



Detroit – Washington D. C.

A faint, light gray world map is centered in the background of the slide, showing the outlines of the continents.

Japan Earthquake Impact Survey Results

Original Equipment Suppliers Association
Date: March 21-30, 2011

504 surveys distributed
103 survey responses

Japan Earthquake Impact Survey Summary

	Yes
Does your company have operations in Japan?	55%
Did your company experience any facility or equipment damage that will require increased levels of capital expenditure over the next 12 months? (filtered to include only those companies with operations in Japan)	13%
Have you identified content in your supply chain (any tier) that is sourced in Japan?	78%
Have you been able to communicate with every one of your Japanese suppliers regarding their ability to produce and ship parts?	73%
Have your Japanese suppliers assured you they will meet your required release schedules?	37%
Have you been able to assure required inbound/outbound transportation?	67%

Local Japan Operations:

What contingency plans have you put in place to communicate with employees regarding operating schedules, safety procedures, etc.?

Responses

Crisis Management Teams

- Crisis management team has coordinated efforts of various departments, including work schedules at Japanese locations (e.g., managing around power blackout periods), reviewing supply chain impacts, etc.
- Nothing specific beyond "war rooms" and extreme amounts of communication by any and all means.

Relocation of Staffs/Travel Restrictions

- The team has been moved to an alternate sales office in Hiroshima.
- Moved all expatriates out. Gave employees the chance to move south. Rented 400 apartments.
- All expatriates evacuated from Japan and local employees are working at home.

Employee Communications-Related

- All 780 employees were personally contacted after the earthquake; employees were given paid leave of absence from 14-21 March.
- Met with all team members to explain the possibility of a slow down and or voluntary time off.

Local Japan Operations:

What policies did you enact to support expatriates in Japan?

Responses

Return to Home Country Options

- Allowed them to go back to home country if they desired. Very few have left as our headquarters and operations are a long way from nuclear plants.
- Expatriates were given the opportunity to move to the west coast of Japan or return to their home country.

Relocation Options

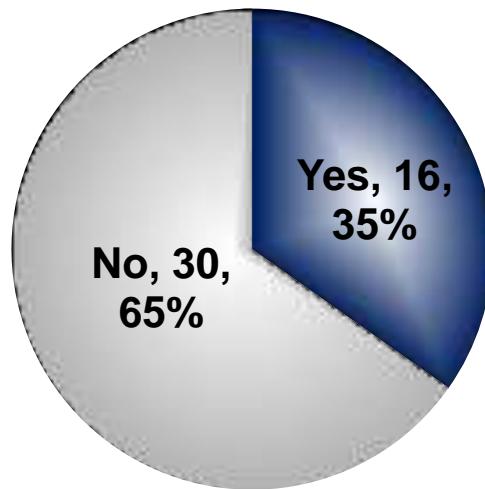
- Offered to pay to move employees from Tokyo area to Nagoya.
- We have moved the expatriates out of Japan due to their proximity to Tokyo.

Other

- We are preparing policy guidelines to use if necessary.
- Provided food, supplies, radiation measurement equipment, evacuation plans.

Local Japan Operations:

Do you have any special plans for evacuating expatriates from affected areas of Japan, either to other parts of the country or back to their home countries?



Return to Home Country Options

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Relocation Options

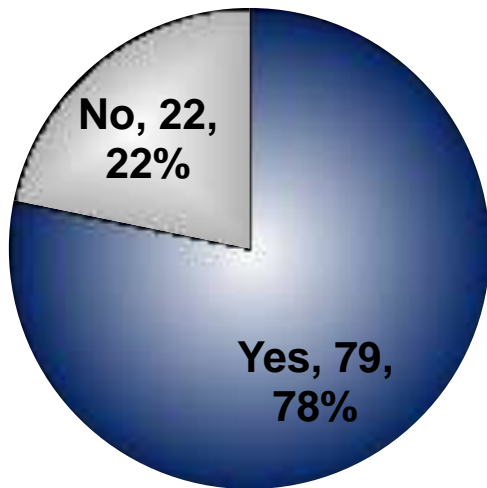
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Supply Chain:

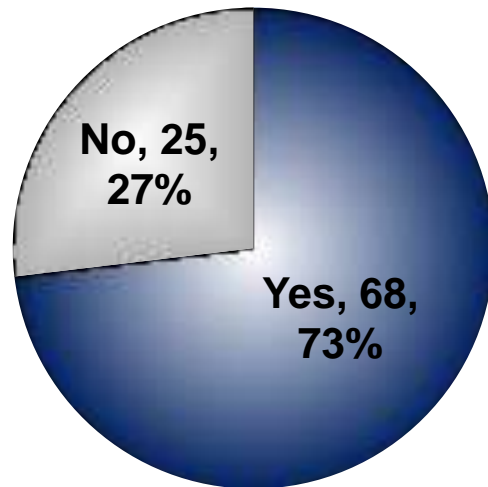
Have you identified content in your supply chain (any tier) that is sourced in Japan?



- Electronic components. (3 similar responses)
- Few Tier1 components; majority at Tier2 and Tier3 levels.
- All suppliers and sub-suppliers are identified and tracked daily with a G/Y/R rating.
- We are a Tier1 electronics supplier, so we have several electronic components that are supplied by tier companies within Japan.
- Tier1 like seals and greases and Tier2 like forgings and certain specialty steel.

Supply Chain:

Have you been able to communicate with every one of your Japanese suppliers regarding their ability to produce and ship parts?



- Initially there was no way to communicate with suppliers in the damaged areas. But, being a Japanese Tier1 company, within 5 days we were able to make contact and establish status of facilities and equipment. We are still in the process of determining supply schedules as we get more information from the lower tiers.
- Direct communication with Tier1 suppliers in Japan; Tier2 and Japanese Tier2 suppliers via our Tier1.
- We have contacted every Tier1 and dug as deep as Tier5 or Tier7 in a lot of cases.
- At least to some level. Some partner sites were destroyed but their affiliated locations have taken on communication and operational roles.

Supply Chain:

What is your most critical component or material?

Electronics:

- Electronic components (11 similar responses)
- Semiconductors (5 similar responses)
- Electronic chips (4 similar responses)
- Switches (2 similar responses)
- Terminal inserts
- Difficult to judge still, but most likely semi-conductors and custom ICs
- Several. The most difficult to track are ASIC's and Semiconductors - where front end production is in Japan, but back end / final product comes from other countries
- Copper electric motor commutators
- Sensors

Raw Materials:

- Steel (9 similar responses)
- Resins (8 similar responses)
- Paint (2 similar responses)
- Pigments (2 similar responses)
- Aluminum
- Polymers, rubber chemicals and silicone
- Engineering materials
- Specialty steels
- Copper powder and a custom resin
- Synthetic rubber and steel cord
- Rubber
- Specialized paper
- Oil
- Chemicals used in our supply chain to produce rubber and plastic materials
- Polyurethane
- Most critical is EFEP
- Rubber EPDM, friction materials
- Chemicals
- Valve spring quality steel rod
- Adhesive
- Raw material - epoxy powder for armature and S45CF steel

Supply Chain:

What contingency plans have your suppliers put in place to meet your needs?

Resourcing, Relocation of Production

- Trying to get approved alternate sources (5 similar responses)
- Submitting domestic alternative. (2 similar responses)
- Reviewing alternate sources of the material. (2 similar responses)
- The supplier is working on it - plan is not reliable, thus our resourcing actions.
- Can find suitable substitution in U.S.A.
- Working directly with customers for work-arounds.

Inventory Adjustments

- Frankly, not many with the suppliers who experienced damage. Not too many alternative
- Ship from inventory, pulling stock from distributors, alternative materials and expedited shipments.
- Buffer stocks.
- Using stocks in warehouse or transit.

Supply Chain:

What contingency plans have your suppliers put in place to meet your needs? (continued)

Tooling Moves

- Moved tooling to other unaffected plants in Japan and Southeast Asia. Generally OK for the next four weeks due to in transit that left before March 11. Beyond that we expect a lot of air freight when contingent supply is confirmed.
- Semiconductor manufacturers have agreed to move production to another facility within Japan.

No Firm Contingency Plans

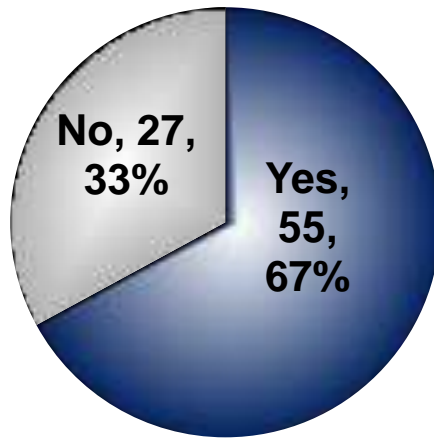
- In many cases the issues are infrastructure related and contingency plans are essentially impossible to implement.
- Most plans known. Situation is still being evaluated relative to power and logistics.
- None at the suppliers. We are currently requesting OEM support for supplier changes.

Other

- Alternate shipping ports, adjusting production to scheduled blackouts.
- Installed generators for continuous power supply of heat treat operations; and moved production locations.

Supply Chain:

Have you been able to assure required inbound/outbound transportation?



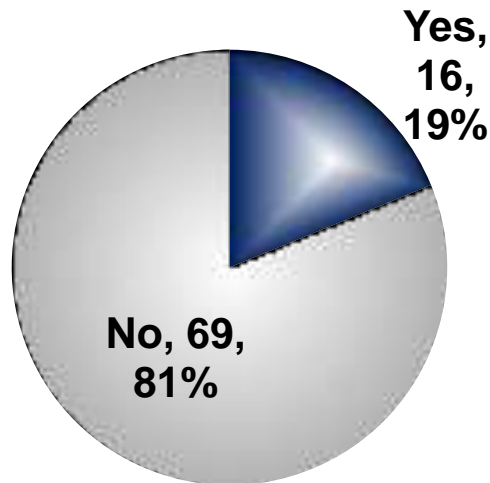
- Yes, but with delays (5 similar responses)
- Almost 100 percent in/out of western ports (Kobe, Osaka). Some forwarders like Yusen and NYK reporting delays due to port changes and reroute of port stops. Adding 5 days delay.

Comments (related to 'No')

- Gas is rationed; logistics is an issue.
- UPS and FedEx are not providing pick-up or delivery service to 13 zip codes in Japan.
- The road traffic has not yet been recovered in the northeast Japan. So far air freight is restricted and the port we use for sea freight, Yokohama is facing delays and back-log.
- There are still issues with the transportation infrastructure and in some cases our suppliers are capable of producing product, but unable to ship due to problems at the ports as well as container shortages.
- Not sure yet. Most of our suppliers have stock in U.S. warehouses.

Supply Chain:

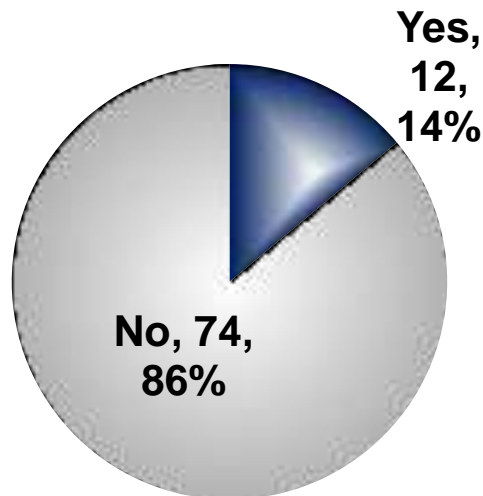
Have any of your suppliers cited force majeure related specifically to their own facilities being damaged or offline?



- We have received only a few very general force majeure letters.
- One electrical component supplier cited force majeure.
- A statement is currently being prepared, we have not yet received this.
- We have received five force majeure letters.
- We have been advised that FM may come into play due to supply issues. We have also advised some of our OEM customers as well.
- One. They have cited power and transportation issues.
- Received letters from some of the friction suppliers.

Supply Chain:

Have any of your suppliers cited force majeure related specifically to lack of supply from Japanese sources?



Comments (related to 'Yes')

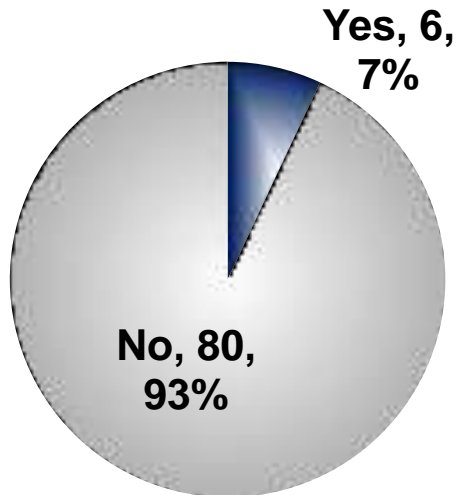
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- Received letters from some of the friction suppliers.

Comments (related to 'No')

- This is an American legal tool. In Japan, they do back-flips to find solutions and no one has given up yet. I expect this will be a very common term used in dealing with U.S. OEMs in the coming months.
- Not so far, but the complete impact is still being assessed. Will take another 2-3 weeks.
- No formal notices yet, but we would expect some to come.
- This answer may require some special case revision as time progresses.
- Not yet. But some have started verbal communications in that direction.

Supply Chain:

Do you have any plans or are you considering plans to scan exports from Japan for residual radiation?



Comments (related to 'Yes')

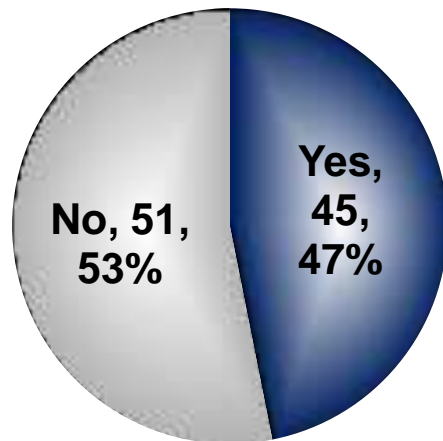
- Limited to affected site. As needed to assure customers and meet our own global standards of quality assurance.
- Government agencies taking the lead but we are monitoring this issue and may begin scans ourselves.

Comments (related to 'No')

- We are considering scanning parts from the Fukushima region that are being delivered to our manufacturing facilities within Japan. At this time, we have not received any components from that region.
- We trust U.S. Customs and Homeland Security has this issue under control.
- We do not have plans. We have asked our Japanese supplier and they said they have no plans for this activity.

Customers and Other Stakeholders:

Have your production schedules been reduced by any customer in direct relationship to the reduction in Japanese vehicle or component production capability?

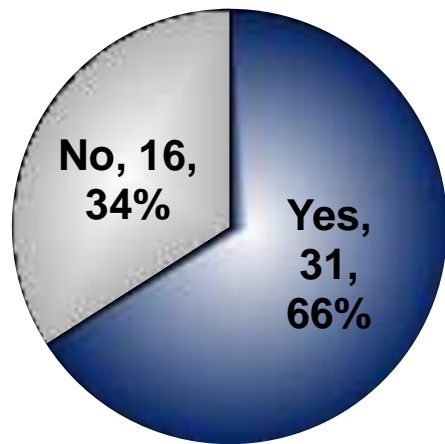


Comments (related to 'Yes')

- GM N.A. - Shreveport closure. (5 similar responses)
- GM (3 similar responses)
- Toyota and GM but expect more.
- Toyota has cancelled overtime at a few plants.
- Honda, Toyota, Nissan, Mazda and Mitsubishi all shuttered plants in Japan and cut overtime and Saturdays in the U.S.
- Mercedes is reducing daily shift hours and have eliminated Saturdays.
- Mazda Flat Rock.
- Still analyzing, but we expect customer impacts in various regions as we sell to all global OEMs.

Customers and Other Stakeholders:

If your production schedules have not be reduced to date, do you believe your company is at risk over the next 45 days for any reduction in customer production schedules?



Comments (related to 'Yes')

- Risk with all customers. (3 similar responses)
- Electronics and sub-supplies to China.
- All customers will feel this impact globally over the next month. Some electrical components will hit global shortages and everyone will be impacted.
- Being a Japanese company, we are fully aware of the supply issues. Electronic component supply issues already existed prior to the earthquake so it is expected that a shortage will happen. We also know that many of the lesser tier companies that experienced damage will have a delayed impact on supply as the Tier1 supplier inventories are depleted and are not replenished due to the lower tiers.

Customers and Other Stakeholders:

What contingency plans have you put in place to communicate with customers?

Escalated Communications

- Daily communications on status of supply. (10 similar responses)
- OEMs are individually bombarding us with daily requests for update, forms to fill out, and very detailed supply chain requests. We do not require a contingency plan for this. It is difficult enough just keeping up with all the requests.
- We are communicating several times per day with each of our customers. Discussing both our ability to supply short, medium and long term as well as their production reductions plans.
- Constant communication. Method and timing dictated by customer.
- We hold twice a day meetings to get supplier updates and pass along pertinent information to our customers at least daily.

Customers and Other Stakeholders:

What contingency plans have you enacted to communicate with government agencies, media and other external stakeholder groups?

- Website updates with special section on Tohoku Earthquake in Japan
- We have a crisis PR center in Japan that is prepared to discuss and we have a website up that shows our status.
- We have developed an internal talking points document on our activities to use with media. Can be used with other sources.
- Media standbys, statements when needed to provide daily updates.
- Any disruptions will be immediately communicated to our customers and stakeholders
- No external communications.
- Board and shareholder updates weekly.
- Issue daily report regarding the status on all the latest information for all to use and have a consistent message.
- Working with our government relations team to get insight into the latest on the radiation threat and what testing is being planned. Trying not to speak to the media - situation is too fluid.

Thank You

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