April 2022

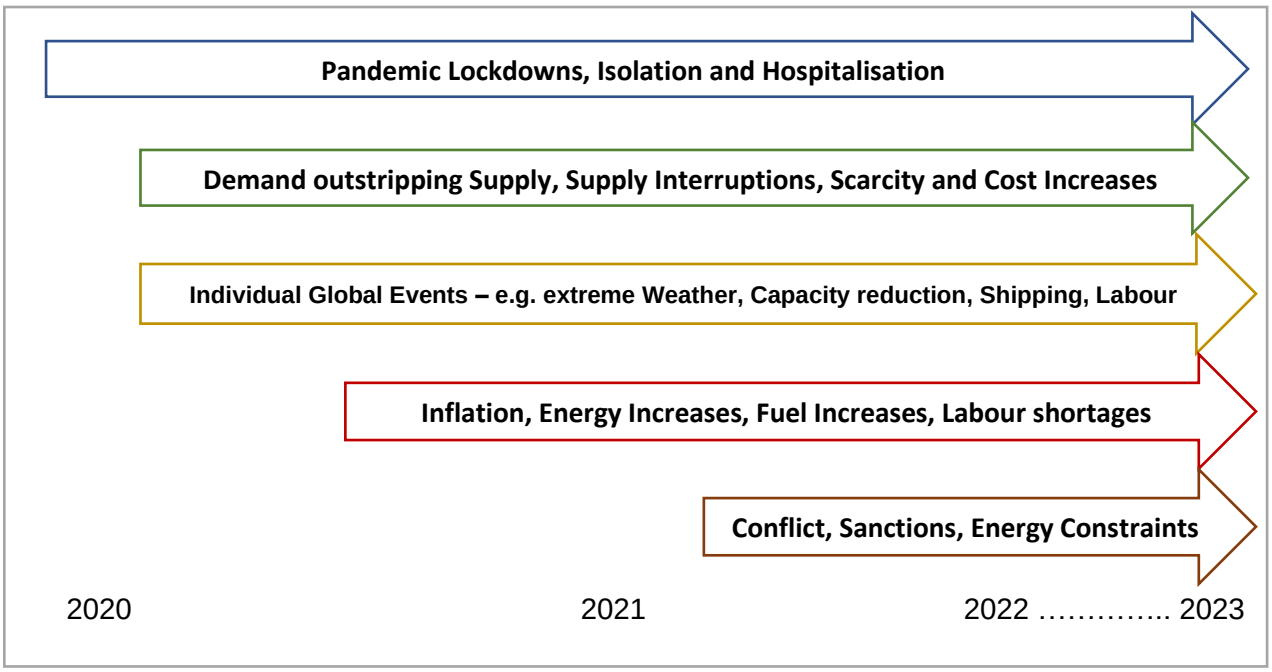
Managing the Supply Chain Together

A revised Statement from the HEA looking at the impact on the Industry of the Global Materials Shortages and Supply Chain Issues

On behalf of the Highway Electrical Association (HEA) and the wider industry, HEA and HEA-HEMSA Councils set up a steering group representing contractors, designers and manufacturers, chaired by the then President, Bob Gaskell in 2021 to undertake a review of supply chain issues. The HEA have released and updated statements in June 2021, November 2021 and now April 2022.

The Construction Leadership Council have also updated their statement on Construction Product Availability from time to time, the latest March 2022 issue can be read here . Fundamentally, the Highway Electrical sector is a small, albeit unique, part of this wider industry, and we are encountering similar issues.

The supply chain has suffered from the global effects of the pandemic lockdowns, isolation and hospitalisation from 2020 to date, disrupting supply, which together with increased and unpredictable demand and other major disruptive events across the globe have resulted in shortages of resources including raw materials, labour shortages, shipping and delivery delays causing longer lead times, and increased costs and price increases. The effects of all of these have been both ongoing and concurrent. The scarcity of materials and labour and the delays and price increases are being felt to different degrees throughout the different supply chains and we continue to experience uncertainty and volatility both globally and as an industry.



Pictorial Timeline of Cumulative and Concurrent Factors Affecting the Supply Chain

The conflict in Ukraine, coupled with sanctions and additional tariffs on Russia and their exported goods have added to the disruption, scarcity, cost increases and uncertainty. Ukraine in particular is the major exporter of raw steel into Europe; and Russia and Ukraine personnel account for some 15% of shipping crews which has had a knock-on effect on delays in shipping.

The increases in energy costs – both electricity and gas – coupled with increasing inflation, increasing interest rates, increased fuel costs, increasing National Insurance and potential wage inflation have also had an effect on the cost of design, manufacturing, delivery, installation and maintenance; with local authorities facing energy cost increases of in the order of 20-70% this year. In addition the reform of red diesel and other rebated fuels coming into force in April 2022 has increased the cost of specialist plant such as cranes.

The main areas affected can be summarised as:

- Energy – unprecedented levels of increases causing additional costs in administration, manufacturing and operations such as galvanising and factory applied coatings as well as impacting local authority budgets
- Fuel – see transportation below
- Labour – scarcity of labour – particularly skilled labour - across many sectors and wage pressure due to inflation and rising costs; Covid isolation and hospitalisation affecting staff numbers; lifestyle resignations and / or additional demands for flexible working causing staff pressures
- Transportation – increases in container costs of up to ten fold in the recent past and increased fuel costs will impact further; congestion and delays in shipping; increased air freight costs; increased vehicular transport costs due in part to fuel costs; scarcity of labour
- Raw materials – e.g. aluminium, steel, copper, plastics, wood and cardboard - scarcity, longer lead times, increased costs and unpredictable supply and demand
- Electronics – scarcity, longer lead times (52 weeks not unknown, and even then, sometimes orders are only partially fulfilled), increased costs and reducing availability, unpredictable supply and demand

The main global materials issues affecting our industry cover:

- aluminium (columns & luminaire housings);
- copper (cable; and brass – e.g. terminal blocks);
- steel (columns and feeder pillars);
- galvanising (due to increasing zinc and energy costs);
- electronic components including passives, discrete semiconductors, specialist semiconductors and LEDs (control components and lighting);
- coatings (both paint and cost of energy for baking)
- plastics (cables, luminaire housings and optics)
- wood and cardboard for packaging (whilst having stabilised recently, the conflict and sanctions will impact certain wood types and consumer demand is still high causing high demand for cardboard)

The highway electrical industry is a small player on the global stage, and electronic components are already in high demand, with significant falls or disruption in output for both the automotive and consumer electronics industries. Double digit to tenfold price increases have been seen since 2020 with lead times on items such as electronic components typically of 52 weeks.

The purpose of this statement is to promote the unique position the Highway Electrical sector is in, raising awareness to our clients and seeking to work collaboratively to address the issues we face, promoting understanding from buyers and organisations that, whilst we all strive to deliver to our customer's needs, we are collectively facing global issues that are impacting our sector. As an industry that has the added responsibility of working on electrical systems in a highways environment, we want to make sure quality is never unduly compromised and waiting for or obtaining the right products and materials may further compound the effects on lead times and costs. We respect each individual company's commercial position and strategy, however all of the above mentioned is being passed down to our industry from the wider global markets and in turn we are all working to find the best solutions to deal with this.

Whilst the current projections are for issues to remain until well in to 2023 and possibly even beyond, additional items such as inflation; gas and electricity price increase;, dissipation in the HGV and other skilled labour areas; shipping delays, congestion and increased costs; and disruption particularly in steel production from Ukraine as well as the effects of sanctions are making the situation much worse. This industry has proven to be resilient in the past and we will rise to this new challenge. Manufacturers are doing what they can to mitigate issues where they can, for example by re-engineering, but the options available are very limited. For contractors, the use of the Early Warning Register, Meetings and Early Warning Notices, or in the limit Force Majeure or the Doctrine of Frustration may be the only recourse available to them.

It is not an exaggeration to say that the supply chain issues are unprecedented, the combination of which has not been seen in a lifetime, and the effects of which could be with us for months and potentially years to come.

What is critical is to ensure we all work together to enable the continuation of a sustainable sector. This means working with partners in the supply chain to mitigate the potential complete erosion of margins, to enable our supply chain partners to continue to function and invest in their people.

Forward planning and forward visibility of spend may help in dealing with these issues and the Highway Electrical Association, on behalf of its members and with its members, will work collaboratively with all clients to address these issues with the least impact possible to the end user.

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