

# COVID-19: Supply Chain Assessment

March 19, 2020 | Vol. 1, Issue 1

As the latest news and recognized effects and impacts of COVID-19 unfold, Energy Solutions' Trade Ally Management Team is working to proactively assess supply chain and market impacts that affect our client's programs.

## Update 1: Method

Starting last week, the Trade Ally Management Team initiated comprehensive outreach to global, national, and regional market actors to gather market data and forecasts from supply chains across various technology areas. The team interviewed market actors to gather market data regarding the following:

1. **Product Availability** — provides insight on observed and/or anticipated impacts related to product sourcing, assembling, and/or delivery.
2. **Equipment Sales** — provides insight on observed and/or anticipated impacts or company directives put in place regarding inside sales, indirect sales, counter sales and availability of online sales.
3. **Service Providers / Contractors** — provides insight on company directives regarding delivering service to customers, e.g., are jobs suspended or are services deemed 'essential' and business as usual with social distancing in mind? If suspended or changed in any way, what are the impacts to the pipeline?
4. **Administrative / Application Submittal** — provides insight on company directives regarding work from home that may impact operations as well as participation in our client's programs.

## Update 2: Findings

**1. Product Availability and Manufacturing:** Strong inventories currently exist across all technology areas.

- a. Water Heating — North American factories are still operational.
- b. Pumps — North American and European factories are still operational, though impaired in Italy.
- c. HVAC — North American factories for unitary, chillers, and water source heat pumps are still operational. However, factories in Asia that manufacture VRF and mini and multi splits are impaired 20%-40% and are impacted by sourcing issues for components made in China.
- d. Lighting — Inventory of 45-90 days exists across categories though most products are sourced from overseas and expected to be impaired in coming months.
- e. Foodservice — North American factories are still operational but specialty equipment orders from Europe and Asia are expected to be delayed.

### 2. Equipment Sales:

- a. Distributors continue to place orders from manufacturers.
- b. Counter sales across all technologies are declining but online sales are increasing.
- c. Cash-and-carry Foodservice is down substantially.
- d. Direct and indirect equipment sales for new construction are forecasted to be postponed for 30-60 days.

The Trade Ally Team communicated with the following number of market actors per technology area:

HVAC	10
Foodservice	16
Water Heating	7
Pumps	5
Lighting	10

### 3. Service Providers / Contractors:

- a. HVAC contractors and Water Heating plumbers are considered essential / critical and are mostly still open for business and are sending their service providers into the field.
- b. Distributors are open for business and allowing limited numbers of employees to work from home.
- c. Government projects have been largely suspended.
- d. The cities of New York and Boston have halted all new construction and it is reasonable to expect the same for all major metropolitan areas in the coming days / weeks.

**4. Administrative / Application Submittal:** Across all technology areas there is a fairly even split between those employers who allow work from home versus halting operations. Distributors see no impairment in their ability to continue to submit applications to programs.

**5. General:** As of March 19, 2020, we estimate the sales volume impact at END OF YEAR to be:

- a. HVAC: down 15% across all categories.
- b. Foodservice: down 30% across all categories.
- c. Water Heating / Pumps: down 15% across all categories.
- d. Lighting: down 20% across all categories (biggest wildcard due to product supply).

### Update 3: Action Items / Moving Forward

- Your program managers are reviewing historical program data to determine what percentage of projects are institutional. We assume these projects are suspended for 60 days and plan to adjust the program forecast accordingly.
- Trade Ally Management Team is continuing to monitor trends and communicate with the market to provide continued updates.
- Energy Solutions is working to develop recommendations on mitigation strategies that can be employed to boost program performance.

**Disclaimer:** The COVID-19 virus pandemic is a rapidly evolving situation, and this is our best estimate of forecast impacts at this time with the information available. We will be continuously updating this forecast and adding details as more information becomes available and the actual impacts of the pandemic on the markets are felt. These updates will be versioned and dated so you can know at what time they apply.

