



Advanced Echem Materials Company Ltd. **(Stock code : 4749)** **Investor Conference**

May, 2025



- AEMC's statements of its current expectations are forward-looking statements subject to significant risks and uncertainties and actual results may differ materially from those contained in the forward-looking statements.
- AEMC makes no representation or warranty regarding such forward-looking statements. Except as required by law, AEMC undertakes no obligation to update any forward-looking statements, whether as a result of new information, future events, or otherwise.

- Company Overview
- Main Products and Markets
- Product Roadmap
- ESG Performance
- Appendix



Mission

Establish upstream and downstream supply chains

Our mission is to establish Taiwan's independent technology in specialty chemicals for advanced semiconductor processes and through collaboration, enhance the global competitiveness of the local specialized materials industry, both upstream and downstream.



Vision

Expand the variety of lithography materials and increase market share

Our vision is to enhance Synthesis, Purification, Formulation, and process technologies to meet customer needs, assist in yield improvement deliver exceptional added value, and become an innovative specialty chemical company with global competitiveness.

Awards

TSMC Excellent Performance Award, 2022
Excellent Material Development and Production Support in Litho Materials

Awards

National Industrial Innovation Award, 2023

Paid-in Capital
NT\$926M / US\$30.8M

Main Products

- **Specialty Materials for Semiconductors**
Advanced Process Materials
Advanced Packaging Materials
Optical Component Materials
- **Specialty Materials for Displays**
LCD Photoresist
Micro-LED Photoresist

Number of Employees
422 (2025.03)
R&D Personnel:122 (2025.03)

