



Semiconductor a Linchpin of Modern Economies

Laith Altimime
President, SEMI Europe



Founded in 1970



2025 Top Priorities

<10 members, all U.S.-based

Thought Leadership

Standards

Expositions/ Conferences

EHS

3,500+ members worldwide Spanning the Semiconductor and **Electronics Design and** Manufacturing Supply Chain PFAS

Driving Global Programs

Global Advocacy & SIPS Platform

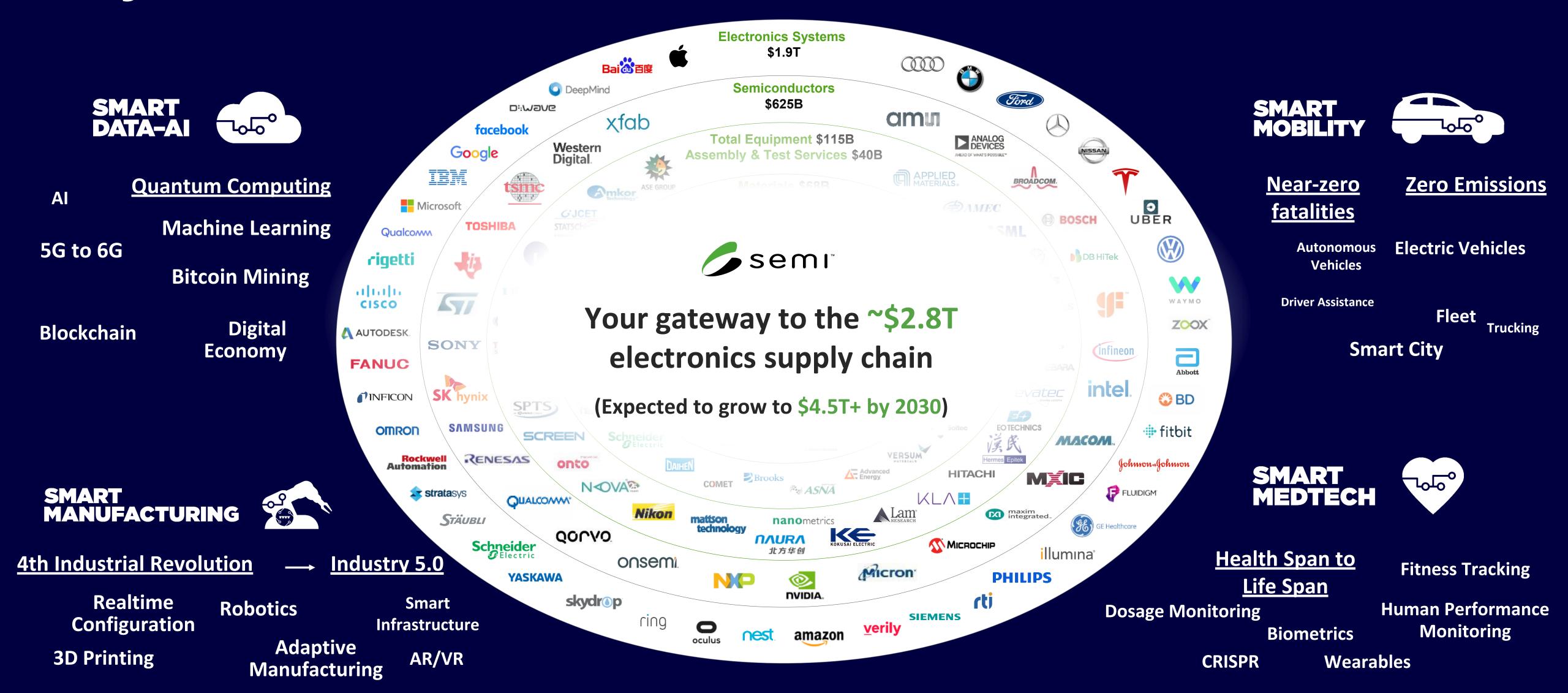
Workforce Development

Sustainability

Cybersecurity &



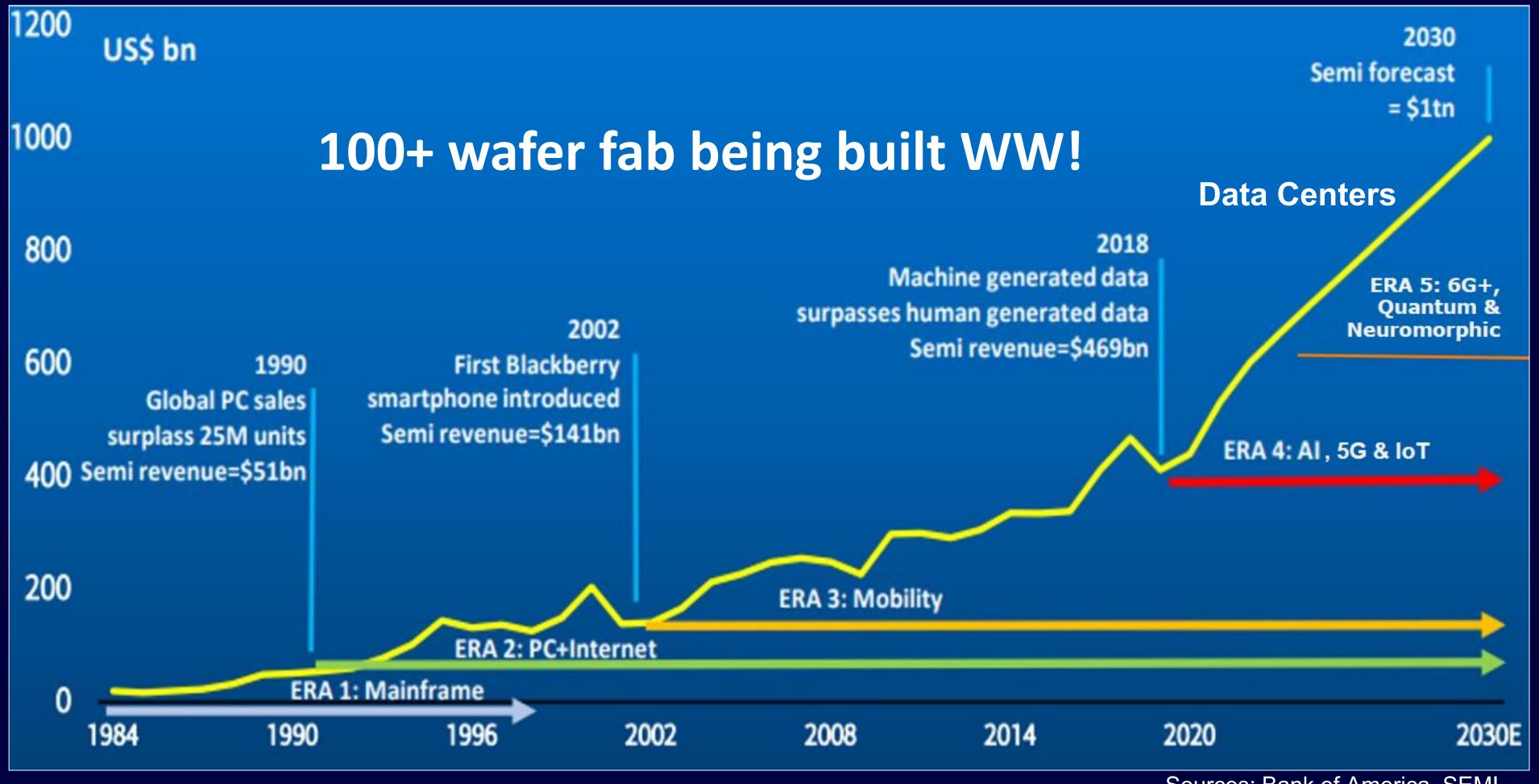
Bringing the Supply Chain Together through Key SEMI Initiatives





