



GlobalWafers (6488 TT) Q320 Results Presentation

November, 2020



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Executive Comments

➤ Q320

- Semiconductor market has remained largely resistant to global macroeconomic headwinds.
- Sequential improvement in revenue and shipment QoQ.
- Utilization
 - ✓ 8" – good
 - ✓ SOI – improving
 - ✓ 12" – hit an all-time record high on both EPI and Polished Wafers, demands for 12" advanced wafers are very strong.
- Accumulated cash flow from operations of NT\$ 9,411mn (US\$323mn) and cash*² of NT\$ 32,651mn (US\$ 1,122mn)*¹ reflect our correct operation strategy and emphasize the strength of our business model and financial moats.

Note:

1. FX Rate: NTD:USD = 29.10

2. Cash = cash and the equivalent + restricted cash



➤ Outlook

- Continue QoQ revenue growth in Q4.
- Substantial market uncertainty remains for the rest of the year: FX volatility, pandemic concerns, geopolitical issues.
- Automotive industry is recovering from 2H20.
- 2021 semiconductor market will grow again!
- SiC & GaN
 - ✓ Despite the short-term impact stricken by the pandemic, SiC device market revenue continues its growth.
 - ✓ Automotive application and mainstream consumer applications are expected to drive the SiC and GaN power device market in the coming years.



- Industry shifts and geopolitical responses
 - ✓ Semiconductor companies are reconfiguring their supply chains to improve resiliency, local production and supply chain are prioritized.
→ With extensive global footprint, GlobalWafers is well-positioned to supply GLOBALLY and LOCALLY.
 - ✓ Strategy -
 - Strengthen supply chain risk management and BCP (Business Continuity Plan).
 - Forward-thinking and prioritize on advanced products to create irreplaceable and unassailable position.

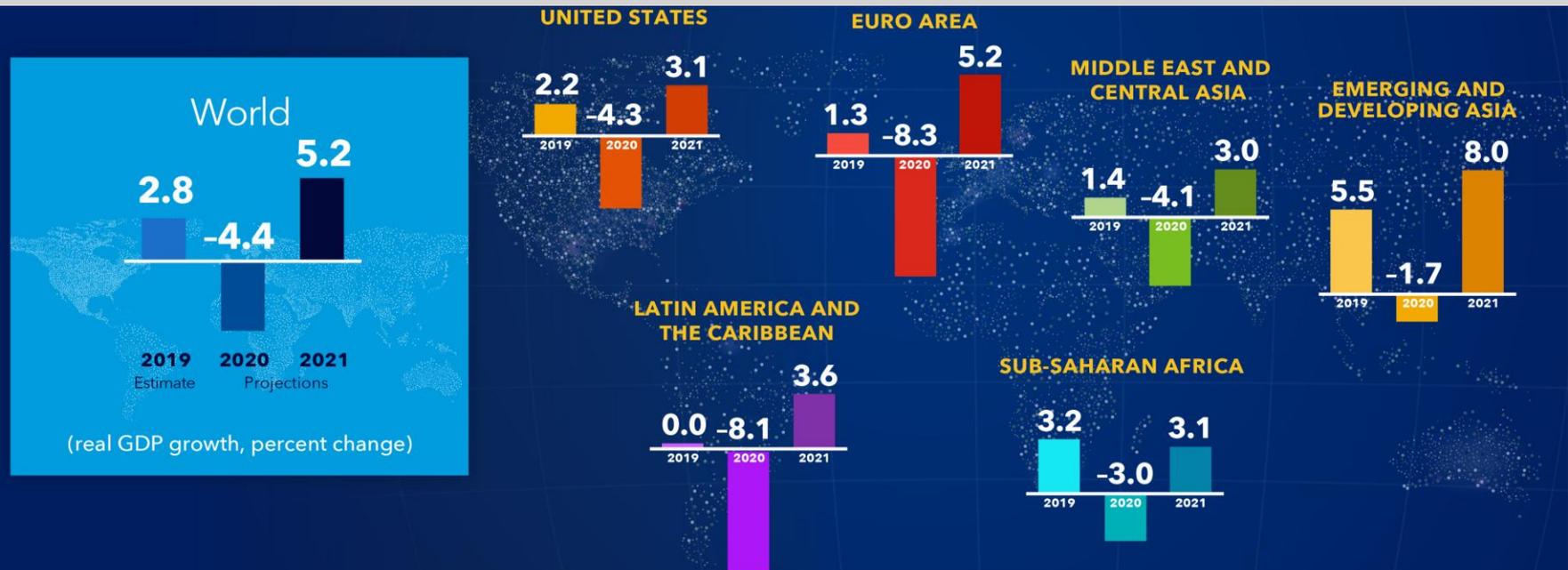


Industry Overview

Latest World Economic Outlook

- IMF estimates that the global economy will contract by 4.4% this year, a slight increase over it's June prediction (-4.9%), and growth in 2021 is projected to rebound to 5.2%,
- Though many economies have started to recover at a faster pace than anticipated after reopening, the recovery is not assured while the pandemic continues to spread.

Latest World Economic Outlook Growth Projection (% change)



Source: IMF, *World Economic Outlook*, October 2020.

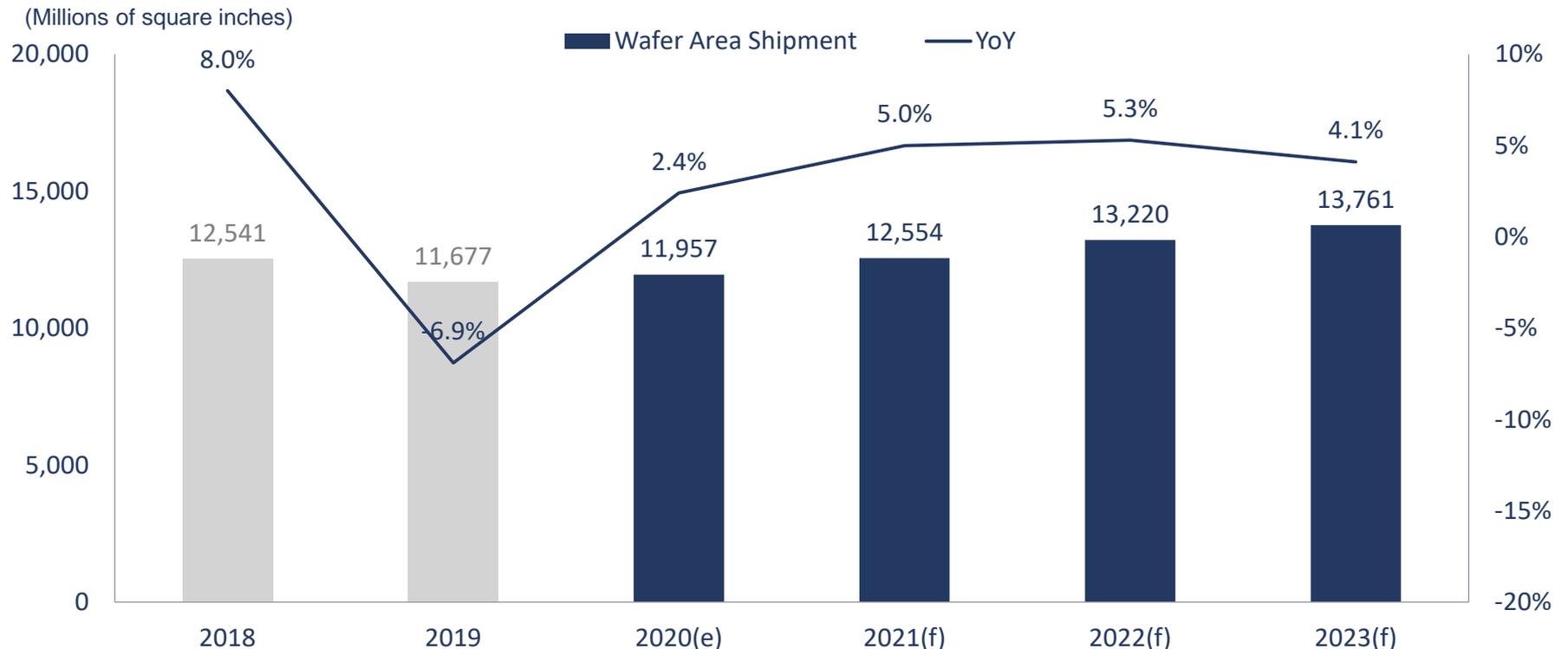
Note: Order of bars for each group indicates (left to right): 2019, 2020 projections, and 2021 projections.



Global Silicon Wafer Area Shipments

- Global silicon wafer shipments are set to increase 2.4% YoY in 2020, with growth continuing in 2021 and shipments reaching a record high in 2022 according to research report.

Global Silicon* Wafer Area Shipments



Source: SEMI ORG, October, 2020

Note: Total Electronic Grade Silicon Slices – Excludes Non-Polished Wafers

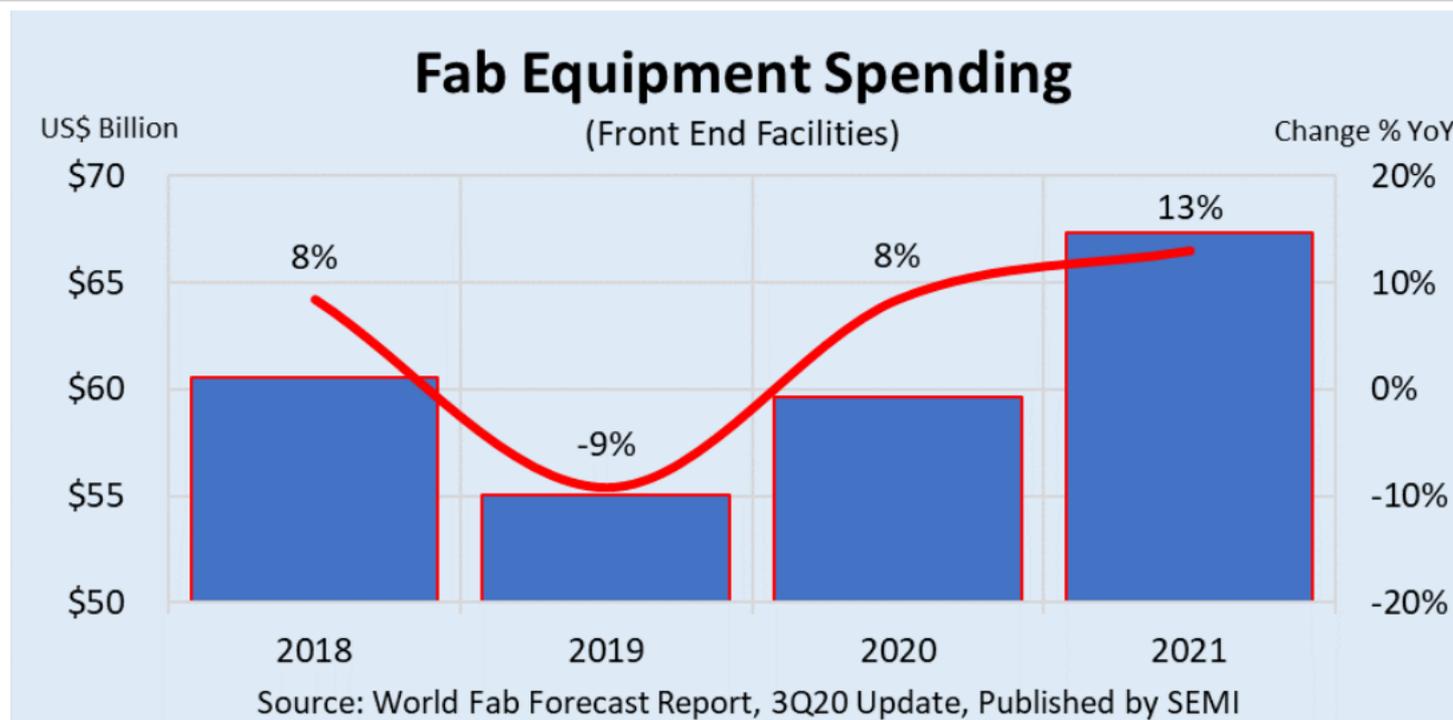
Shipments are for semiconductor applications only and do not include solar applications



COVID-19 Drives Rise in Global Fab Equipment Spending

- Soaring pandemic-inspired demand for chips, rising demand for semiconductors for datacenter infrastructures and server storage along with the buildup of safety stock as U.S.-China trade tensions intensify will drive an 8% increase in global fab equipment spending in 2020 and a 13% increase in 2021, according to SEMI Report.

Fab Equipment Spending



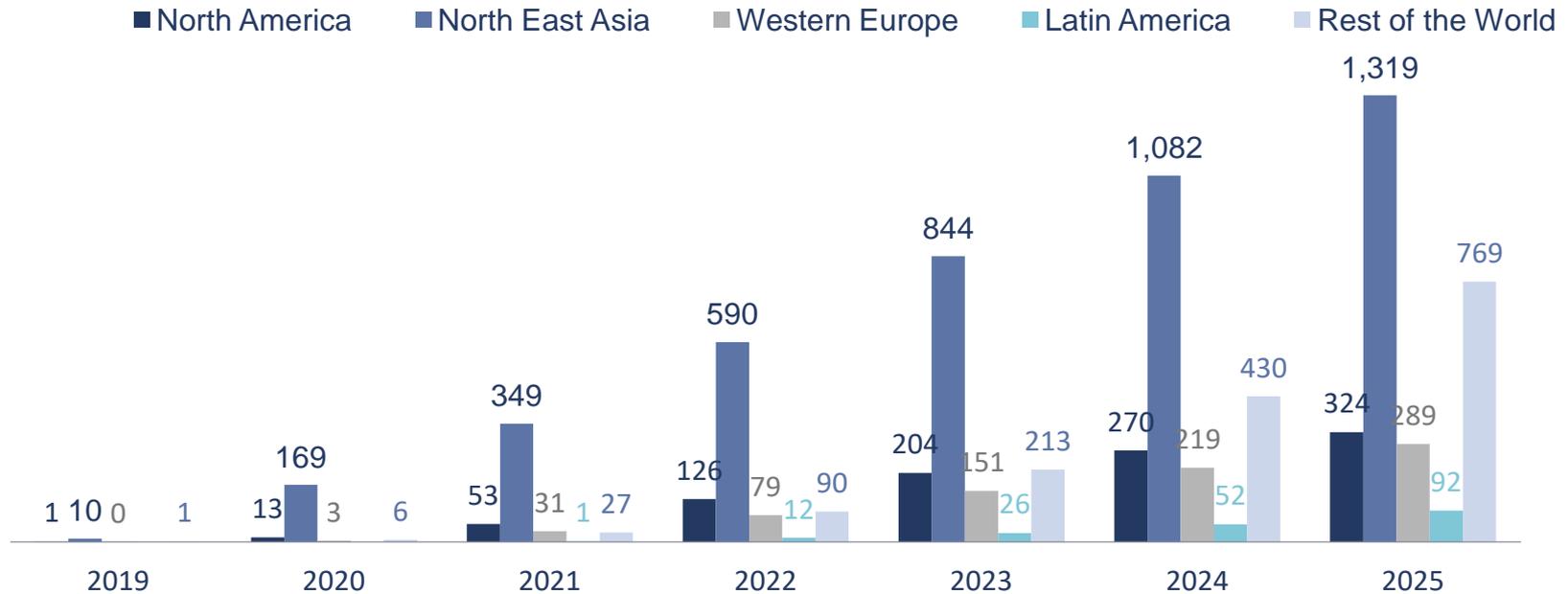


5G Subscriptions Worldwide Forecast

- 5G subscriptions are forecast to increase worldwide from 2019 to 2025. The number of 5G mobile subscriptions worldwide is forecast to exceed 2.7 billion at 197% CAGR by 2025, with North East Asia, North America, and Western Europe having the most 5G subscriptions.

5G Subscriptions Worldwide Forecast (2019~2025)

(millions of connections)



Source: Ericsson, July, 2020

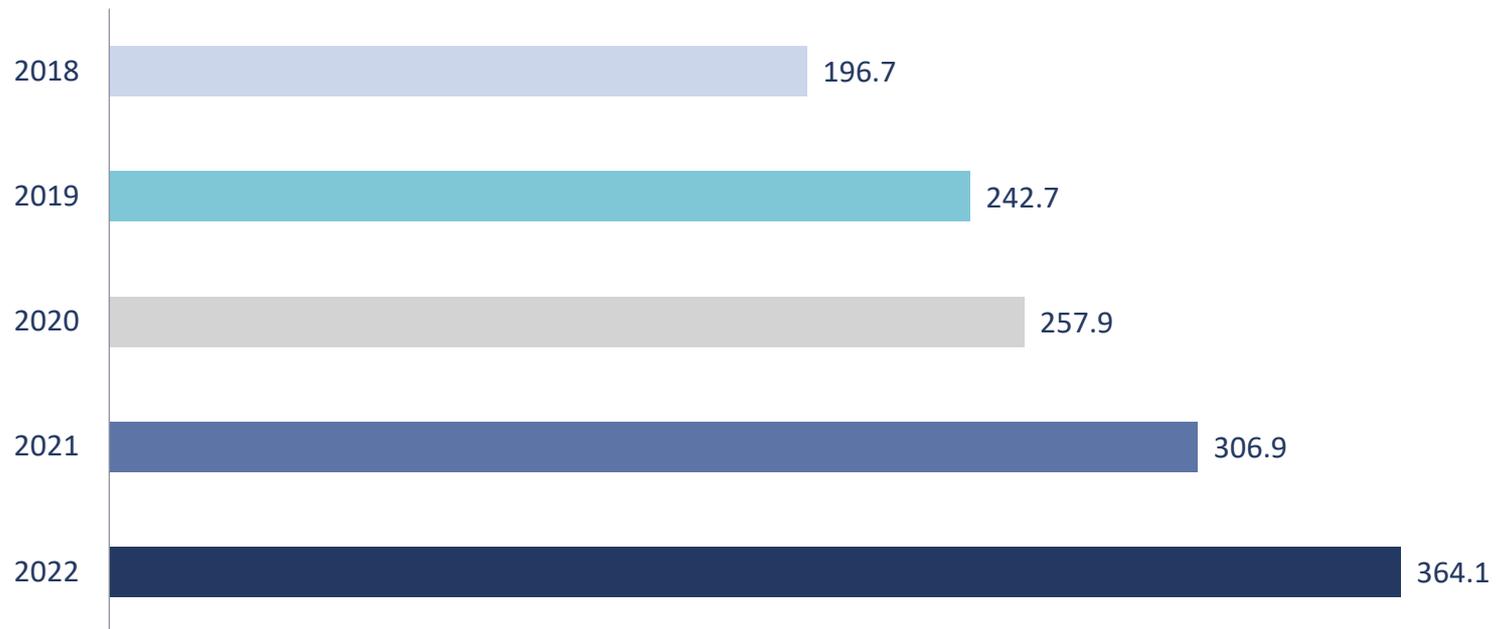


Public Cloud Computing Services Market Forecast

- The worldwide public cloud services market is forecast to grow 6.3% in 2020 to total \$257.9 bn and by 2022 market revenue is forecast to exceed 364 bn, representing 16.4% CAGR from 2018 to 2022. Cloud spending in many regions is expected to grow rapidly as economies reopen and more normal economic activity resumes

Public Cloud Computing Services Market Forecast (2018~2022)

(USD Billions)



Note: This encompasses business process, platform, infrastructure, software, management, security, and advertising services delivered by public cloud services

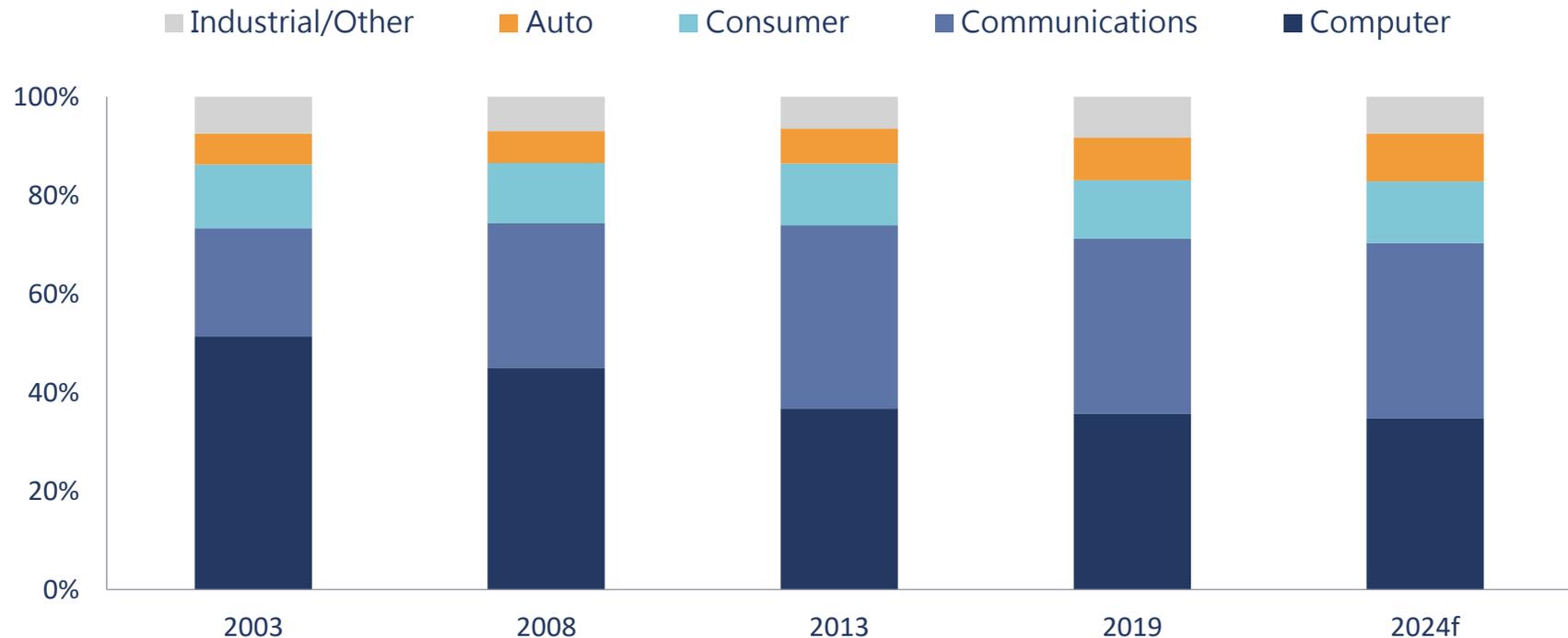
Source: Gartner, July, 2020



Automotive IC with Strongest CAGR Through 2024

- As shown in the research report, the automotive IC market share has displayed a steady increase and is forecast to register the strongest 2019-2024 CAGR of any of the end-use segments at 9.7%.

IC Market Share by System Type (2003~2024)

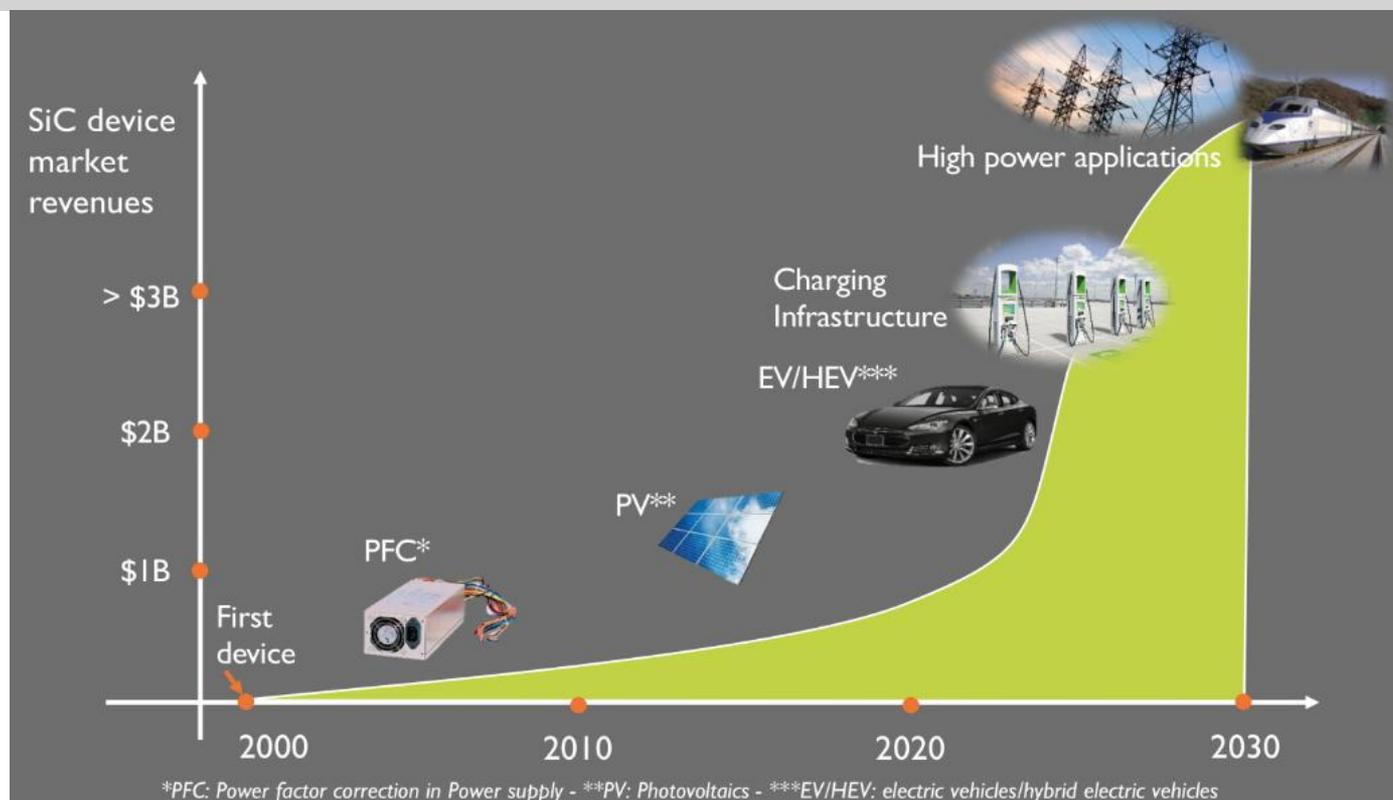


Source: IC Insights, June, 2020

Roadmap for SiC Power Devices

- The benefits of SiC devices built on fundamental material benefits of high breakdown field and thermal conductivity drive the wide deployments in numerous applications and its market revenue is expected to grow quickly in the near future.

Roadmap for SiC Power Devices

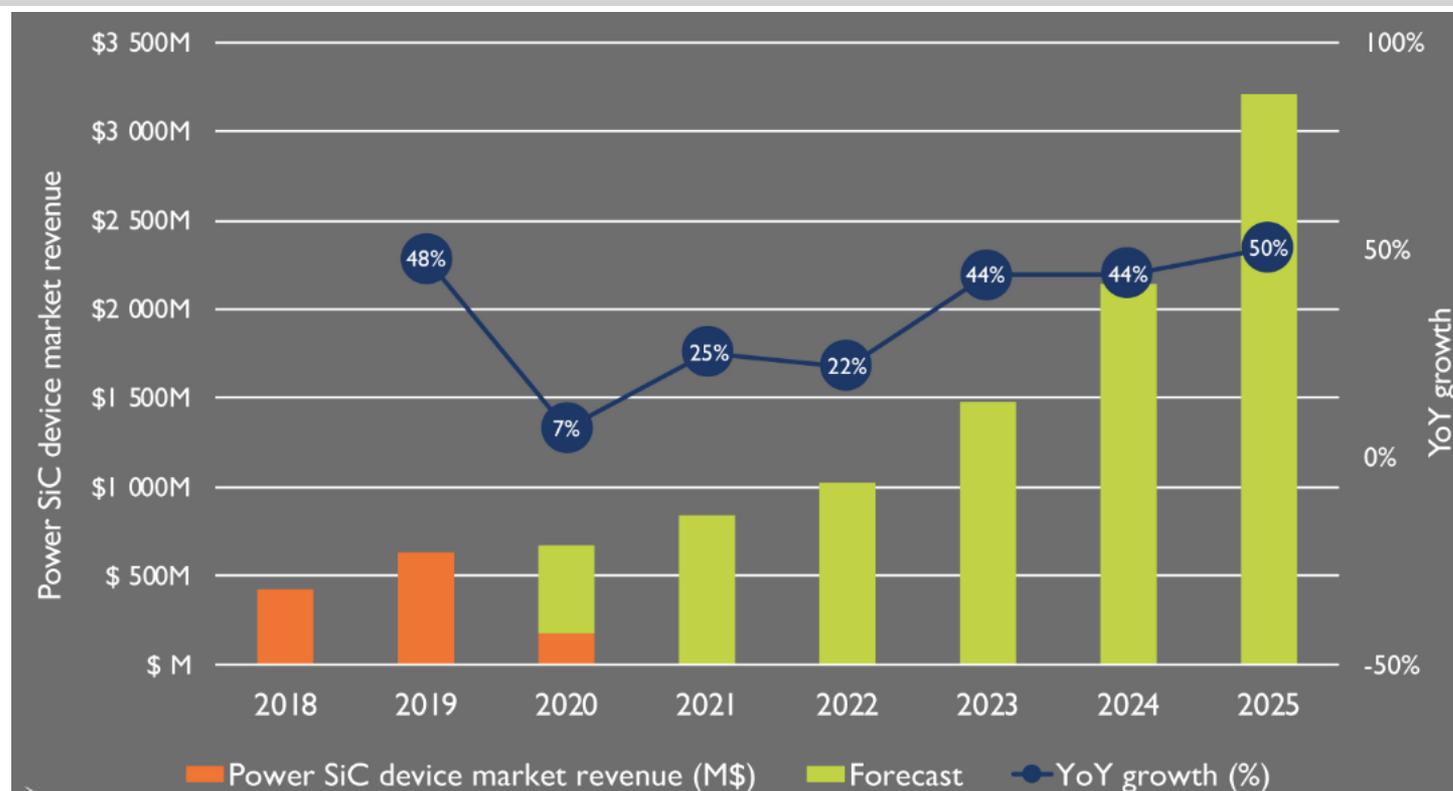


Source: Yole, June, 2020

Prospering SiC Driven by Automotive Applications

- In the prospering SiC power market, the automotive segment is undoubtedly the foremost driver, and as such will hold more than 50% of total device market share in 2025.

Power SiC Device Market Revenue



Source: Yole, June, 2020

SiC - Revolutionizing the Electric Vehicles

SiC Advantages in Electric Vehicles

Smaller Battery

SiC's great conductivity minimizes transmission loss and reduces battery size.



Si



SiC

Reduce Weight

SiC eliminates complex and heavy cooling systems on vehicles, making the total car weight lighter.



Si



SiC

Fast Charging

SiC is suitable for highly efficient power electronics and very high power density, favorable for fast charging.



Si



SiC

Increase Range

With lighter weight, SiC increases electric vehicle ranges compared to same battery capacity.

Si



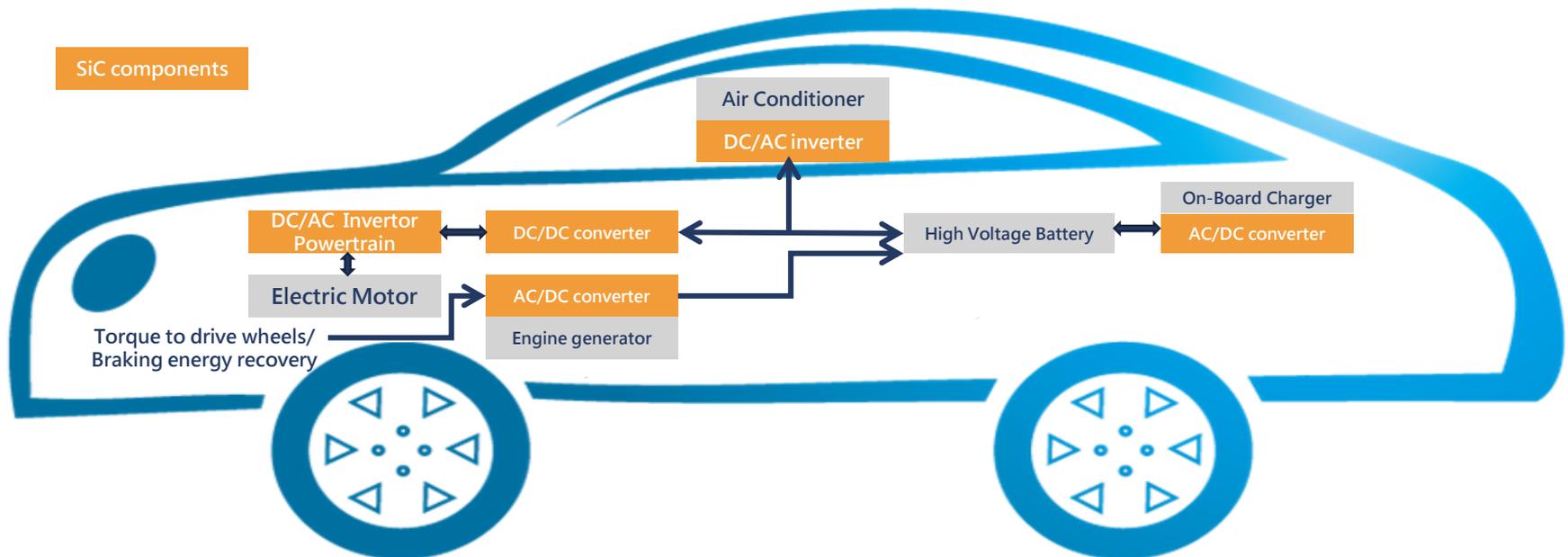
SiC



SiC Positioning within an EV/HEV

- Automakers launched 143 new electric vehicles—105 BEVs and 38 plug-in hybrid electric vehicles (PHEVs)—in 2019, and plan to introduce around 450 additional models by 2022.
- The number of automakers applying SiC-based components has dramatically increased. SiC's primary automotive applications are onboard electric vehicle (EV) chargers, DC/DC converters, and powertrain inverters.

SiC Positioning within an EV/HEV



Source: On Semi, Yole, Digitimes Research, January, 2020

SiC Adoption in Automotive Companies

- SiC sets new standards for switching speed, heat loss, and size, and these characteristics translate into fewer components for use in high-voltage electronics, as well as reduced complexity and cost. Automakers are gearing up to adopt SiC technology in their drivelines.

SiC Adoption in Automotive Companies



TESLA

Tesla Model 3 uses SiC MOSFETs for its main inverter



RENAULT

Renault uses SiC to build high-power OBCs (On-Board Chargers)



ZF adopts SiC inverter solutions to increase drive efficiency



BOSCH

Bosch will begin production of energy-efficient SiC microchips specifically for use in electric vehicles.



The Future in Motion

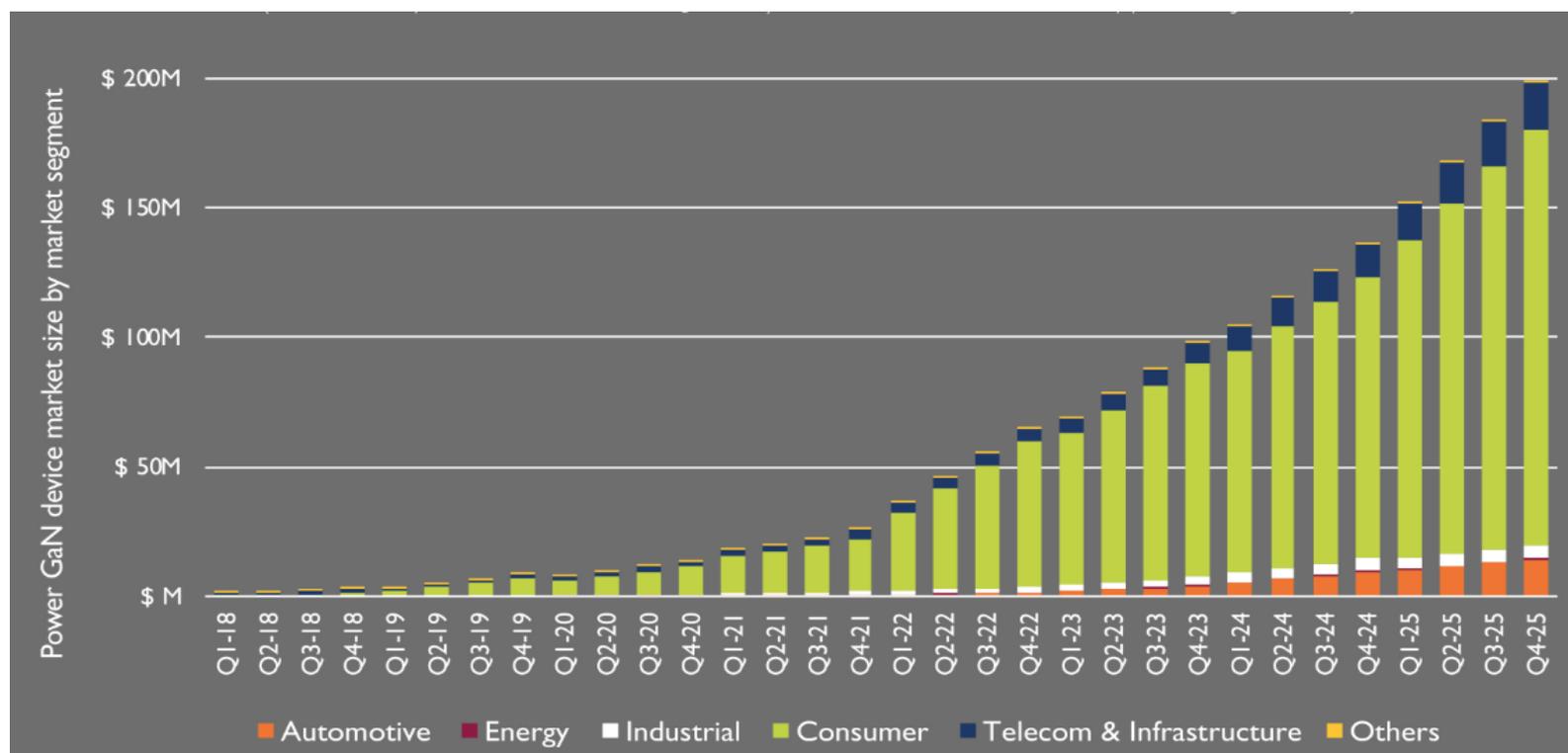
vitesco
TECHNOLOGIES

The drive division of automotive supplier Continental, Vitesco Technologies dedicates on the adaptation of SiC technology.

Power GaN Device Market Forecast

- Driven by consumer fast-charger applications, power GaN device market growth will be in the range of 167% Y/Y in 2019, with a market value of more than US\$700 million in 2025. However, due to the COVID-19 outbreak, smartphone production is estimated to drop 20% in 2020. The impact of the pandemic is region and player dependent.

Power GaN Device Market Forecast by Segment



Source: Yole, June, 2020



Q320 Performance Update



Financial Highlights

➤ Q320

● Sequential improvement in revenue and shipment

(NT\$m)	Q320	Q220	Q120	Q320 vs. Q220	Q220 vs. Q120
Revenue	14,006	13,701	13,515	2.2%	1.4%

● Good Profits despite of COVID-19

- ✓ EBITDA %: 40.0% (YoY : 1.9%)
- ✓ Net Profit %: 24.2% (YoY : 0.9%)
- ✓ EPS: NTD 7.78 (YoY : NTD 0.14)

➤ 3Q20 (accumulated)

- EBITDA : 2nd Best
- Operating Profit %, Net Profit % : 2nd Best

➤ Financial Leverage

- Sufficient cash*¹ position – NT\$ 32,651 mn (US\$ 1,122 mn)*²
- Prepayment – NT\$ 17,546 mn (US\$ 603 mn)*²

Note:

1. Cash = cash and the equivalent + restricted cash

2. FX Rate: NTD:USD = 29.1



Financial Highlight : Q320 vs. Q220

(NT\$mnn)	Q320	Q220	QoQ
Revenue	14,006	13,701	2.2%
EBITDA* ¹	5,602	5,609	-0.1%
EBITDA %	40.0%	40.9%	-0.9%
EBIT	4,062	4,344	-6.5%
Operating Profit	4,078	4,229	-3.6%
Operating Profit %	29.1%	30.9%	-1.8%
Net Profit	3,388	3,397	-0.3%
Net Profit %	24.2%	24.8%	-0.6%
EPS	7.78	7.81	-NT\$0.03
ROE* ² (annualized)	29.2%	29.6%	-0.4%
ROA* ³ (annualized)	13.7%	13.2%	0.5%

1. EBITDA = Net Profit + Tax + Interests + Depreciation + Amortization.

2. ROE = Net Profit / Average Shareholders Equity

3. ROA = (Net Profit + Interest*(1- Effective Tax Rate))/Average Asset



Financial Highlight : Q320 vs. Q319

(NT\$m)	Q320	Q319	YoY
Revenue	14,006	14,303	-2.1%
EBITDA* ¹	5,602	5,453	2.7%
EBITDA %	40.0%	38.1%	1.9%
EBIT	4,062	4,207	-3.4%
Operating Profit	4,078	4,171	-2.2%
Operating Profit %	29.1%	29.2%	-0.1%
Net Profit	3,388	3,328	1.8%
Net Profit %	24.2%	23.3%	0.9%
EPS	NT\$7.78	NT\$7.64	NT\$0.14
ROE* ² (annualized)	29.2%	33.2%	-4.0%
ROA* ³ (annualized)	13.7%	15.4%	-1.7%

1. EBITDA = Net Profit + Tax + Interests + Depreciation + Amortization.

2. ROE = Net Profit / Average Shareholders Equity

3. ROA = (Net Profit + Interest*(1- Effective Tax Rate))/Average Asset



Financial Highlight : 3Q20 vs. 3Q19 (accumulated)

(NT\$m)	3Q20	3Q19	YoY
Revenue	41,222	44,588	-7.6%
EBITDA* ¹	16,226	17,689	-8.3%
EBITDA %	39.4%	39.7%	-0.3%
EBIT	12,251	14,130	-13.3%
Operating Profit	12,112	14,044	-13.8%
Operating Profit %	29.4%	31.5%	-2.1%
Net Profit	9,666	10,727	-9.9%
Net Profit %	23.4%	24.1%	-0.6%
EPS	NT\$22.21	NT\$24.67	-NT\$2.46
ROE* ² (annualized)	29.2%	33.2%	-4.0%
ROA* ³ (annualized)	13.7%	15.4%	-1.7%

1. EBITDA = Net Profit + Tax + Interests + Depreciation + Amortization.

2. ROE = Net Profit / Average Shareholders Equity

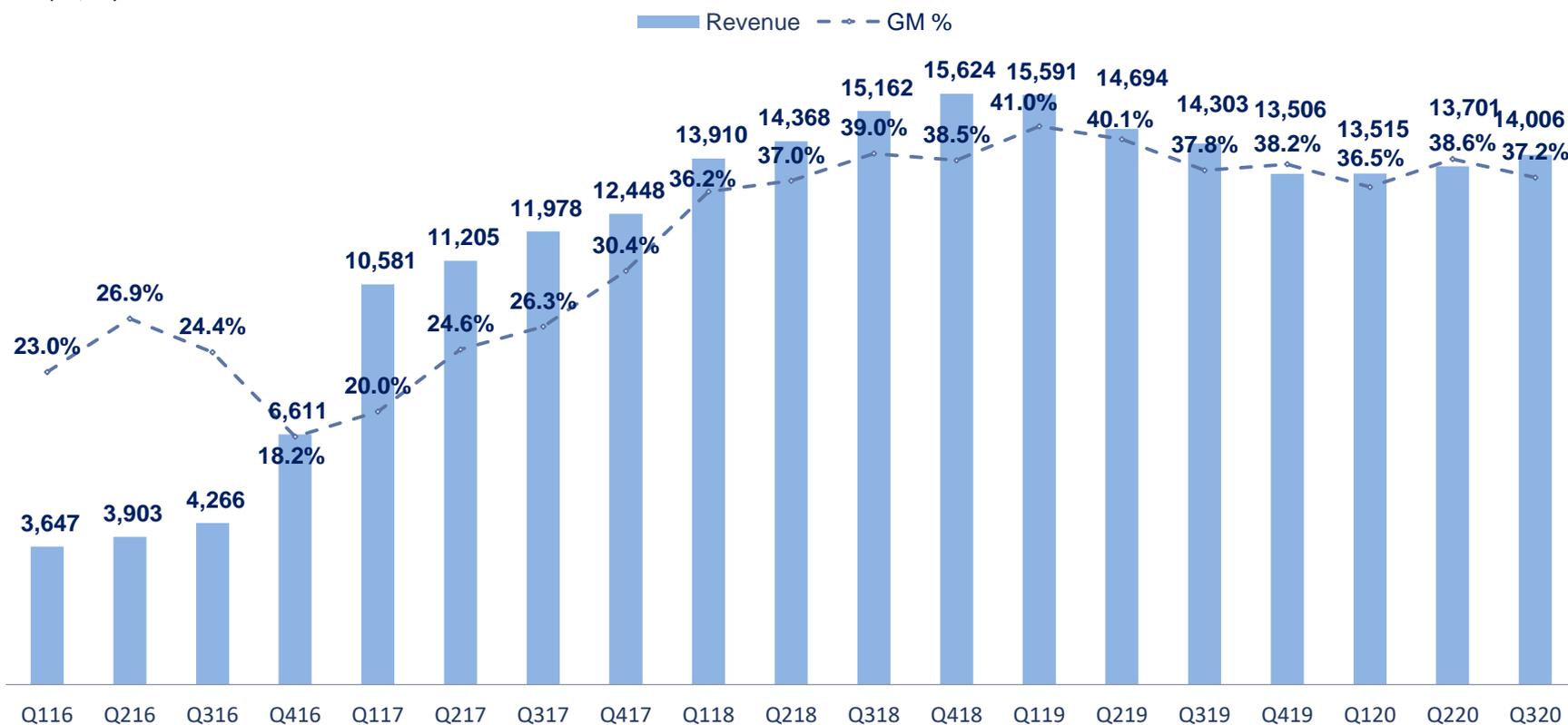
3. ROA = (Net Profit + Interest*(1- Effective Tax Rate))/Average Asset



Revenue & Gross Margin

Revenue & Gross Margin

(NT\$mn)

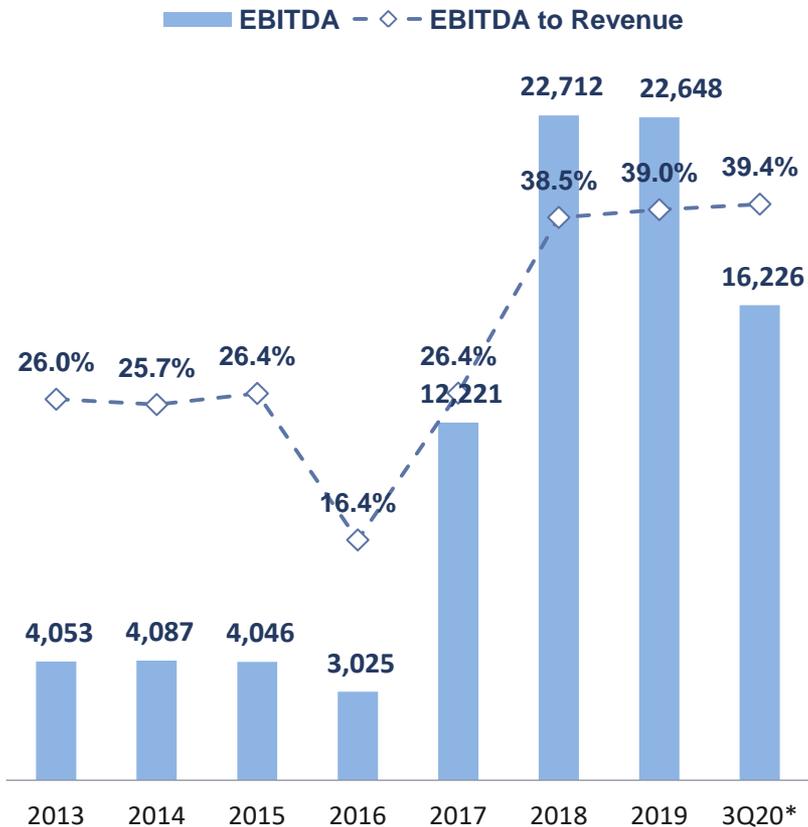




EBITDA & EPS

EBITDA

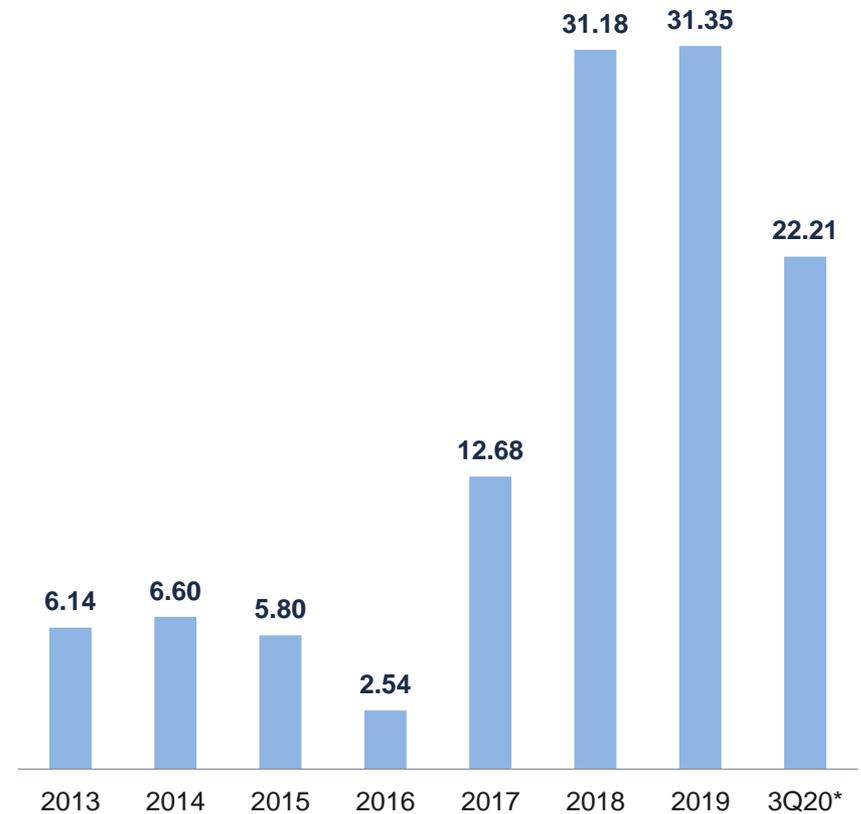
(NT\$mn)



Note: 3Q20 : Accumulated number

EPS

(NT\$)



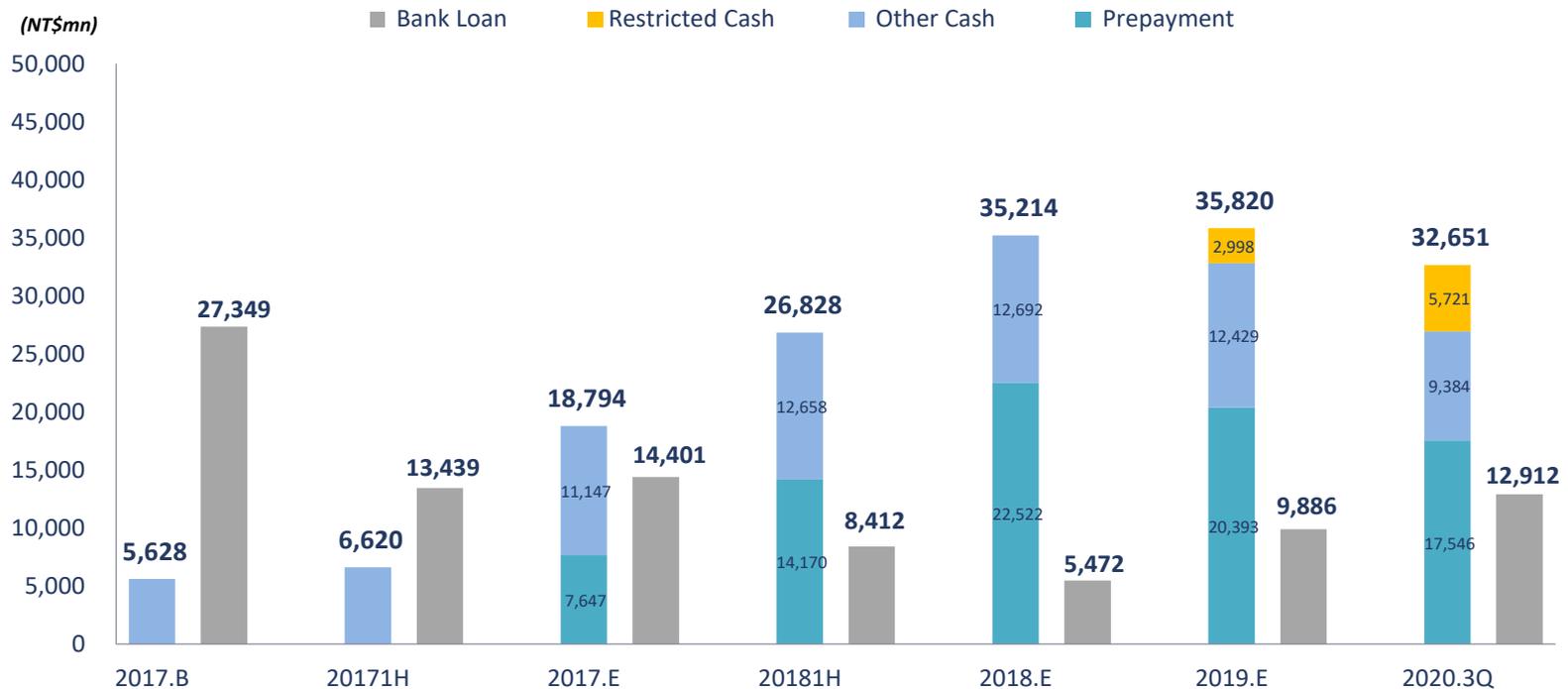
Note: 3Q20 : Accumulated number



Financial Leverage

- Sufficient cash makes GlobalWafers capable of sustainable development.
- Increasing bank loan for dividend payment reflects GWC's commitment to share the constant growth with shareholders.

Cash Structure and Bank Loan



Note: Cash = cash and the equivalent + restricted cash



Income Statement

Income Statement

(NT\$mn)	2013	2014	2015	2016	2017	2018	2019	3Q20*
Revenue	15,570	15,922	15,310	18,427	46,213	59,064	58,094	41,222
<i>Growth (%)</i>	-	2.3%	-3.8%	20.4%	150.8%	27.8%	-1.6%	-
Gross Profit	3,663	3,728	4,073	4,130	11,808	22,299	22,847	15,436
<i>Gross Profit Margin (%)</i>	23.5%	23.4%	26.6%	22.4%	25.6%	37.8%	39.3%	37.4%
EBITDA	4,053	4,087	4,046	3,025	12,221	22,712	22,648	16,226
<i>EBITDA Margin (%)</i>	26.0%	25.7%	26.4%	16.4%	26.4%	38.5%	39.0%	39.4%
Operating Profit	2,194	2,336	2,685	1,378	7,414	17,578	17,897	12,112
<i>Operating Profit Margin (%)</i>	14.1%	14.7%	17.5%	7.5%	16.0%	29.8%	30.8%	29.4%
Profit before Tax	2,204	2,679	2,808	1,344	6,875	18,253	18,554	12,417
<i>Profit before Tax Margin (%)</i>	14.2%	16.8%	18.3%	7.3%	14.9%	30.9%	31.9%	30.1%
Net Profit	1,948	2,095	2,044	939	5,278	13,634	13,636	9,666
<i>Net Profit Margin (%)</i>	12.5%	13.2%	13.4%	5.1%	11.4%	23.1%	23.5%	23.4%
EPS (NT\$)	6.14	6.60	5.80	2.54	12.68	31.18	31.35	22.21

Note:

1. Upon completion of GWC's acquisition of SunEdison Semiconductor ("SEMI") in 2016, FY2016 financials has included earnings from SEMI from the period of 02 Dec 2016 – 31 Dec 2016.

2. 3Q20: Accumulated number



Balance Sheet

Balance Sheet

(NT\$mn)	2013	2014	2015	2016	2017	2018	2019	3Q20
Assets								
Cash and cash equivalents	1,536	2,685	3,662	5,628	18,794	35,214	32,822	26,930
Account receivable	3,165	3,694	4,538	7,642	7,869	9,226	8,140	8,313
Inventories	3,291	2,829	3,262	7,307	7,347	7,040	6,849	7,369
Property, plant and equipment	9,796	8,972	9,361	31,036	28,202	30,887	34,697	36,727
Other assets	3,286	3,204	2,994	8,948	8,020	7,455	14,078	13,502
Total assets	21,074	21,385	23,816	60,560	70,232	89,822	96,586	92,842
Liabilities								
Short-term loan	1,302	2,069	696	12,982	10,738	5,042	9,886	12,912
Account payable	1,816	1,789	1,383	5,126	4,269	4,870	3,837	3,841
Long term loan	--	--	--	14,367	3,663	430	--	0
Other liabilities	4,821	4,325	5,012	12,267	17,508	36,324	37,790	32,997
Total liabilities	7,939	8,184	7,091	44,742	36,178	46,666	51,513	49,749
Shareholder equity	13,135	13,201	16,725	15,819	34,054	43,156	45,073	43,093

Note:

1. Upon completion of GWC's acquisition of SunEdison Semiconductor ("SEMI") in 2016, FY2016 financials has included earnings from SEMI from the period of 02 Dec 2016 – 31 Dec 2016.

2. Account receivables include account receivables from related parties.

3. Account payables include account payables from related parties.



ESG Highlights

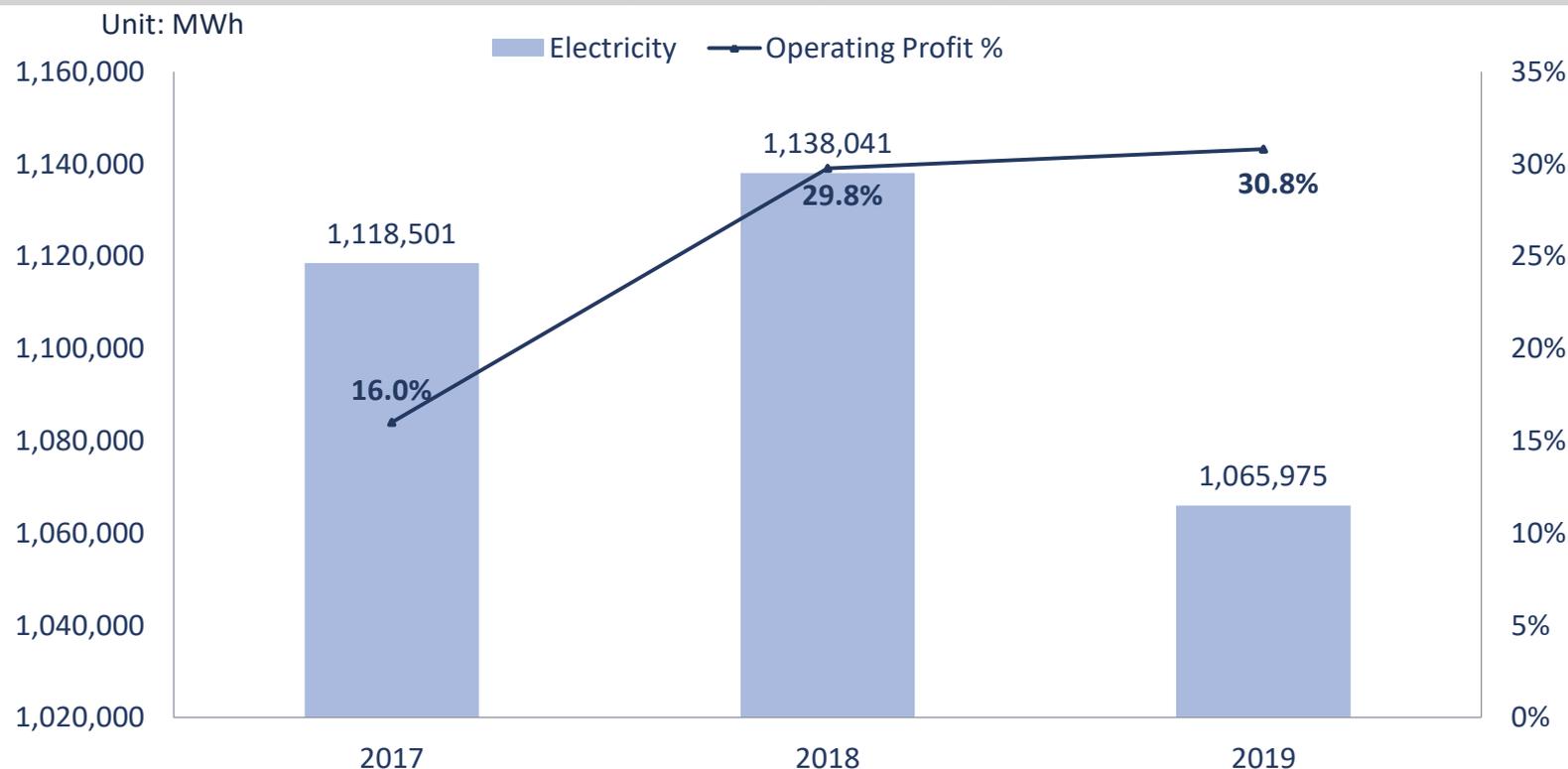
- Responsible Growth is our principle in business practices.
- GlobalWafers aims at being at the forefront of global responsibility in the aspects of environment, health & safety and corporate governance.



Sustainable Environment - Electricity

- By introducing energy saving measures, GlobalWafers lowers power consumption successfully without impeding it from enlarging production ability, we have achieved 1% power saving compared to last year as of now.
- Optimizing electricity consumption group wide has helped us improve operating profit by 14.8% in 3 years.

GWC-Group Electricity Consumption vs. OP%

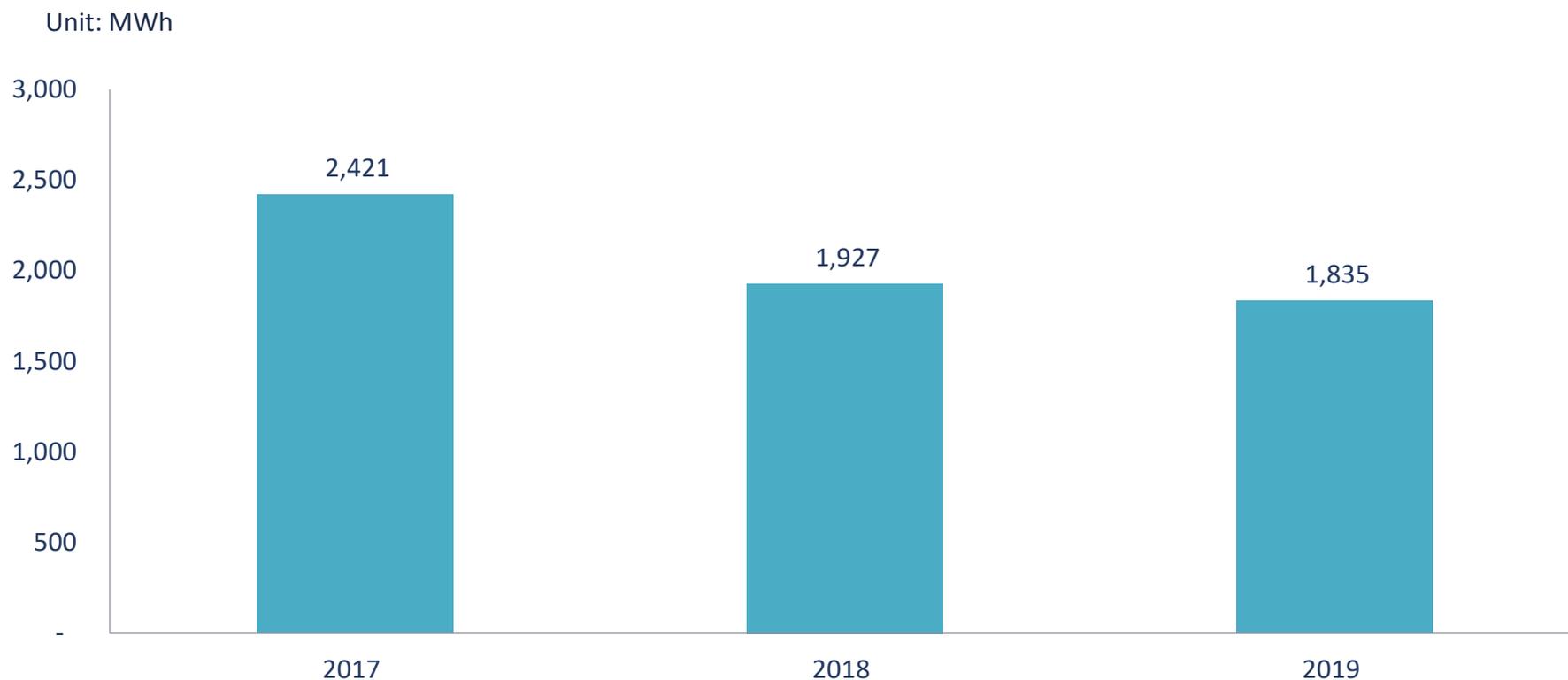




Improvement on Electricity Consumption

- Though ingot growing and wafering consume a great deal of energy, GlobalWafers dedicates in enhancing energy efficiency and achieves same revenue with less energy.

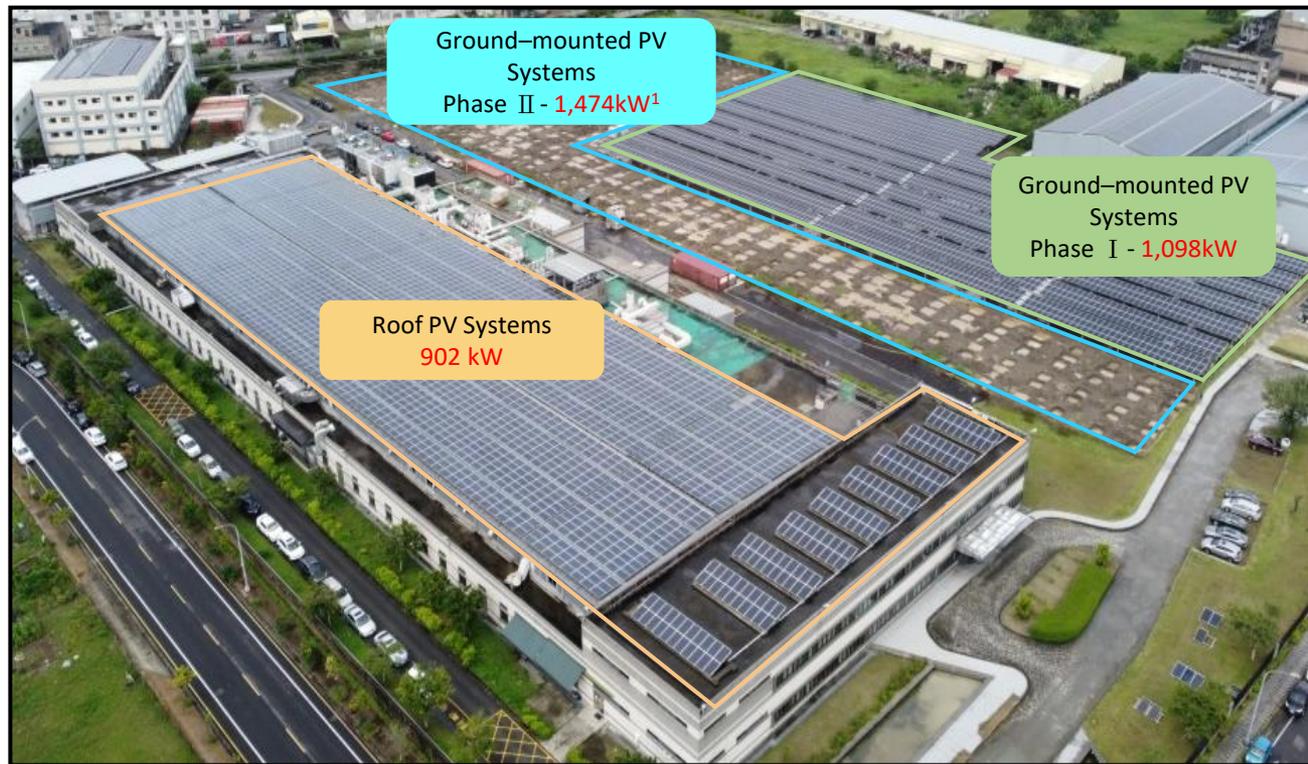
Electricity Needed to Generate NTD100mn Revenue



Committed to Green Energy

- To fulfill the commitment to sustainable development, GWC cooperates with its parent company, SAS, on solar installation of 3,474 kW* which could reduce 1,842 tons of CO₂ emission every year.

Solar System Project



Note:

1. Ground-mounted PV Systems Phase II is under construction and expected to be done in Q221.

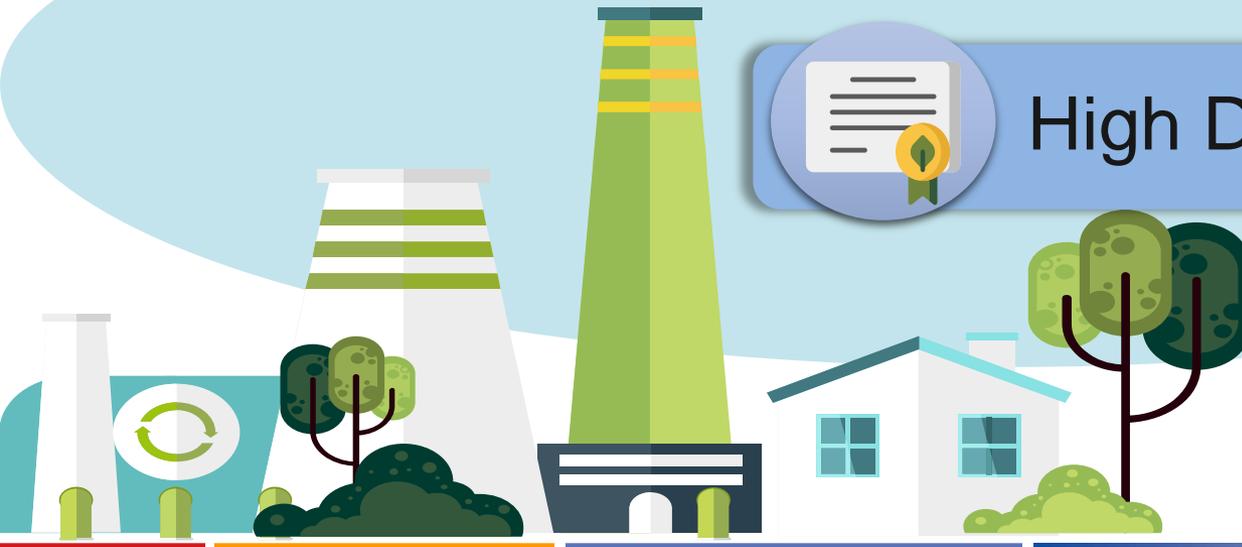
Sustainable Environment – Waste

- GlobalWafers adopts circular economy solutions to reduce costs and environmental impact.
- Almost 80% of the waste could be reused and regenerated as ingredients by other industries.
- Our relentless efforts make us outshining in the industry and are awarded the High Distinction Award from Year 2020 Outstanding Enterprise for Waste Reduction and Circular Economy.

*2020 Outstanding Enterprise Award
for Waste Reduction and Circular Economy*



High Distinction Award





Charity and Environment Protection

- GlobalWafers devotes our love to the ones that in need via donations. We also extend our care to environment through corporate volunteers by a series of activities like beach cleaning.



**2020 Aug.
Nanliao Beach Cleaning**



**2020 Sep.
Donation to Rural Tribe**



**2020 Oct.
Ambulance Donation to Italian Red Cross (CRI)**



Ethical Business Practice



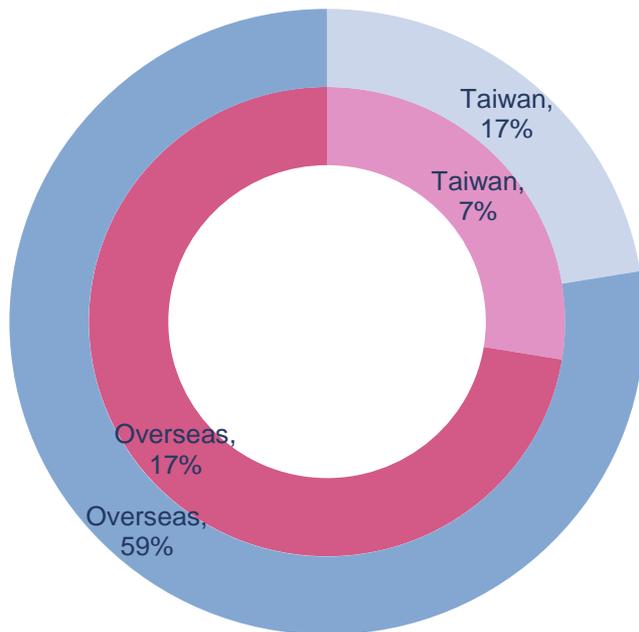


Diversity and Inclusion

- GlobalWafers is committed to supporting gender equality, advancing women in the workplace globally.
- Women in our global workforce is 24% overall, 14% on our board.

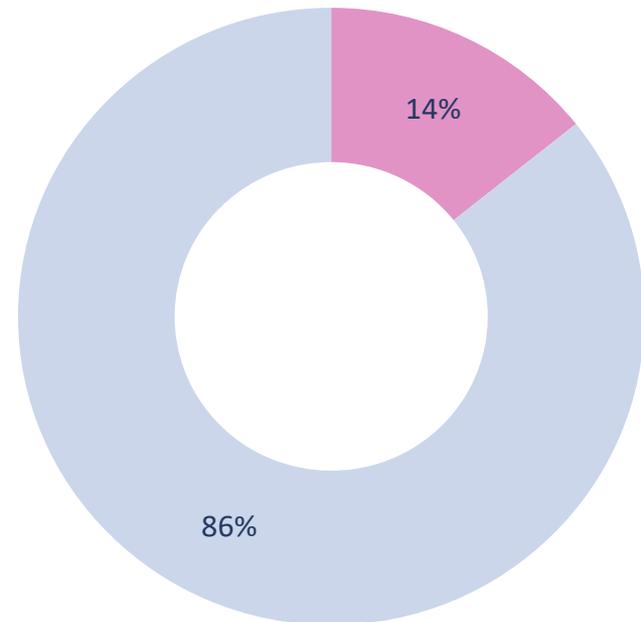
Percentage of Women in Our Global Workforce

Male Female



Percentage of Women on Our Board (%)

Female Male





Q&A



Thank You