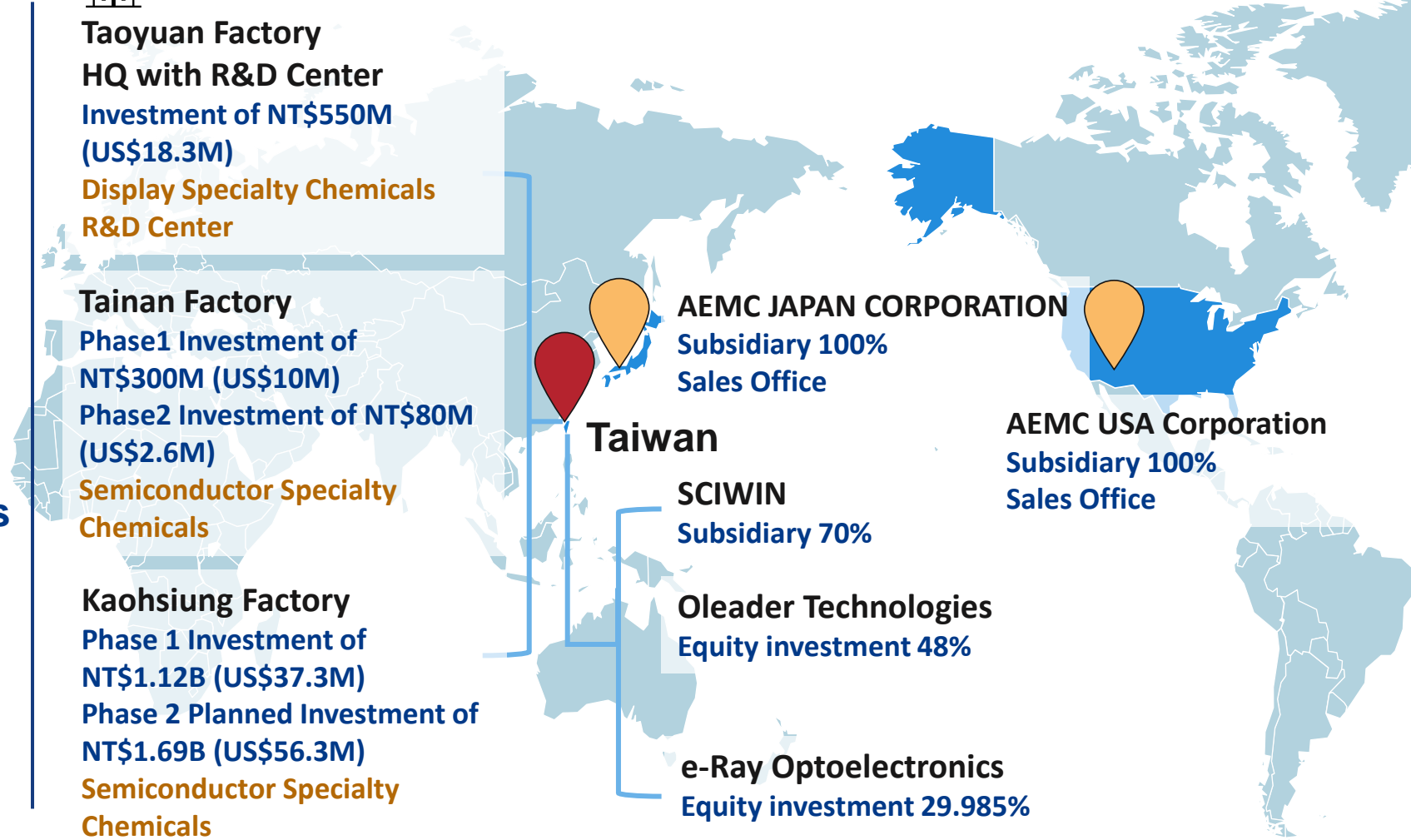


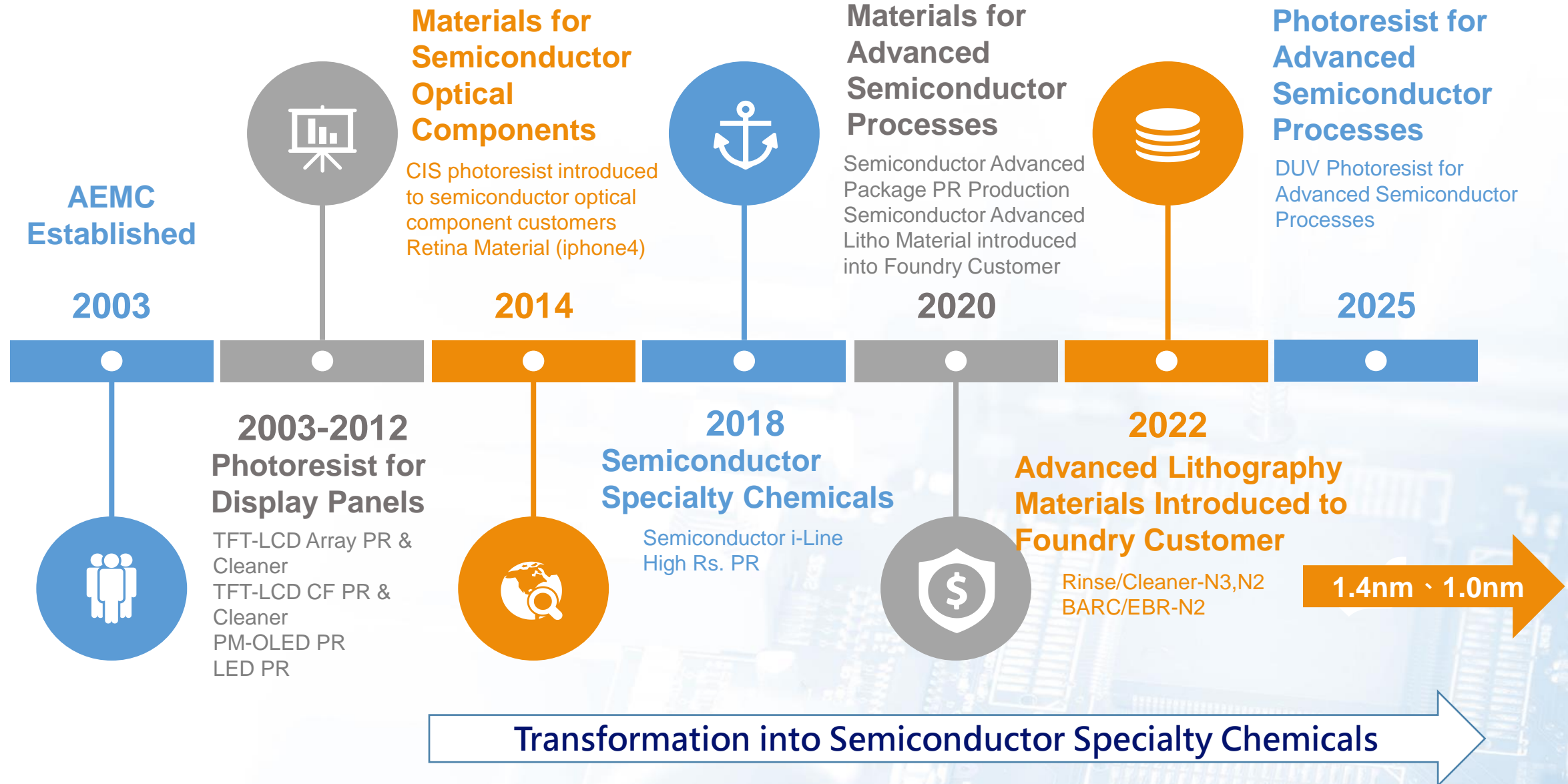
AEMC

Taoyuan Factory
HQ with R&D Center
Investment of NT\$550M (US\$18.3M)
Display Specialty Chemicals
R&D Center

Tainan Factory
Phase1 Investment of NT\$300M (US\$10M)
Phase2 Investment of NT\$80M (US\$2.6M)
Semiconductor Specialty Chemicals

Kaohsiung Factory
Phase 1 Investment of NT\$1.12B (US\$37.3M)
Phase 2 Planned Investment of NT\$1.69B (US\$56.3M)
Semiconductor Specialty Chemicals





- **Advanced Lithography Process**

Rinse

EBR

Cleaner

Developer

BARC

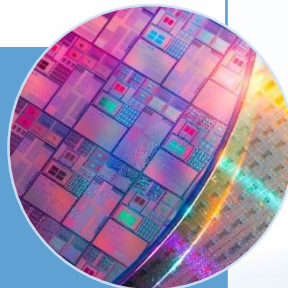
- **Advanced Packaging**

- **Optical Component**

Image Sensor Material

Micro-Optical Component Material

**Semiconductor
Specialty Chemicals**



- **TFT LCD**

TFT Photoresist

- **Micro LED**

QD Ink/PR

Gray/White Block Layer PR

Release Layer PR

Bottom Fill Gel

Low-Temperature PR

High/Low Refractive Index

Materials

**Display
Specialty Chemicals**



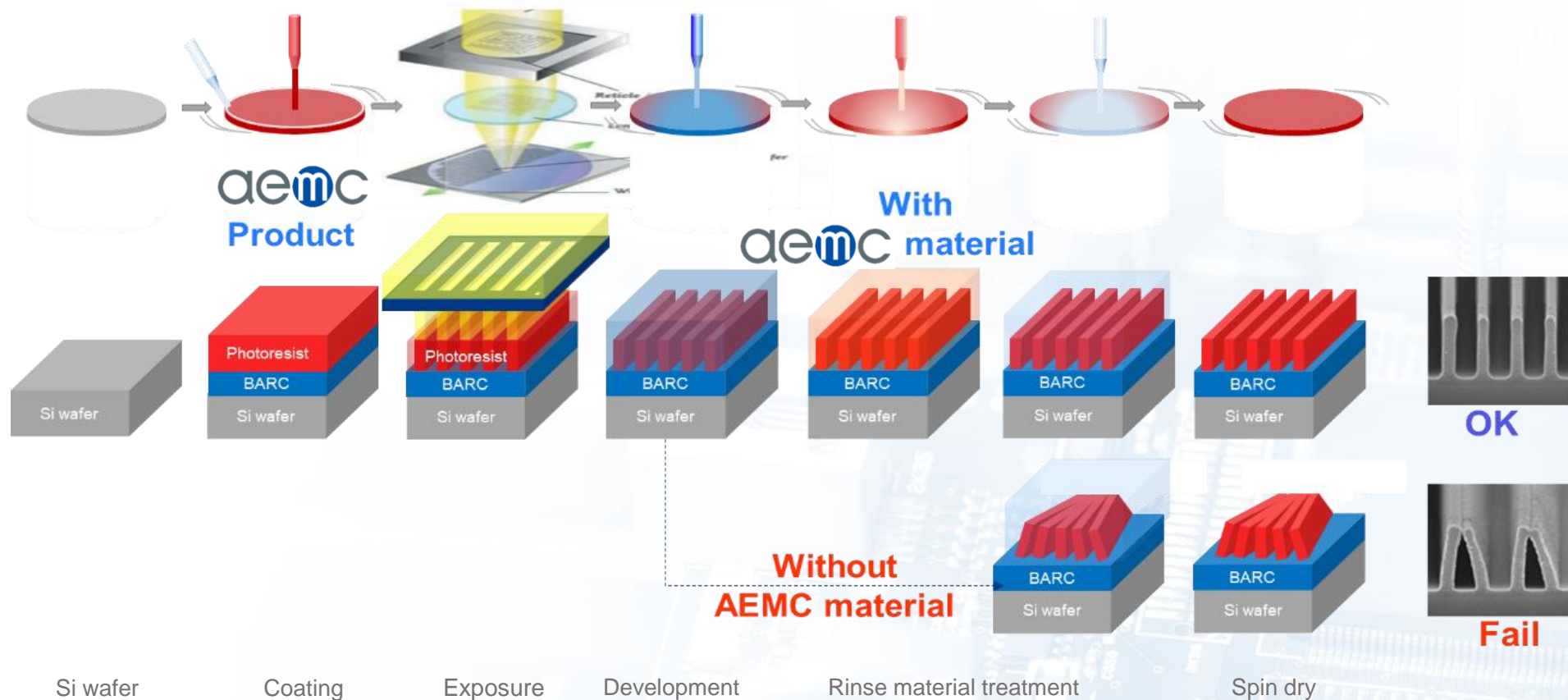
aemc
Products

■ BARC
■ EBR

■ Developer

■ Rinse Material

■ Cleaner
(Pipeline and Equipment)



Benefits

- ✓ Straightforward process
- ✓ Pattern collapse mitigation
- ✓ Defect reduction

Infusing Professional Resources to Enhance Supplier's R&D Capabilities

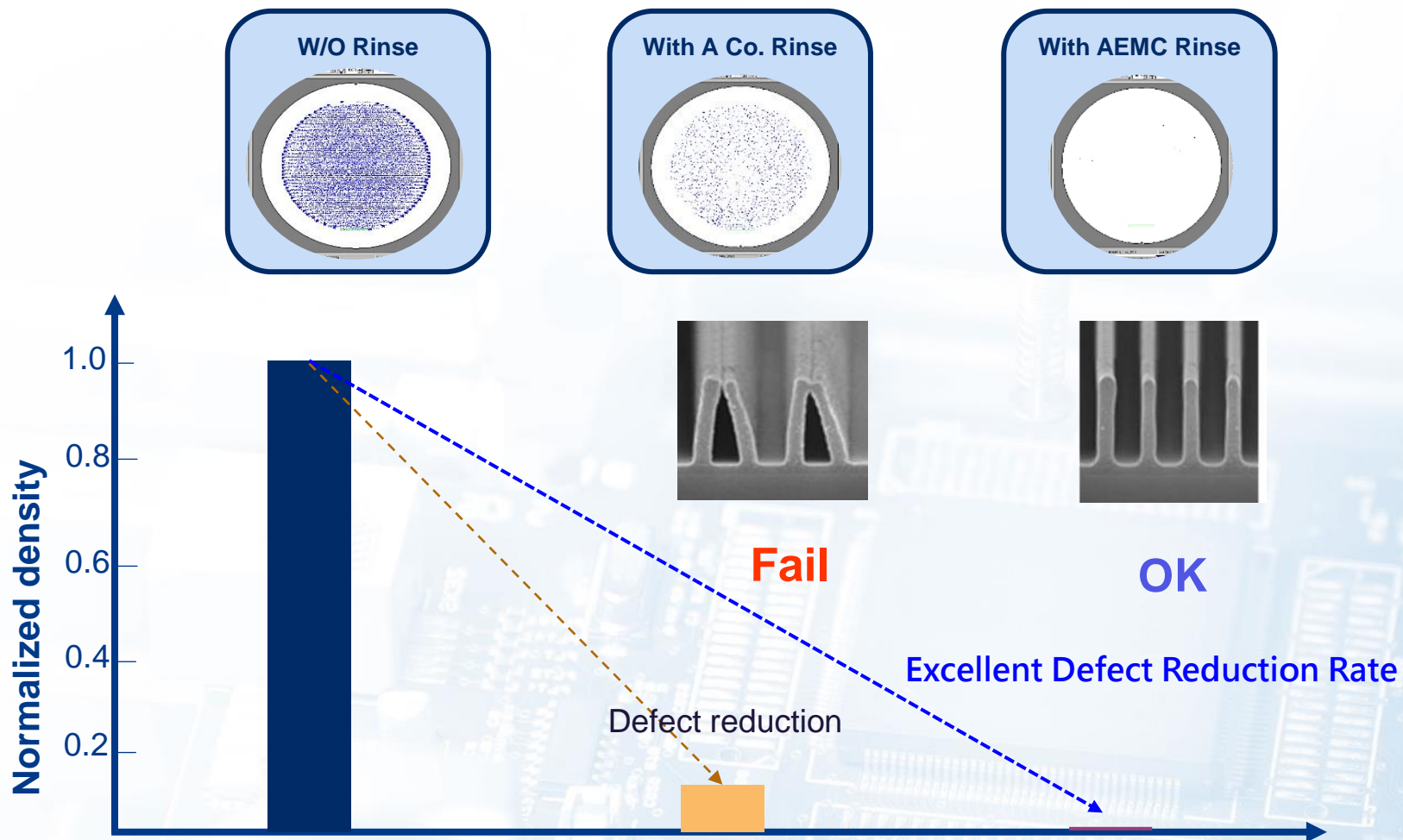
Lithography is a critical process in semiconductor manufacturing and is one of the core technologies that ensures chip quality and stability. Due to the high threshold for material research and production technology, the Lithography process has traditionally relied on imported materials. In 2019, in order to enhance the research and development capabilities and production efficiency of the domestic supply chain, TSMC's Material Supply Chain Management (MSCM) collaborated extensively with the Nano Patterning Technology Division (NPTD) to launch the 'Supplier Raw Material Technology Guidance Program'. Offering expert guidance on the seven major aspects of Lithography process materials, including technology development, quality assurance analysis, data calibration, sample verification, factory configuration, tank optimization, and production expansion planning. The program has not only effectively reduced the supplier's line setup and product verification time by 50%, but its material quality also surpasses TSMC's process standards, further improving yield rates and strengthening the competitiveness of the supplier in all aspects. This initiative has laid a solid foundation for the development of the domestic Lithography process material supply chain.



Source: Foundry Customers' ESG Website
<https://esg.tsmc.com/en/update/responsibleSupplyChain/caseStudy/42/index.html>

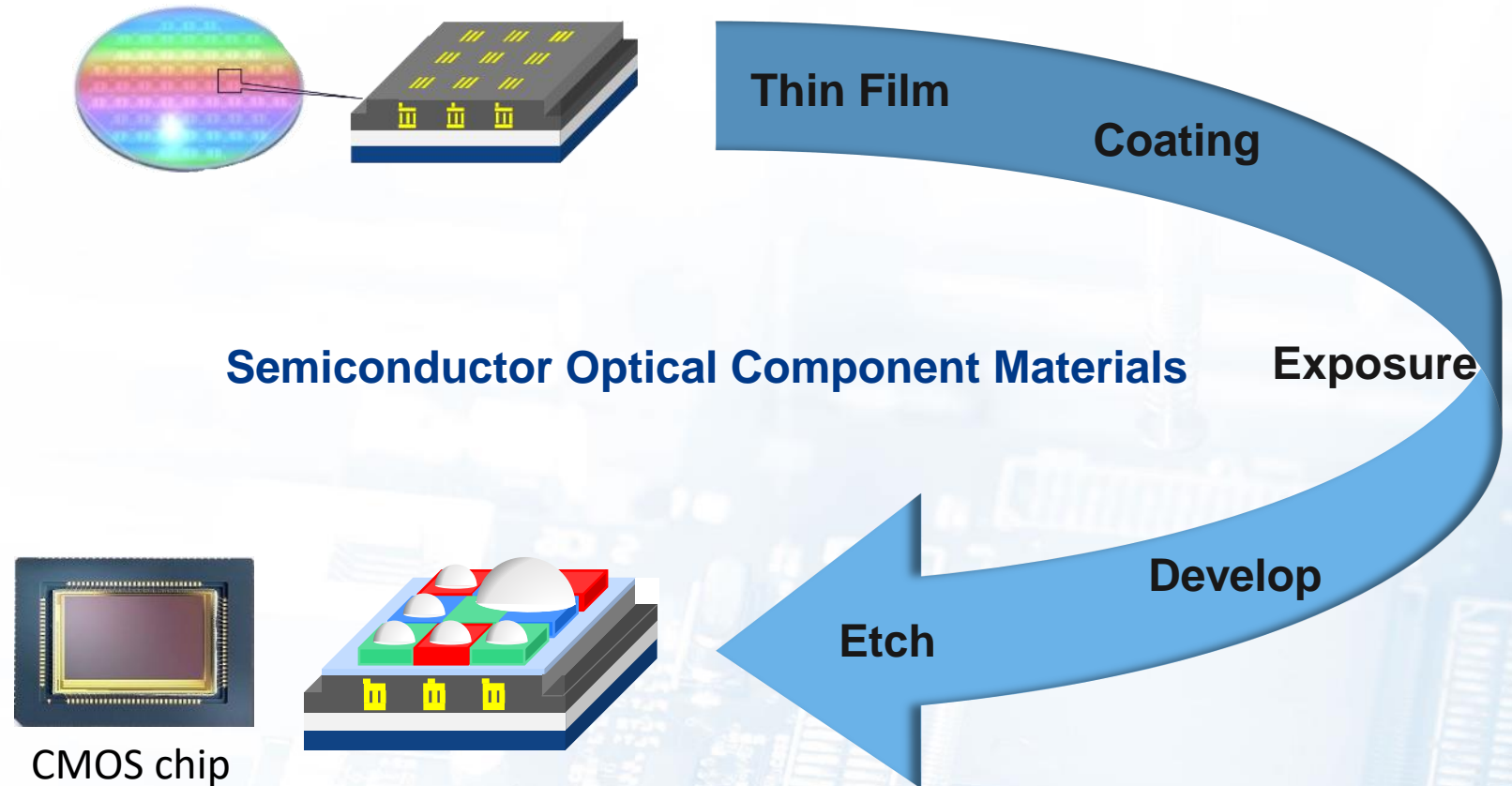
Defect comparison

The performance of AEMC's Rinse materials ranks No. 1 in the world.