Industry Exponential Growth to \$1 tn

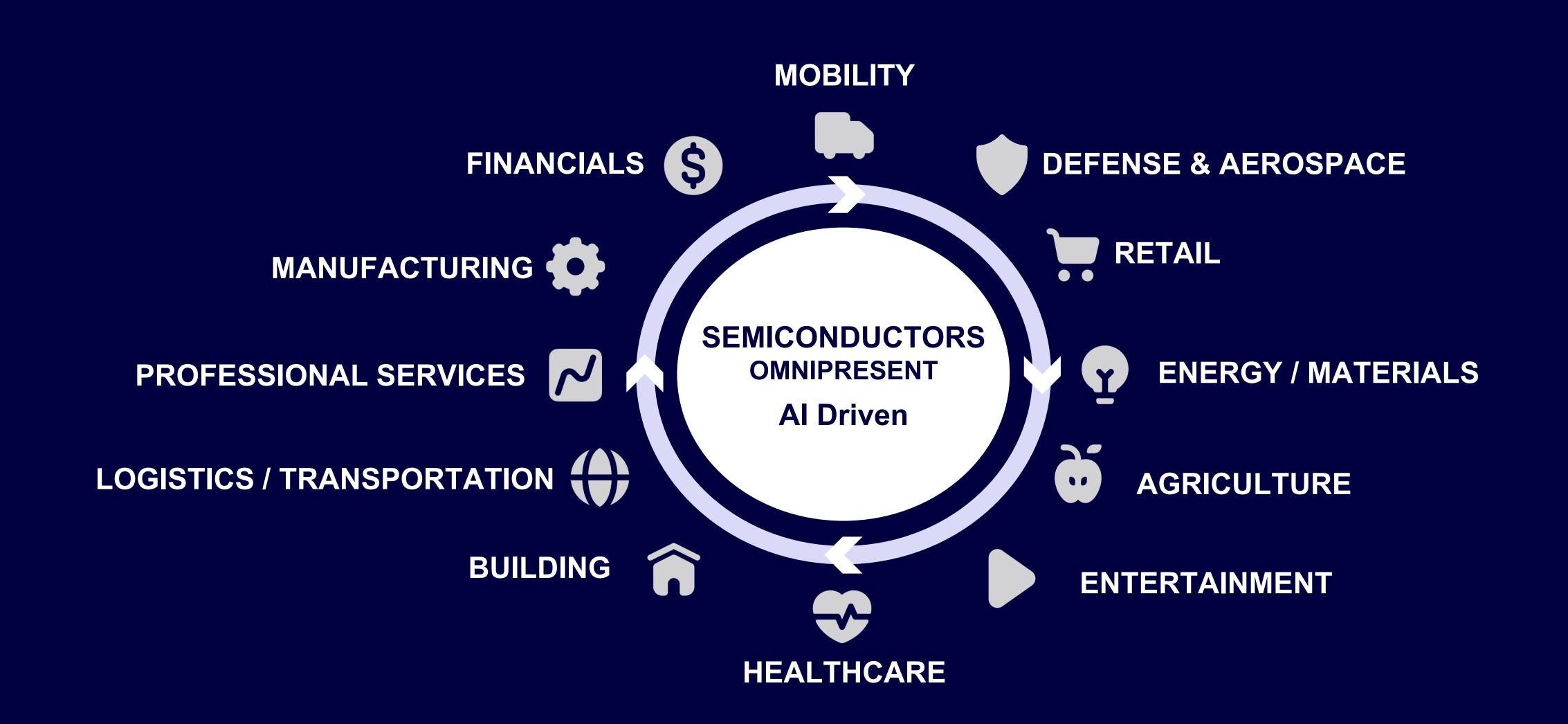




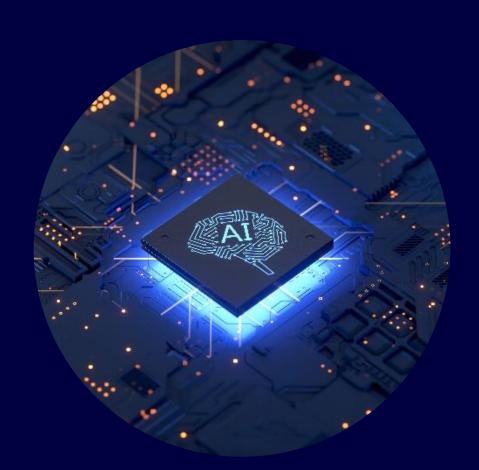
Sources: Bank of America, SEMI



Semiconductors and Al are Key Enablers







Artificial Intelligence



Sustainability & Decarbonization



Geopolitical
Tensions & Resilience



War for Talent







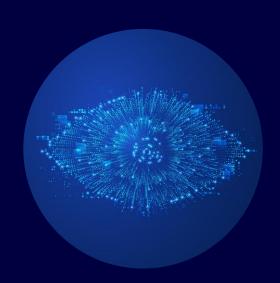
Sustainability & Decarbonization



War for Talent







