gaining traction

Future

Integration of multiple integrated photonics standards for stronger solutions





Indium Phosphide photonic chip



■ SMART
PHOTONICS

The industry needs efficient
integration technologies
that are scalable



Various initiatives that you can join

LIGHTUP

Interreg
Flanders – The Netherlands

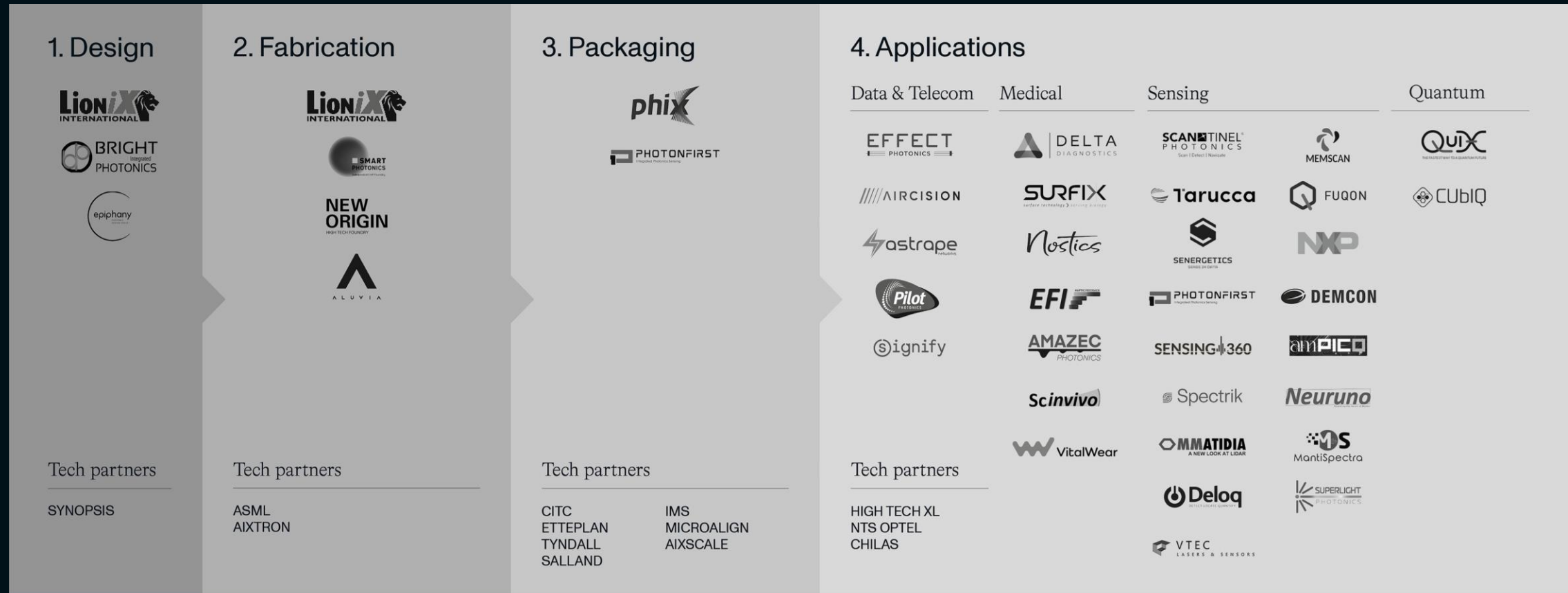


Co-funded by
the European Union

 **National Growth Fund**



PhotonDelta ecosystem...and there's more to come!



Research & development partners



Thank you for your time