AEMC Product

- ✓ Over Coat PR
- ✓ Adhesive Promoter
- ✓ Photo Resist
- ✓ Micro lens PR
- ✓ Micro lens Protection PR



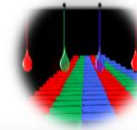
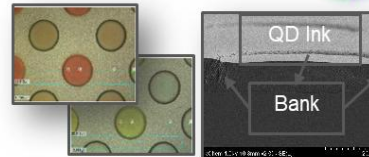
TFT-LCD PR Materials



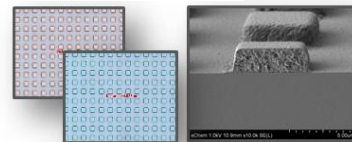
- TFT LCD PR



QD Ink
Resolution: 30~50 μ m
Color Gamut
(NTSC>120%)



QD PR
Resolution: 3~5 μ m
Color Gamut
(NTSC>120%)

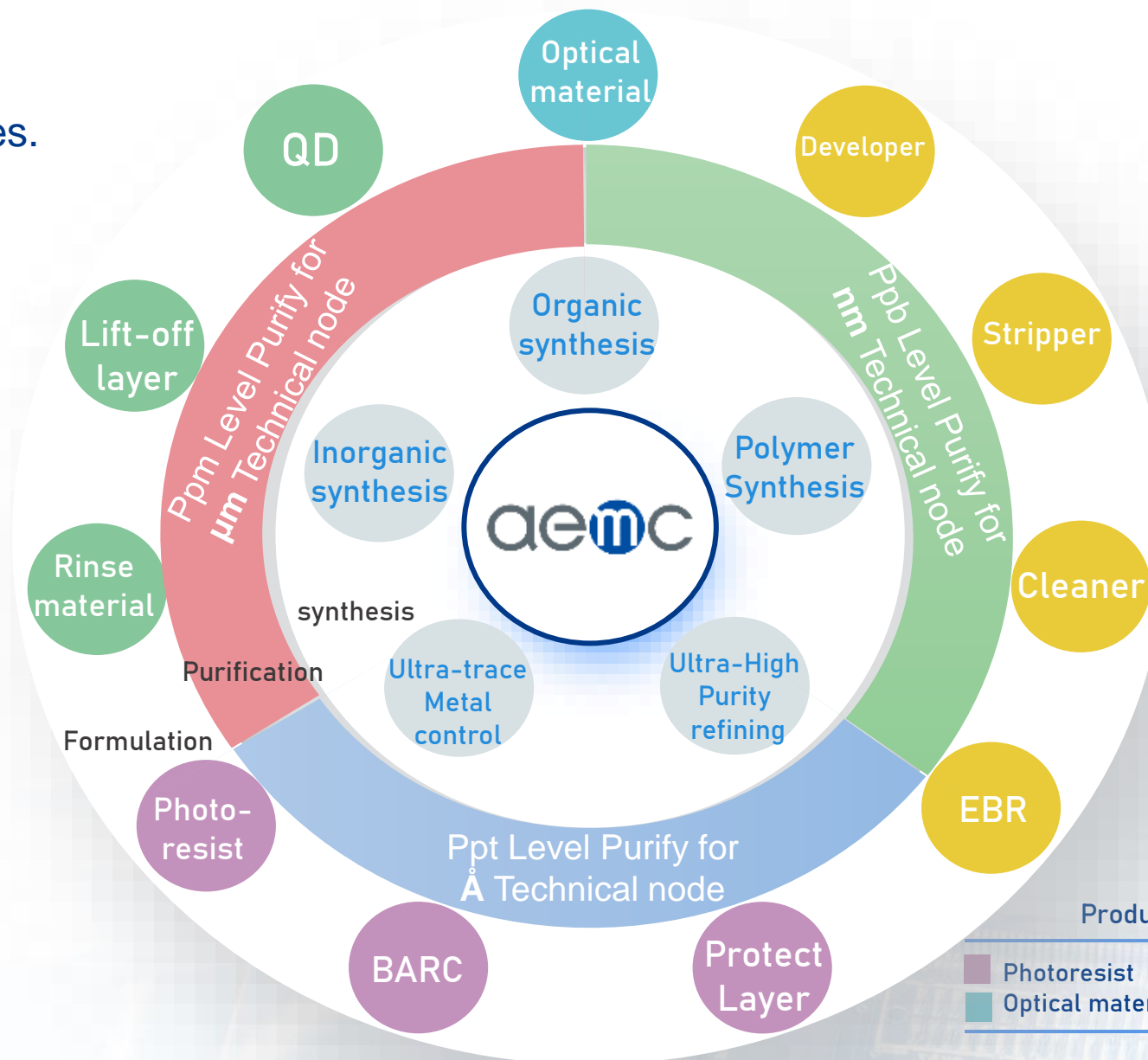
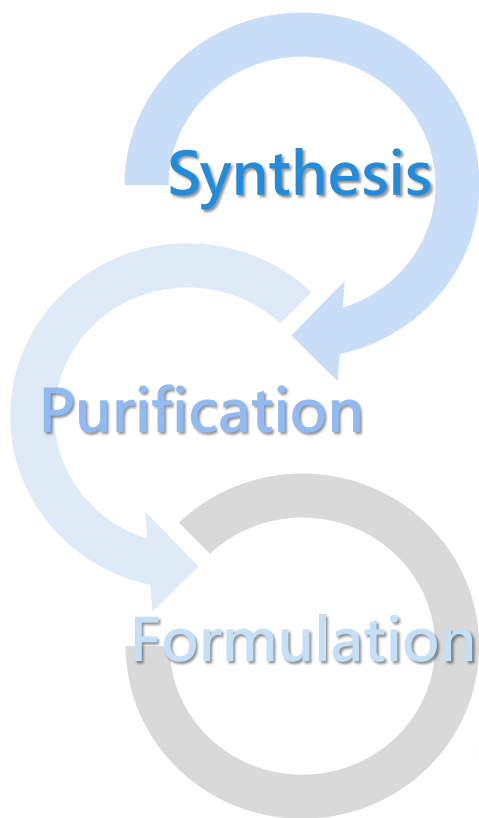


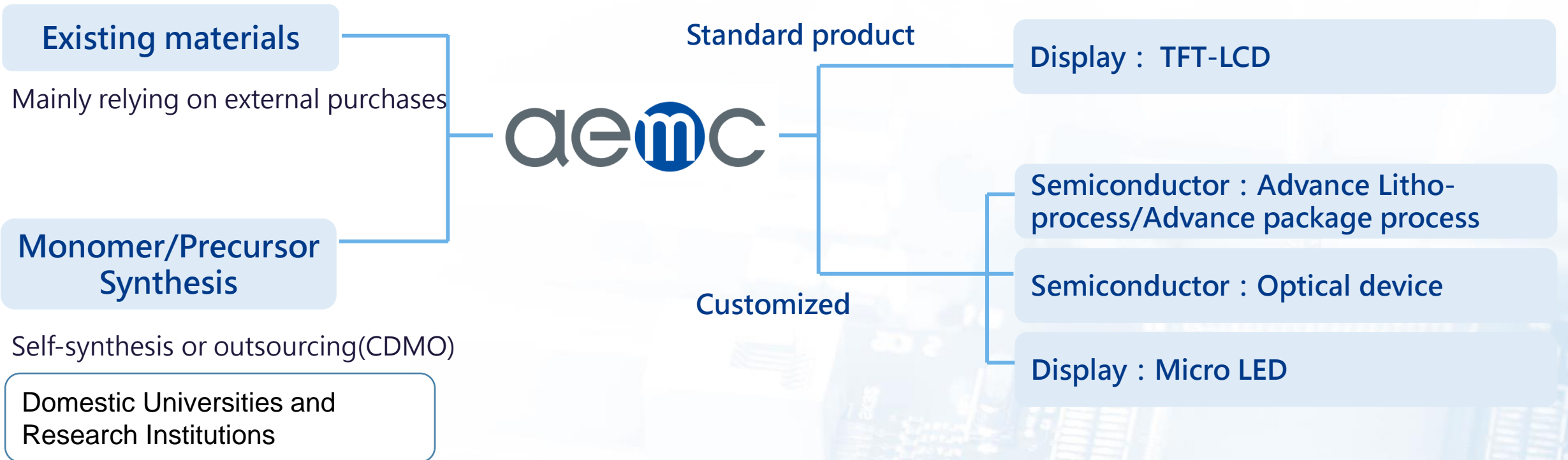
Micro LED QD Key Materials



- QD Ink/PR
- Gray/White Block Layer PR
- Release Layer PR
- Bottom Fill Gel
- Low-Temperature PR
- High/Low Refractive Index Materials

20 Years of Materials and
>1,000 Formulations Databases.

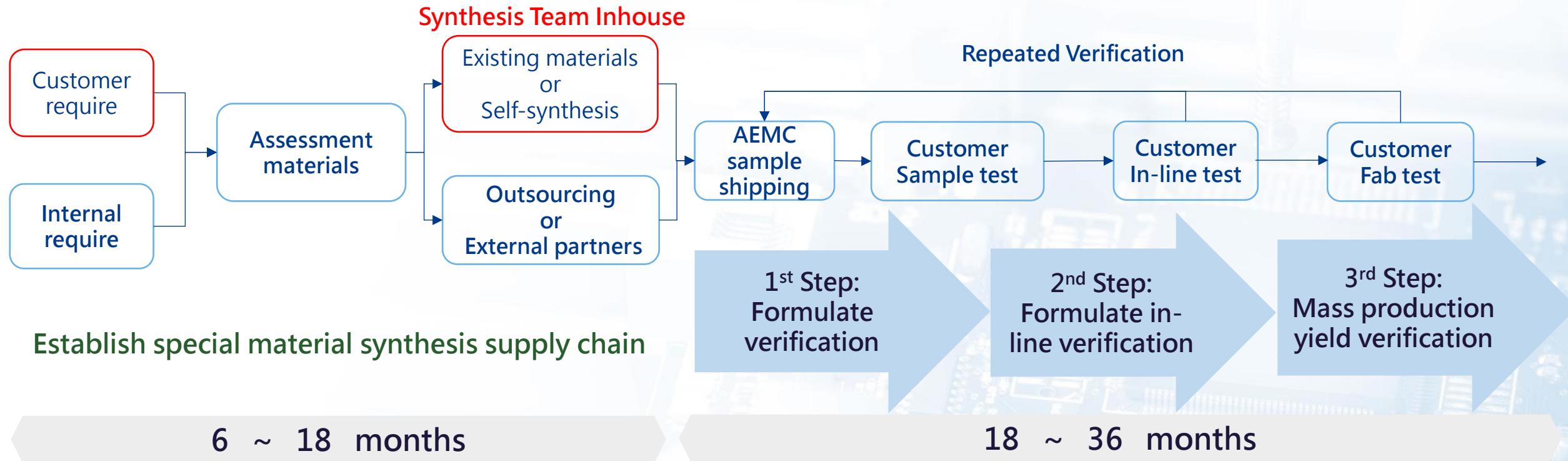




Higher response speed / Sample delivery frequency
Customized development

Raw material Synthesis

Purification and Formulation



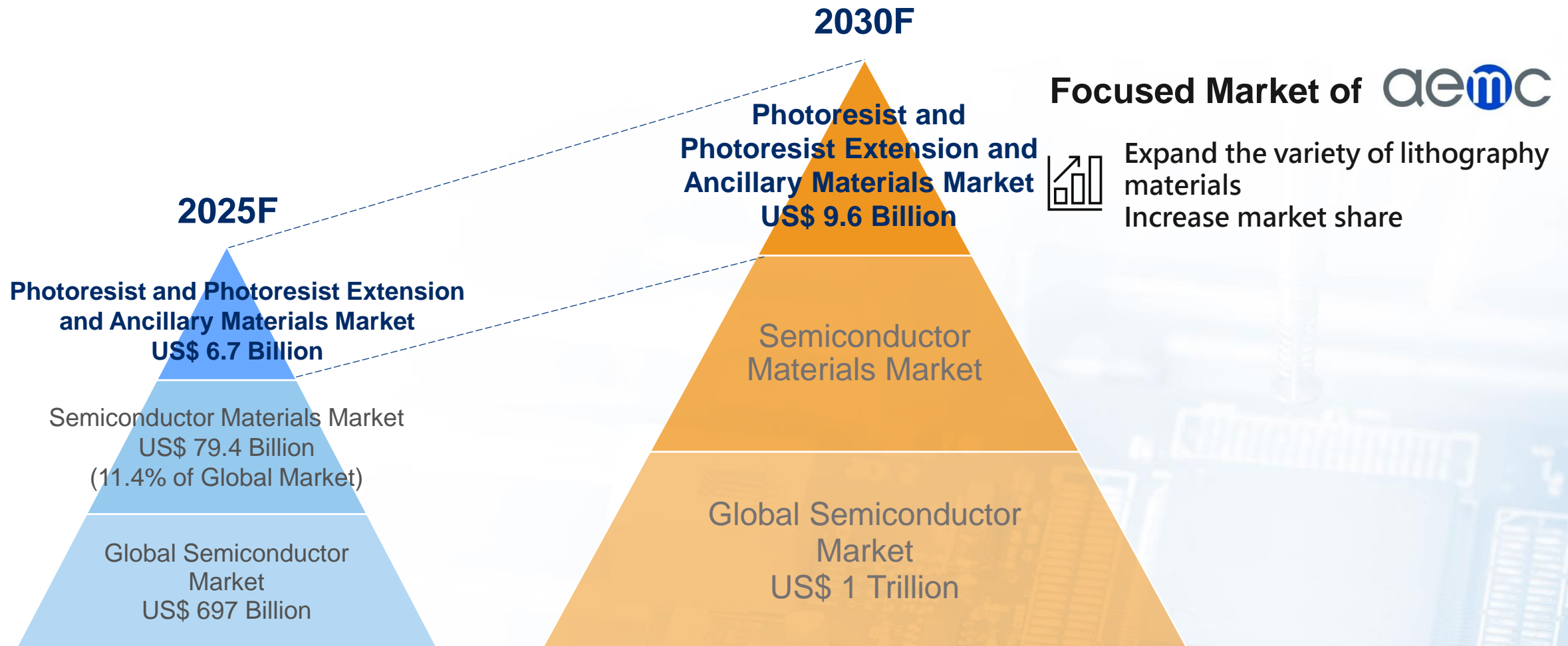
Excellent Quality Control

✓ Quality Control Equipment and Systems:

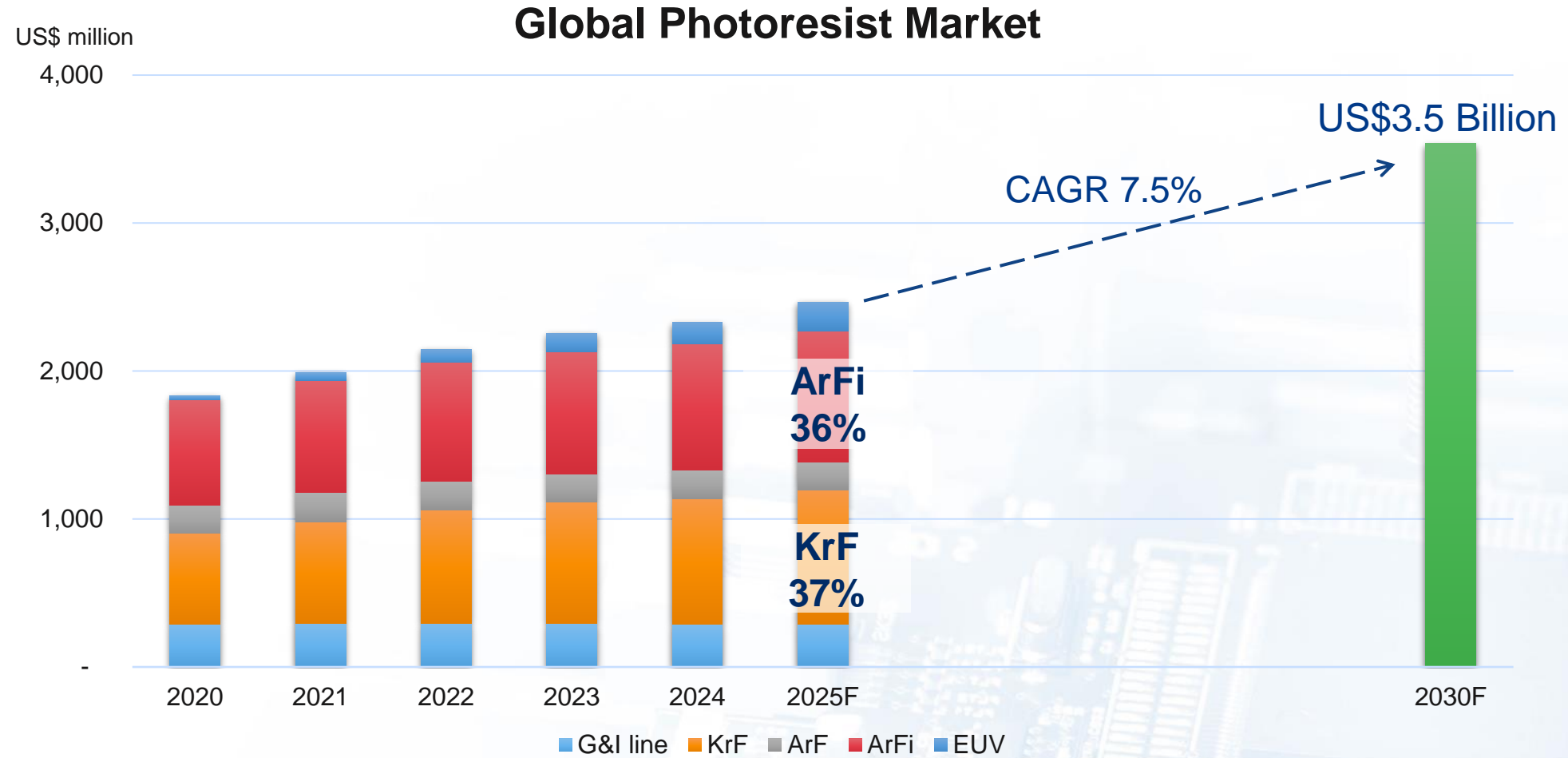
1. Building Equipment of the Same Level as Customers
2. Ultra-Trace Impurity Control to Meet the Requirements of Advanced Semiconductor Processes: Evolving from ppb (10^{-9}) to ppt (10^{-12}) levels
3. Intelligent Quality Monitoring System: Automated Product Inspection and Integrated Quality Data Analysis

Self Designed Manufacturing Technology





Sources : TECHCET(2021) 、WSTS(2024) 、Deloitte(2025) 、 Estimate by AEMC



Sources : TECHCET(2021) 、 WSTS(2024) 、 Deloitte(2025) 、 Estimate by AEMC

Baoshan, Hsinchu

2nm

2 fabs / 4 fabs*

Taichung

0 fab / 4 fabs *

Shalun, Tainan

0 fab / 3 fabs *

Kaohsiung

2nm

3 fabs / 6 fabs *

TAIWAN

USA

Arizona

4/3/2nm

2 fabs / 6 fabs *

JAPAN

Kumamoto

28/22/16/12/7/6nm

1 fab / 2 fabs *

GERMANY

Dresden

28~12nm Automotive ICs

1 fab / 1 fab *

* Number of wafer fabs under construction / Total number of planned fabs

Source: Reports from Infotimes, United Daily News, and other media.

May 5, 2025 – China Times

...Due to strong demand for TSMC's 2nm process, the company is accelerating the construction of four fabs in Baoshan, Hsinchu, and three more in Nanzih, Kaohsiung. The total investment exceeds NT\$1.5 trillion, aiming to create the world's largest semiconductor manufacturing cluster. ...

April 12, 2025 – United Daily News

... Following the decision to expand 2nm production capacity in Kaohsiung, TSMC has revised its Central Taiwan Science Park Phase II project to focus on 1.4nm production instead. Designated as Fab 25, the plan includes four 1.4nm fabs. The first fab is scheduled to complete risk trial production by the end of 2027, with volume production targeted for the second half of 2028. ...

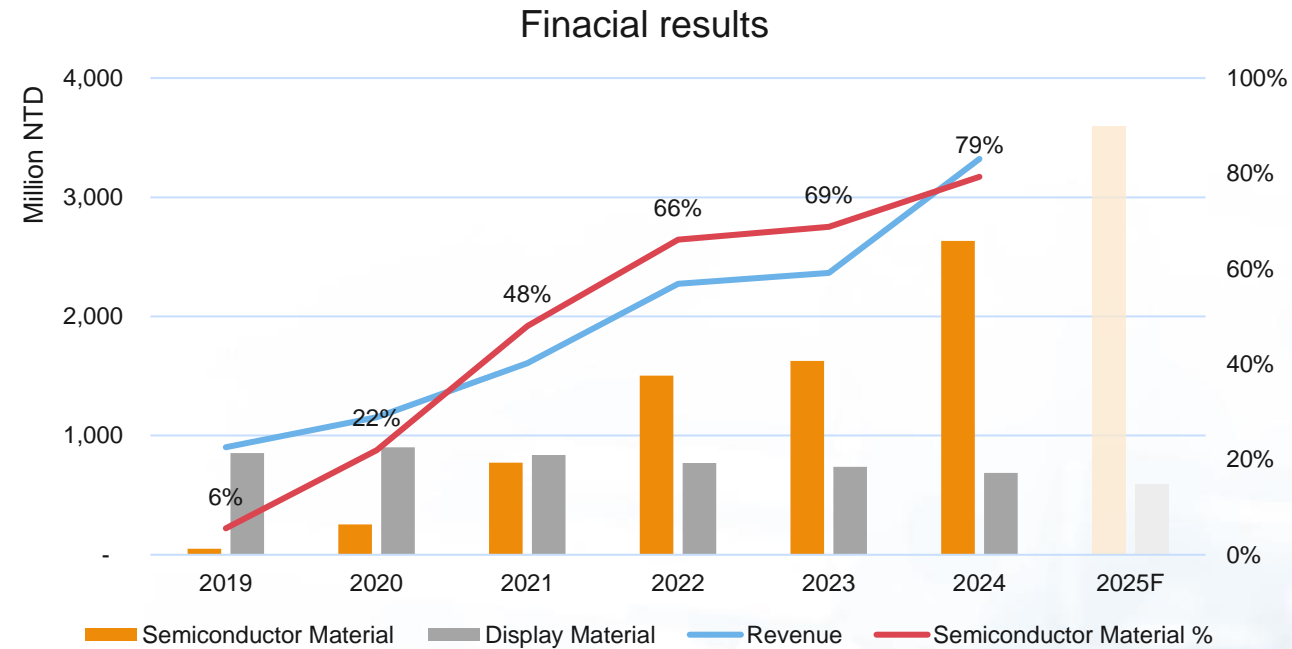
March 6, 2025 – iKnow (Science & Technology Industry Intelligence)

... TSMC announced an additional US\$100 billion investment in Arizona to expand its advanced semiconductor manufacturing facilities, bringing its total U.S. investment to a record US\$165 billion. The new plan includes three additional wafer fabs, two advanced packaging facilities, and one major R&D center. This will increase TSMC's total U.S. fabs from the originally planned three to six. The investment is being called the largest single foreign direct investment in U.S. history, reflecting TSMC's significant strategic shift in global semiconductor deployment. ...

October 18, 2024 – ETtoday Finance

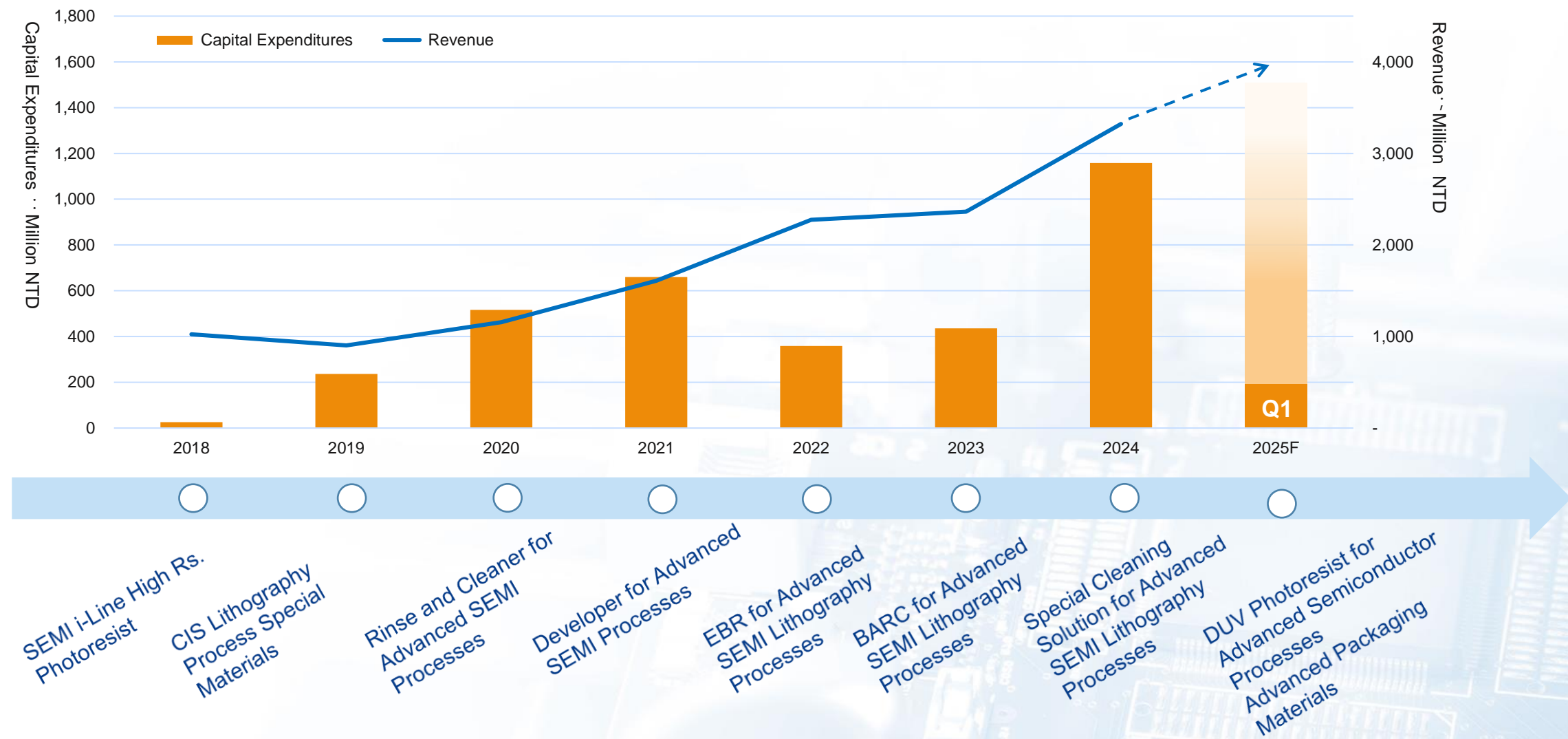
... TSMC's Baoshan P1 fab in Hsinchu Science Park has been completed and is currently undergoing 2nm trial production, with mass production expected next year. The P2 fab is also under rapid construction. In Kaohsiung's Nanzih district, P1 and P2 fabs are being built, with the first fab scheduled for equipment installation by the end of the year. P3 is in the tendering process, and according to Kaohsiung Mayor Chen Chi-mai, P4 and P5 fabs are currently under environmental impact assessment. ...

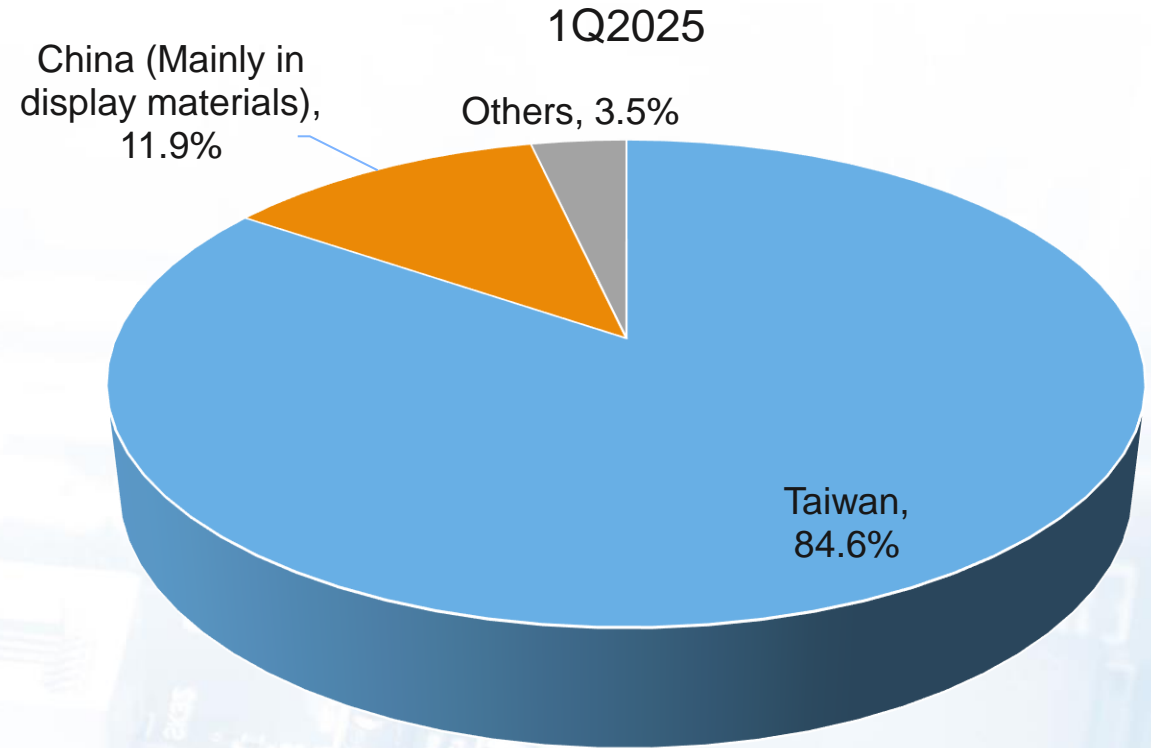
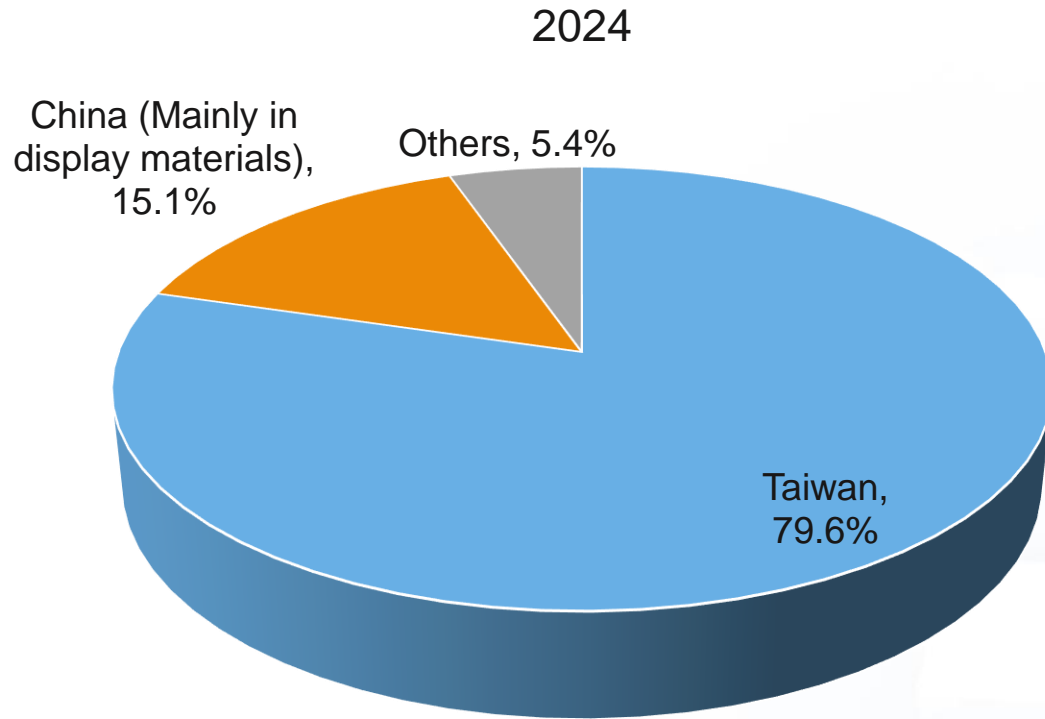
Application Field		Mass Production	Verification	Developing
Semiconductor	Advanced Microlithography Materials	<ul style="list-style-type: none"> • Rinse Material • BARC • EBR • Cleaner 	<ul style="list-style-type: none"> • Rinse Material for next node • BARC for next node • EBR for next node 	<ul style="list-style-type: none"> • DUV Photoresist (KrF) • Bottom Layer • Advanced BARC • Protection Layer
	Advanced Packaging Materials	<ul style="list-style-type: none"> • NA 	<ul style="list-style-type: none"> • Protection Layer • Cleaner • Photoresist 	<ul style="list-style-type: none"> • Protection Layer • High AR Photoresist • Leveling Layer • Packaging Glue
	Optical Element Materials	<ul style="list-style-type: none"> • Photoresists • Flat Layer • Color Filter Layer • Light-cut Layer 	<ul style="list-style-type: none"> • Photoresists • Stripper 	<ul style="list-style-type: none"> • DUV Photoresist (ArF) • Leveling Layer • Microlens Materials
Display	Micro-LED Materials	<ul style="list-style-type: none"> • QD Ink • Bank Layer • Flat Layer 	<ul style="list-style-type: none"> • QD ink • Black Glue 	<ul style="list-style-type: none"> • QD Ink for next generation



年度	2020	2021	2022	2023	2024	1Q2025
Revenue	1,155,590	1,609,310	2,274,422	2,364,382	3,321,861	959,316
Semiconductor Material	253,662	772,820	1,503,477	1,627,118	2,634,121	787,504
Display Material	901,928	836,490	770,945	737,264	687,740	171,811
Gross Profit	297,287	422,167	723,053	694,252	1,204,394	374,655
Operating Income	(6,442)	52,685	295,186	224,802	586,794	191,380
Pre-tax Net Income	13,277	132,458	465,957	361,436	828,347	249,870
Net Income Attributable to the Parent Company	13,277	122,346	403,500	318,372	697,538	207,757
EPS	0.21	1.62	5.01	3.91	8.5	2.28

Since transitioning to semiconductor material development in 2018, the cumulative capital expenditure as of the end of 2024 has exceeded NT\$3.3 billion.





Note: Other sales regions include the United States, Japan, Singapore, and others.

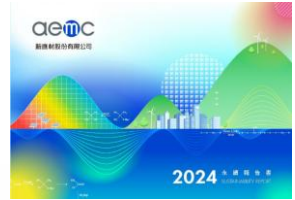
Completed greenhouse gas inventory ahead of regulatory schedule and obtained a statement from a third-party verification body in 2024.

Awarded a certificate of appreciation by a major wafer foundry customer for the 'Supplier Energy Saving and Carbon Reduction Guidance Program'



4 Independent directors, accounting for more than 44%

2 Female directors, accounting for more than 22% Sustainability Report to be issued in 2025



Female employees > 35%
Female Executives and Managers > 35%

- Established the 'AEMC Scholarship'
- Founded the 'New Immigrant Children Scholarship'
- Actively participated in 'Industry-Academia Cooperation'

Employees voluntarily organize and participate in ESG activities.





Thank you for listening.
Q&A



NT\$ million	1Q25	4Q24	1Q24	QoQ	YoY
Net Revenue / Net Sales	959	915	692	4.8%	38.6%
Gross Profit	375	348	207	7.7%	80.6%
Gross Margin	39.1%	38.0%	30.0%	2.7%	30.3%
Operating Expenses	(183)	(208)	(119)	-11.9%	53.8%
Operating Profit	191	140	88	36.7%	116.8%
Operating Margin	19.9%	15.3%	12.8%	30.4%	56.4%
Non-operating Income and Expenses	59	59	109	0.7%	-46.1%
Net Income Attributable to the Parent Company	208	173	173	20.0%	20.1%
EPS (NT\$)	2.28	2.10	2.11	8.6%	8.1%

NT\$ million	1Q25		4Q24		1Q24	
	Amount	%	Amount	%	Amount	%
Cash and Cash Equivalents	2,769	27.4%	437	8.2%	509	11.1%
Accounts Receivable	528	5.2%	532	10.0%	460	10.0%
Property, Plant and Equipment	2,942	29.1%	2,770	51.9%	1,986	43.1%
Total Assets	10,113	100.0%	5,334	100.0%	4,604	100.0%
Current Liabilities	1,391	13.8%	1,156	21.7%	1,319	28.7%
Long-term Borrowings	225	2.2%	1,102	20.7%	767	16.7%
Total Liabilities	1,758	17.4%	2,400	45.0%	2,208	48.0%
Total Shareholders' Equity	8,355	82.6%	2,935	55.0%	2,395	52.0%
Key Financial Ratios						
Current Ratio	463%		157%		144%	
Debt Ratio	17%		45%		48%	
Net Asset Value Per Share(NT\$)	90.09		35.67		29.21	

NT\$ million	1Q25	4Q24	1Q24
Beginning Cash Balance	437	505	423
Cash Flows from Operating Activities	293	264	147
Depreciation and Amortization Expenses	61	60	56
Capital Expenditures	(195)	(366)	(252)
Long-term Borrowings	(974)	75	89
Ending Cash Balance	2,769	437	509
Free Cash Flow	98	(101)	(105)

Note: Free Cash Flow = Cash Flows from Operating Activities – Capital Expenditures