Computer Vision RECOGNITION, DETECTION



RPA*
AUTOMATE REPETITIVE
PROCESSES



Causal AI
UNDERSTAND PATTERNS AND COMPLEX SYSTEMS



Advanced
Optimization
IMPROVE PROCESSES



Foresight
Analytics
ANTICIPATE THE FUTURE



NLP**

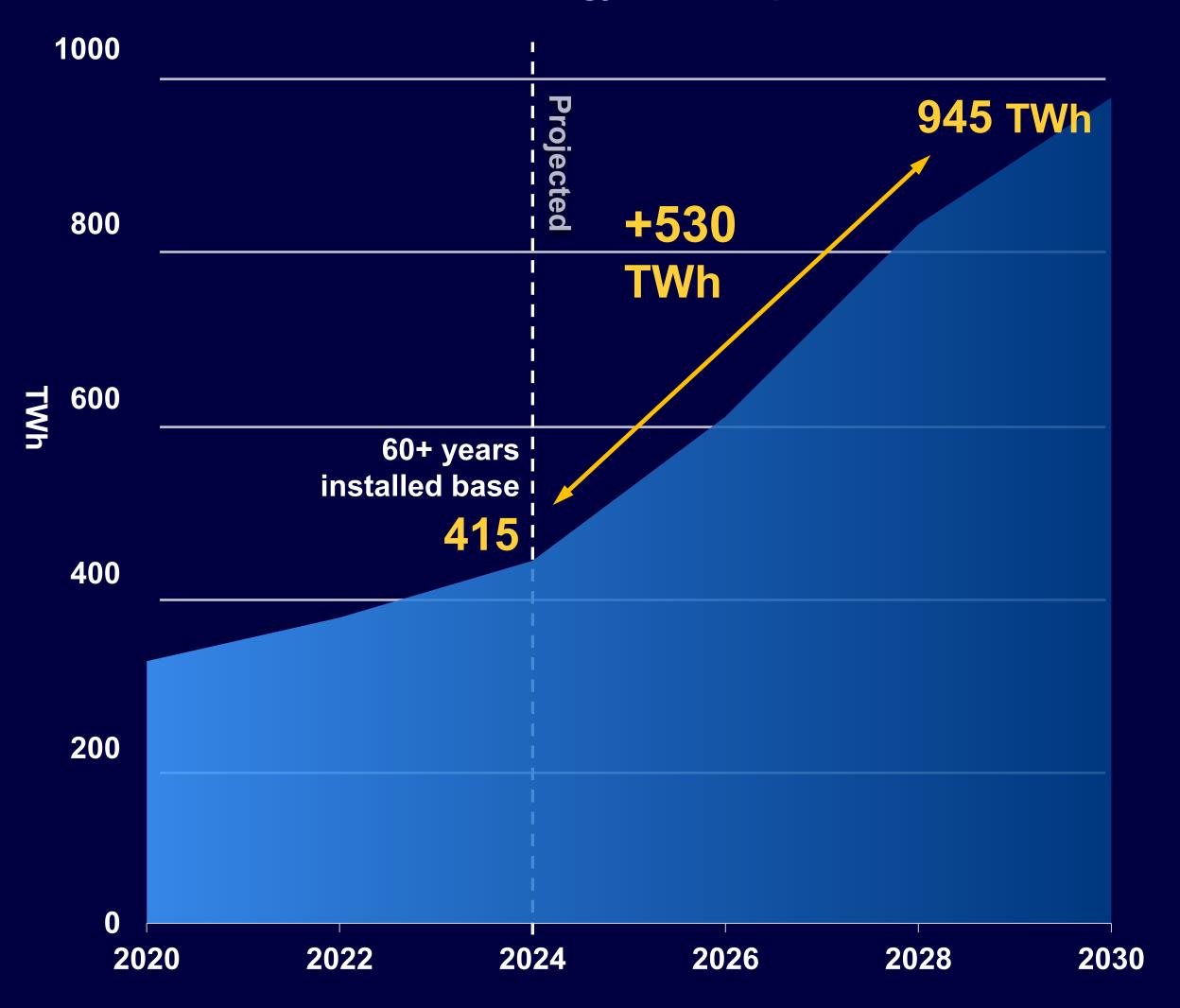
CLUSTERING, CLASSIFICATION, INFORMATION RETRIEVAL & IDEATION



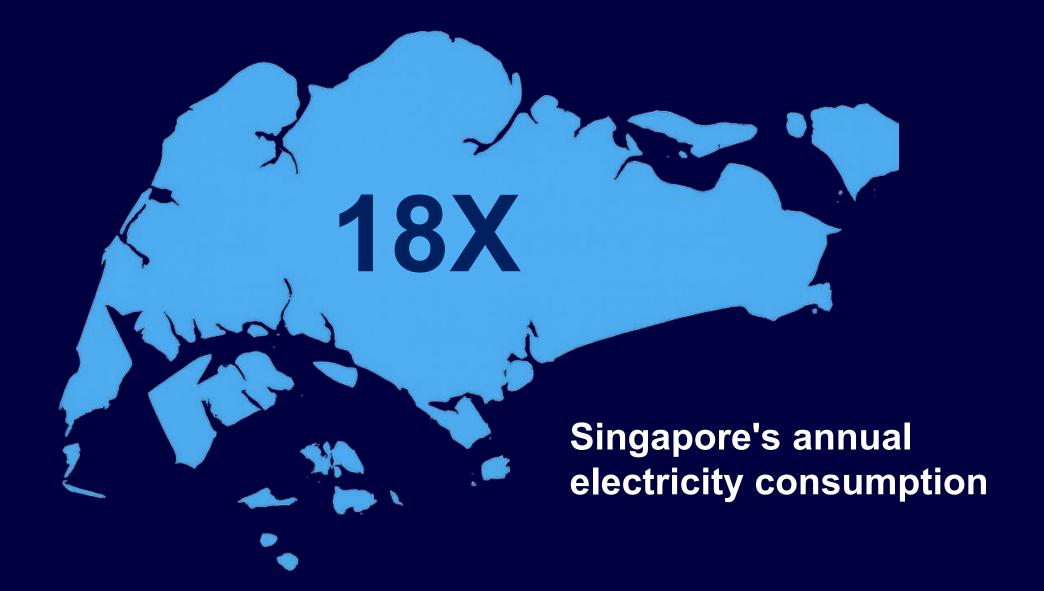


Growth in Al Driving Increasing Energy Consumption





What is 945 TWh in 2030?

