Construction Products and Supply Chain inflation report

Updated 16th December 2022

Executive summary:

- The construction industry is currently facing unprecedented risks attributed to the impact of the Russia-Ukraine war, Rising Energy Costs, Covid-19, Brexit and Industrial Action. The key risks we are facing are rising material, fuel, energy and shipping costs as well as material shortages and delays due to reduced shipping capacity to the UK, overseas Covid 19 lock downs and industrial action at key UK ports.

- Rising Energy Costs are a key risk to many of the manufacturing markets and are currently the main driver behind increasing pricing structures within product groups such as bricks, terracotta, glass and aluminium. Economic analysts have forecast that such rapidly rising energy prices could push UK inflation as high as 18% next year, the highest rate in almost 50 years.

- Construction News reported that close to 17,000 construction related businesses are at "significant risk" of insolvency due to rising construction costs, high levels of inflation and rising interest rates on debt.

The following report provides further insight to the various markets and the apparent risk of each market to the construction industry, as well as forecasting where the markets may head in the next 4 to 8 weeks.

Key changes this month:

- **Steel Reinforcement** pricing has reached the bottom of the market at c£980.00 Per Tonne. There remains a large amount of uncertainty in the market from Mills, Fabricators and Importers with prices starting to rise and forecast to continue. The removal of energy support for businesses in the UK from 31st March 23 is a risk as pricing is forecast to substantially increase in line with this withdrawal.
- **Structural Steel** remains at Amber as demand has continued to reduced during November and early December, however caution should be applied as Energy Support for businesses is set to end 31/03/23, the withdrawal of this support will most likely result in price increases.
- **Steel Profiles** have moved from Amber to Green due to pricing reaching a stable and constant position
- **Aluminium** remains at Amber, however pricing is starting to take an upward trend. During November Aluminium has increased from $2,215.00 Per Tonne to $2,461.00 Per Tonne. The forecast in the market is that costs will continue to rise during the early months of Q1 23.
- **Plasterboard** has moved from Amber to Green due to stabilisation in supply to market and forward notification and greater visibility of pricing levels.
- **Facing Brick** demand has continued to reduce. Caution should still be applied as Energy Support for businesses is set to end 31/03/23, the withdrawal of this support will most likely result in price increases and increase the threat of factory closures during the colder months of 2023.
- **Energy** pricing has increased during December, with wholesale pricing for Gas reaching a high of 372p per therm on 7th December and Electricity reaching a high of 394p per therm on 8th December

RAG risk summary

Material	RAG	Summary
Steel reinforcement	RED	Pricing to the market has reduced in line with a reduction in demand and a strengthening foreign exchange between GBP and USD. However, scrap dealers have increased pricing and coupled with high energy, fabrication and shipping costs, the commercial benefit of a reduction in demand is limited as the market price and base cost are almost equal. Pricing has already started to increase and is forecast to continue to rise during December 22 and January 23
Cement	RED	Rising Energy costs are forcing cement production costs upwards which will be reflected in market wide price increases in the coming months. These increases will impact Cement, Ready Mix Concrete, Ready Mix Mortar and Pre-Cast Concrete Products. Precast products to increase by 5% to 19% in January 23
Bricks	RED	Demand has reduced and the manufacturers are now reviewing pricing structures once more with a view to filling their order books. Energy Support for businesses is set to end 31/03/23, the withdrawal of this support will most likely result in price increases and increase the threat of potential for temporary plant closures
Structural Steel Sections	AMBER	Market demand and pricing has reduced during November and early December, however Scrap and Iron ore pricing has increased. Caution should be applied as Energy Support for businesses is set to end 31/03/23, the withdrawal of this support will most likely result in price increases.
Aluminium profiles	AMBER	The cost of Aluminium on the London Metal Exchange (LME) has increased continued to increase during November from $2,215.00 Per Tonne to $2,461.00 The forecast in the market is that costs will continue to rise during the early months of Q1 23.
Glass	RED	Raw material shortages leading to increased demand and Raw material prices continue to increase. Some manufacturers are applying Energy Surcharges to their pricing, which is linked directly to the Gas Index Price for the following month.
Plasterboard	GREEN	Supply of materials now returned to normal and allocation system has been removed. Status has returned to Green although price increases are pending for Jan 23, these increases are known and can be mitigated.
Steel profiles	GREEN	HRC pricing has continued to fall during November with European, North American and Chinese markets all showing cost reductions and returning to pricing levels in line with this same point during 2021. HRC This category has moved to Green due to pricing reaching a stable position.
Gas	RED	During early December gas pricing has increased. November closed out at 330p per therm and measured on 7th December gas had reached a price of 372p per therm.
Electricity	RED	Electricity Market tracks the gas market and pricing has increased during early December. November closed out at 340p per therm and measured on 8th December Electricity had reached a price of 394p per therm.
Semi-conductors	RED	Global shortage resulting in extended lead times and higher costs for our IT and electronic equipment.

RAG status summary

Material	Fast link to report page	Trades affected
Steel reinforcement	Steel reinforcement	RC frame, groundworks, civils
Steel sections	Structural steel sections	Structural steel frame
Steel profiles	Steel profiles	Drylining, fit-out, SFS
Cement	Cement	RC frame, groundworks, civils, brickwork
Bricks	Bricks	Groundworks, brickwork, envelope
Aluminium profiles	Aluminium profiles	Curtain walling, punch hole windows
Glass	Glass	Curtain walling & Window Systems
Plasterboard	Plasterboard RAG	Drylining, fit-out
Gas	Gas	General impact on all business
Electricity	Electricity	General impact on all business
Semi-conductors	Semi-conductors	General impact on all business

Steel reinforcement

RAG Status: RED

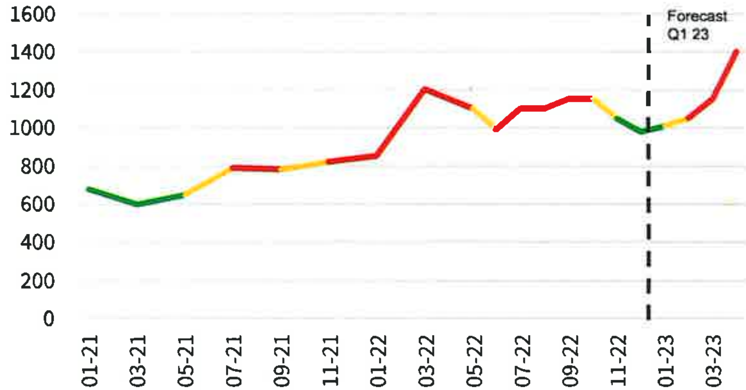
Trades affected
- RC Frame
- Groundworks
- Substructure

Key risks
- Demand for materials
- UK Quotas
- Increased shipping costs
- Energy costs
- Raw Material Costs

Changes on month
- Reduction in pricing to the market
- Caution regarding energy pricing beyond March 23

Current market position
- Current UK Rebar Market is c1.2m Tonnes per Year (c.650,000T UK produced).
- Ukrainian, Belarusian and Russian Quota Allocation now split between EU and Turkish Mills
- Turkish Coil is now restricted to 3,000 Tonnes per Quarter whereas previously is was unrestricted
- The new Quota Allocation allows for c503,000 Tonnes of import per annum. This still leaves strain on supply in a 1.2m Tonne Market
- The New UK Import Quotas are :
  EU Mills – 33,389 Tonnes Per Quarter (Stock Bar)
  EU Mills – 70,644 Tonnes Per Quarter (Coil)
  Turkey – 12,567 Tonner Per Quarter (Stock Bar)
  Turkey – 3,084 Tonnes Per Quarter (Coil)
  All Others – 7,142 Tonner Per Quarter (Stock Bar)
- It is estimated that over the next 2-3 years, large infrastructure projects will add around 300,000
- to 400,000 tonnes of rebar into the market thus adding pressure to the situation
- Chinese and Middle Eastern rebar is now under consideration for import, however, the Chinese and Middle Eastern mills do not hold UK CARES sustainability credentials – this is a Risk to the UK Construction Market
- Pricing has reduced slightly due to a reduction in demand with current pricing levels between £980 and £990 Per Tonne
- Scrap pricing has increased during late November and early December. However, a strengthening foreign exchange (£/$) has supported prices reducing slightly during November and early December.
- Caution should be applied to pricing as there is a high level of uncertainty in the market and European mills are reporting their base cost is now almost equal to Market Selling prices.
- Energy Support for businesses is set to end 31/03/23, the withdrawal of this support will result in price increases. Early indication is £300-£400 per tonne!

Steel reinforcement tracker £ per tonne



High Risk - avoid purchasing, where possible
Medium Risk - purchase small volumes for short term works
Low Risk - purchase large volumes and secure cost certainty

Structural steel sections

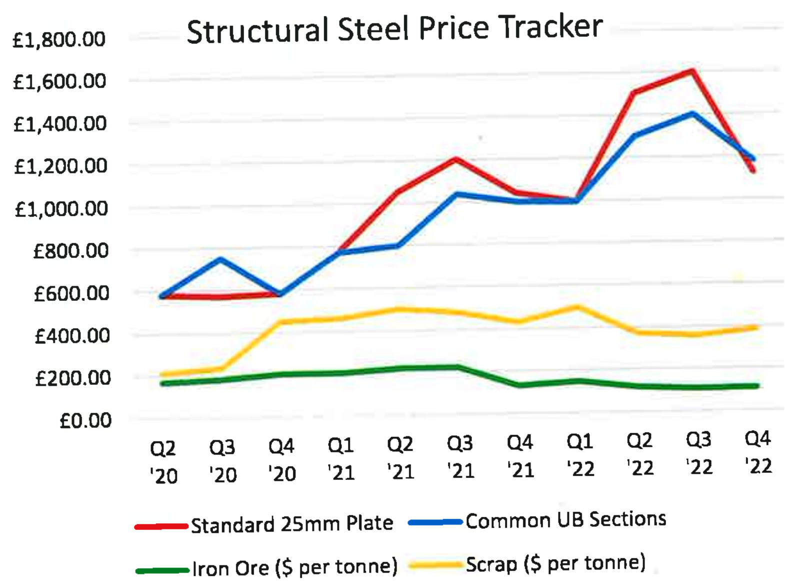
RAG Status: AMBER

Trades affected
- Steel frame

Risks
- Conflict between Russia and Ukraine
- Demand for materials
- Increased prices

Changes on month
- Reduced market demand
- Reduction in pricing of UB Sections
- Reduction in pricing of Steel plate
- Increased pricing of Raw Materials

Current market position
- Market demand has continued to reduced during November and steel mill order books are looking weak for early 2023 as stock holders have stocks readily available
- Pricing today is c15% lower than in November 2022
- Iron Ore pricing has increased during November and into early December, moving from $84 per tonne to $110 per tonne
- Scrap pricing has increased during November and into early December, moving from $350 per tonne to $385 per tonne
- Caution should be applied as this market remains volatile and as Energy Support for businesses is set to end 31/03/23, the withdrawal of this support will most likely result in price increases.



** Above price graph is materials only. Fabrication and Shipping are not included within these costs*

Steel profiles

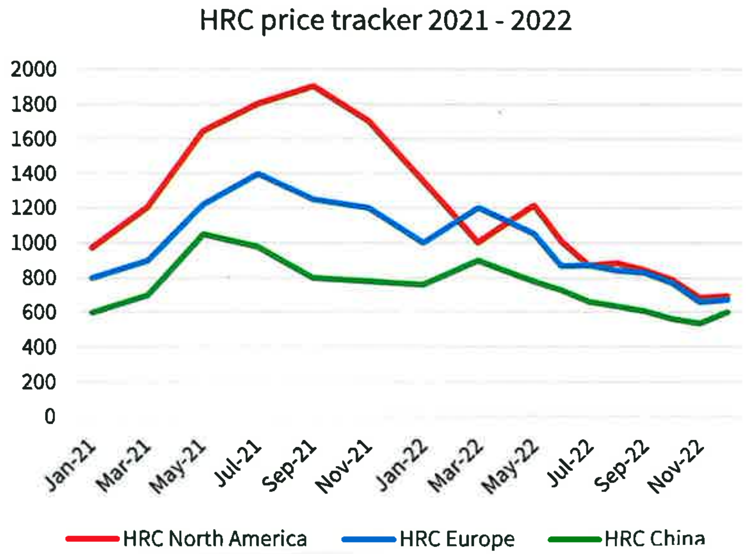
RAG Status: GREEN

Trades affected
- Dry lining
- SFS

Risks
- Conflict between Russia and Ukraine
- Demand for materials
- Increased prices

Changes on month
- No Change

Current market position
- Rising energy costs are a driving factor in the European Market price increases and High European dependency on Russian Fuels
- Shipping and Fuel costs continue to rise which will further impact on finished product costs
- EU HRC Mills applied a price increase during Feb & Mar as demand increased due to the "missing" volumes usually produced in Russia and Ukraine, ArcelorMittal have paved the way by looking for an uplift of over $168 per tonne
- Shortfall of material available from Russia and Ukraine may lead to material shortages if the other EU mills are not able to increase demand to cover the capacity
- Forecast that we will see price increases in the SFS and Drylining sectors in the coming weeks
- HRC pricing has continued to fall during November and has reached a stable position where fluctuation is up / down by $10 per tonne.



Cement

RAG Status: RED

Trades affected

- Groundworks
- Civils
- RC Frame
- Brickwork

Risks

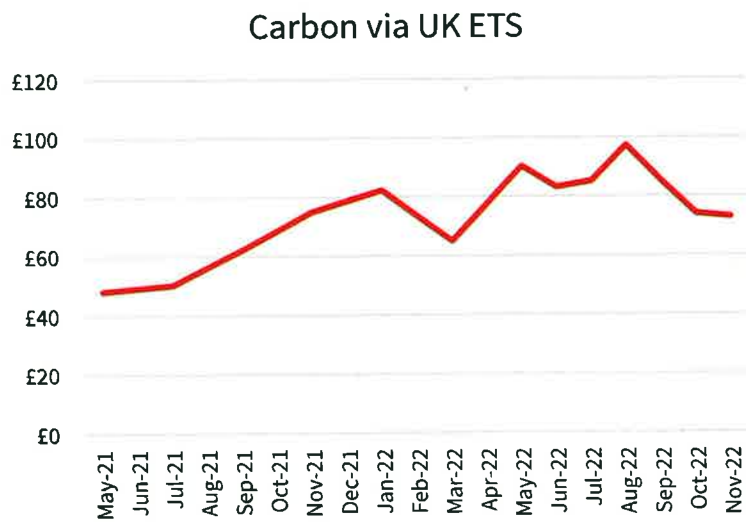
- Rising Energy Costs

Changes on month

- No Change

Current market position

- High European dependency on Russian Fuels: *(gas and oil)* are a risk to the market, natural gas is particularly vital as it fuels cements kilns as part of the production process.
- Increased gas costs will ultimately lead to increased production costs and thus increased finished material costs.
- A price increase of 19% was applied to Cement in January 2022. A further price increase of 20% was applied to Cement from April 1 2022 and a further price increase was applied during October of between 10% and 15%
- Carbon credits have stabilised at between £73.00 and £75.00 per tonne *(12^{th} Dec 22 : £74.59 Per Tonne)* therefore price increases are now being driven purely by energy costs.
- Raw cement, Ready-mix concrete, Ready-mix mortar and Precast concrete product producers have all announced price increase will apply early 2023.
- Precast producers have confirmed that January 2023 will see increases of between 5% and 19%
- A shortage of GGBS has increased pressure on cement demand as ready mix concrete providers are unable to blend cement and GGBS to produce mixes.
- GGBS pricing increased by c. £40 per tonne during Q3 which has again increased pressure on cement demand.



Bricks

RAG Status: RED

Trades affected

- Groundworks
- Brickwork
- Envelope

Risks

- Conflict between Russia and Ukraine
- Demand outstripping supply
- Material shortages
- Unpredictable price inflation

Changes on month

- Risk of price increase if Energy Support in the UK is withdrawn 31/3/23

Current market position

- High European dependency on Russian fuels *(gas and oil)* are a risk to the market, natural gas is particularly vital as it fuels brick kilns almost exclusively with very few exceptions.
- Increased gas costs are impacting the market from certain suppliers as 'energy surcharges' over and above the agreed cost of the bricks.
- Some Italian manufacturers have incurred 1000% price increases from their gas suppliers, leading them to reduce production to a third of capacity.
- Energy Support for businesses is set to end 31/03/23, the withdrawal of this support will most likely result in price increases and increase the risk of less efficient UK based brick plants being mothballed during the colder months of 2023 to help deal with the high energy costs of production
- Existing orders are working on a 10 to 20 week lead time for deliveries to site
- Manufacturer imposed allocation systems are making it difficult for large private schemes with short programmes to obtain bricks within the desired timeframe. This could ease during 2023 with a downturn in the housing market leading improved availability of bricks from most manufacturers

- Some brick types from the leading manufacturers are still being reported as not available until 2024
- Demand has reduced and the manufacturers are now reviewing pricing structures once more with a view to filling their order books. Some are actively re-negotiating the below applied price increases on a project specific basis.
- A potential down turn in the housing sector may allow for further price negotiations and a larger capacity to supply during 2023.

- Previously Imposed Price Increases, Q4 22 :
  Ibstock 28.5% on 1st October 2022
  Weinerberger 18.9% on 5th December 2022
  Forterra 15.5% on 3rd October 2022
  Vandersanden 32% 1st November 2022

Aluminium profiles

RAG Status: AMBER

Trades affected

- Curtain walling

Risks

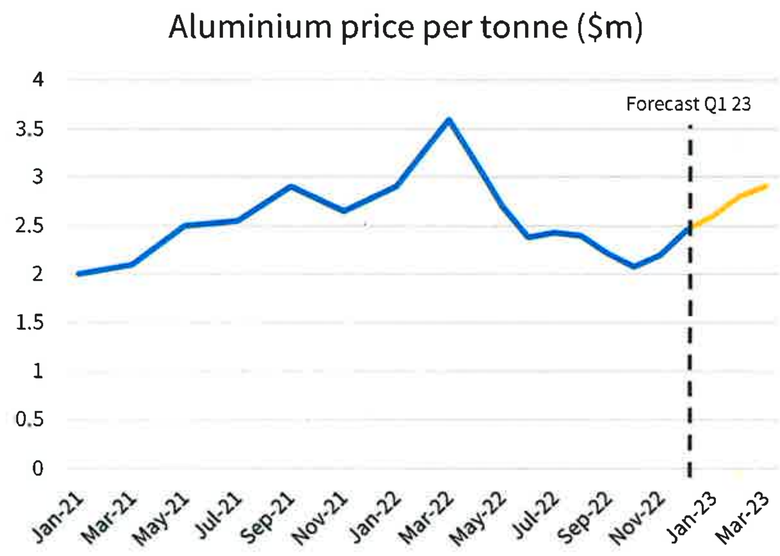
- Demand outstripping supply
- Rising cost of raw materials

Changes on month

- LME Aluminium price Increase

Current market position

- The cost of Aluminium on the London Metal Exchange (LME) has increased continued to increase during November from $2,215.00 Per Tonne to $2,461.00
- The forecast in the market is that costs will continue to rise during the early months of Q1 23.
- The aluminium billet premium remains highly inflated which is being driven by over demand in the market since early 2021 and rising energy costs.
- Billet premium benchmarking :
  2020 peak of $350 per tonne
  2021 peak of $1,175 per tonne
  October 2022 cost was £1,400 per tonne
- Supply chain intel suggests that price increases are unavoidable in the coming months, with some UK extruders already applying increases of over £200 per tonne.
- Energy is a driving factor in current pricing structures and intel from the supply chain forecasts that operational energy costs will have increased by approximately 300% from Q1 2021 to end Q4 2022.



Glass

RAG Status: RED

Trades affected

- Curtain walling & Window Systems

Risks

- Rising Energy Costs
- Raw Material Shortages
- Conflict between Ukraine & Russia

Changes on month

- No Change

Current market position

- Strong UK Pipeline with manufacturers operating selectively to ensure they can meet the current demand.
- Raw material shortages leading to increased demand and pricing of both PVB *(Polyvinyl Butyral)* and Soda Ash
- Raw material prices are also increasing linked directly to the UK Carbon Tax Credit costs
- Russian Manufactured Glass now banned from the European Market which has increased demand on UK and European manufacturing plants
- Some manufacturers are applying Energy Surcharges to their pricing, which is linked directly to the Gas Index Price for the following month.
- Float and Coated Glass manufactured in UK as well as Europe. UK market uses a mix of routes to market.

Plasterboard

RAG Status: GREEN

Trades affected
- Drylining

Risks
- Future Price Increases

Changes on month
- No Change

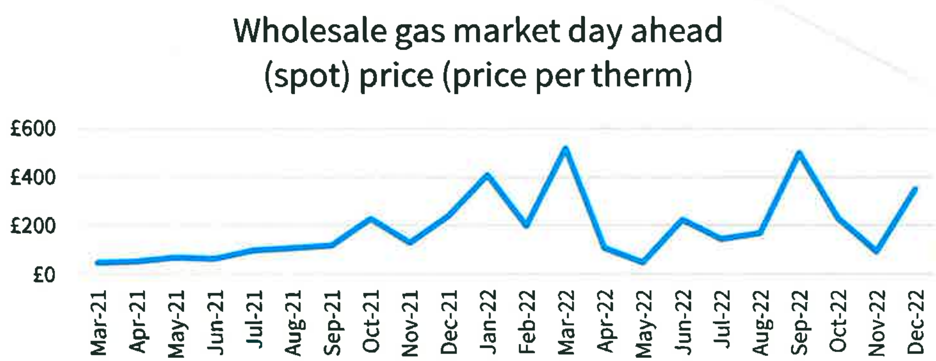
Current market position
- Plasterboard availability has stabilised and lead times have now returned to 3-5 days from receipt of order.
- Caution should still be applied to lead times as front loaded programmes to avoid the pending January 2023 price increases could create a false demand in the market and unexpectedly extend lead times.
- Volatile market as further price increases are announced and will apply from 1st January 2023, making it difficult to gain cost certainty against budgets already allowed for on our projects.

- British Gypsum, Siniat and Knauf Drywall have announced price increases of up to 18% from January 1st 2023.

- Siniat have announced an allocation system from 7th November 2022 to help them safeguard stocks from increased “distributor stock” ordering to avoid the January price increase. Allocation system is not deemed to impact on current live project work.

Gas

RAG Status: RED



Trades affected

- All

Risks

- Wholesale market increases
- Demand outstripping supply

Changes on month

- Gas pricing across Europe have increased during December

Current market position

17th March 2022

- Wholesale market has fallen this week on the basis of mild weather (reduced consumption), strong supply (continued from Russia into EU and alternative sources such as US) and hope for progression in peace talks between Russia and Ukraine. Future supply risks remain.

24th March 2022

- Market increasing again on news that Russia have stated that 'unfriendly' countries will have to pay for gas in Roubles.

21st April 2022

- Second phased assault from Russia in Donbas region has created concern in the market, resulting in further increases.
- Concerns continue over whether Russia will continue to accept payment for Gas in Euros.
- Vessels of LNG from Qatar, US and Peru due to land in April.

11th May 2022

- Shipments of LNG, milder weather and an over supplied gas market has seen the market fall to near "normal" levels
- European Commission to present plan on acceleration of renewables on 18th May

24th May 2022

- Sharp fall in gas price was due to excess gas supply in UK but due to limited storage facilities and the majority being sold to mainland Europe, the price

6th June 2022

- There are concerns over a cut in Russian gas supply to Denmark and Netherlands combined with slowing LNG arrivals to Europe

21st June 2022

- Flows from Russia into Germany and Italy reduced, feeding concerns in the market of shortages this winter.

23rd August 2022

- Large spike in pricing due to North Sea outages and announcement of maintenance being carried out on Nordstream 1 from 31st August for 3 days. Significant concerns that flows may not return.

21st October 2022

- Oversupplied system, above-normal temperatures and plentiful LNG supplies for remaining of October and November has seen market fall

3rd November 2022

- The government has announced a new Energy Bill Relief Scheme during September (subject to parliamentary approval) that aims to help businesses with their energy costs. The scheme will support eligible businesses with their energy costs between 1st October 2022 and 31st March 2023. Under the scheme, the government will provide a discount on wholesale gas and electricity prices for all eligible non-domestic customers.

Electricity

RAG Status: RED

Wholesale electricity market day ahead (spot) price (£/WMh)

Trades affected

- All

Risks

- Wholesale market increases
- Demand outstripping supply

Changes on month

- Electricity pricing across Europe have increased during December

Current market position

24th March 2022

- Low wind generation and lower than seasonal average temperatures expected for w/c 28th March pushing market higher.

21st April 2022

- Warmer temperatures and high wind generation have resulted in falling prices.
- However, below seasonal averages and low wind in coming days could see increases.
- Electricity market continues to largely track gas market
- Contract unit rates (day) varying between 34p and 42p depending on HV / LV, duration and volumes

6th June 2022

- Relatively low wind generation across Europe and a rise in Gas pricing has resulted in the Electricity market following the same trend.

23rd August 2022

- Continuing trend of tracking gas market - big concerns over surety of supply of gas significantly impacting market and resulting in low liquidity for suppliers and limiting market trading

21st October 2022

- Electricity Market tracks the gas market. Mild temperatures are having positive effect on markets, however low wind generation offsets this somewhat. Q1 '23 futures price very high due to continued uncertainty

3rd November 2022

- The government has announced a new Energy Bill Relief Scheme during September *(subject to parliamentary approval)* that aims to help businesses with their energy costs. The scheme will support eligible businesses with their energy costs between 1st October 2022 and 31st March 2023. Under the scheme, the government will provide a discount on wholesale gas and electricity prices for all eligible non-domestic customers.

Semi-conductors

RAG Status: RED

Trades affected

- Sir Robert McAlpine

Risks

- Global shortage of semi-conductor chips
- Extended lead times
- Rising costs

Changes on month

- No Change, still a global shortage

Current market position

- Global shortage of semi-conductor chips still relates to a fire at largest supplier in October 2020 in Japan and the pandemic, where we saw an increase in remote / mobile working, hence a higher demand for devices (laptops, mobile phones, games consoles, etc.)
- