

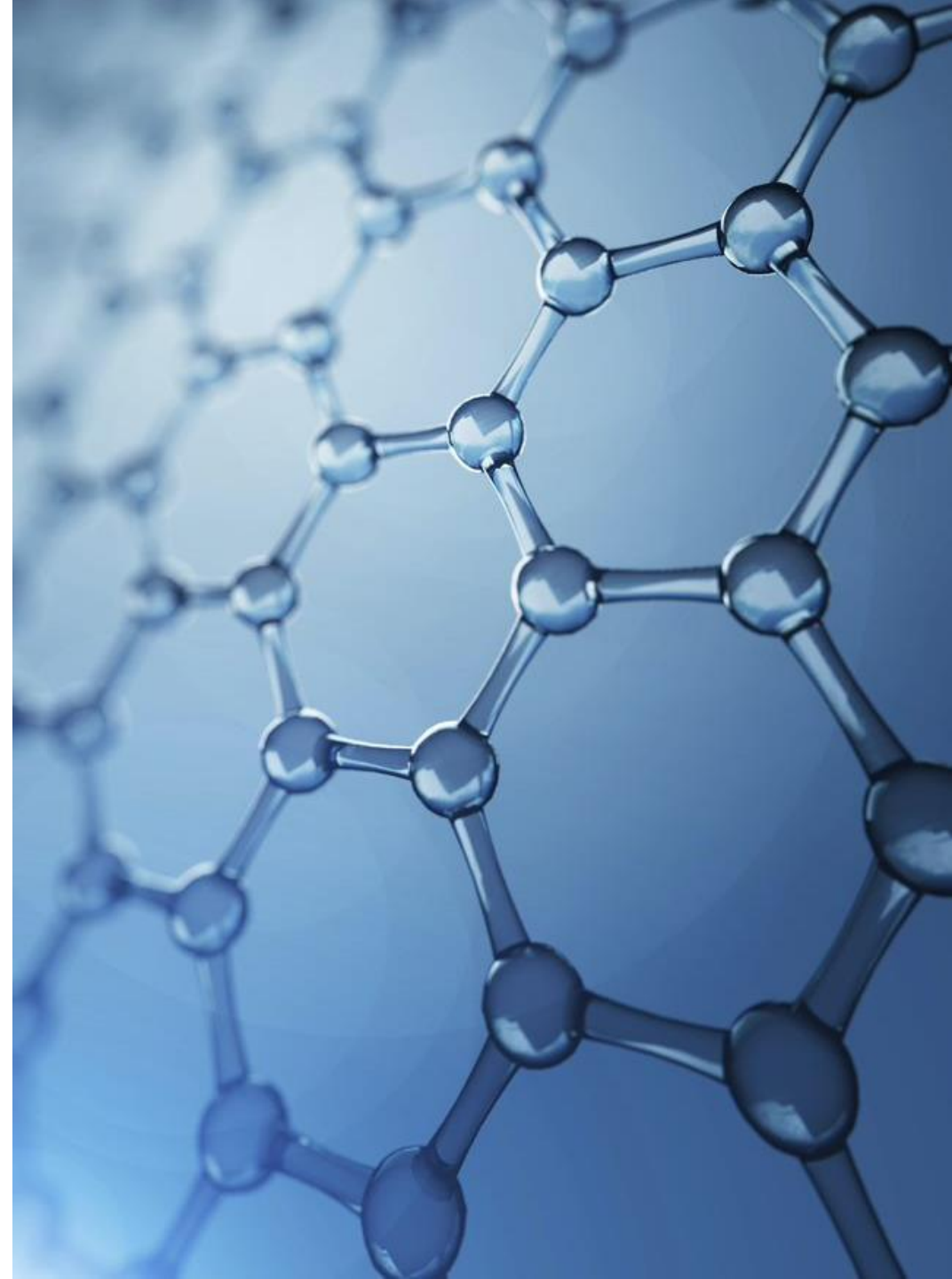


# NANOFILM TECHNOLOGIES INTERNATIONAL

1H2023 Results Announcement

August 2023

*MAKING THE WORLD A BETTER PLACE  
Through ubiquitous applications of our deep  
technology capabilities*



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# Management Panel



**Mr Gary Ho Hock  
Yong**

Executive Director and  
Group Chief Executive Officer



**Mr Kay Lim**

Group Chief Financial Officer



**Mr Gian Yi-Hsen**

Group Chief Strategy Officer



**Mr Ian Howe**

Group Chief Commercial Officer

# Agenda

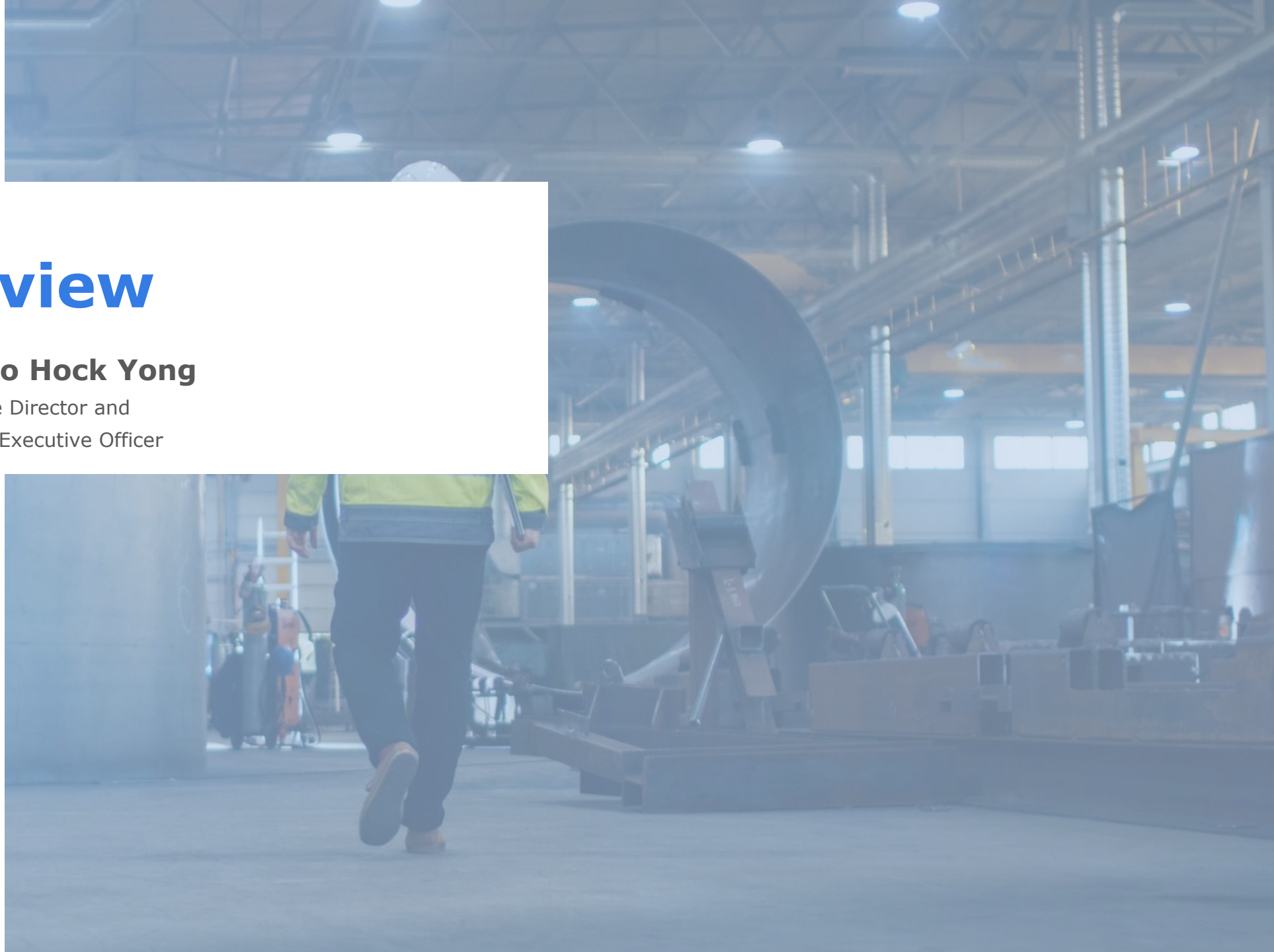
- **Overview**
- **Financial Highlights**
- **ESG Update**
- **Outlook**
- **Q&A**



