



## Record of Telephone Conference Concerning Q1 FY2019 Results

Reference: FY2019 Q1 Results & FY2019 Q1-Q2 Forecast

Note:

PKG = Package substrate

HDI = High density interconnect

### **Engineered Materials Segment**

Q.

Could you give us a breakdown of the demand trends for copper foil and MicroThin™ in Q1 and Q2?

A.

Regarding general copper foil, we have seen a recovery in the demand for this product category in relation to flexible printed circuit and communications infrastructure applications. Given this, the H1 results for copper foil will likely exceed forecasts. As for MicroThin™, PKG-related demand has risen, particularly in relation to memory, and it should recover in Q2 to the level initially forecasted. HDI-related demand, as we expected, rose in Q1 before peaking in Q2, but sales volume has fallen below the initial forecast.

Q.

How much of MicroThin™ sales are for PKG applications and how much for HDI applications? Also, have you developed any new HDI-related leads or applications?

A.

HDI accounted for around a quarter of the sales in Q1, and it accounts for around a third in Q2. I have no updates on new HDI leads at this time.

Q.

The segment's income level, when inventory factors are excluded, has remained flat across Q1 and Q2, despite an increase in MicroThin™ sales volume. How do you explain this?

A.

When inventory factors are excluded, income is up in Q2 by some hundreds of millions of yen. Revenue from copper foil has increased, but so too have R&D costs.

Q.

You forecasted that sales of MicroThin™ will increase in Q2. How certain is this forecast? Also, why did you revised the initial forecast downward?

A.

We are confident that the forecasted sales increase will materialize. As to why we revised the forecast downward, we judged that the initial H2 forecast is unlikely to be met given that sales slumped in Q4 FY2018 before recovering in Q1 FY2019.

Q.

You have downwardly revised the segment forecasts. How has each business unit contributed to this outcome?

A.

The biggest contributing factor has been inventory adjustment for copper powders, a major component of engineered powders.

Q.

Are there any factors, beside those related to demand, that explain why you downwardly revised the H1 forecast for MicroThin™?

A.

One such factor is a fall in HDI applications. Another is improvement of production efficiency by customers.

Q.

You said that you expect sales of ITO sputtering targets to recover in Q2. What is the demand outlook? Also, how have your margins been affected by the fall in indium prices?

A.

There is reasonable demand for ITO, and it is driven by high production rates among China-based touch panel manufacturers. That said, smartphone-related ITO orders have declined. Sales volume has also dipped slightly as a result of price competition over some customers. The decline in indium prices has harmed our margins, as it has encouraged customers to push for lower sales prices.

## **Metals Segment**

Q.

How did the Caserones copper mine perform in Q1, and how is it performing in Q2?

A.

The mine made a loss of 500 million yen in Q1, and is making a loss of 1.5 billion yen in Q2. So for H1, we expect a loss of 2 billion yen.

Q.

Your gain/loss on equity in the mine has deteriorated in Q2. Does this imply a decline in the copper market?

A.

Yes, there has been no major operational issue in Q1 or Q2. The deterioration simply reflects a fall in copper prices.

Q.

Kamioka hydropower station was hit by a lightning strike. How is the damage, and how has this impacted revenue from the station?

A.

As we announced in an August 8 press release, we are still investigating the outlook for recovery. The damaged station is producing 30 to 40 percent of the electricity it did prior to the incident. This situation is obviously affecting revenue, but we are still working out the exact figures. I would add that the lightning strike has not affected operations at the station.

### **Affiliates Coordination Segment**

Q.

In FY2019 Q1, earnings were down year-on-year. What are the factors behind this result? Also, why have you downwardly revised the H1 forecasts?

A.

A key reason is that the engineering business experienced a downturn in construction orders. We revised the forecast downward because of an accumulation of several factors, including a slump in the markets for rolled copper and die-cast materials.

Q.

Will the segment continue to decline across the rest of the fiscal year?

A.

Fortunately, the engineering business, which accounts for a large share of the segment, should see increased earnings in H2.