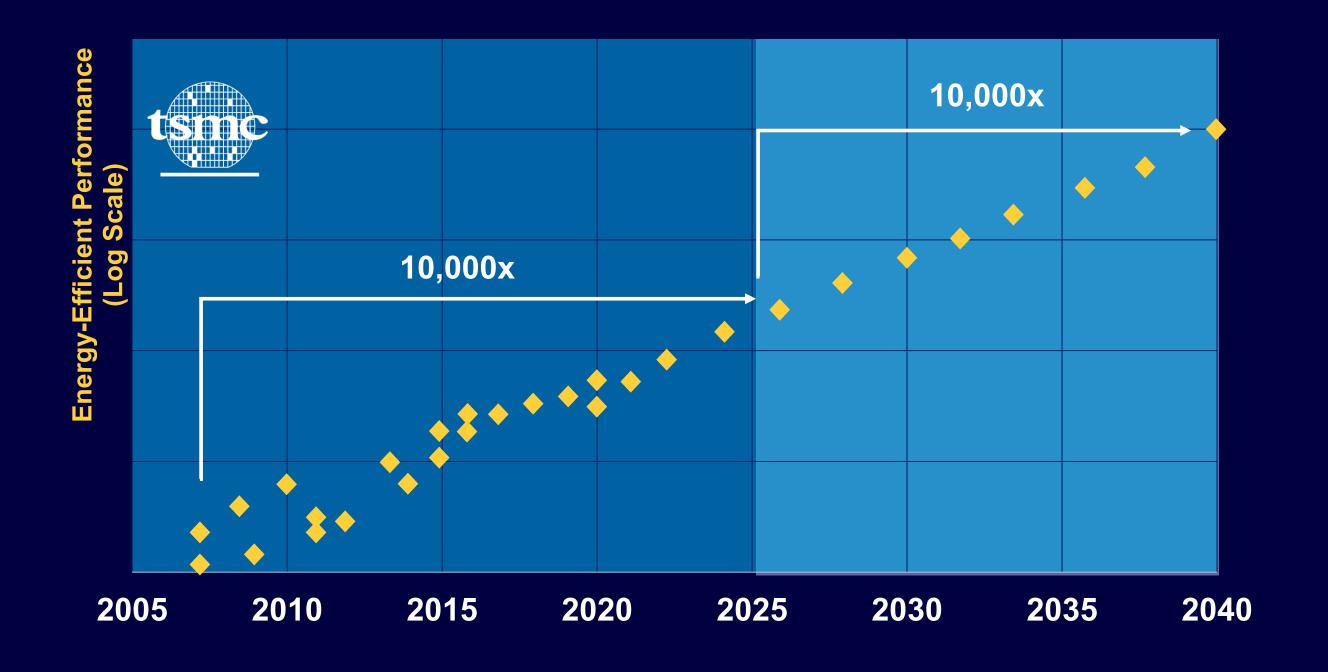


Our industry must respond to reduce energy consumption



Semiconductor Devices

10,000x improvement needed in next 15 years



We have to continue to drive the generational performance up quite significantly to drive down cost and energy consumption."

Jensen Huang CEO



In order to realize the benefits of AI, we must find a way to optimize power without sacrificing performance."

Mark Fuselier SVP, Technology and Product Engineering



Need higher performance at lower power usage Performance Per Watt = Energy-Efficient Performance (EEP)







Artificial Intelligence



War for Talent

European Commission Investments:

February 2025:

- Approved €500 million French scheme for chemical recycling
- Revealed new framework to boost competitiveness and decarbonization

March 2025:

 Presented a plan to mobilize some €800 bn for Europe's defense

May 2025:

 Launched European Chip Centre in Czech Republic under EU Chips Act (€3.7 bn) for semiconductor prototyping and R&D





Europe's Microelectronics Ecosystem

European Excellence



Semiconductor Research

Semiconductor for Automotive, IOT, MS/ RF, Sensors, Power





Lithography **Equipment & Materials**

Mobile Network Equipment



RTOS













SUPPLIERS







































































Onsemi: \$2 bn Investment in Czech Republic Semiconductor Plant Expansion

- Investment Overview: \$2 bn investment to expand existing semiconductor manufacturing facility in the Czech Republic.
- Focus on SiC: Development of vertically integrated silicon carbide manufacturing capabilities at the site.
- Supply Chain Enhancement: Strengthen the advanced power semiconductor supply chain for European and global customers.
- Support for Key Industries: Provide critical manufacturing for energy-efficient chips.





