



中美矽晶製品股份有限公司  
Sino-American Silicon Products Inc.



## SAS (5483 TT) Industry Overview

July, 2022

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# Executive Comments

## 1. Financial Highlight

### ■ Revenue

- ✓ June → NTD \$7.3 billion, 16.5% YoY, record high!
- ✓ Q222<sup>1</sup> → NTD \$20.3 billion, 18.0% YoY, record high!
- ✓ Since the third quarter of 2020, SAS' revenue has increased sequentially!

Quarters	Q220	Q320	Q420	Q121	Q221	Q321	Q421	Q122	Q222
Revenue (NT\$m)	15,038	15,379	15,703	16,052	17,183	17,522	18,084	18,769	20,271

- ✓ 1H22<sup>2</sup> → NTD \$39.0 billion, 17.5% YoY, record high!

Note:

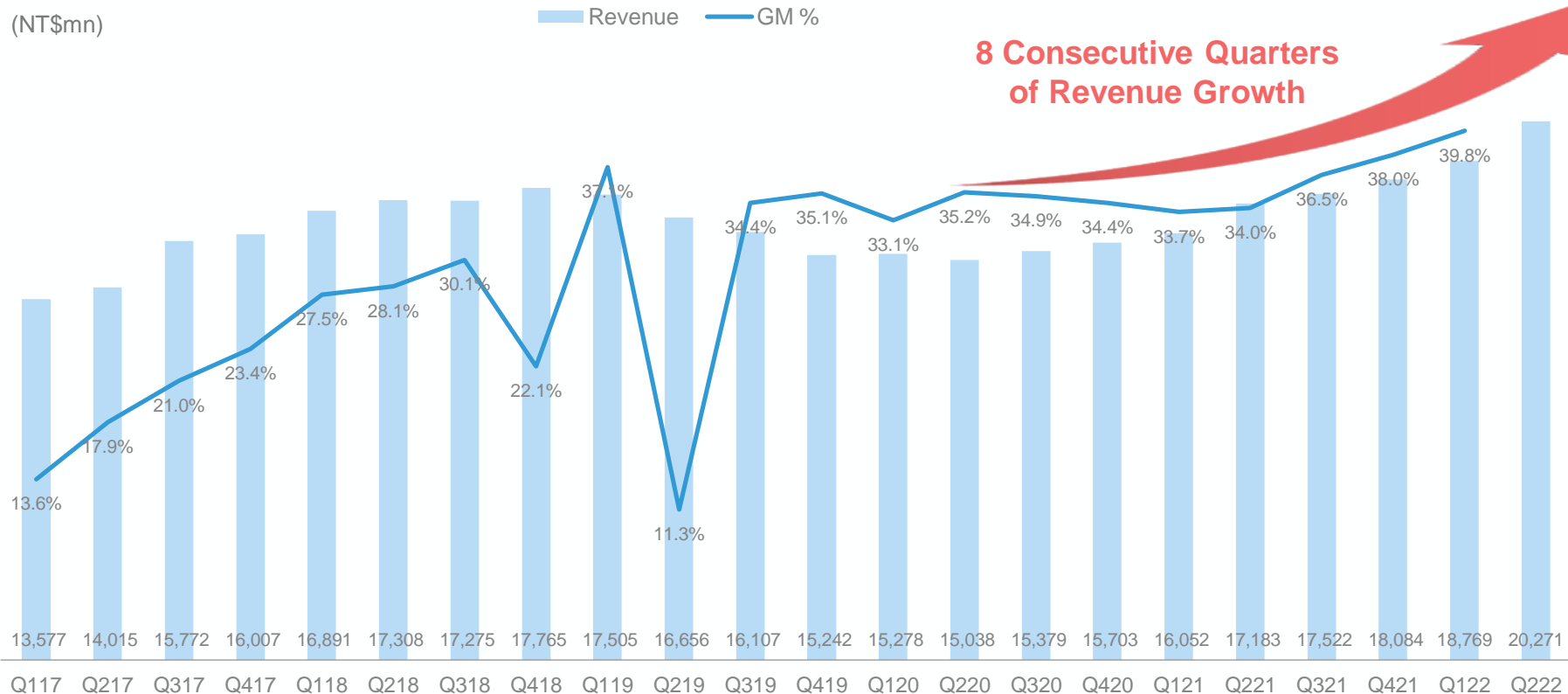
1. Q222: Second quarter of 2022
2. 1H22: First half year of 2022



# Executive Comments

## 1. Financial Highlight

### Revenue & Gross Margin



Note: Impairment of assets and onerous contract provision were recognized in 4Q18 & 2Q19 respectively



# Executive Comments

## 2. Solar Industry Outlook

### ■ Worldwide

- ✓ Russian aggression and soaring energy price have accelerated EU countries' ambition to decarbonation and displace fossil fuels in order to build a resilient energy system which could withstand and adapt to the turbulence and instability of climate and macroeconomics.

### ■ Taiwan

- ✓ Government policy to increase power rate by 15% for large-scale industrial user is expected to stimulate enterprise and household solar installations, with Taiwan's 2050 net-zero transition, green energy led by solar energy are powered by both system and demand fronts with promising prospects.



# Executive Comments

## 3. Planned Dividend Payout

- ✓ 2021 Dividend — NT\$ 8 (1H21: NT\$3.5 + 2H21: NT\$4.5)
- ✓ 2021 Payout Ratio — 69%
- ✓ Record Date — July 25, 2022
- ✓ Payment Date — August 12, 2022

## 4. Taiwan Wafer Manufacture Index

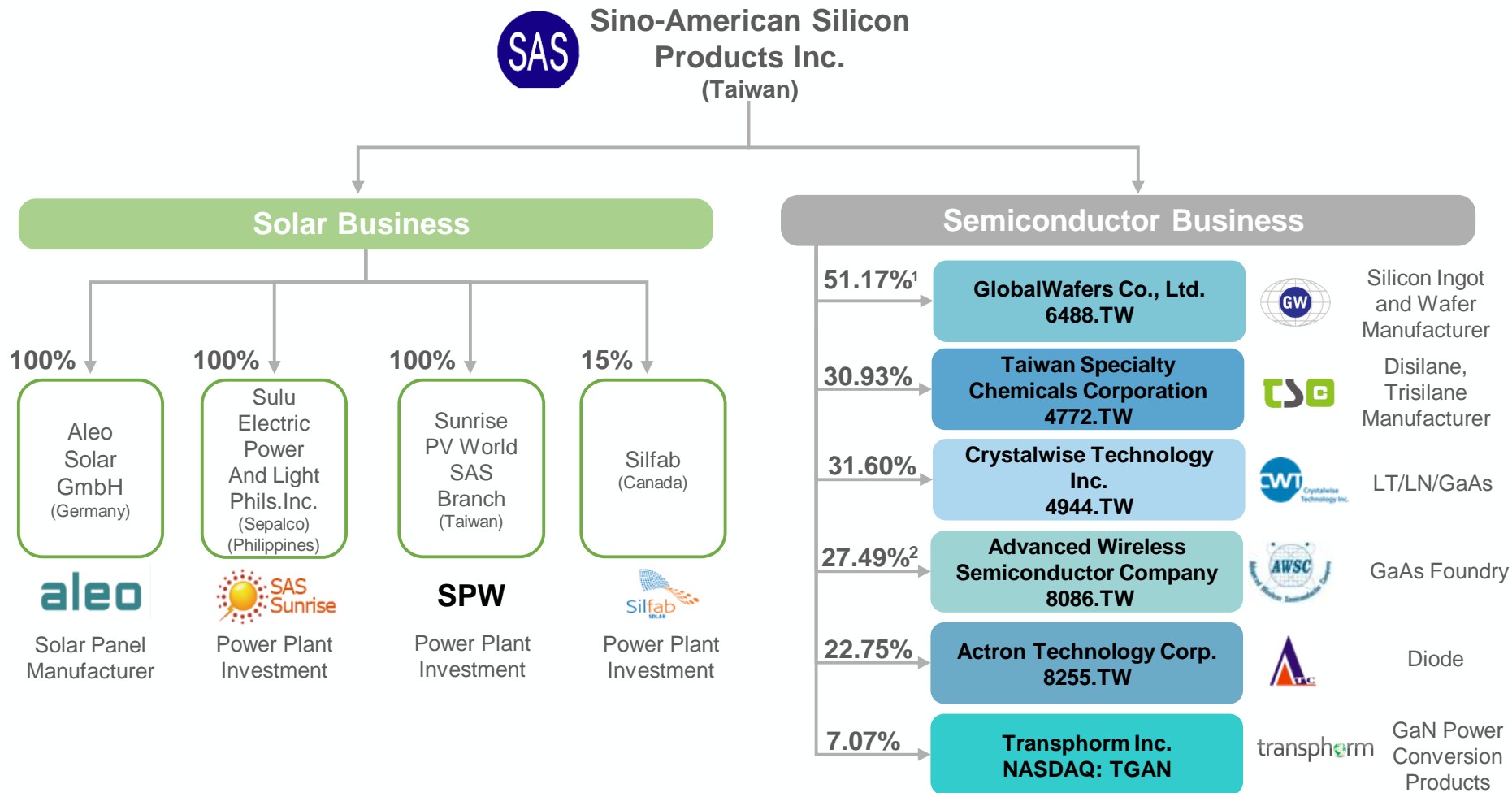
- ✓ Listed in TIP(Taiwan Index Corporation) Customized Taiwan Wafer Manufacture Index (Top 10) since 2022/7/4.



# Company Overview



# SAS Group Structure



Note:

1. SAS' shareholding % of GWC : GWC shares held by SAS / GWC total outstanding shares deducting repurchased shares
2. The shareholdings % of Advanced Wireless Semiconductor Company is as of 5<sup>th</sup> July, 2022.
3. Except for the company mentioned above, the shareholdings % of other reinvestments are updated to the end of June 2022.

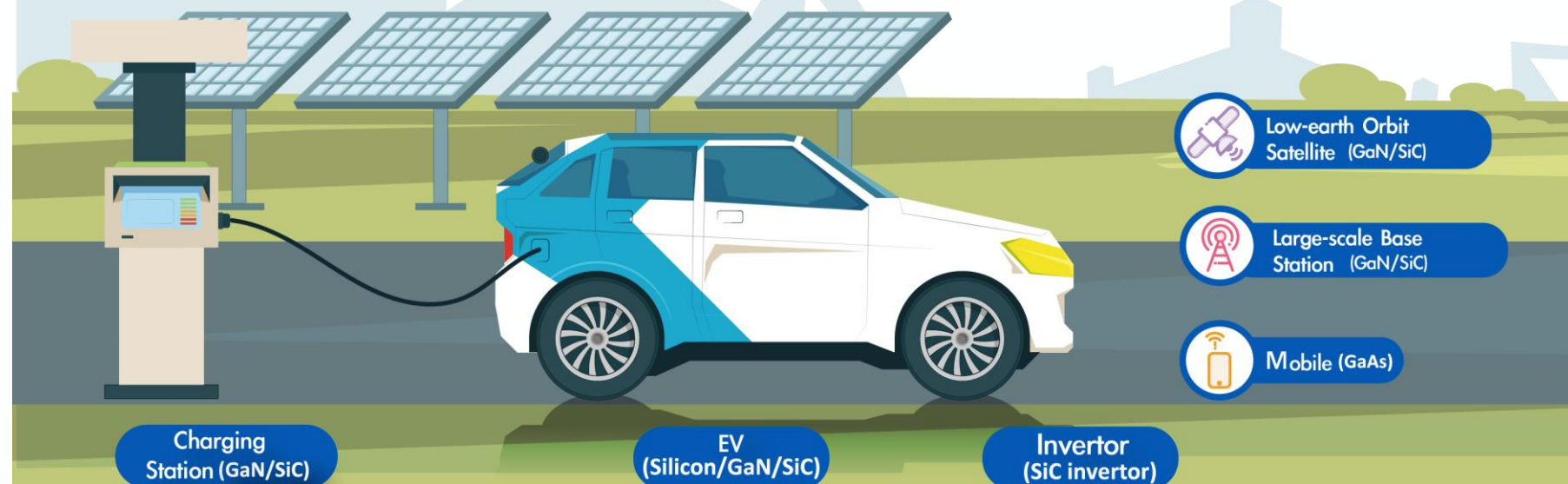




# Application and Focus of SAS Reinvestments



# Foundation of World-Connecting Technologies



## Materials

## Design House

## Foundry

## Assembly

1st generation Si



2nd generation GaAs



3rd generation  
SiC / GaN



transphorm



transphorm



transphorm



Specialty Gas





# Rationale for the Strategic Partnership

- The strategic partnership of SAS and ATC/AWSC/TSC/CWT/Transphorm provides an unique opportunity to expand high value business, fostering innovations into future economic growth.

