



**TPC Electronic Industry
Coronavirus (COVID-19) Impact Survey
April 28, 2020**

TPC Electronic Industry COVID-19 Impact Survey

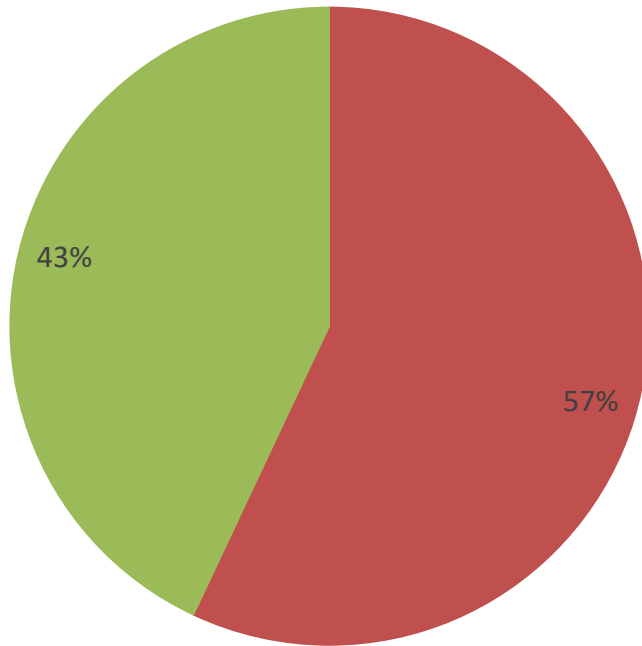
Survey Date: March 5-8 Respondents: ~4000 Location: Worldwide/China focus (~85% China) Who: Active Electronics Industry Professionals

As a follow up to our ongoing research on the impact to the electronics supply chain in China from the Coronavirus (COVID-19); we did our 3rd special survey. The survey had ~6500 respondents with ~85% located in China. Our key findings along with our supporting on the ground checks are as follows:

- 48% of the respondents are seeing an incremental negative impact over the past 4 weeks to demand and/or production from the virus; vs. 57% previously.
- Roughly 80% of the respondents see production down only 5% or less for C2Q due to the virus' impact. This compares to 80% seeing C1Q's production down >5% in the March survey.
- Now 53% think the production shortfall in C1Q will be made up in C2Q which is up significantly from 16% in the March survey.
- Only 15% are saying the production shortfall will never be fully made up vs. 28% in the March survey.
- Regarding the C2Q shortfall, ~10% (vs. 19% previously) of these responses believe there will not be enough workers back by C2Q to make up the C1Q production deficit; while ~47% (vs. 51% previously) believe there will not be enough components available in C2Q to make up the shortfall.
- Now 27% (vs. 7% in March and 25% in February) see any demand being destructed in C2Q because of production shortfalls in C1Q.
- Now 37% (vs. 28% in March) of the respondents see 5% or less demand destruction; while 24% see >10% demand destruction (vs. 27% in March's survey).
- The weighted average of this survey's demand destruction due to COVID-19 is ~7-8% vs. ~8-10% in the March survey.

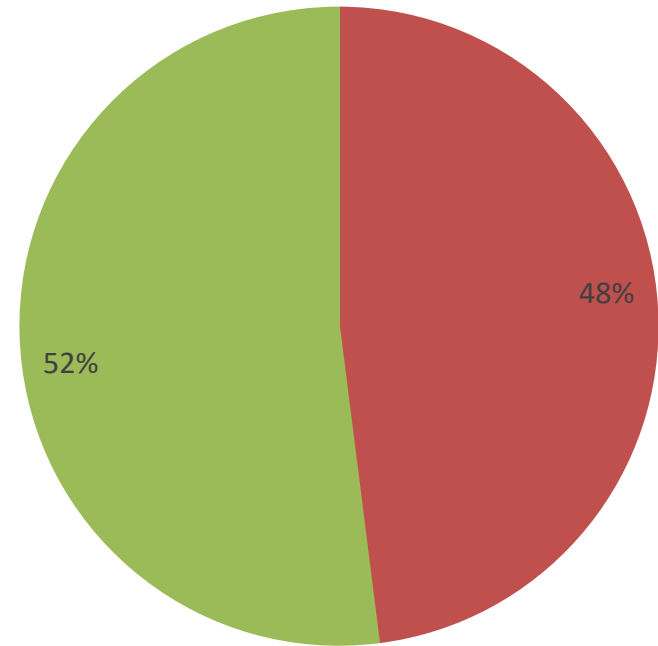
Have you seen any additional negative impact to component demand and/or production due to COVID-19 over the last 4 weeks?

March



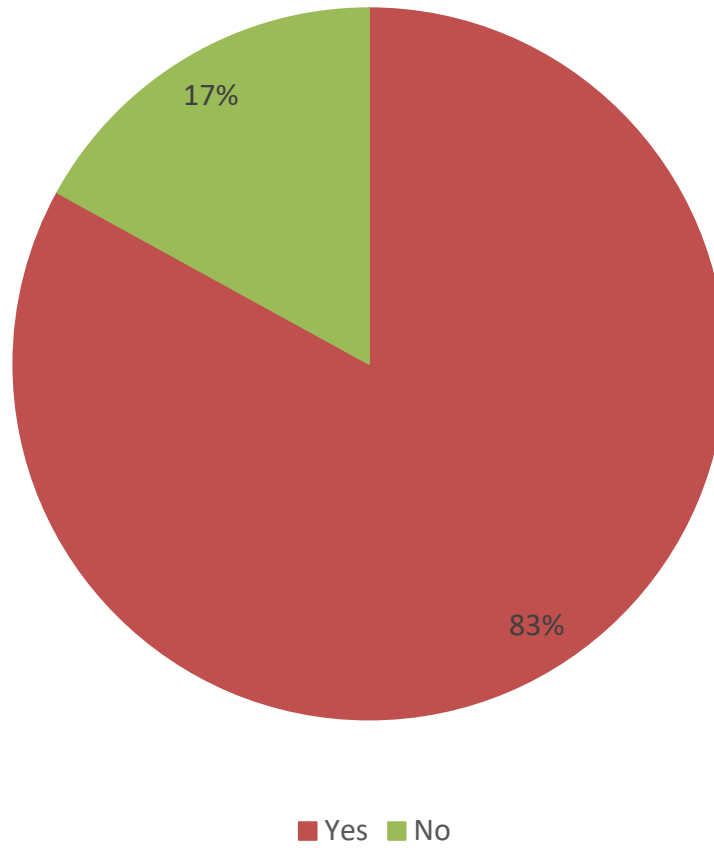
■ Yes ■ No

April

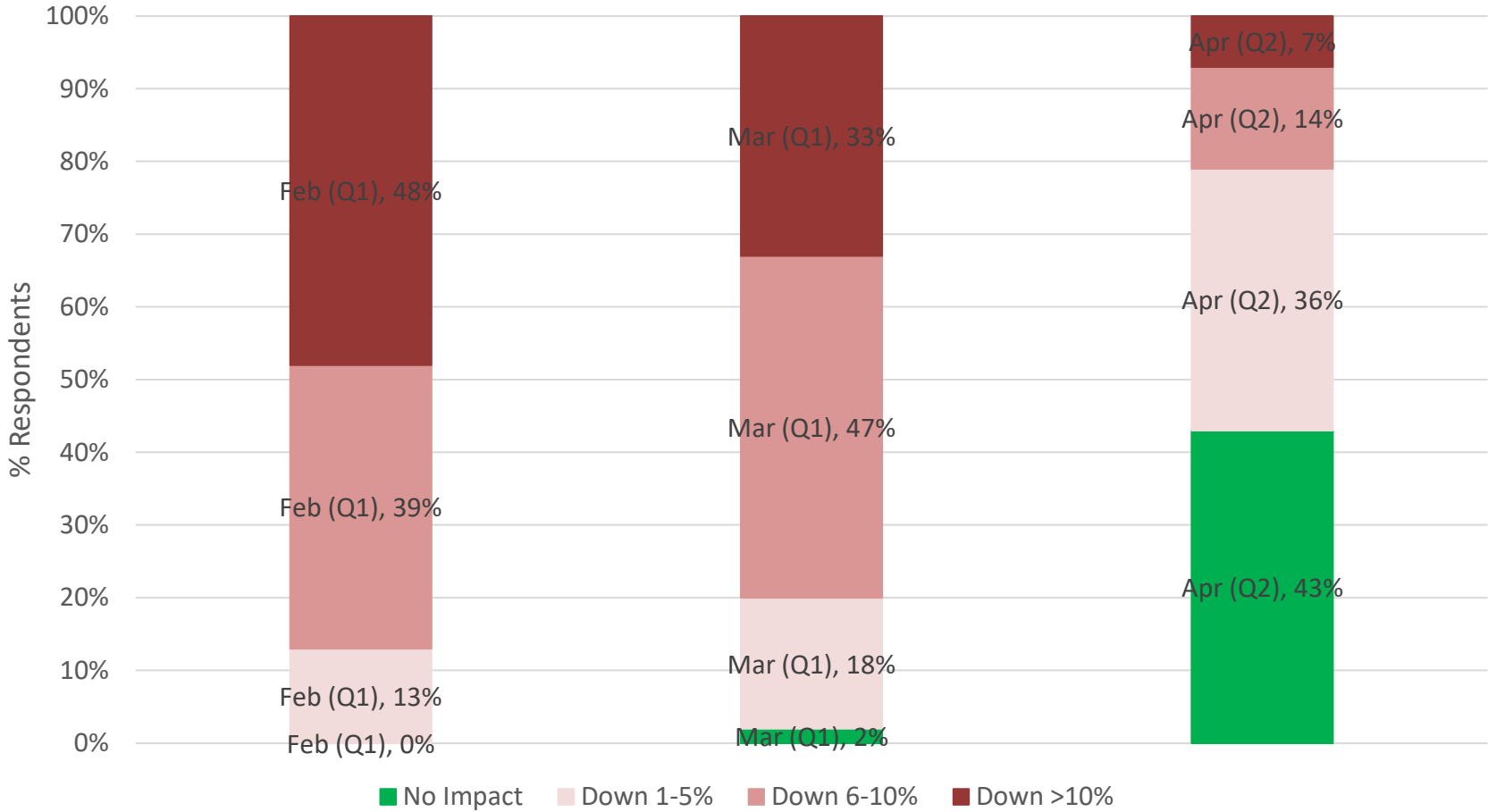


■ Yes ■ No

February Survey: Have you seen a negative impact to component demand and/or production due to COVID-19?

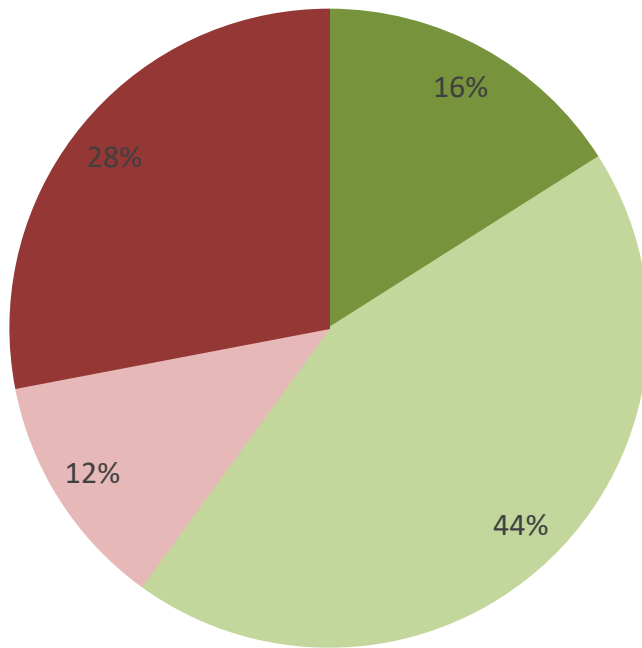


What % of C1Q & C2Q's electronics production do you think this will impact vs. previous plans?



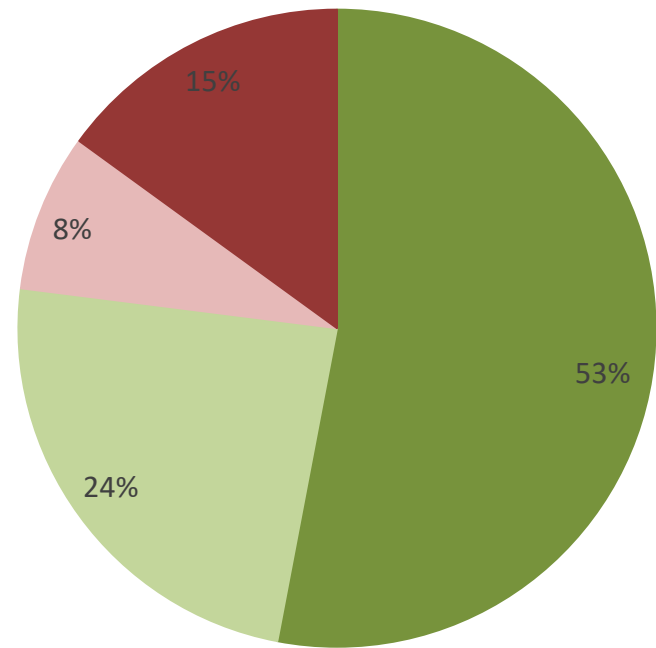
When do you think the production shortfall from COVID-19 will be made up?

March



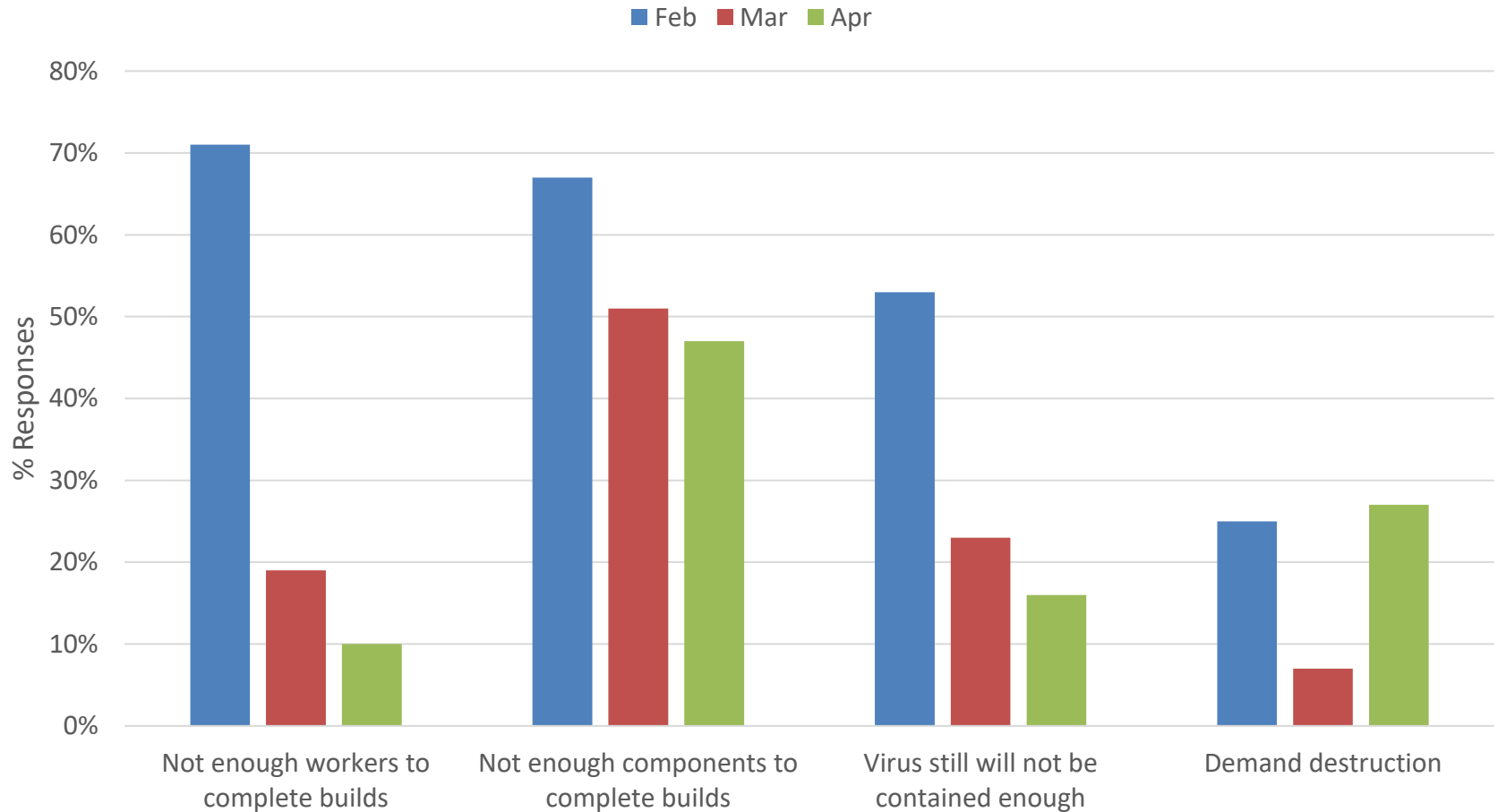
■ C2Q ■ C3Q ■ C4Q ■ Never

April



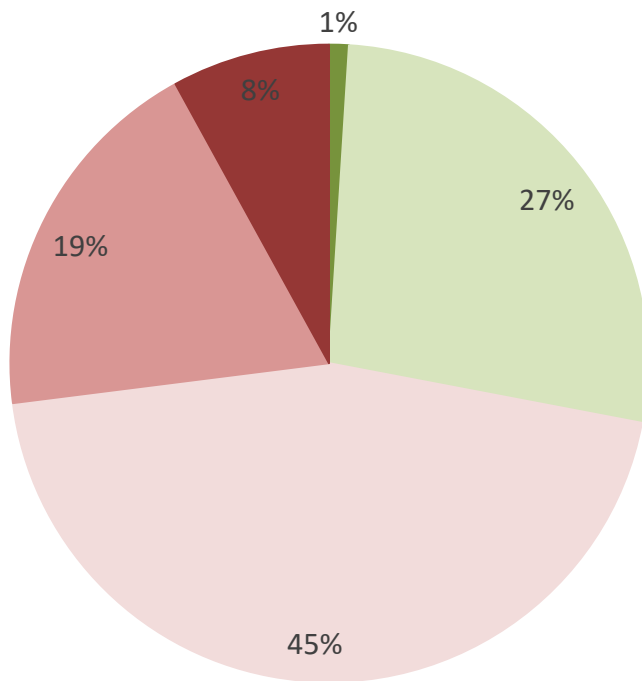
■ C2Q ■ C3Q ■ C4Q ■ Never

If production delta will not be recovered by C2Q, why? (multiple answers OK)



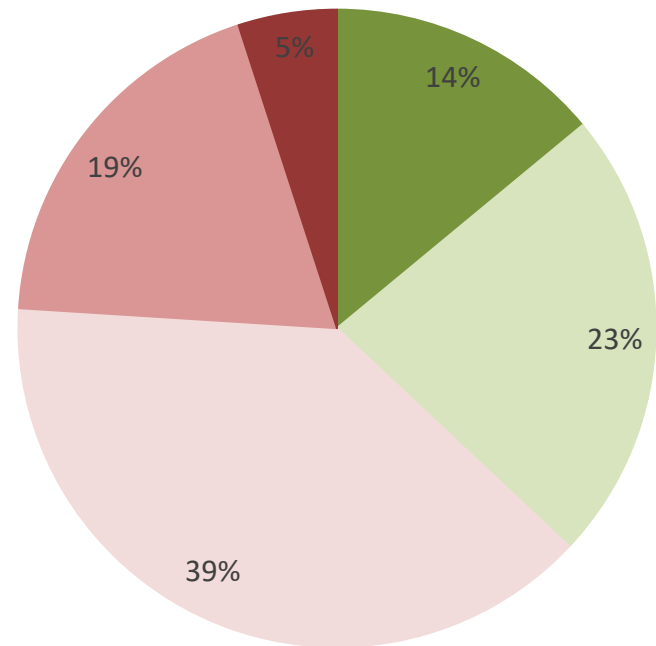
How much demand destruction (if any) do you think we will see due to COVID-19?

March



■ None ■ 0-5% ■ 6-10% ■ 11-15% ■ >15%

April



■ None ■ 0-5% ■ 6-10% ■ 11-15% ■ >15%