



(ASX: RVS)

FULL YEAR RESULTS PRESENTATION – FY19

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Revasum uses certain measures to manage and report on its business that are not recognised under Australian Accounting Standards or IFRS. These measures are collectively referred to in this document as 'non-IFRS financial measures' under Regulatory Guide 230 'Disclosing non-IFRS financial information' published by ASIC. Management uses these non-IFRS financial measures to evaluate the performance and profitability of the overall business. The principal non-IFRS financial measures that are referred to in this document is Adjusted EBITDA. Adjusted EBITDA is earnings before interest, tax, depreciation and amortisation and significant items. Management uses Adjusted EBITDA to evaluate the operating performance of the business prior to the impact of significant items, the non-cash impact of depreciation and amortisation and interest and tax charges.

Although Revasum believes that these measures provide useful information about the financial performance of Revasum, they should be considered as supplements to the income statement measures that have been presented in accordance with the Australian Accounting Standards and IFRS and not as a replacement for them.

Financial data

All dollar values are in US dollars (US\$) unless as otherwise presented.



HIGHLIGHTS OF 2019

SIGNIFICANT INVESTMENT IN FAST GROWING SILICON CARBIDE MARKET

- Launch of 6EZ Silicon Carbide (SiC) Polisher to the Market during Q419
- Demonstrated impressive process results to the world's leading wafer & device manufacturers
- Compelling process results mean a lower cost per wafer to produce & improved device yield
- In advanced discussions with key industry players to place the 6EZ tools in their facilities in 1H2020

PREFERRED SUPPLIER STATUS ACHIEVED WITH KEY CUSTOMER

- Entered into a multi-year supplier agreement with Cree, Inc. – a world leader in manufacturing silicon carbide (SiC) wafer substrates
- Earlier this year, Cree announced a multi-year, \$1B investment to increase its SiC wafer production by 30x
- The parties have entered into a multi-year agreement pursuant to which Revasum will support Cree's expansion by supplying a significant quantity of grinding machines to Cree that will be used for high-volume manufacturing of 150mm and 200mm SiC substrates

MARKET REBOUND RESULTS IN STRONG 1H20 BACKLOG

- Company heads into 1H20 with a strong systems backlog (including confirmed orders not yet shipped and orders shipped in Q120) of \$6.0M
- The backlog includes \$3.9M relating to our Silicon Carbide Grinders which operate seamlessly alongside the new 6EZ Silicon Carbide Polisher
- Backlog does not include \$3M of expected recurring revenue for the half (incl. spares, service & other)

INVESTMENT IN INTERNAL INFRASTRUCTURE

- Successful deployment of new Enterprise Resource Planning System



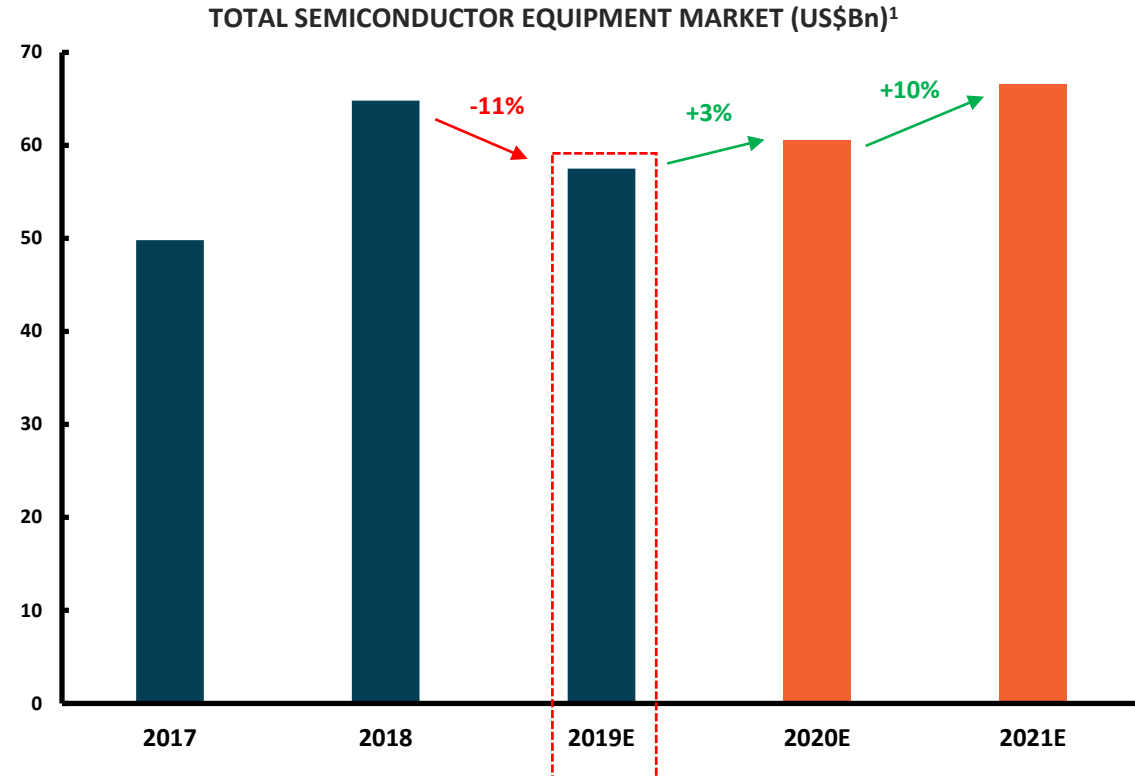
SEMICONDUCTOR EQUIPMENT INDUSTRY OUTLOOK