STMicroelectronics: World's First Fully Integrated Silicon Carbide Facility in Italy

- Major Investment: Projected €5 bn multi-year investment, with €2 bn from the Italian State under the EU Chips Act.
- Catania Silicon Carbide Campus: Centralizes ST's vertically integrated SiC capabilities—from R&D to manufacturing.
- Focus on Electrification: Supports automotive and industrial sectors in enhancing energy efficiency and electrification efforts.
- Innovative Technology: Pioneering advancements SiC technology for improved performance and sustainability.



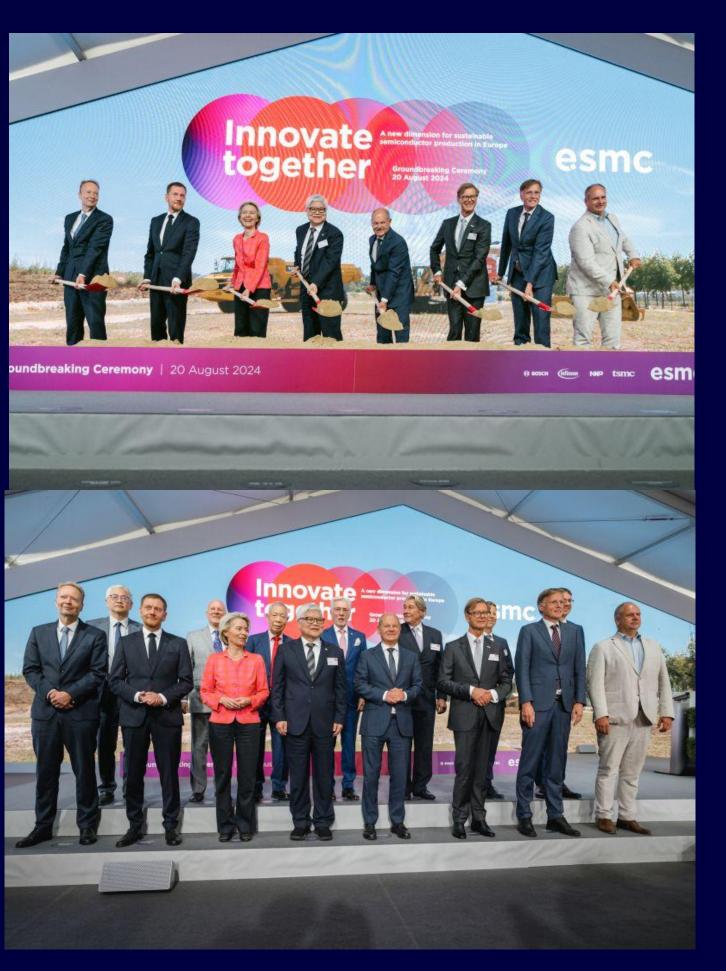


TSMC Groundbreaking Ceremony for First German Plant

Dresden, August 2024

TSMC plans to establish a chip design center in Munich, Germany, expected to officially launch in Q3 2025



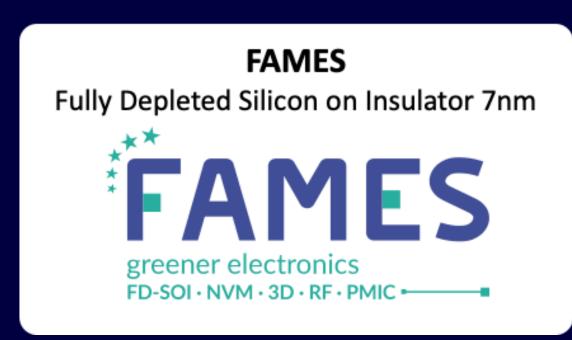






Pilot Lines - Cutting-edge facilities Accelerating industrial uptake of new technologies









More Pilot Lines being announced.