# 1 | Overview

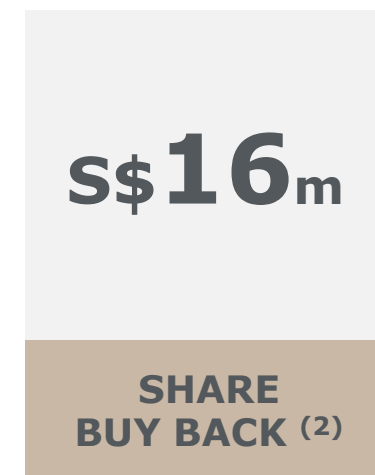
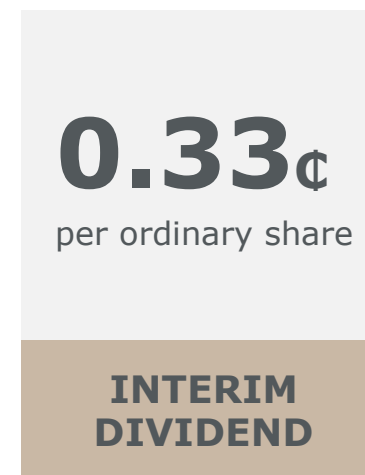
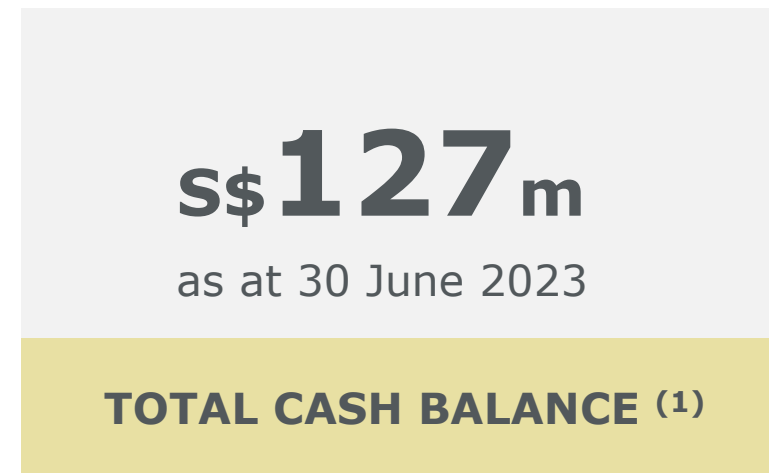
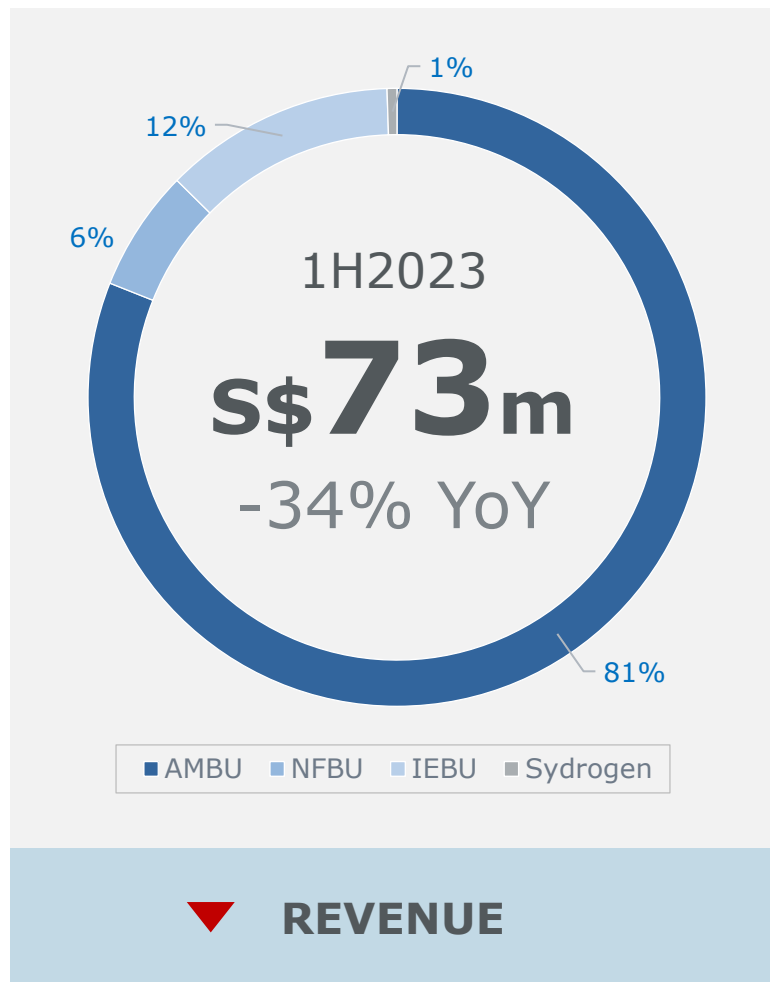
**Mr Gary Ho Hock Yong**

Executive Director and  
Group Chief Executive Officer



# 1H2023 At a Glance: Revenue lower due to seasonality and soft 3C market

Fundamentals remain sound while the Group navigates macro challenges



Source: Company information

(1) Includes cash and liquid assets as at 30 June 2023

(2) Total number of ordinary shares bought back in 1H2023 was 10.5m shares, totalling S\$16.1m

# 1H2023 BU Review: Consumer demand, lower seasonality, customer capex tightening and FX impacted revenue

Double digit growth in AMBU non-consumer sub-segments and positive momentum in Sydorgen

## AMBU

Coating As a Service



- **Consumer (Communication, Wearables & Accessories and Computer):**
  - 1H2023 revenue fell 42% YoY in a typical softer 1H due to lower seasonality
  - Comparative performance impacted by a relatively stronger 1H last year lifted by prior year's spill-over production
  - Compounded by a soft consumer electronics market resulting in inventory reduction in the supply chain
  - Weaker FX, translation from RMB to SGD
- **Industrial (Precision Engineering, Printing Imaging):**
  - Efforts yielding positive results, with 15% growth YoY, driven by execution of growth strategy focused on scalable commercial applications
- **Automotive:**
  - Sales recovered and grew 25% YoY, led by rebound in commercial vehicle market

## NFBU

Nanofabricated products



- **Consumer (Communication, Wearables & Accessories and Computer):**
  - 1H2023 revenue fell 36% YoY, due to softer demand resulting in push back in production ramp of Micro Lens Array wearables components, as the supply chain reduced inventory

## IEBU

Equipment making



- 1H2023 revenue fell 55% YoY, mainly driven by execution of brought forward order book, which was soft as customers tightened equipment capex spending

## Sydorgen

Hydrogen Fuel Cell Products



- 1H2023 revenue grew 24x YoY due to low base effect and encouraging developments from bi-polar plates coating customers either going through qualification, batch samples or small batch production
- Sydorgen has successfully qualified with several leading Chinese automotive customers; however, volumes are not meaningful due to slow-down in the Chinese market