**1 Diversify investments to strengthen business deployment**

**2 Expand territory into business with high potential to increase SAS' intrinsic value**

**3 Invest in semiconductor value chain for growth potential to SAS' market value**

**4 Augment company scale through reinvestment recognition for sustainable growth<sup>1</sup>**

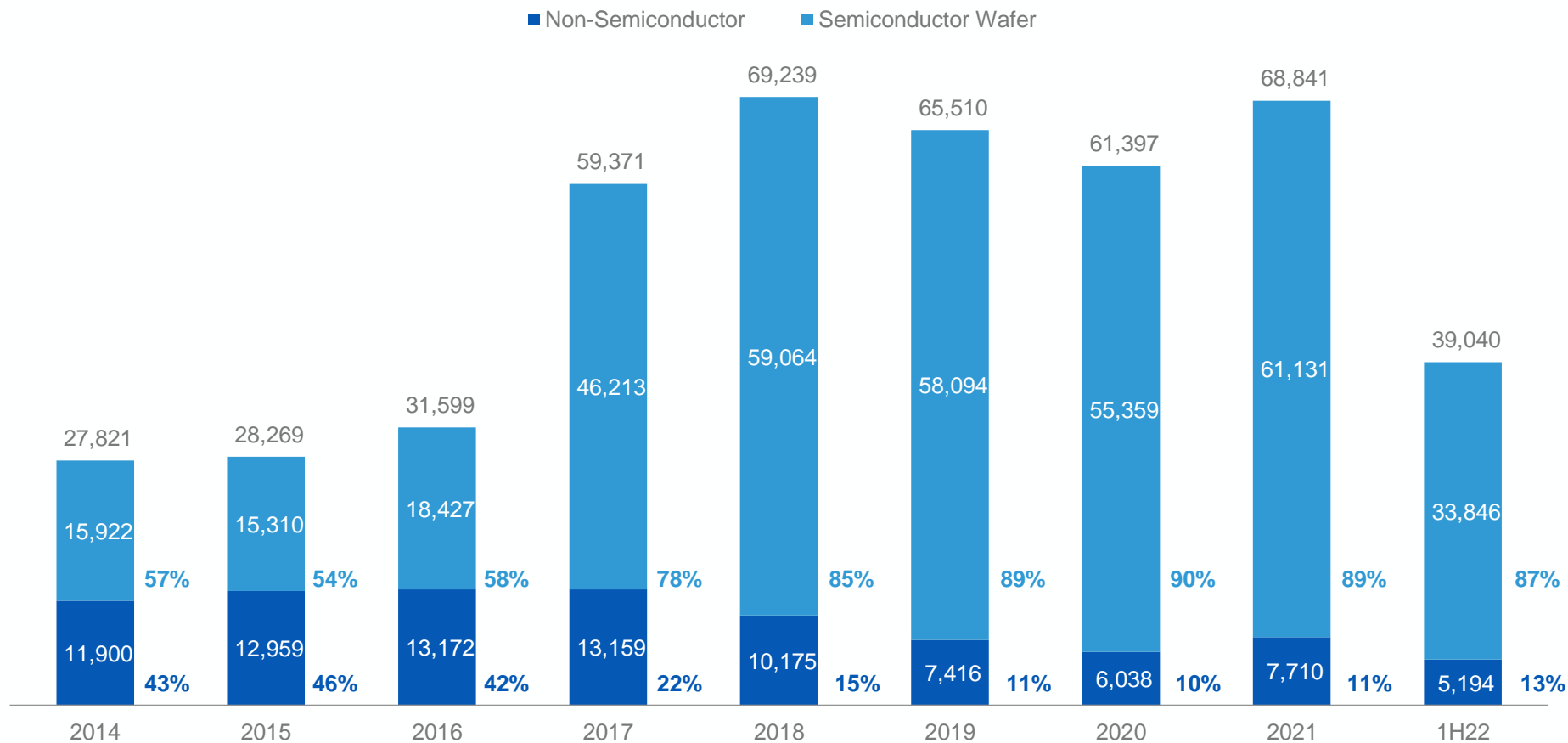
*Note: TSC and AWSC have become SAS' subsidiaries since August, 2021 and June, 2022 respectively. (AWSC revenue to be recognized from July, 2022)*



# Group Revenue by Business

## Group Revenue by Business

(NT\$m)



Note:

1. 1H22: First half of 2022

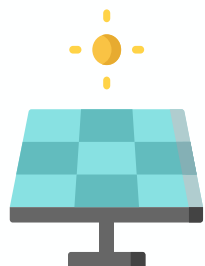


# Industry Overview

# Solar Energy Repowers Europe

- The EU Solar Energy Strategy will boost the roll-out of photovoltaic energy as part of the REPowerEU plan, which aims to bring over 320GW of solar PV newly installed by 2025, and almost 600 GW by 2030.

## EU Solar Energy Strategy



**320GW** by 2025



**EU Solar PV  
Industry Alliance**

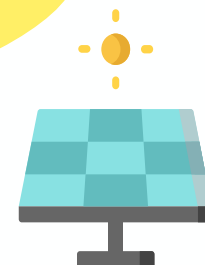
**European Solar  
Rooftops initiative**



**EU large-scale  
skills partnership**



**600GW** by 2030



Source: Factsheet: Clean energy by European Commission, May 18th, 2022.

# EU Countries Accelerate Energy Transition

- The war in Ukraine has provided additional tailwind to the uptake of ambitious renewable energy policies across the European continent, with many countries making significant announcements.

## Snapshot of EU Energy Transition

19

19 European governments accelerated their decarbonization in response to the COVID-19 pandemic, gas crisis and Russia's aggression

63%

Under latest national plans, EU countries will reach 63% of renewables share in electricity generation by 2030, up from 55% under previous commitments

31%

EU countries cut planned 2030 fossil fuel power generation by 31% (272 TWh) compared to national strategies from 2019 (NECPs)

Source: EU national plans slash fossil fuels, June, 2022.

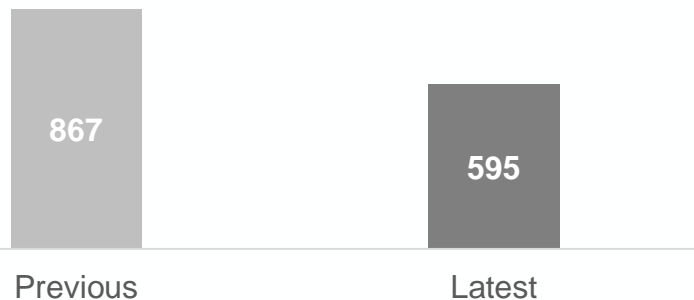
# Governments Replace Fossil Fuels with Renewables in Response to Russia's Aggression



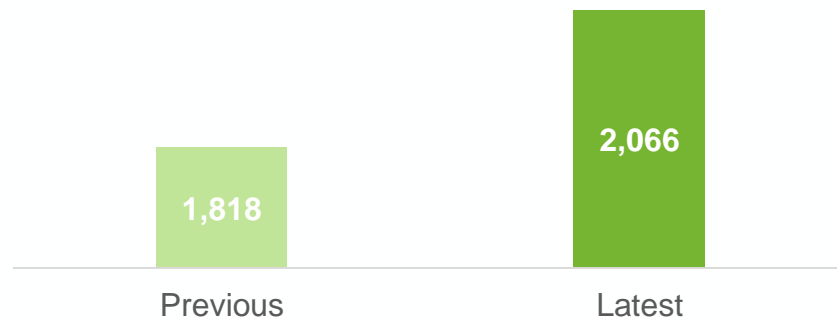
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- The European Commission and most EU Member States have increased the planned pace of renewables additions to shield themselves from fossil fuel import dependence

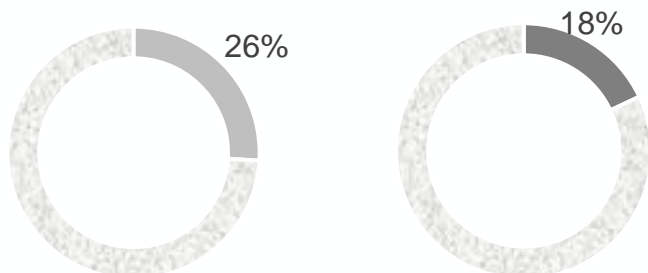
EU-27 Electricity Generation in 2030 - Fossil Fuels (TWh)



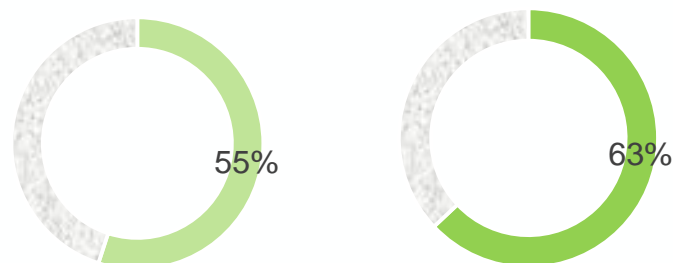
EU-27 Electricity Generation in 2030 - Renewables (TWh)



EU-27 Electricity Generation in 2030 - Fossil Fuels (%)



EU-27 Electricity Generation in 2030 - Renewables (%)



Source: Analysis by CREA and Ember, June 1st, 2022

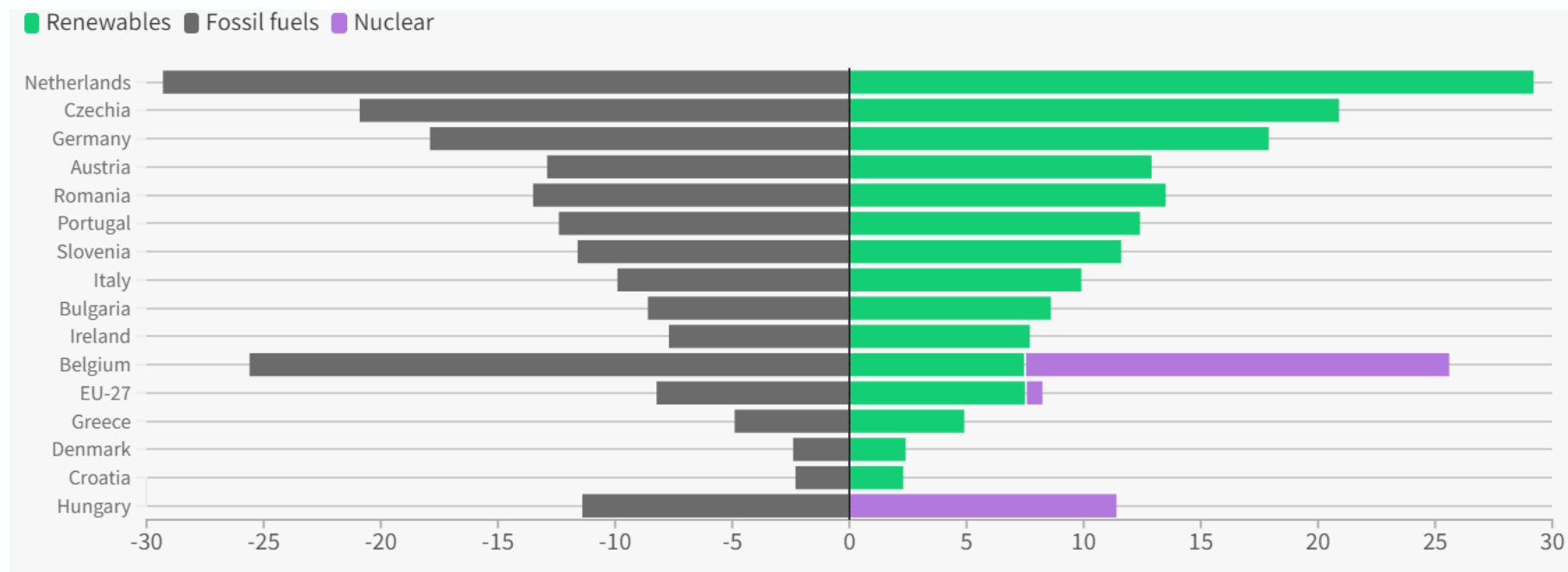
Note: Previous = National Energy and Climate Plans (NECPs) from 2019; Latest = national policy announcements as of May 2022; Reference point is generation data for 2021 data from Ember's European Electricity Review 2022.



# Renewables are the Go-to Solution for EU Countries

- In response to Russia's aggression and soaring fossil prices, most EU Member States have announced significant increases in renewables deployment, while scaling down plans for fossil fuels.

## Percentage Point Change in Share of Electricity Generation in 2030 (Latest Vs. Previous Plans)



Source: Analysis by CREA and Ember, June 1st, 2022

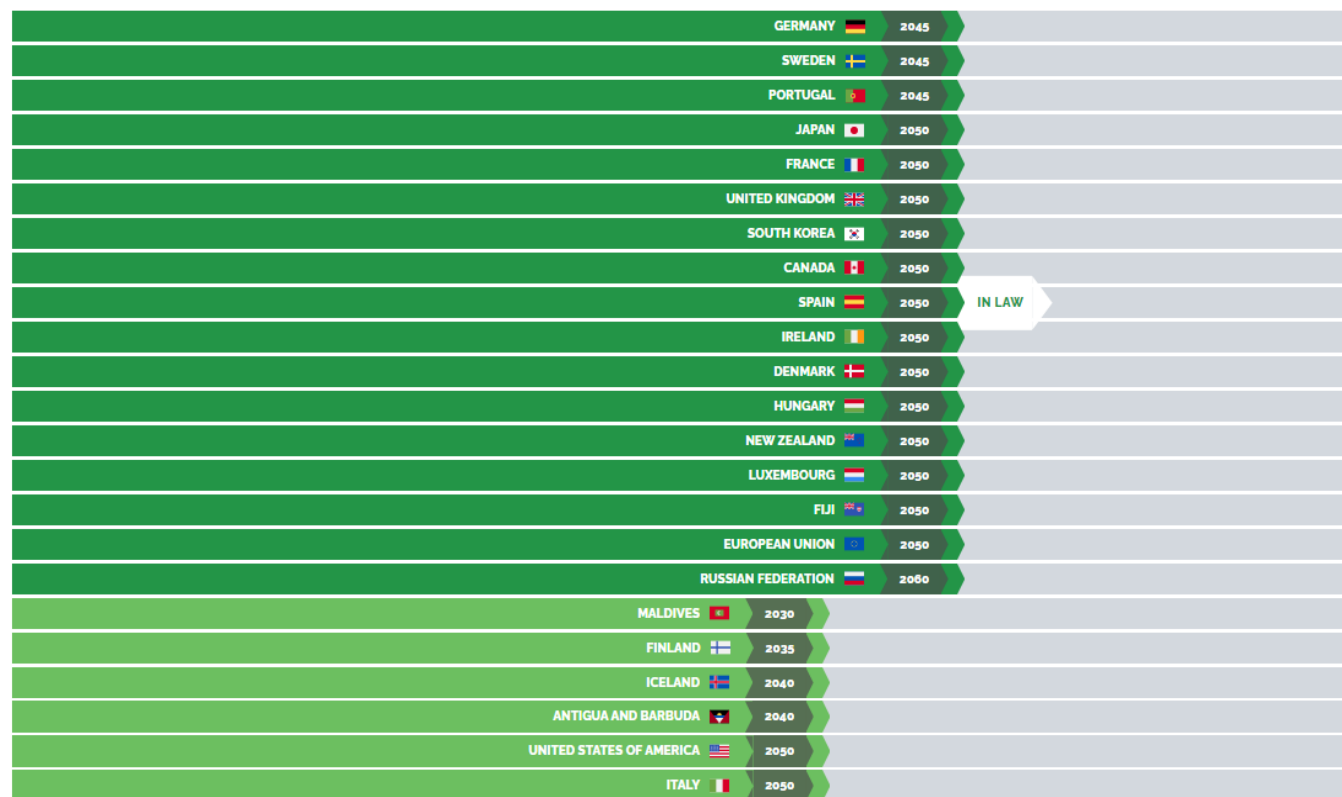
Note: Previous = National Energy and Climate Plans (NECPs) from 2019; Latest = national policy announcements as of May 2022.

Countries selected have changed their 2030 power sector targets since 2019 (Poland and France changed targets for 2040-2050, but impact on 2030 values is uncertain).

# Countries Race to Net Zero Emissions

- A growing coalition of countries are pledging to get to net-zero emissions. More than 70 countries, including the biggest emitters, United states of America (2050 Policy) China (2060 Policy), EU (2050 Law)...etc have established Net-Zero target by means of law, policy, and pledge.

## Top Countries of Committing Net Zero Emissions

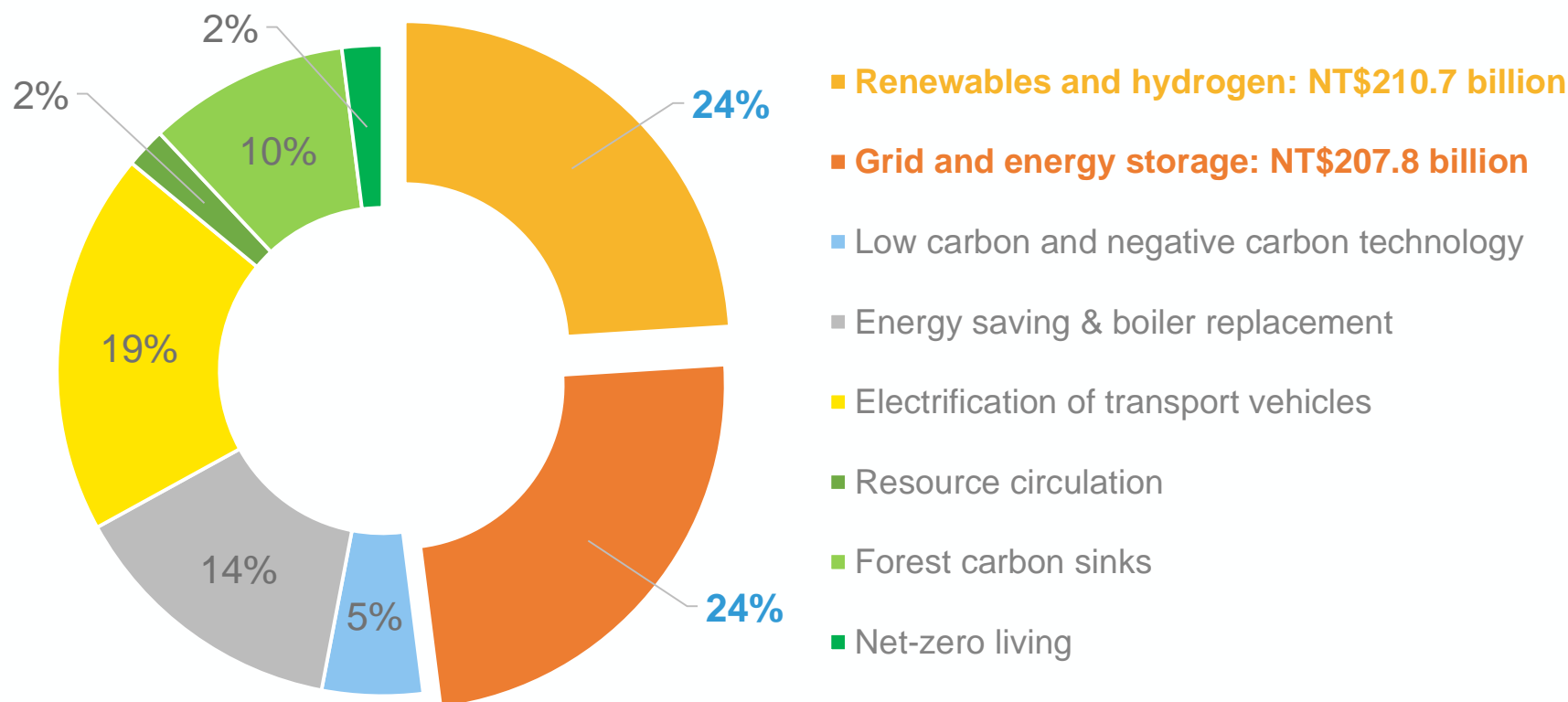


Source: Net Zero Scorecard by Energy & Climate Intelligence Unit.

# Taiwan 2050 Net-Zero Transition : Budget

- Taiwan government plans a budget of nearly NTD 900 billions by 2030 for major plans of 2050 net-zero transition, among which, renewables as well as grid and energy storage occupy almost 50%

Budget for Taiwan 2050 Net-zero Transition



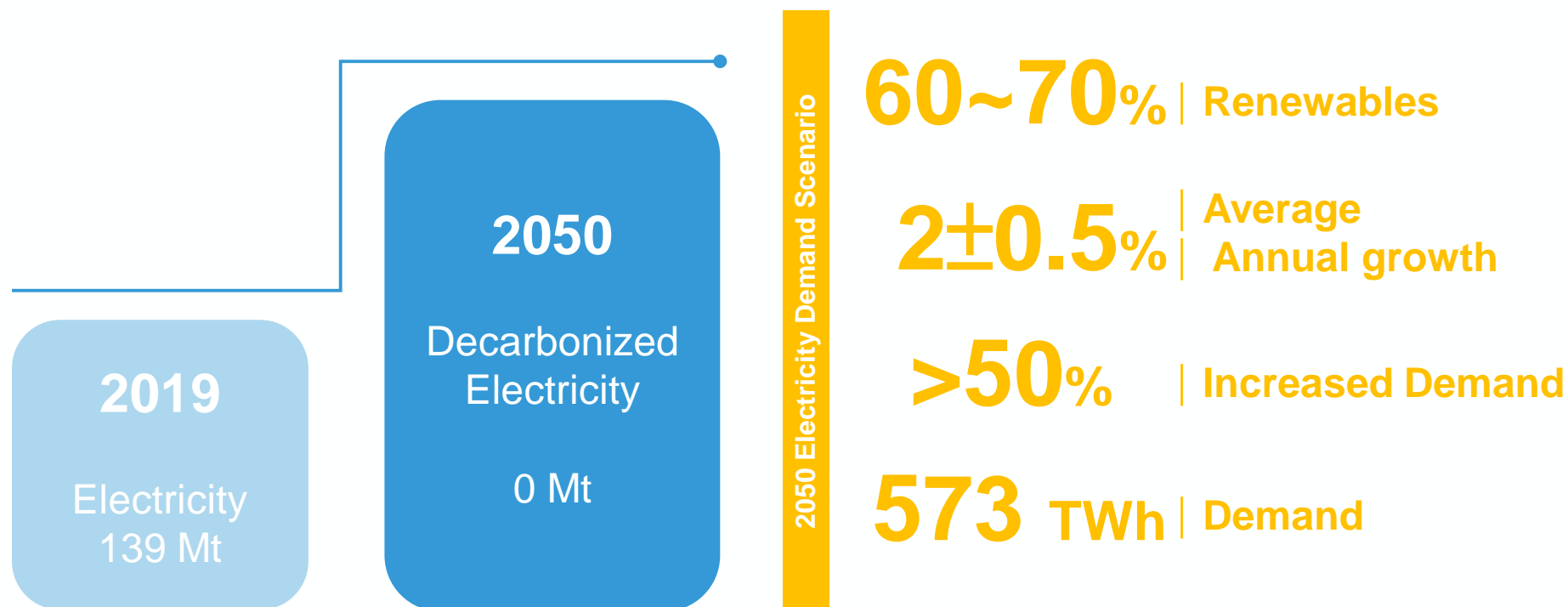
Source: Taiwan's Pathway to Net-Zero Emissions in 2050, March, 2022

# Taiwan 2050 Net-Zero Transition : Electricity

- Being the single largest source of CO<sub>2</sub> emissions, electricity is the key to achieve net zero emission.
- Based on Taiwan government's plan, renewable will weight up to 70% in 2050 with average annual growth rate at 2%, and demand is expected to increase over 50%, reaching 573 TWh.

## Electricity Emission and Demand in Net Zero Plan

Unit: Mton CO<sub>2</sub>

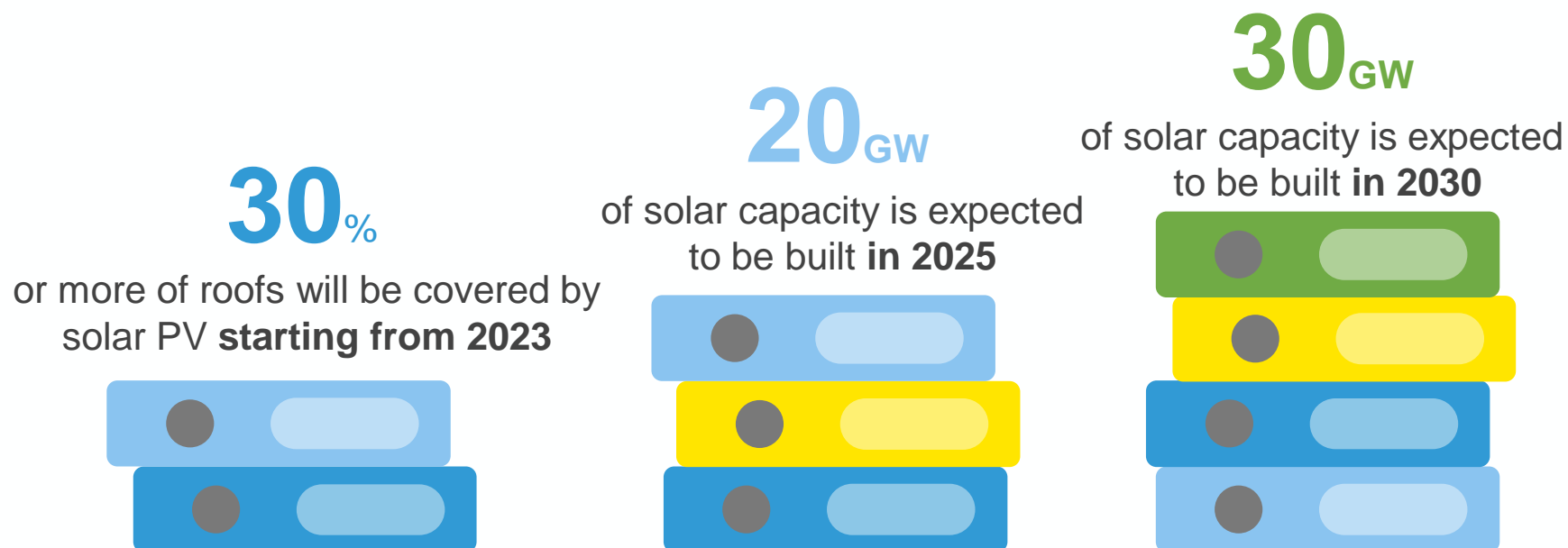


Source: Taiwan's Pathway to Net-Zero Emissions in 2050, March, 2022

# Promoting Rooftop PV in Taiwan

- Promoting rooftop PV is indispensable and important in net-zero transformation and decarbonization of the building sector.
- Taiwan government plans mandatory installation of PV systems to cover at least 30% of the roof area of new and renovated buildings, which will come into force in 2023, to expand green power.

## Roadmap of Promoting Rooftop PV in Taiwan

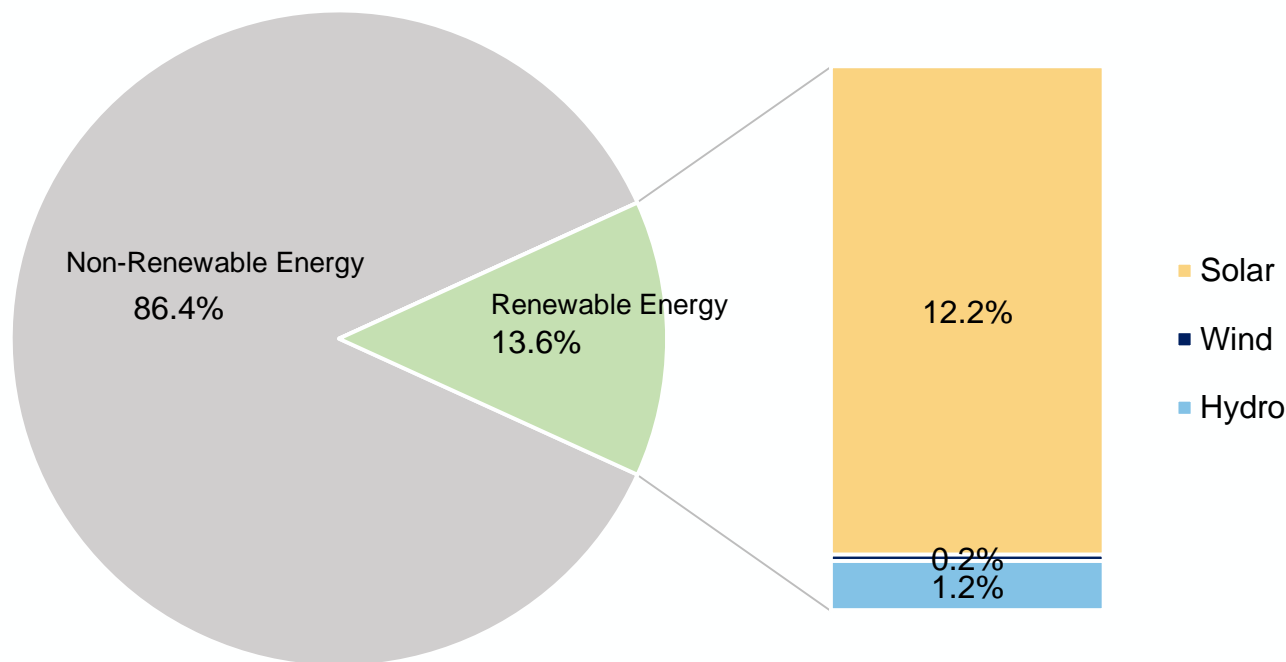


Source: Bureau of Energy Ministry of Economic Affairs

# Solar Becomes the Key of Energy Transformation in Taiwan

- Taiwan, located in subtropical region, is characterized by hot summers and mild winters, making it ideal for solar energy development. Furthermore, solar electricity generation and electricity consumption are very compatible, as demand for electricity increases during periods of intense sunlight. Solar alone could provide double-digit of the total electricity at noontime.

Taiwan Electricity Source Percentage (by Fuel Type)<sup>1</sup>



Note: Statistics is July 8, 2022.

Source: Bureau of Energy Ministry of Economic Affairs & Taiwan Power Company, Summarized by SAS

# Geographical Advantages Bring Taiwan to the Solar Era

- Taiwan is located in the global solar belt, giving it an average annual daylight of nearly 1,800 hours. Taiwan makes good use of the advantages of abundant daylight and deploys solar panels on idle agricultural and industrial land, making solar energy the largest renewable energy source in Taiwan.

Solar Power as a Percentage of Renewable Energy Accumulated Installed Capacity (as of 2022/5)



**68.3 %**  
**8.4 GW**



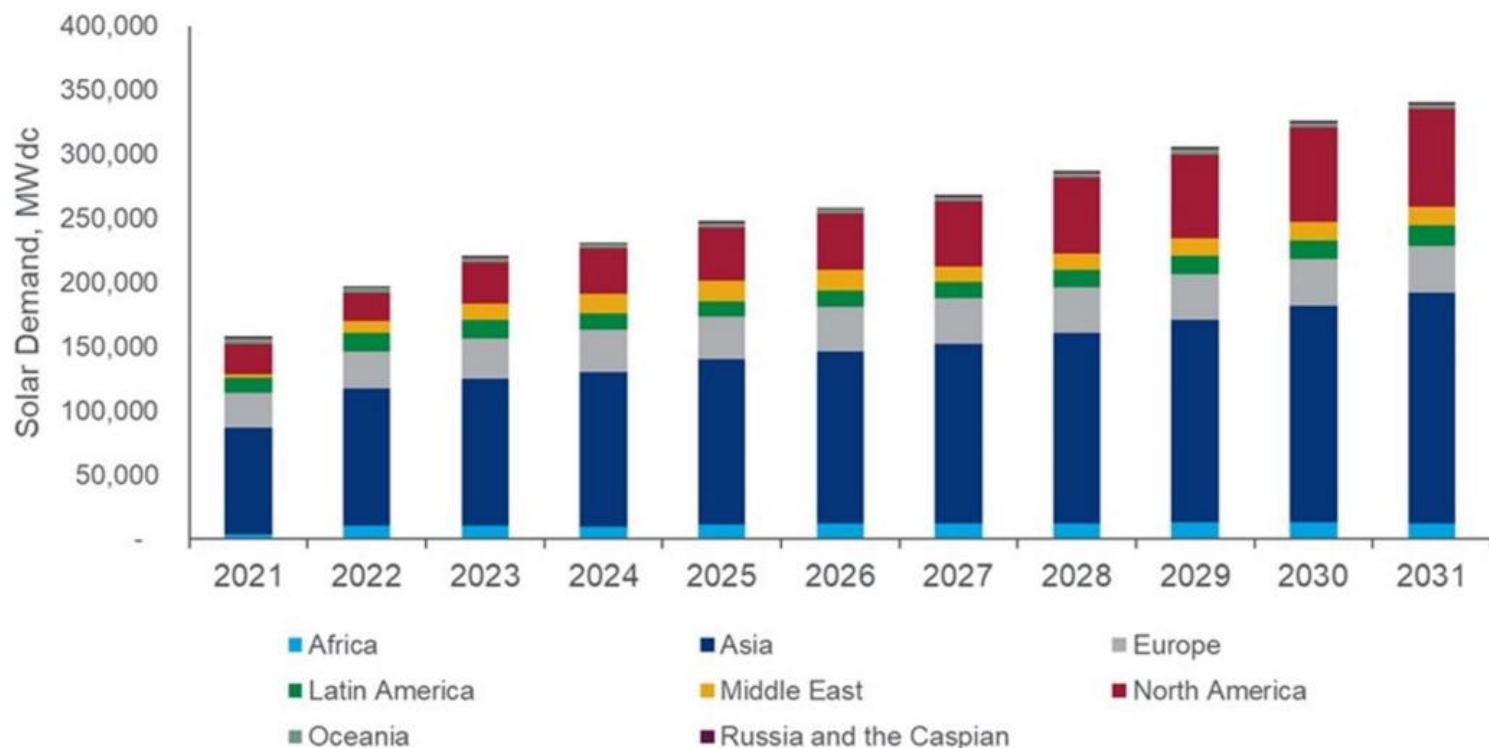
*Note: Statistics was until the end of May 2022.*

*Source: Bureau of Energy Ministry of Economic Affairs & Taiwan Power Company, Summarized by SAS*

# Global Solar Installation Forecast

- The global push to phase out coal & fossil fuels worldwide has boosted demand for clean energy, global solar installation is expected to grow at 8% CAGR and exceed 3,500 GW of total installed capacity in the next decade

Global Solar Installation Demand, 2021-2031



Source: Soaring solar raw materials prices could thwart REPower EU Plans by Wood Mackenzie, May, 2022.





# Q&A



# Financial Statements



# Income Statement

## Income Statement

(NT\$m)	2019	2020	2021	Q121	Q221	Q321	Q421	Q122
<b>Revenue</b>	<b>65,510</b>	<b>61,397</b>	<b>68,841</b>	<b>16,052</b>	<b>17,183</b>	<b>17,522</b>	<b>18,084</b>	<b>18,769</b>
Growth (%)	-5.4%	-6.3%	12.1%	2.2%	7.0%	2.0%	3.2%	3.8%
<b>Gross Profit</b>	<b>19,268</b>	<b>21,114</b>	<b>24,527</b>	<b>5,405</b>	<b>5,849</b>	<b>6,403</b>	<b>6,871</b>	<b>7,462</b>
Gross Profit Margin (%)	29.4%	34.4%	35.6%	33.7%	34.0%	36.5%	38.0%	39.8%
<b>EBITDA</b>	<b>18,712</b>	<b>22,232</b>	<b>23,901</b>	<b>5,276</b>	<b>7,159</b>	<b>5,800</b>	<b>5,666</b>	<b>2,387<sup>4</sup></b>
EBITDA Margin (%)	28.6%	36.2%	34.7%	32.9%	41.7%	33.1%	31.3%	12.7%
<b>Operating Profit</b>	<b>13,515</b>	<b>14,932</b>	<b>18,080</b>	<b>3,961</b>	<b>4,314</b>	<b>4,823</b>	<b>4,982</b>	<b>6,205</b>
Operating Profit Margin (%)	20.6%	24.3%	26.3%	24.7%	25.1%	27.5%	27.6%	33.1%
<b>Profit before Tax</b>	<b>13,924</b>	<b>16,238</b>	<b>17,206<sup>3</sup></b>	<b>3,613</b>	<b>5,506</b>	<b>4,131</b>	<b>3,956</b>	<b>703<sup>5</sup></b>
Profit before Tax Margin (%)	21.3%	26.4%	25.0%	22.5%	32.0%	23.6%	21.9%	3.7%
<b>Net Profit</b>	<b>8,895</b>	<b>12,711</b>	<b>12,615</b>	<b>2,769</b>	<b>4,052</b>	<b>3,352</b>	<b>2,442</b>	<b>2,149<sup>4&amp;5</sup></b>
Net Profit Margin (%)	13.6%	20.7%	18.3%	17.2%	23.6%	19.1%	13.5%	11.4%
<b>EPS (NT\$)</b>	<b>3.86</b>	<b>10.82</b>	<b>11.62</b>	<b>2.49</b>	<b>3.61</b>	<b>3.12</b>	<b>2.40</b>	<b>2.16<sup>4&amp;5</sup></b>

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. Impairment of assets and onerous contract provision were recognized in 4Q18 & 2Q19 respectively

3. Due to NT\$1.6 billion (EUR 50 million) of termination fee from Siltronic M&A recognized by the subsidiary, GlobalWafers.

4. Due to realized loss of Siltronic shares measured at fair value through profit or loss recognized by the subsidiary, GlobalWafers.

5. Reversing the deferred tax liability based on no dividend distribution of offshore earning recognized by the subsidiary, GlobalWafers.



# Balance Sheet

## Balance Sheet

(NT\$m)	2019	2020	2021	Q121	Q221	Q321	Q421	Q122
<b>Assets</b>								
Cash and cash equivalents	34,901	23,813	67,118	13,485	49,571	59,163	67,118	71,312
Account receivable	8,507	8,407	9,889	9,788	9,968	9,996	9,889	10,724
Inventories	7,398	7,929	8,646	7,766	7,945	8,088	8,646	9,144
Property, plant and equipment	40,277	42,455	40,428	40,607	39,310	39,673	40,428	41,596
Other assets	18,300	27,349	41,170	39,963	40,632	39,070	41,170	34,428
<b>Total assets</b>	<b>109,383</b>	<b>109,953</b>	<b>167,251</b>	<b>111,608</b>	<b>147,426</b>	<b>155,989</b>	<b>167,251</b>	<b>167,204</b>
<b>Liabilities</b>								
Short-term loan	11,465	10,804	7,791	16,683	12,610	8,419	7,791	8,493
Account payable	4,180	4,204	4,586	4,354	4,334	4,063	4,586	4,498
Long term loan	0	1,048	46,124	1,050	33,489	46,194	46,124	46,143
Other liabilities	45,123	44,227	56,588	39,285	46,929	43,838	56,588	54,170
<b>Total liabilities</b>	<b>60,767</b>	<b>60,283</b>	<b>115,088</b>	<b>61,372</b>	<b>97,362</b>	<b>102,514</b>	<b>115,088</b>	<b>113,304</b>
<b>Shareholder equity</b>	<b>48,616</b>	<b>49,669</b>	<b>52,163</b>	<b>50,236</b>	<b>50,064</b>	<b>53,475</b>	<b>52,163</b>	<b>53,900</b>

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. Impairment of assets and onerous contract provision were recognized in Q418 & Q219 respectively

3. Account receivables include account receivables from related.

4. Account payables include account payables from related parties.



# Thank you