MARKET CONTRACTION IN 2019

- Initial estimates are that the total market contracted in 2019, with a forecasted decline of circa. 11% year-on-year.
- This is in line with what Revasum has seen in the industry during the fiscal year, this was a significant factor driving the 25% year-on-year decline in Revenue compared to 2018.

MARKET FORECASTED TO GROW IN 2020

- During 2020 the semiconductor equipment market is forecasted to return to growth.
- A spend of over US\$60bn is forecast for 2020.
- Existing equipment market, serviced by Revasum's legacy products, produces Silicon (Si) Wafers.
- Revasum's research and product development targets high-growth Silicon Carbide (SiC) market subset.
- Expected growth supported by announcements from key market players such as Cree who announced an investment of US\$1bn to expand their SiC capacity.



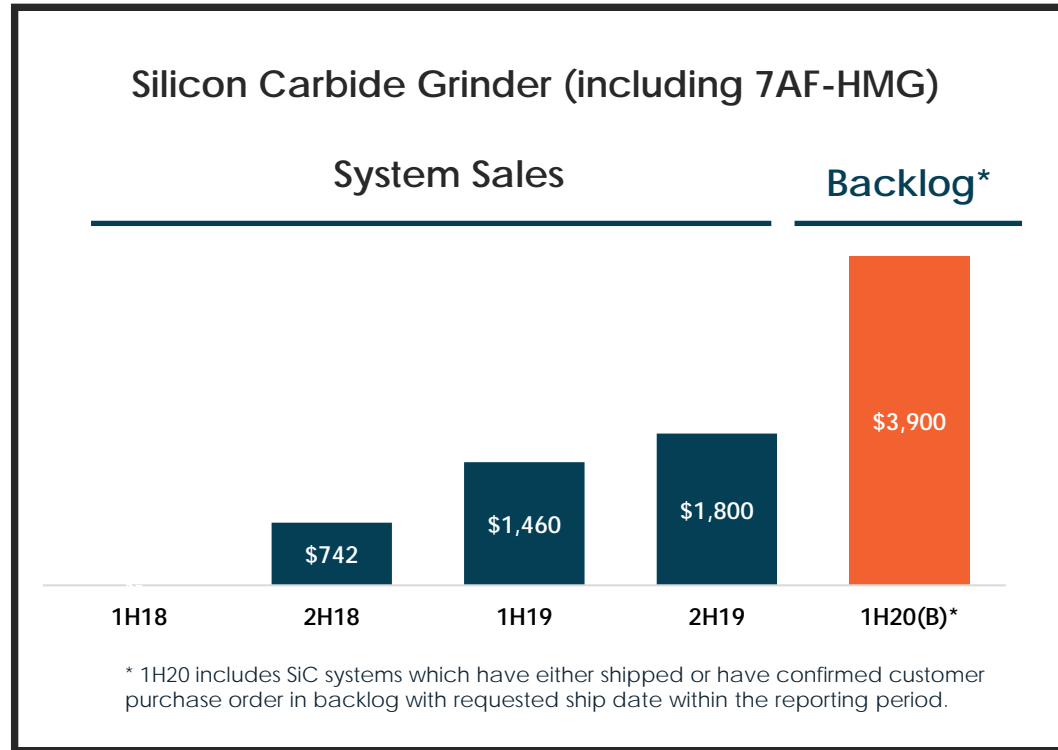
¹ Source: SEMI Global Update, December 2019