# 2 | Financial Highlights

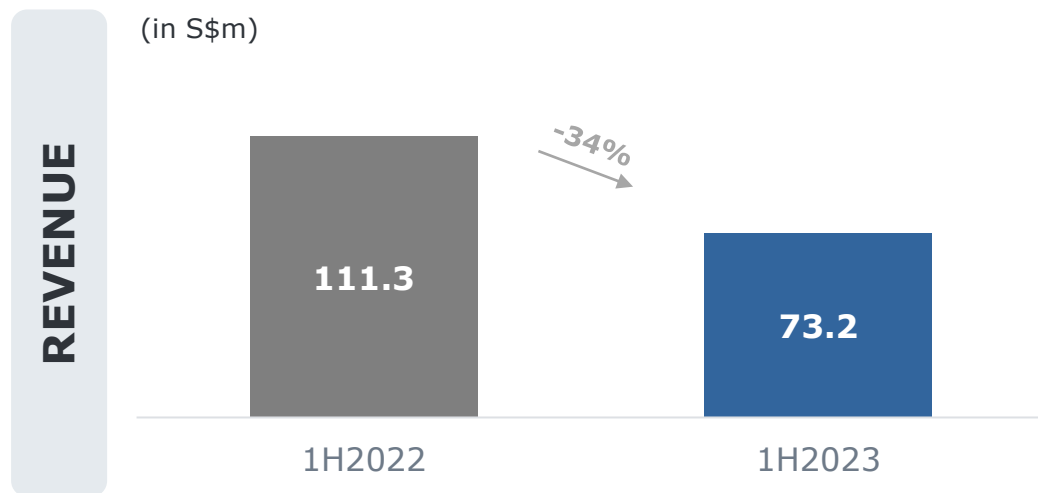
**Mr Kay Lim**

Group Chief Financial Officer



# 1H2023 Revenue Breakdown

AMBU consumer and NFBU negatively impacted by weaker consumer electronics market  
Encouraging growth from other AMBU sub-segments



- **Group revenue declined 34% YoY to S\$73m**

- AMBU consumer and NFBU negatively impacted by a weaker consumer electronics market resulting in inventory reduction in supply chain
- Industrial equipment capex tightening affecting IEUBU

- **Other AMBU sub-segments recorded double-digit growth**

- AMBU industrial sub segment recognised 15% growth YoY led by rebound in printing & imaging and increasing commercial adoption of precision engineering applications;
- Automotive sub-segment recovered with 25% growth YoY, driven by rebound in commercial vehicle market and adoption of coated diesel piston rings

## Business Units

S\$m	1H2022	1H2023	YoY
AMBU	84.5	59.3	-29.9%
NFBU	7.3	4.7	-36.2%
IEBU	19.5	8.9	-54.5%
Sydragen	0.0	0.4	n.m.
<b>TOTAL</b>	<b>111.3</b>	<b>73.2</b>	<b>-34.4%</b>

## End-Markets

S\$m	1H2022	1H2023	YoY
Consumer <sup>(1)</sup>	75.2	43.9	-41.6%
Industrial <sup>(2)</sup>	36.0	28.9	-19.9%
New Energy <sup>(3)</sup>	0.0	0.4	2,443.5%
<b>TOTAL</b>	<b>111.3</b>	<b>73.2</b>	<b>-34.4%</b>

Includes

Source: Company information, numbers may not tie due to rounding (refer to results announcement)

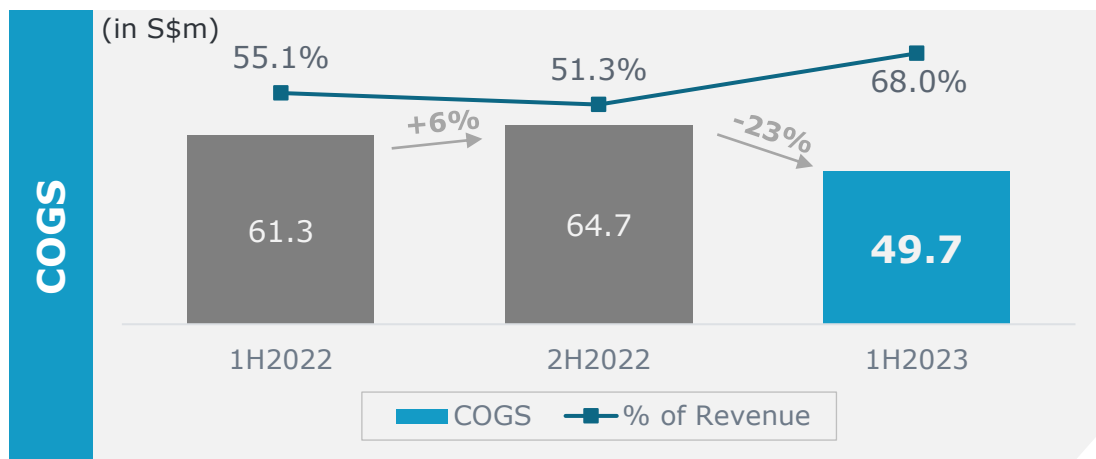
(1) Consumer comprises revenue contributions from 3C and NFBU

(2) Industrial comprises revenue contributions from Automotive, Precision Engineering, Printing & Imaging, and IEUBU

(3) New Energy comprises revenue contribution from Sydragen

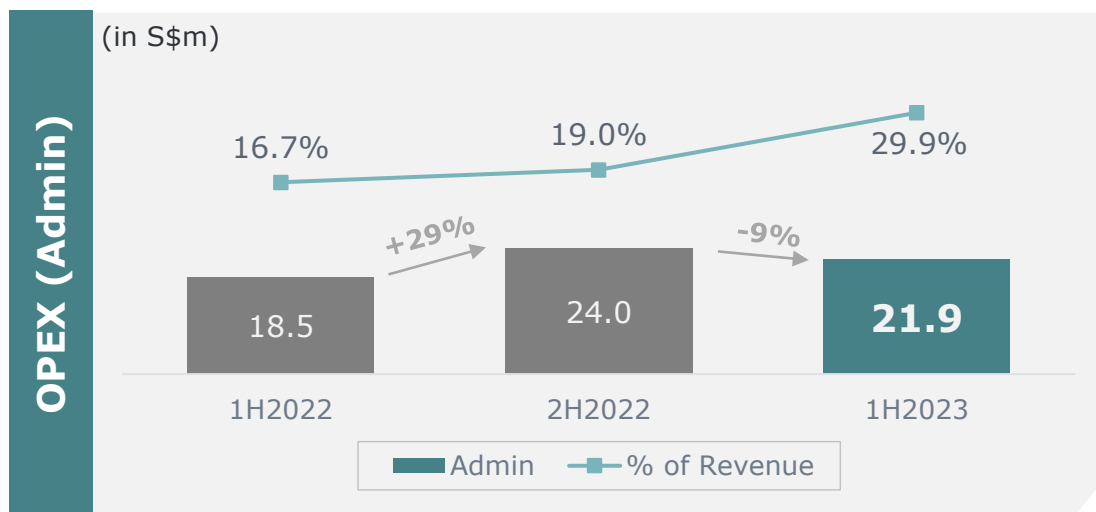
# Core Expenses Review

Renewed focus on operational efficiency and cost management



- Lower COGS YoY due to lower cost incurred for lower sales while COGS as a percentage of revenue is higher YoY primarily attributed to three factors:

- 1) Lower revenue base effect but partially mitigated by on-going cost reduction efforts;
- 2) Increase 5% point in direct D&A fixed costs; and,
- 3) Increase in 4.6% point in materials cost, mainly due to relatively higher material content from the AMBU Automotive sub-segment



- Higher admin opex YoY of S\$3.4m mainly due to two reasons:

- 1) Higher D&A of S\$1.2m mainly related to new SG HQ;
  - 2) Higher professional fees of S\$1.1m mainly related to services provided for M&A activities
- Compared to 2H2022 of higher admin opex, the Group's on-going cost reduction efforts have reduced admin opex
  - Cost reduction efforts include delays in non-essential manpower hires, prudence in incurring travel and other non-essential expenses

