# MEC CO., LTD (4971 JP)

FY21 GUIDANCE WAS REVISED UP BUT ONLY FOR IH. VIEW ON 2H REFLECTS UNCERTAINTY DUE TO SEMICONDUCTOR SHORTAGE

# FY21 Q1 RESULTS SUMMARY

MEC (4971 JP) reported FY21 Q1 (Dec year-end) earnings with operating profit [OP] of ¥973mil (+95.5% YoY) on sales of ¥3,505mil (+24.7% YoY). This strong performance resulted in a substantial improvement in the operating profit margin [OPM], up from 17.7% in FY20 Q1 and 19.8% in FY20 to 27.8%. The firm's core product, CZ-8101, an adhesive-enhancing chemical used in packages for servers and chiplet packaging such as EMIB, reported record quarterly sales of ¥1,026mil (+30.4% YoY / +18.6% QoQ), supported by the rapid surge in package production. Furthermore, ¥385mil of the ¥475mil increase in OP is thanks to the growth in the firm's core chemicals segment.

Strong Q1 results led the firm to revise up FY21 earnings guidance for the IH (OP up from ¥1,150mil (+1.5% YoY) to ¥1,750mil (+54.5% YoY) / sales up from ¥6,100mil (+7.0% YoY) to ¥6,900mil (+21.0% YoY)). The full-year guidance was also revised to OP of ¥3,100mil (+30.8% YoY) on sales of ¥13,600mil (+13.7% YoY), up from OP of ¥2,500mil (+5.5% YoY) and sales of ¥12,800mil (+7.1% YoY), previously. MEC only revised up its IH guidance but did not revise the 2H forecast due to unclarity on the back of semiconductor shortage. However, given that MEC's customers— package makers — are continuing to invest in production capacity expansion, on the back of CAPEX increase by chipmakers, a rapid shrink in demand for the firm's chemicals in 2H will be unlikely.

Change in FY21 1H & FY guidance								
	FY2I							
(¥mil / Dec year-end)	IHCE Old	IHCE New	FY21CE Old	FY21CE New	FY21 CE Change (%)			
Sales	6,100	6,900	12,800	13,600	6.3			
ОР	1,150	1,750	2,500	3,100	24.0			
OPM (%)	18.9	25.4	19.5	22.8	+3.3pp			
RP	1,150	1,850	2,500	3,200	28.0			
NP for the parent's s/holders	800	1,300	1,750	2,250	28.6			
EPS (¥)	42.15	68.47	92.21	118.46	28.5			
Source: MEC Co., Ltd. press release on 12 May 2021								

# **SEGMENTS**

Chemicals division sales, which comprises more than 90% of the firm's total revenue, rose 29.7% YoY to ¥3,452mil and contributed ¥385mil of the ¥475mil YoY increase in FY20 OP. By product, adhesive enhancing chemicals and etching chemicals enjoyed strong sales growth of 25.0% YoY and 35.9% YoY, respectively. A further ¥52mil increase in Q1 OP came from improvement in the Chemical division's GPM thanks to an improved sales mix on the back of solid sales of the CZ series (¥1,906mil, +26.5% YoY).

## **EXECUTIVE SUMMARY**

- MEC reported strong FY20 QI earnings with OP surging +95.5% YoY on sales growth of 24.7% YoY.
- Sales of CZ-8101 hit yet another quarterly sales record, supported by the rapid surge in package production.
- CZ-8100 and V-Bond, both of which are exposed to the auto sector, saw sales recover YoY but fall QoQ due to the semiconductor shortage.
- Etching chemicals such as SF and EXE also did better than expected as there were delays to the production of high-end smartphone and tablets that will not use touch panels going forward.
- Chemical division sales (90%+ of total revenue) improved 29.7% YoY to ¥3,452mil. Both Adhesive Enhancer (that includes CZ series) and Etching Chemicals saw favourable YoY sales growth, +25.0% YoY and +35.9% YoY respectively.
- Thanks to the strong FY21 Q1 result, MEC revised up full year guidance. However, only 1H guidance was revised (i.e., no to change to the 2H forecast) due to unclarity on the back of semiconductor shortage.
- Over the medium-term, factors that will likely drive MEC's earnings growth are unchanged. Chipmakers and package makers are aggressively investing in capacity expansion to meet demand from data centre servers that will be required as part of essential 5G infrastructure.
- No change in dividend forecast.

Continued strength in server demand at data centres, bolstered by the increase in data transmission on the back of COVID-led remote working and distant learning, supported MEC's sales growth. FY21 Q1 sales of Copper Treatment Chemicals (ca. 95% of Chemicals sales) reached ¥3,278mil (+28.5% YoY / +6.8% QoQ), which renewed its record sales.

These products can be divided into the following two segments:

Chemical Sales by Products (Quarterly)											
(¥mil / Dec year-end)		FY19			FY20			FY21			
		Q2	Q3	Q4	QI	Q2	Q3	Q4	QI	Q <sub>0</sub> Q (%)	YoY (%)
Copper surface treatment chemicals	2,134	2,497	2,919	2,592	2,551	2,701	2,824	3,069	3,278	6.8	28.5
Adhesive Enhancer (CZ,V-Bond etc.)	1,360	1,588	1,718	1,695	1,720	1,695	1,828	1,970	2,150	9.1	25.0
CZ Series Total	1,185	1,379	1,484	1,468	1,507	1,491	1,562	1,700	1,906	12.1	26.5
CZ-8100	232	260	257	269	246	225	264	314	301	-4.1	22.4
CZ-8101	540	789	752	753	787	820	822	865	1,026	18.6	30.4
Other CZ chemicals	413	330	475	446	474	446	476	521	579	11.1	22.2
Etching Chemicals (EXE, SF etc.)	773	909	1,200	897	830	1,006	996	1,099	1,128	2.6	35.9
SF	145	205	407	222	182	298	247	362	326	-9.9	79. I
EXE	297	349	369	278	301	362	316	326	407	24.8	35.2
Other surface treatment chemicals	132	125	133	122	109	127	121	91	174	91.2	59.6
Chemical Sales Total	2,266	2,623	3,052	2,715	2,661	2,829	2,946	3,160	3,452	9.2	29.7
Source: Nippon-IBR based on MEC's earnings presentation materials											

### 1) Adhesive Enhancer

FY21 Q1 Adhesive Enhancer sales rose 25.0% YoY / 9.1% QoQ to ¥2,150mil – yet another quarterly sales record. The core CZ series sales improved 26.5% YoY / 12.1% QoQ to ¥1,906mil. Sales of CZ-8101 hit ¥1,026mil (+30.4% YoY / +18.6% QoQ), the renewed quarterly sales level. The growth driver for CZ-8101 sales has been packages for (1) servers, bolstered by the increase in data transmission, and (2) for PCs whose demand remains strong on the back of prolonged remote working and distant learning. CZ-8101 sales were further enhanced with the package makers gradually shifting to chiplet technology such as EMIB.

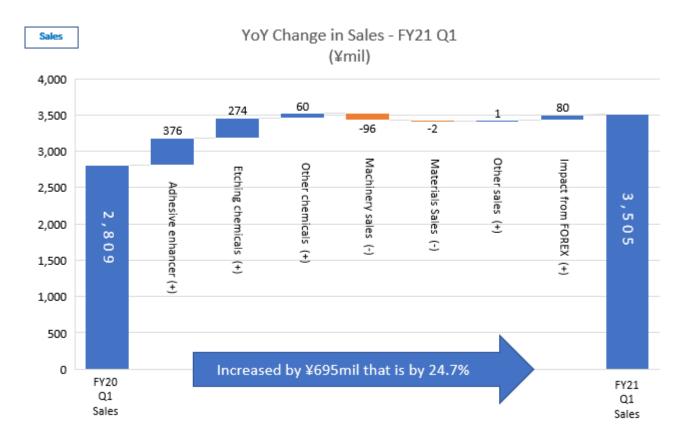
On the other hand, CZ-8100, which is partly used in packages for automobile components, remained lacklustre. While FY21 Q1 sales saw a +22.4% YoY recovery in sales (¥301mil) compared to a year ago, when the firm saw a drop in sales due to weaker automobile production, sales fell 4.1% QoQ as automobile production was constrained by the global shortage of semiconductors.

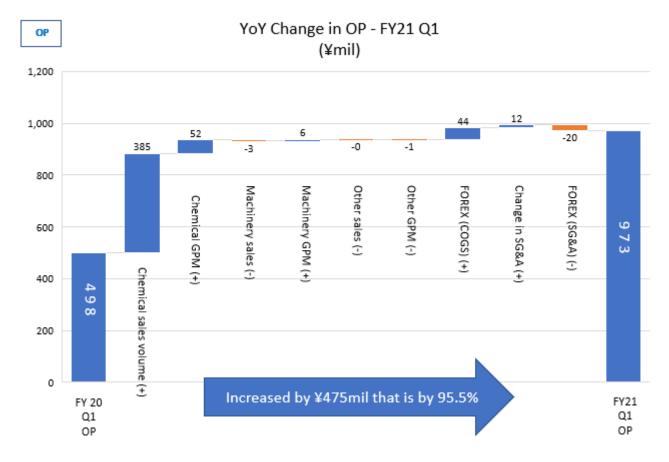
V-Bond, another adhesive-enhancing chemical used in multilayer substrates for automobiles, reported quarterly sales of ¥187mil (+21.4% YoY / -1.6% QoQ).

# 2) Etching Chemicals

Q1 sales of Etching Chemicals were ¥1,128mil (+35.9% YoY / +2.6% QoQ). SF, a key material used in touch panel sensors, saw sales of ¥326mil (+79.1% YoY / -9.9% QoQ). Q1 sales were much better than the firm's forecast. The original assumption was that SF sales will gradually decline by the launch of new high-end tablet models whose touch panels will not use SF. However, continued strong demand for existing tablet models on the back of prolonged remote working and distant learning boosted SF sales in Q1.

EXE, another of MEC's etching chemical products, reported record quarterly sales of ¥407mil (+35.2% YoY / +24.8% QoQ). Demand for use in chip-on-film [COF] remained solid thanks to steady demand for laptops and displays on the back of continued remote working and distant learning. COF for TVs also contributed to the sales increase of EXE. Furthermore, recovery in the production of the middle-end smartphone also supported sales of EXE.





Source: MEC Co., Ltd FY21 Q1 earnings presentation material

## FY21 OUTLOOK

MEC revised up its original FY21 guidance from OP of  $\pm 2,500$ mil ( $\pm 5.5\%$  YoY) on sales of  $\pm 12,800$ mil ( $\pm 7.1\%$  YoY) to OP of  $\pm 3,100$ mil ( $\pm 30.8\%$  YoY) on sales of  $\pm 13,600$ mil ( $\pm 13.7\%$  YoY). FY21 dividend forecast remains unchanged at  $\pm 28.00$ /share.

MEC does not disclose sales forecasts for its products. The firm's assumptions on each segment are as follows:

#### Adhesive Enhancer

The firm assumes that the current favourable trend in CZ-8101 sales will likely continue in Q2 but MEC has a conservative assumption for 2H given the shortage of semiconductors. Demand for CZ-8101 remains solid, especially for packages used in servers.

For CZ-8100, MEC assumes a similar trend in Q2 but anticipates a slowdown in 2H sales because of semiconductor shortages that continue to be an issue for the automobile sector. Equally, for V-Bond, the Q2 trend so far has been in line with Q1 but while the firm assumes that sales trend will continue to remain solid, it expects a slower pace of growth in 2H. This assumes that the lacklustre sales to the automobile sector but will be offset by a recovery in middle-end smartphone production.

# 2) Etching Chemicals

MEC initially assumed that SF sales would gradually shrink as new versions of a certain high-end smartphone and tablet no longer require touch panel sensors, for which SF is used. However, the COVID-led boost in the sale of tablets that do include touch panels, and the delay in the production of the new high-end tablet model that is also touch panel sensor-free boosted sales of SF. However, the firm estimates that such a positive effect will fade away in 2H.

For EXE, sales growth will likely be delivered by strong demand for displays and mid-range smartphones in which EXE is used in COF throughout the year.

The upward revision was only made for IH guidance while that 2H remains unchanged. The firm maintains a cautious view on 2H due to unclarity under the global shortage of semiconductors and estimates an increase in personnel cost and overheads. Although there is a short-term uncertainty, the medium-term potential for MEC's chemicals will likely remain steady. Chipmakers, as well as package makers, reportedly continue to invest in capacity expansion. Package makers – MEC's direct customers – continue to increase CAPEX to meet demand from data centre servers as more 5G infrastructure is installed. It is said that towards 2025, package makers will gradually shift to the chiplet packaging method, which enables the size of a package to be larger and have more layers. Therefore, packages will require ca. 8x more CZ chemicals than the current technology used to produce packages for PCs.

The shift of the capacity from Nishinomiya factory to a factory in Thailand has been pending due to COVID which delayed the accreditation process of the Thai factory by customers. Over the past two years, the firm spent total of ca.  $\pm 2,200$ mil on CAPEX to enhance the production capacity to generate an annual sale of ca.  $\pm 17,000 \sim 18,000$ mil.

There is no change in FY21 dividend forecast despite earnings guidance was revised.

Applications and trend for MEC's main chemicals									
Chemicals	Applications	Trend	FY20 (¥mil)	YoY (%)	FY21CE Old (¥mil)	FY21CE New (¥mil)	YoY (%)		
CZ series	PC, Tablets, Servers, AiP, packages for automobile.	The continued trend from FY20 is a strong demand for servers due to an increase in demand for tablets and laptops on the back of increasing remote work and distant learning. Expansion of 5G infrastructure that requires more servers will help boost CZ-8101 sales. CZ-8101 is partially used in chiplet technology such as EMIB. The newer generation CZ-8201 is also used in chiplet technology.	6,260	13.5	6,883	7,400	18.2		
EXE	COF (Chip-on-Film) for smartphones and tablets. Currently tested for use in the high-end smartphone motherboards.	FY20 sales were led by increase in tablet and laptop demand. FY21 growth relies on recovery of Chinese smartphone production. Increasing enquires for the subtractive wire forming method, in which EXE is used, in HDI motherboard	1,307	1.1	1,412	1,617	23.7		
V-Bond	Pre-lamination treatment for multilayer substrates. Used in packages for autos and mid-end smartphones	Sales recover in line with automotive and Chinese smartphone production	668	-2.5	768	768	15.0		
SF	Touch panel sensor	Decline in sales from smartphone display expected because of a new technology that does not require sensor.	1,091	11.4	960	1,205	10.5		
Source: Nippon-	IBR based on data provided by MEC								

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For further enquiry, please contact:

Nippon Investment Bespoke Research UK Ltd I 18 Pall Mall London SW I Y 5EA TEL: +44 (0)20 7993 2583

Email: enquiries@nippon-ibr.com



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