REVASUM'S SILICON CARBIDE (SiC) OFFERING



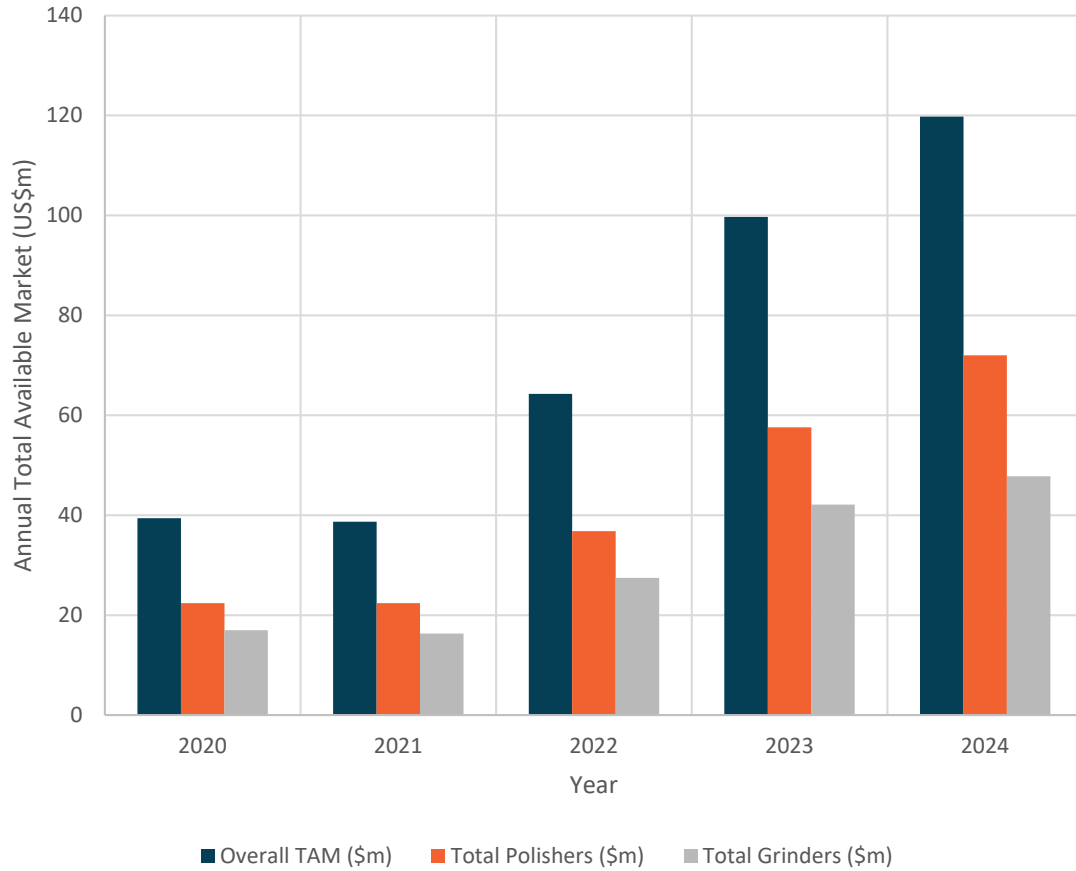
**7AF-HMG
SiC Grinder**



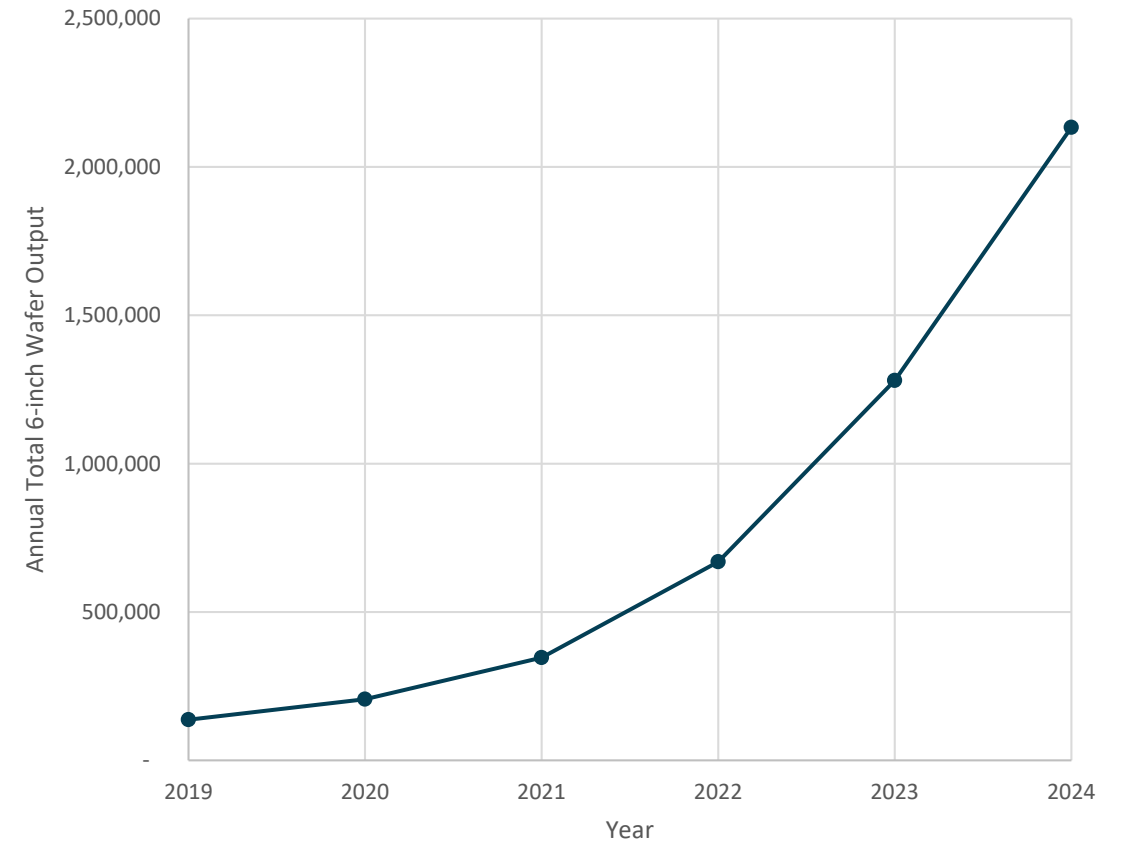
**6EZ
SiC Polisher**
Launched Q419

SILICON CARBIDE (SiC) EXPECTED MARKETS

ANNUAL EQUIPMENT TAM



ANNUAL TOTAL 6-INCH SiC N-TYPE WAFER OUTPUT



SILICON CARBIDE (SiC) MARKET DRIVERS



ELECTRIC VEHICLES – SiC USED IN ONBOARD CHARGING UNITS

SiC-based power semiconductors are used in the onboard charging units in EVs and it is also making inroads in a key part of the system – the traction inverter – which provides pull to the motor in order to propel a vehicle.

SiC-based power modules eliminate switching losses, which enable fast switching and significantly improve the low torque motor efficiency. High switching frequency also reduces motor copper and iron losses. Specifically, for EVs, this results in an efficiency increase of 5-12%. For instance, Tesla has been integrating SiC MOSFET-based (metal-oxide-semiconductor field-effect transistor) power modules from STMicroelectronics in its Model 3 inverter.



RF & 5G EQUIPMENT – SiC HAS SUPERIOR ELECTRON MOBILITY AND THERMAL CONDUCTIVITY

Both SiC and GaN possess superior properties compared to Si for RF (radio frequency) devices. SiC is a superior semiconductor because of its higher bandgap and thermal conductivity than GaN or Si implying that SiC-based devices can operate at higher power densities than GaN or Si.

In either case, the devices of interest for switching and RF power applications require an epitaxial layer of either SiC or GaN to be grown or deposited on a substrate composed of either the same (homoepitaxy) or a different (heteroepitaxy) material. Thus, considering all this, heteroepitaxial GaN on SiC is best suited for telecom and wireless applications for the following reasons:

- o As in other application areas, the high thermal conductivity of SiC-based devices allows them to run at a much higher voltages while the higher power density increases efficiency of the overall wireless infrastructure.
 - o The cubic crystalline lattice structure of SiC allows a region of bandgap change to be formed without changing the structure of the substrate material and hence, lowering the defect density, which improves the reliability.
-



SOLAR/PV CELLS – SiC SAVES 10MW FOR EACH GW INSTALLED PER YEAR

Compared to Si, SiC saves 10 megawatts (MW) for each gigawatt (GW) installed per year and 500 watts for every second in operation. Due to the better physical properties of SiC (as compared with Si) it provides several advantages for PV cells, such as;

- o High junction temperature² capability allowing the heat sink³ to be small and light to increase the power density of PV inverters.
- o A low dielectric constant allows low parasitic capacitance and fast switching frequency, which in turn allows reduction of weight and volume of PV inverters.
- High critical electric field allows reduction of ON-resistance⁴ and junction capacitance⁵ while improving switching frequency and reducing conduction loss.

SILICON CARBIDE (SiC) ADVANTAGES

HIGHER VOLTAGES

In electrical applications, heating is often an unwanted by-product of current flow. This diversion of energy is referred to as resistive loss. SiC, having the ability to sustain higher voltages, i.e., a high breakdown field, can be used to enable smaller devices with low resistive losses. Further, it can help reduce system complexity and cost, and improve reliability.

HIGHER CONVERSION EFFICIENCY

Devices made from SiC can switch currents relatively faster with less power loss. Also, it helps reduce the size of energy storage devices such as capacitors and inductors.

HIGHER CURRENT

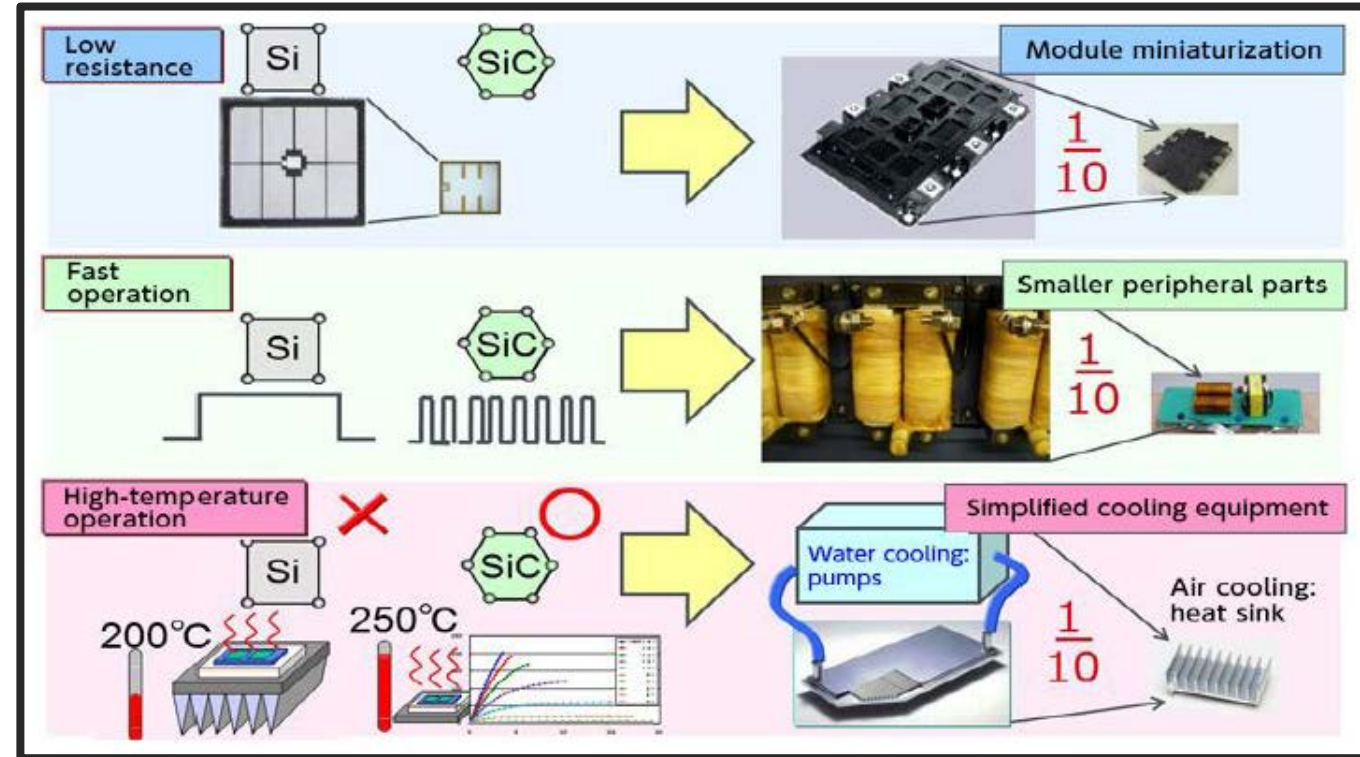
SiC can carry much higher currents reducing the area of devices as well as the parasitic (or stray) capacitance.

HIGHER OPERATING TEMPERATURE AND THERMAL CONDUCTIVITY

SiC-enabled devices can operate well over 400 degree centigrade (vs. Si at 150 degree centigrade) and have a much higher thermal conductivity compared with Si. This improves the reliability of the device and also eliminates the need for ancillary components such as cooling systems, which provides significant reductions in cost and size.

HIGHER ENERGY BAND GAP

SiC has a higher energy band gap than Si making it more robust against disturbance such as heat, radiation or electromagnetic fields. This makes it more suitable for sensor and military applications.



REVASUM'S PROCESS PROVIDES CUSTOMER YIELD IMPROVEMENTS

TRADITIONAL BATCH PROCESSING:



REVASUM AUTOMATED SINGLE-WAFER PROCESSING:



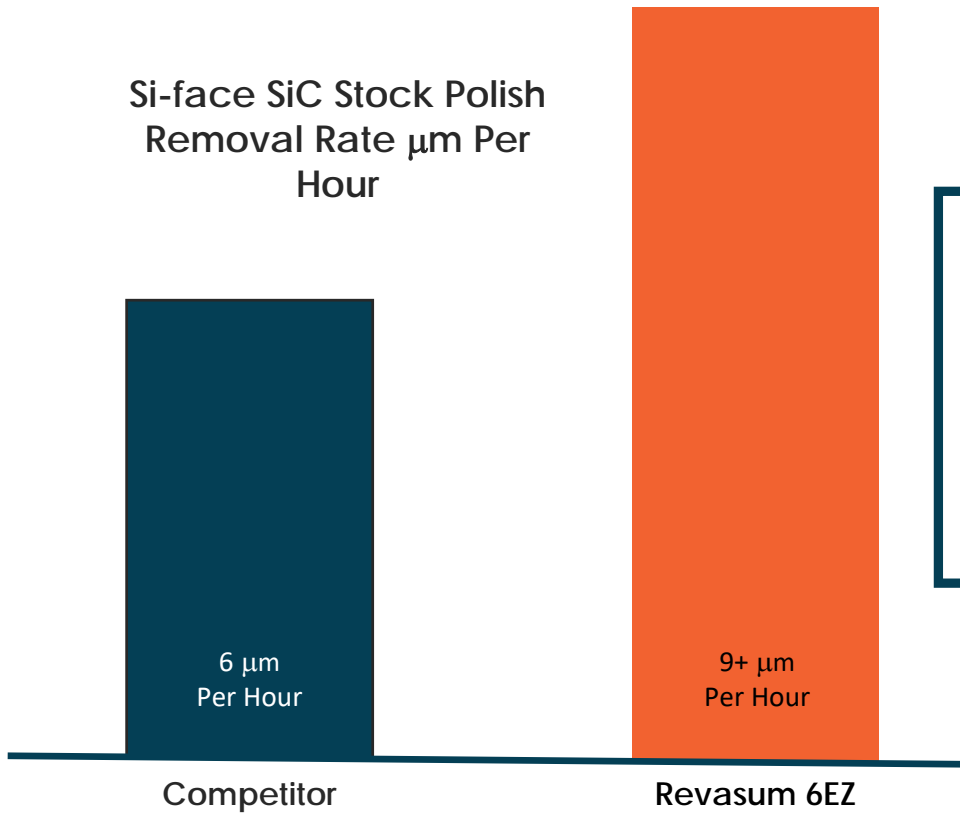
≥25%

YIELD IMPROVEMENT COMPARED TO
TRADITIONAL BATCH PROCESSING

HIGHER YIELD = LOWER COST PER WAFER



REVASUM'S TOOL IMPROVES REMOVAL RATE COMPARED TO COMPETITORS



~50% Faster

Better removal rate means
faster wafer processing and
increased productivity per
hour



**6EZ
SiC Polisher**



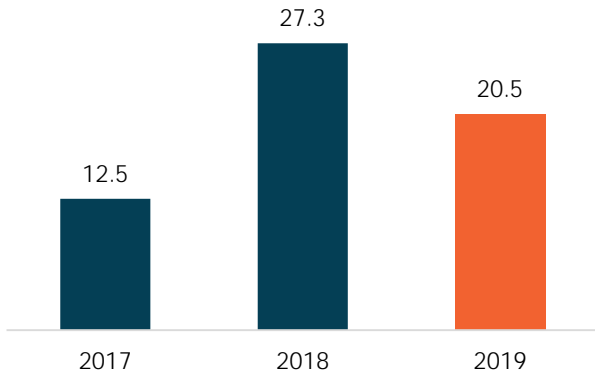


**REVIEW OF
FINANCIAL RESULTS**

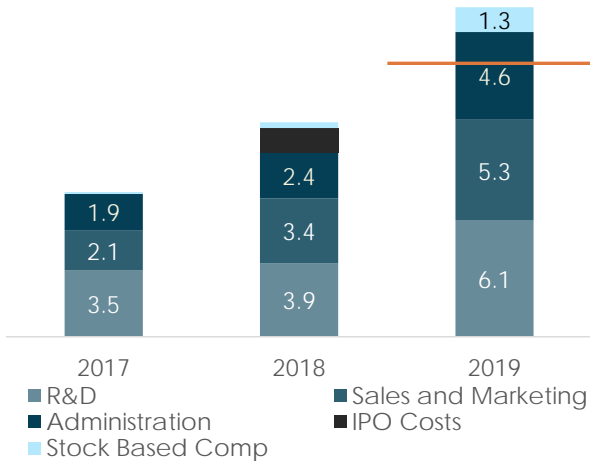
**PERIOD ENDED
5 JANUARY 2020**

KEY FINANCIAL METRICS

REVENUE US\$M



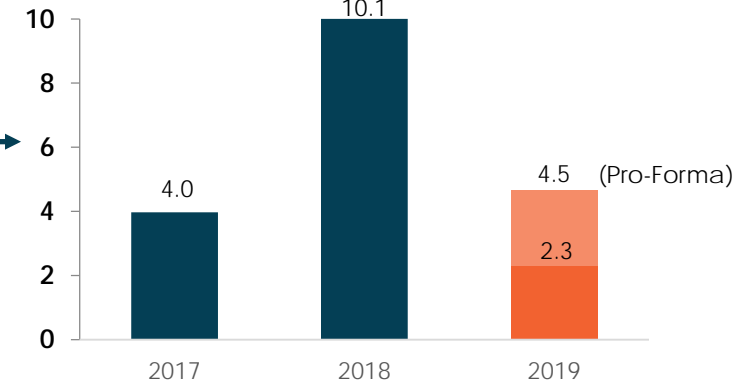
OPEX US\$M



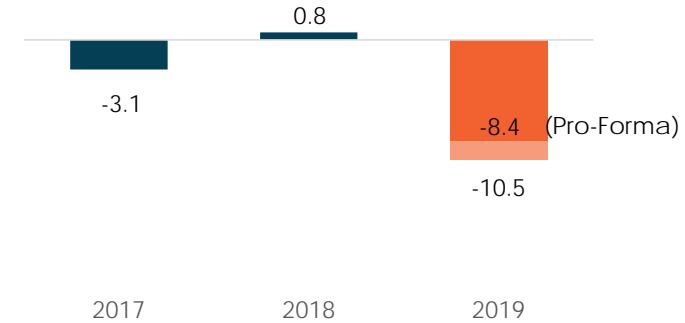
- During the year, Company took a **one-time charge** related to legacy inventory product purchases of US\$2,155K during the fiscal year. The charge had an 11% detrimental impact on gross margin %.
- Company continues to review ways in which legacy inventory can be monetized and is confident that this will be achieved.

- Company focused **investment on new Silicon Carbide Tools** – 6EZ Silicon Carbide Polisher & 7AF-HMG Grinder.
- **R&D OPEX for FY19 includes impairment of US\$1.9M** recognized as CMP tool development project is postponed.
- Following the fiscal period end, the Company has **completed a re-organization** in order to best position the Company to achieve its FY2020 goals while improving financial efficiency. The re-organization also involved significant streamlining in all areas of the Company in order to improve efficiency and preserve cash.

GROSS PROFIT US\$M



ADJUSTED EBITDA US\$M



FY19 – FINANCIAL HIGHLIGHTS

(USD in millions)	FY19	FY18	Y/o/Y Change
Revenue	\$20.5M	\$27.3M	(\$6.8M)
Gross Profit	\$2.3M	\$10.2M	(\$7.9M)
GM%	11.2%	37.2%	(2,600bps)
Operating Expenses	\$17.2M	\$11.2M	\$6.0M
Operating Income/(Loss)	(\$14.9M)	(\$1.0M)	(\$13.9M)

Reconciliation of Adjusted EBITDA to Operating Loss

(USD in millions)	FY19	FY18	Y/o/Y Change
Adjusted EBITDA	(\$10.5M)	(\$0.8M)	(\$9.7M)
IPO Costs	(\$0.0M)	(\$1.3M)	\$1.3M
Share Based Compensation	(\$1.2M)	(\$0.3M)	(\$0.9M)
Intangibles Impairment	(\$1.9M)	(\$0.0M)	(\$1.9M)
Depreciation & Amortization	(\$1.3M)+	(\$0.2M)	(\$1.1M)
Operating Income/(Loss)	(\$14.9M)	(\$1.0M)	(\$13.9M)

+ Includes \$0.7M Depreciation for impact of adoption of AASB 16 Leases

- Decrease of US\$6.8M in Revenue driven by contraction in Semiconductor Capital Equipment market. Company expects growth in FY20 as the market recovers.
- 11% impact on Gross Margin as a result of one-time legacy inventory reserve.
- AASB 16 Adopted in FY19 using the modified retrospective method – additional US\$0.7M of depreciation in OPEX.



5 JANUARY 2020 – BALANCE SHEET

<i>(USD in thousands)</i>	5 January 2020		31 December 2018	
Cash and cash equivalents	\$	6,838	\$	24,469
Trade and other receivables		1,821		8,189
Inventories - net		10,168		8,378
Prop., plant and equip.-net		3,688		1,034
Right-of-use Asset		2,590*		-
Intangible assets - net		6,770		1,536
Other assets		752		600
Total assets	\$	32,627	\$	44,206
Trade and other payables	\$	3,053	\$	5,911
Customer deposits		2,077		2,742
Lease Liabilities		2,708*		-
Borrowings		1,931		-
Other liabilities		1,530		560
Total liabilities	\$	11,299	\$	9,213
Total equity	\$	21,328	\$	34,993

* Asset/Liability for lease of Company Headquarters added upon adoption of AASB16 - Leases

- Cash at 5 Jan 2020 US\$6.8M, with US\$2.0M drawn down on the Bridge Bank facility.
- Significant reduction in trade & other receivables to US\$1.8M due to improved collections and timing of shipments.
- Intangible assets increased to US\$6.8M as development of 6EZ ramped during the fiscal year and the new ERP system was implemented on the first day of FY20.
- Increase in P,P & E of US\$2.7M as a result of build of first 2 6EZ tools which will remain in our process & engineering labs.
- Right-of-use asset and corresponding Lease Liability added upon adoption of AASB16 Leases.



FY19 – CASH FLOW

(USD in thousands)		FY2019		FY2018
Receipts from Customers	\$	26,423	\$	20,936
Payments to Suppliers and Employees		(35,070)		(28,850)
Interest & Taxes Paid – net		(144)		(11)
Operating Cashflow	\$	(8,503)	\$	(7,925)
Purchase of PP&E	\$	(3,085)	\$	(384)
Payment of Cap. Dev. Costs		(7,262)		(1,362)
Investing Cashflow	\$	(10,347)	\$	(1,746)
Financing Cashflow	\$	1,219	\$	31,734
Net (Decrease)/Increase in Cash	\$	(17,631)	\$	22,063
Cash, Beginning Balance	\$	24,469	\$	2,406
Cash, Ending Balance	\$	6,838	\$	24,469

- Cash receipts from customers US\$26.4M
- Investing cash inflows as a result of arrangement of Bridge Bank financing facility - US\$2M drawn down on the facility as at the year end date
- Payments for capitalized development costs of US\$7.3M as investment in the new 6EZ silicon carbide tool ramped, along with the implementation of the new ERP system
- Payments for PP & E increased significantly to US\$3.0M as a result of build of first 2 6EZ tools which will remain in our process & engineering labs



A large, stylized, light blue 'R' logo is positioned on the left side of the slide, set against a dark blue background. The 'R' is composed of thick, rounded lines and is partially obscured by several overlapping, curved, light blue bands that sweep across the frame from the top left towards the bottom right.

QUESTIONS

**DIAL * 1 IF YOU HAVE
A QUESTION**



17%

Management Ownership Fully-Diluted



A\$47.59 million
(~US\$31.17 million)
Market Cap



A\$0.61
Stock Price



78.01 million
Shares on Issue