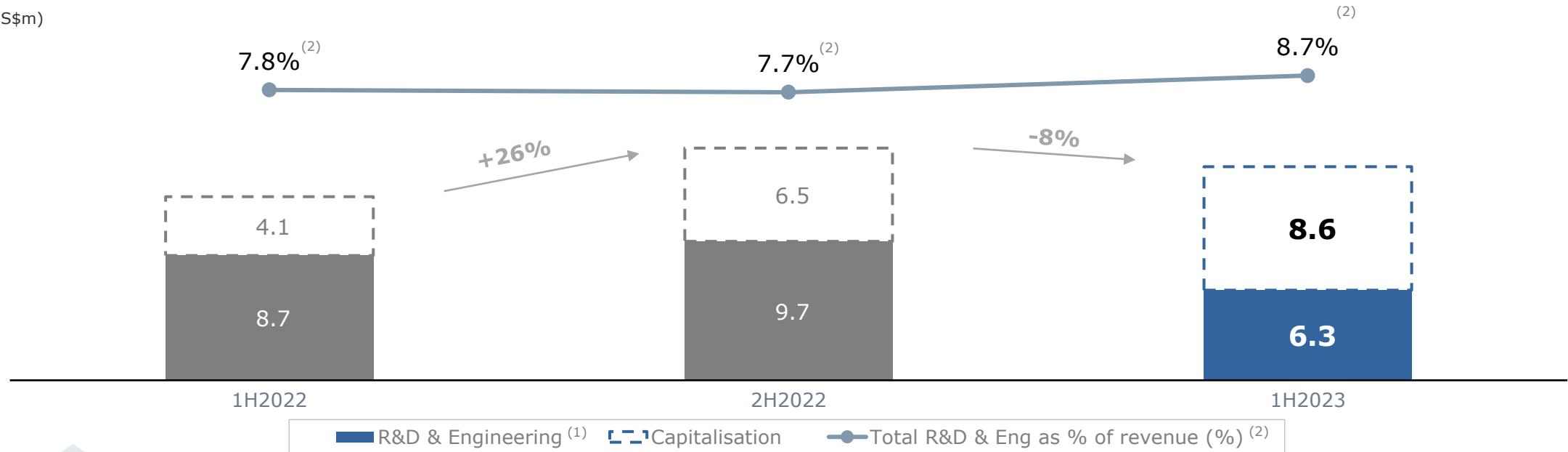
Source: Company information, numbers may not tie due to rounding (refer to results announcement)

# Investing in Technology & Innovation

Higher portion of R&D and Engineering activities moving closer to commercialisation

## R&D and Engineering Expenses <sup>(1)</sup>

(in S\$m)



- Higher capitalisation of eligible R&D and engineering expenses YoY and HoH reflects higher quality R&D and engineering activities that are closer to achieving commercial benefits
- The Group, as a deep-tech material science company, views R&D investments as essential to maintain its lead in technology and innovation to promote long-term sustainable growth
- Field of research includes expansion of advanced materials coating kinds, product development in fuel cell applications and new advanced nanocomposite materials

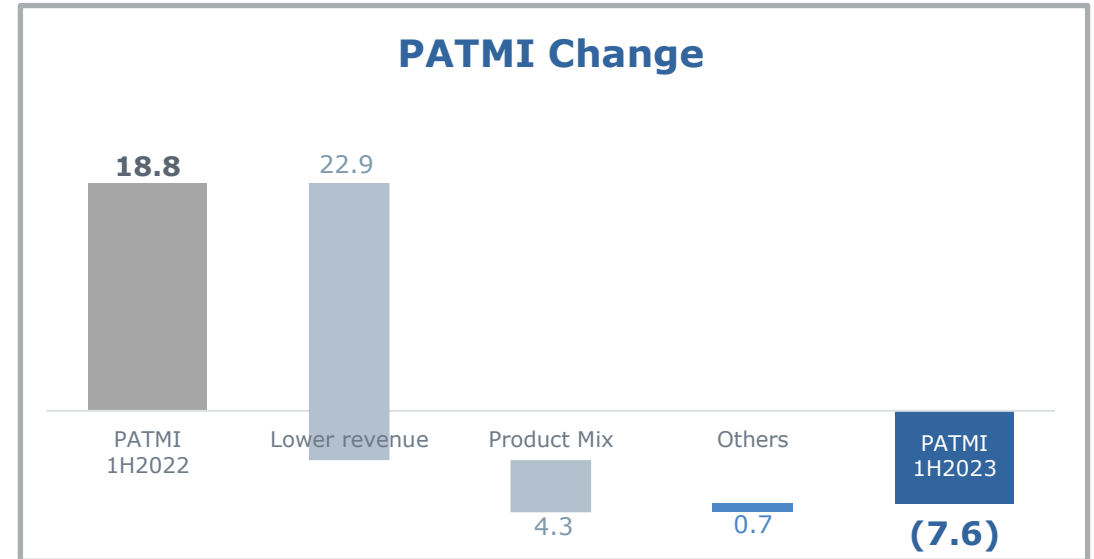
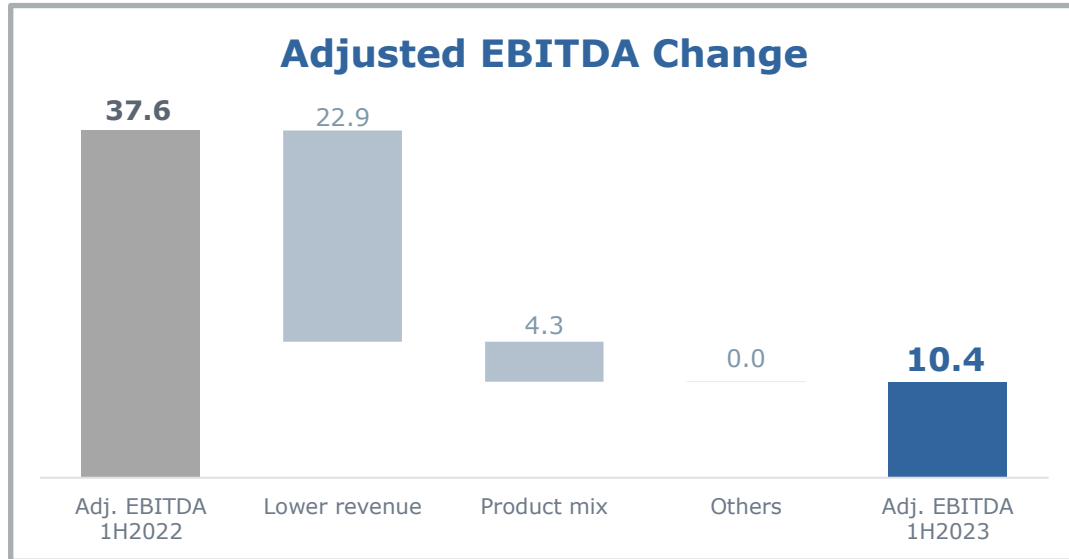
Source: Company information, numbers may not tie due to rounding (refer to results announcement)