War for Talent



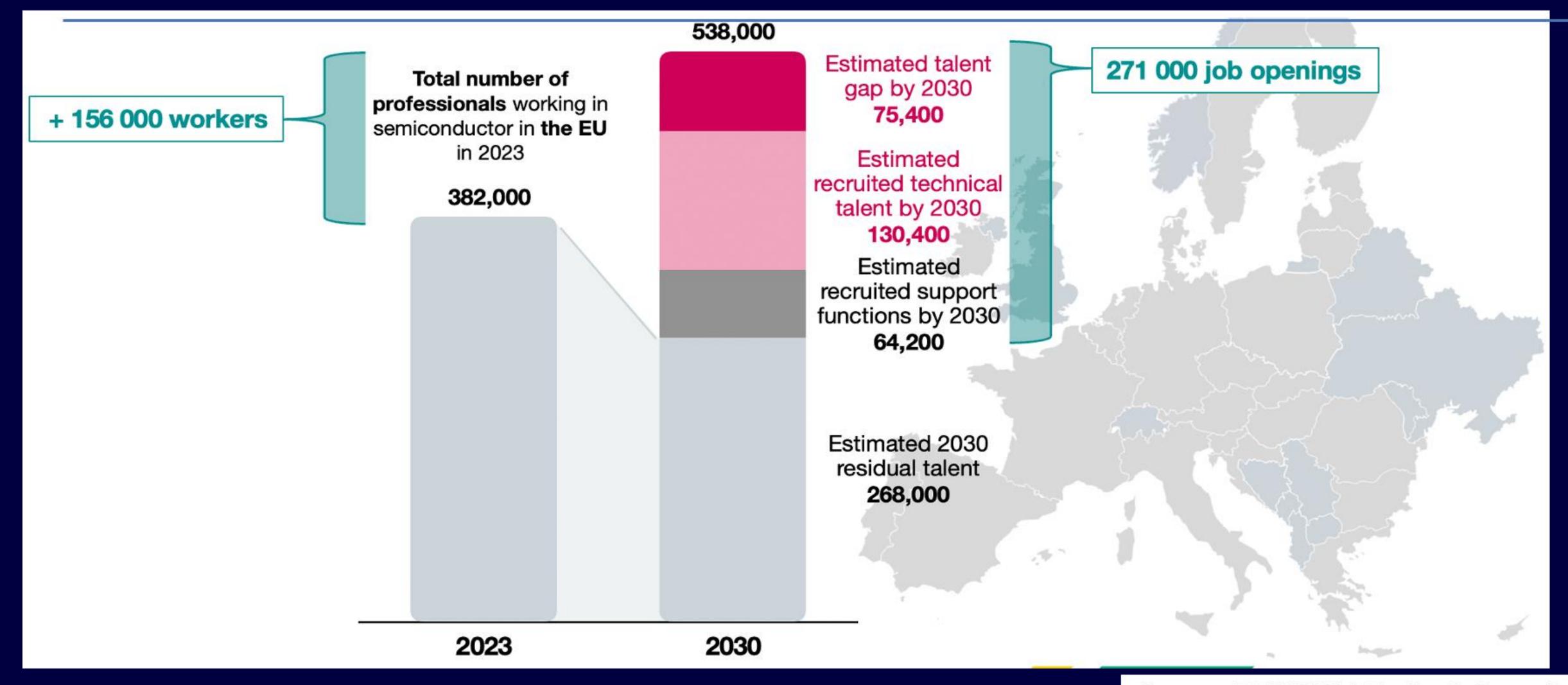
Artificial Intelligence



Sustainability & Decarbonization



Estimating the Talent Gap 2023 -2030



Source: DECISION Etudes & Conseil



SEMI Europe Initiatives – Talent & Diversity

European Commission Funded Projects



- Innovative VET Courses
- Image Campaign
- Network of Stakeholders and Policy Advice



- Skills Intelligence
- E-learning Platform
- Led to European Chips Skills Alliance



- Summer School
- Student Ambassadors
- Education Leaders Board



- Industry-led Data and Research
- Mentorship and Ambassador Programs,
- Online Training Platform



- Double-degree MsC in Embedded Systems
- SEMI and Higher Education Institutions from 5 Countries
- Student Exchange and Scholarship Programs

SEMI Initiatives

- #SEMIOnCampus
- 20 Under 30 Award
- ChipQuest Challenge
- Talent Forum
- High Tech U
- SEMI University
- Careers Platform
- Award, Industry Leader in DEI
- Podcast & Webinar Series
- Blog Series, Role Models & Rising Stars
- Event Video Testimonials
- Chip In Documentary Film



European Chips Skills Academy

Alliance between academia and industry to develop a decentralized Academy to meet the growing demands for skills.

European Chips Diversity Alliance

Alliance to lower the barriers and enhance participation from under-represented groups by providing data, tools, trainings, and engagement programs.

















unec



Melexis













MIDAS





xfab

















COMENIUS UNIVERSITY BRATISLAVA





























20 Under 30 Award Class of 2024



Abel Andemichael PCB Layout









Alicia Pang Li Si



s**:**itec





Annika Schnell Application Specialist



Augustin Detruit Production Manager



Lead Application





David Coenen Senior Researcher



Elisabeth Brierley Sustainability Graduate

EDWARDS



Felix Holtsch Engineer II -**Product Specialist**



Felix Kohler Use Case Manager





Giulia Cioffi Asic Digital Design, **Staff Engineer**



James McGrath CVD Process Engineer





Lizzie Boakes Kamal Rudra R&D Integration Researcher **Engineer**



Luca Sinkó **R&D Team Leader** - SRP Application



Mouadh Ayache



unec

Pascal Fasel Senior Engineer Process Engineer/Project Customer Engineer Senior Software Developer Manager



Pheobe Kuo



Steve Kalkbrenner



Thibaud Rebotier Senior Industrial Engineer





















Could you pass my phone?

CHIP QUEST

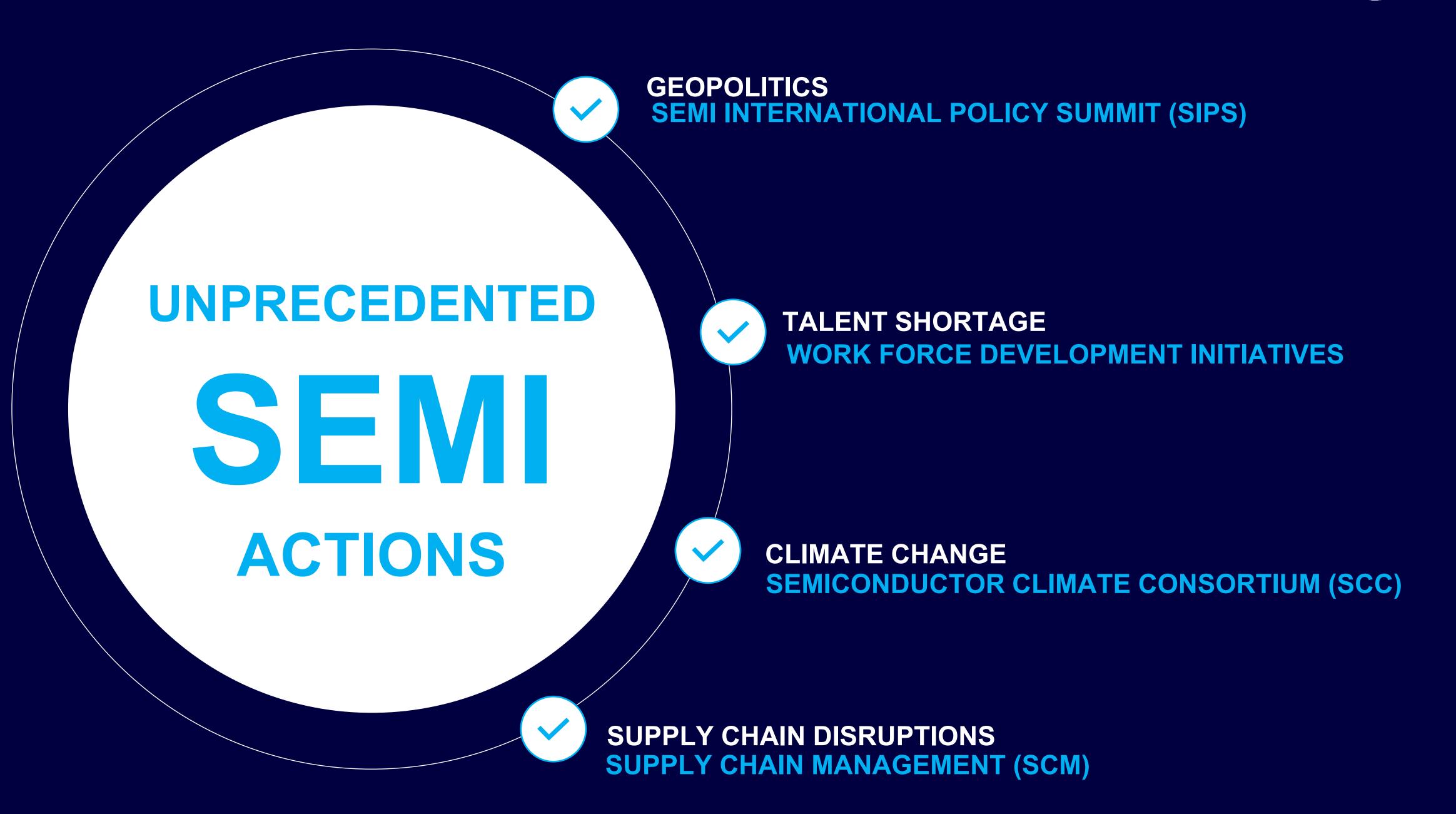
Learn more











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SAVEDEDATE

Celebrating 9 years partnership with Messe Munich as SEMICON Europa thrives in Europe's chip region!

You are cordially invited!





Thank you!

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