(1) R&D & Engineering expense excludes Quality Assurance expense

(2) Excludes capitalised R&D & Engineering expenses

# EBITDA and PATMI Overview

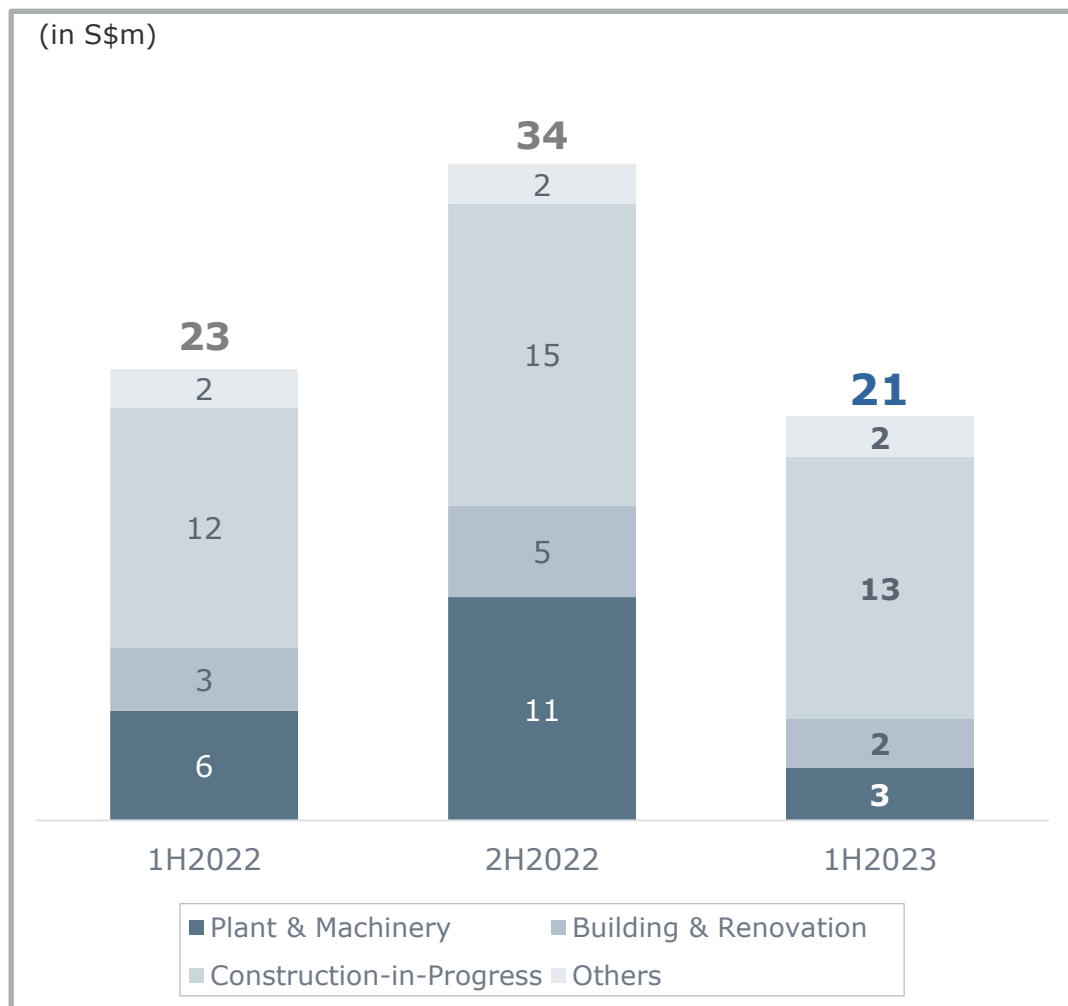
EBITDA and PATMI impacted by higher fixed costs attributed to fixed asset expansion



- Lower 1H2023 revenue contribution resulting in profits impacted adjusted EBITDA and PATMI by a decrease of S\$22.9m
- Product mix changes (e.g., higher revenue contribution from Automotive BU) and higher costs reduced gross margins and resultant adjusted EBITDA and PATMI by S\$4.3m
- PATMI changes under Others are mainly attributed to net changes in interest, depreciation, and taxes

# PPE Update

Continuing investments in strategic priorities to drive future growth



## PPE in 1H2023

- Total PPE for 1H2023 was S\$20.7m:
  - S\$3.5m acquired under right-of-use assets under the leasing arrangements
  - Additions of property, plant and equipment amounted to S\$17.2m
- Infrastructure investments in Zigong (for green plating) and Huizhou (southern base of China) sites, new mega plant 2 in Vietnam (land acquisition and initial construction)
- Renovations of Tai Seng site (corporate HQ) in Singapore
- Renovations of Ayer Rajah operational site in Singapore
- Equipment additions for Zigong and Huizhou

Source: Company information

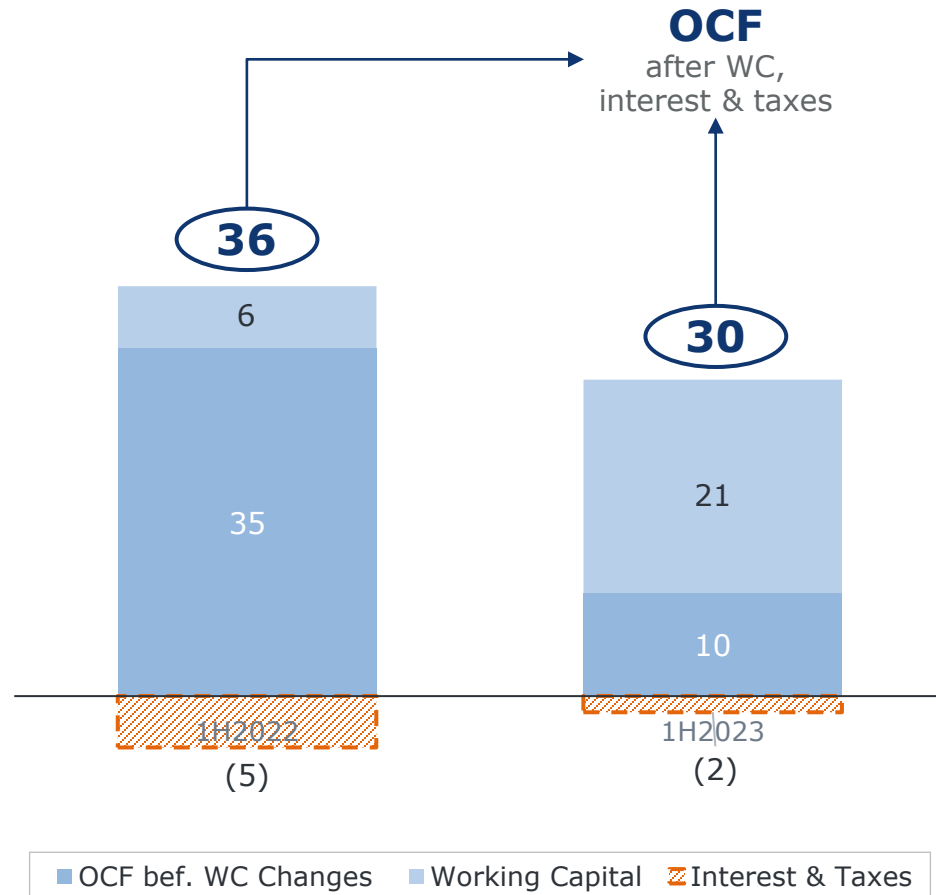
Note: PPE amount includes right-of-use assets under leasing arrangements

# Positive Operating Cash Flow Generation

Cash generation despite challenging market

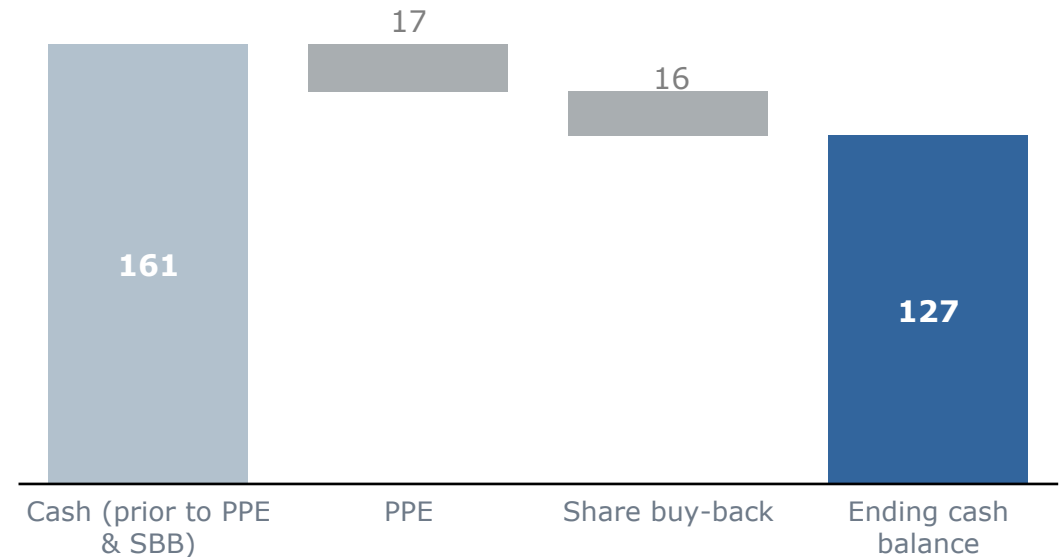
## Positive operating cash flow

(in S\$m)



## Total cash balance as at 30 Jun 2023

(in S\$m)



- Company continued share buyback in 1H2023 of S\$16m with the objective of enhancing shareholder value
- Interim dividend declared in view of 1H2023 performance and full year outlook

Source: Company information, numbers may not tie due to rounding (refer to results announcement)

# 3 | ESG Update

**Mr Gian Yi-Hsen**  
Group Chief Strategy Officer



# Sustainability – Operations

Moving towards renewable energy in Shanghai with Solar Panels and Hydropower

- Taking proactive steps towards sustainability:
  - Moving towards renewable energy in Shanghai with Solar Panels and Hydropower
  - Replacing electroplating with **Green Plating**

## Installing Solar Panels in Shanghai



### PLANT 1

- Connected
- Rooftop area covering **9,000 m<sup>2</sup>**
- 0.90 MW



### PLANT 2

- Completed in March 2023
- Rooftop area covering **10,000 m<sup>2</sup>**
- 1.47 MW



## Purchasing Hydroelectricity from State Grid

- Shanghai plants have successfully converted to **100%** hydroelectricity from January 2023
- Nanofilm has now full coverage of renewable energy in Shanghai

Source: Company information

Picture: Davies, N, The 22.5GW Power Plant - What You Should Know About Three Gorges, China, accessed 07 Aug 2023., <<https://blog.isa.org/the-22.5gw-power-plant-what-you-should-know-about-three-gorges-china>>



# Sustainability – Technology

Replacing electroplating with Green Plating, another sustainable innovation by Nanofilm

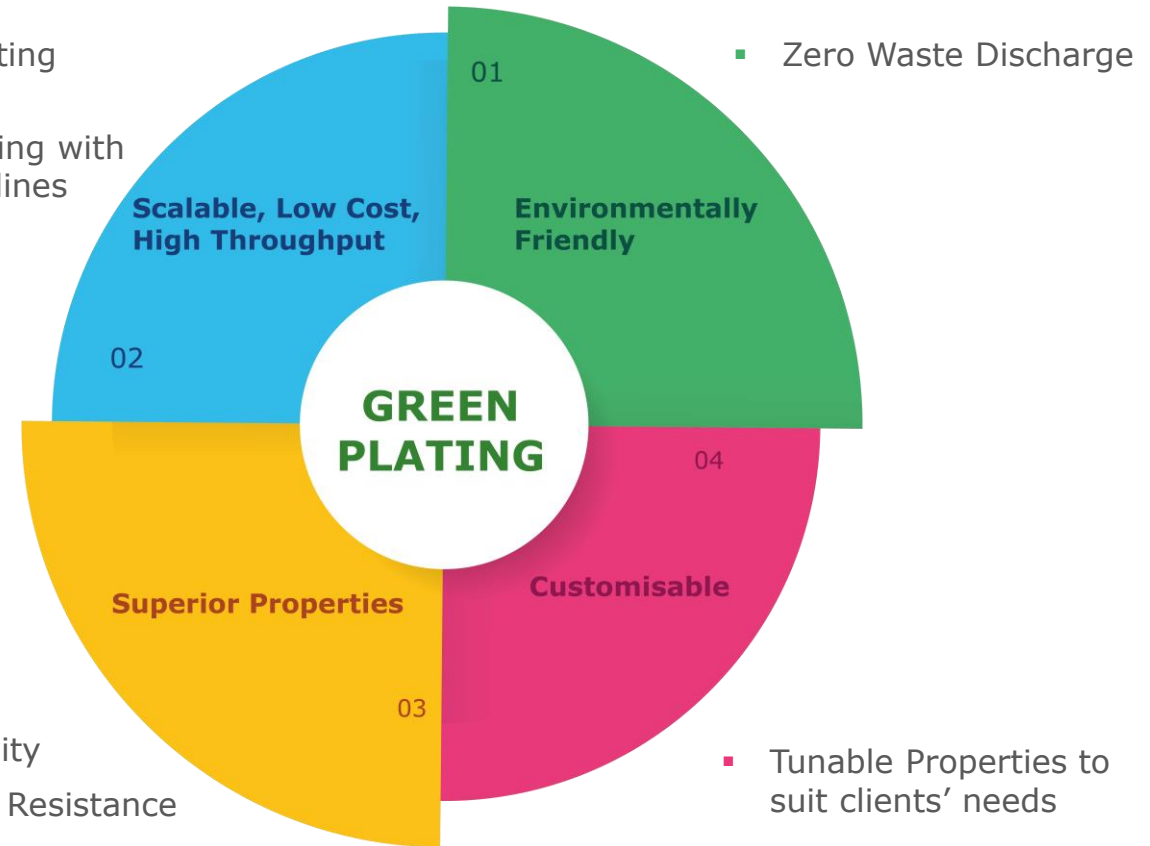
- Electroplating produces heavy metal waste
- Developed to relieve:
  - Environmental impacts
  - Increased costs resulting from environmental policies

## Commercialisation:

- Introduce environmentally sustainable components into EV sector through ApexTech (JV)
- Busbars and Interconnects
- Other commercialisation avenues are underway

- Self-developed coating systems
- Capable of integrating with clients' production lines

- High Conductivity
- High Corrosion Resistance



Available in 3 series: • **Decorative** • **Power** • **Power+**

Source: Company information

# 4 | Outlook

**Mr Gary Ho Hock Yong**

Executive Director and  
Group Chief Executive Officer

**&**





**Mr Ian Howe**

Group Chief Commercial Officer



# Our Strategic Priorities of BU in Key Focused Areas

Focused on longer-term objectives including strategic expansion, market diversification and investment in R&D to unlock greater opportunities and grow revenues

	AMBU	IEBU	NFBU	Sydragen
<b>Diversification</b> 	<ul style="list-style-type: none"> <li>3C expansion to new sites in Vietnam and India</li> <li>Expand capacity with new Huizhou and Zigong (ApexTech) sites</li> <li>Europe expansion</li> </ul>	<ul style="list-style-type: none"> <li>Continue to support diversification and expansion efforts of BUs</li> </ul>	-	-
<b>New Segments/ Products</b> 	<ul style="list-style-type: none"> <li>Industrial teams to expand new focused market segments and applications, examples in green plating of EV battery connectors; functional coating of PCB drills, semi-con toolings, etc</li> </ul>	<ul style="list-style-type: none"> <li>Focused on completing the in-line mass production green plating lines</li> </ul>	<ul style="list-style-type: none"> <li>Focused on bringing projects (new customers and new components with existing customers) to mass production</li> </ul>	<ul style="list-style-type: none"> <li>Focused on business development and customers engagement for bi-polar plates coating through its mass production in-lines equipment for hydrogen fuel cell systems</li> </ul>
<b>JVs / M&amp;A</b> 	<ul style="list-style-type: none"> <li>Ongoing exploration and assessment of synergistic partnerships or M&amp;As that accelerate pace and size of existing organic growth strategy, and drive revenue</li> </ul>			
<b>R&amp;D</b> 	<ul style="list-style-type: none"> <li>Advanced Technology Research Centre for new application and product development, expected to be completed in 4Q2023 at Singapore HQ Tai Seng</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of product line offerings</li> </ul>	<ul style="list-style-type: none"> <li>Nanofab Engineering Centre for new product development expected to be completed by end-2023 at Singapore HQ Tai Seng</li> </ul>	<ul style="list-style-type: none"> <li>Development of fuel cell systems and selected end-product applications</li> </ul>

# 2H2023 Business Outlook



## MARKET ENVIRONMENT

- Challenging business climate – particularly on IEPU business where customers remain tight on capex spending / investments
- 3C consumer business (AMBU and NFBU) inventory rebalancing is improving
- Demand and production volume for 2H peak season will be predicated on end-consumer interests for the upcoming new product launches



## OPERATIONS

- Cost improvement measures, while ongoing, will be balanced against 2H peak production requirements and new businesses initiatives
- Anticipates strong operating leverage when the markets recover and production volume returns
- Capex spend in 2H2023 will be directed more towards infrastructure and R&D investments



## MARKET EXPANSION

- **Vietnam & India:** predominantly driven by customer supply chain shifts
  - Vietnam: phase one construction of new site has commenced, expect to complete by 1Q2024
  - India: negotiations with partner underway, expect to finalise agreement by end-2023
- **Europe:** opportunities to apply functional coating solutions for European customers setting the stage for meaningful penetration



## FINANCIAL PERFORMANCE

- **2H2023:** Looking ahead to 2H2023, barring any unforeseen circumstances, revenue is expected to be higher than 1H2023, driven by seasonality peak production for consumer segment. However, 2H2023 will not be comparable to 2H2022 due to uncertain macro environment
- **FY2023:** Full-year profitability is subject to the level of end-consumer demand in the upcoming new 3C product launches and customers' capex not further tightened, continued focus on executing pipeline contracts and lean cost management
- Management remains confident of the mid to long-term prospects

**Taking necessary steps to optimise operations today and to further improve performance when markets recover / volume returns**

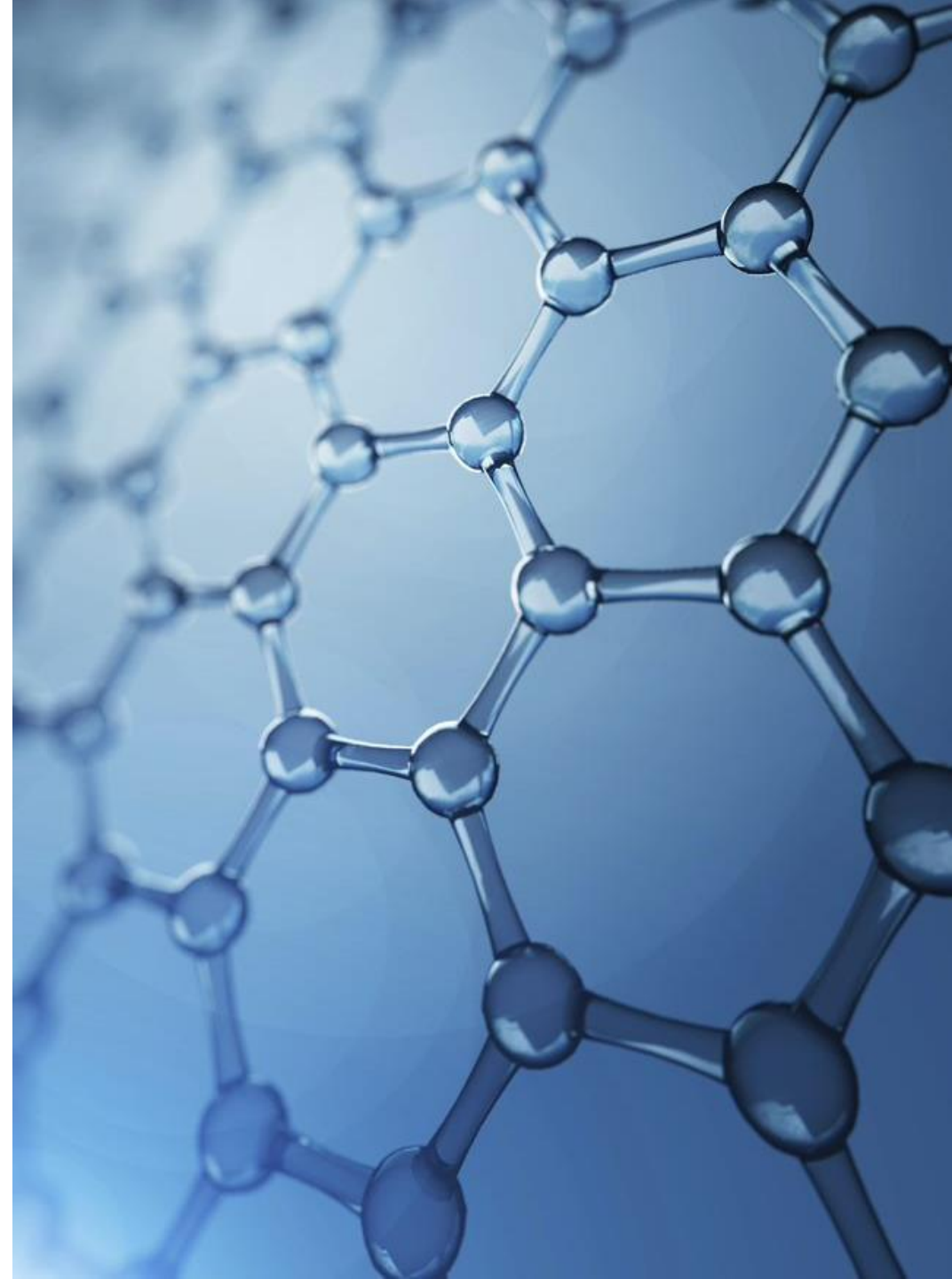
# 5 | Q&A



**THANK YOU**





# **APPENDICES**

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# Strategic Focus Areas: Progress & Updates

Fully focused on improving performance by pursuing opportunities to expand product offering and diversifying customer base

STRATEGIC AREAS	 <b>Geographical Expansion</b>	 <b>New Segments &amp; Product Diversification</b>	 <b>Joint Ventures / M&amp;A</b>	 <b>R&amp;D and Engineering Product Development</b>
<b>LATEST UPDATES</b>	<ul style="list-style-type: none"> <li>▪ <b>Vietnam new plant's</b> phase one, 15,000 sqm GFA, construction in progress and expected operationally in 1Q2024</li> <li>▪ <b>Europe site</b> expansion underway through organic approach, involving hiring and active sourcing for suitable locations, and exploring potential M&amp;A</li> <li>▪ <b>India site</b> expansion with local Indian subsidiary incorporated. Active sourcing for site location and factory-in-factory operation for AMBU Consumer</li> <li>▪ <b>China Huizhou site:</b> commenced small batch production for AMBU Industrial</li> <li>▪ <b>China Zigong site - ApexTech:</b> renovation completed and batch equipment going through commissioning then customers qualification</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Green plating solution</b> – sustainable and green compared to electroplating               <ul style="list-style-type: none"> <li>○ ApexTech established with partner Everwin, a leading metal manufacturing powerhouse:                   <ul style="list-style-type: none"> <li>• Batch equipment going through commissioning then customers qualification on EV battery busbars</li> <li>• Inline mass production equipment under construction</li> </ul> </li> <li>○ Focus business development in expanding green plating to selected applications</li> </ul> </li> <li>▪ <b>Nanofabricated optical solution</b> <ul style="list-style-type: none"> <li>○ New optical sensory module, a critical feature in smartwatches, under initial build development phase</li> </ul> </li> <li>▪ <b>SydroDIAMOND® solution</b> <ul style="list-style-type: none"> <li>○ Focus business development and customers engagement for bi-polar plates coating for hydrogen fuel cell systems</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Ongoing assessment of synergistic M&amp;A targets in geographical regions and markets of focus</li> <li>▪ Disclosure will be made at appropriate times</li> <li>▪ Earlier acquired 21.9% stake in Zulu Inc, has launched its second gen tunable eyewear and new tunable VR inserts under VOY Glasses brand</li> </ul>	<ul style="list-style-type: none"> <li>▪ Collaboration talks with a leading university to set up a Corporate Lab in final stages</li> <li>▪ Renovation and fitting of Advanced Technology Research Centre and Nanofab Engineering Centre for new application and product development, expected to be completed in October at Singapore HQ Tai Seng</li> </ul>

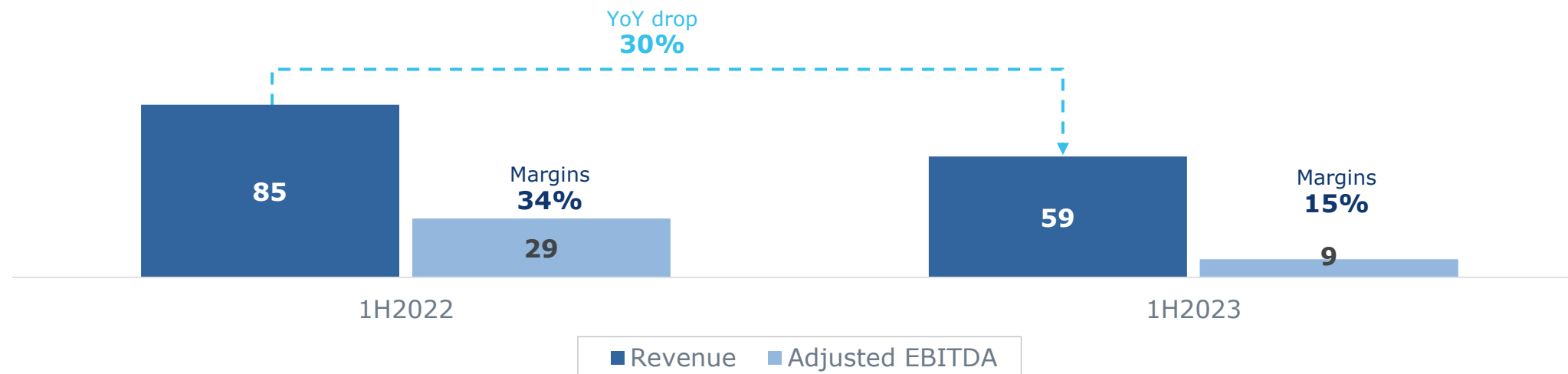
Source: Company information



# AMBU: Soft 3C market, partially offset by an increased Industrial contribution

## Financial performance

(in S\$m)



## Key operating data

	1H2022	1H2023
Coating equipment (no.) <sup>(1)</sup>	238 <sup>(4)</sup>	248
In-line coating equipment (no.) <sup>(2)</sup>	4	5
Equipment utilisation (%) <sup>(3)</sup>	48%	20%

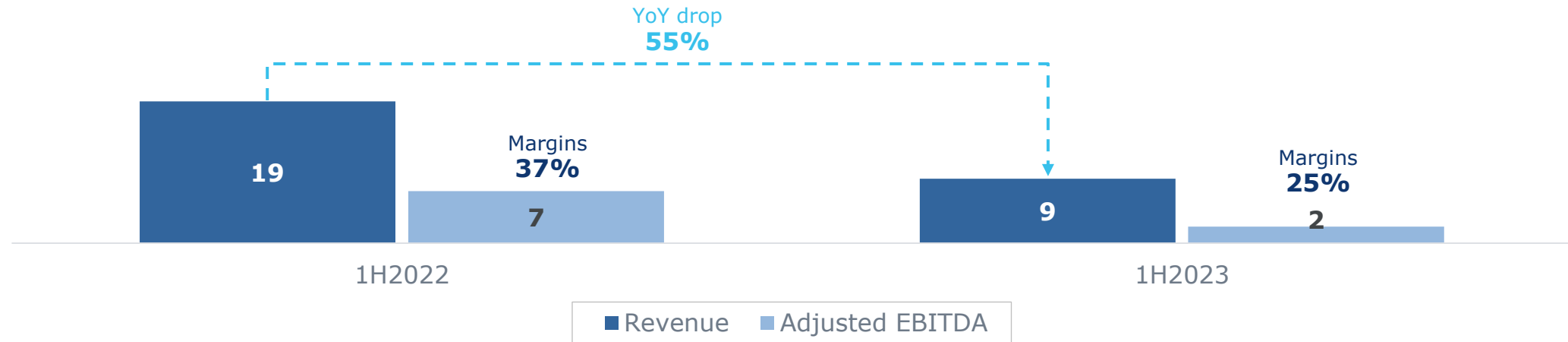
Source: Company information, numbers may not tie due to rounding (refer to results announcement)

- (1) Based on number of coating equipment at the end of the period which are utilised to fulfil revenue generating customer orders only, excludes coating equipment used for R&D activities
- (2) In-line coating equipment consists of several coating equipment and the capacity of an in-line coating equipment is approximately 4.5 coating equipment
- (3) Utilisation rate is calculated by dividing the average number of operating hours of our coating equipment and in-line coating system by the number of hours in a day (i.e. 24 hours)
- (4) Includes one coating equipment transferred from R&D to production

# IEBU: Customers remained cautious with Capex spend

## Financial performance

(in S\$m)



## Key operating data

	1H2022	1H2023
Equipment produced (no.) <sup>(1)</sup>	10	5
Equipment sold (no.)	8	3
Equipment used internally (no.)	2	2

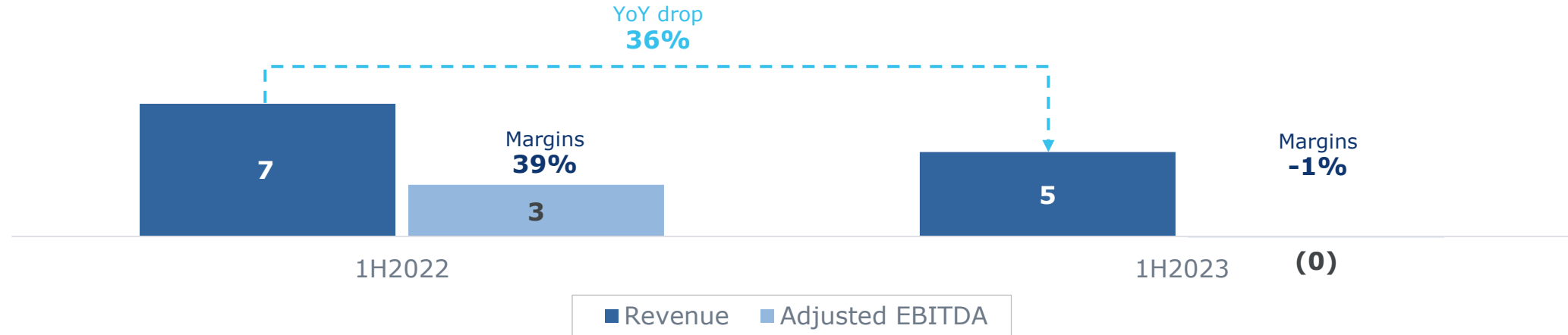
Source: Company information, numbers may not tie due to rounding (refer to results announcement)

(1) Includes in-line coating equipment, figures as at the end of the period

# NFBU: Similarly, soft 3C market affecting our components BU

## Financial performance

(in S\$m)

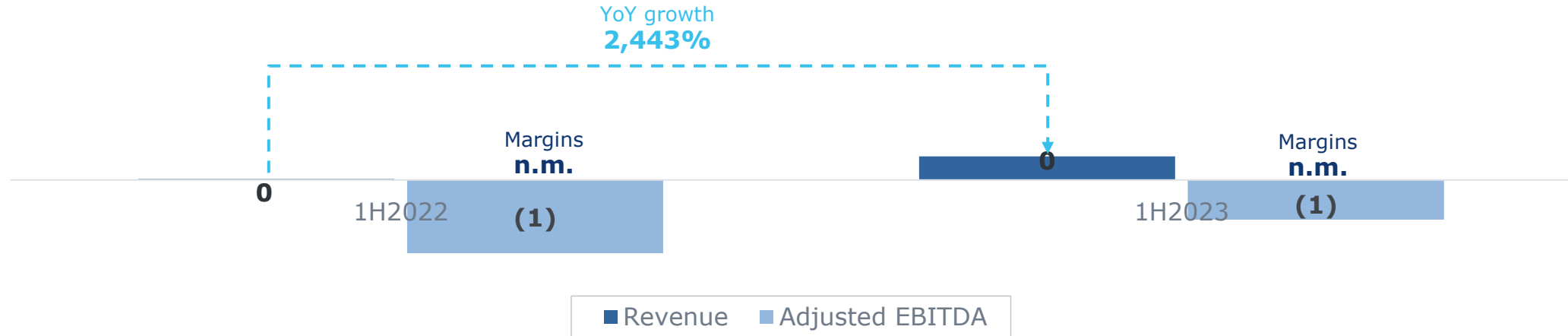


Source: Company information, numbers may not tie due to rounding (refer to results announcement)

# Sydragen: Continue gaining traction with encouraging customer feedback

## Financial performance

(in S\$m)



Source: Company information, numbers may not tie due to rounding (refer to results announcement)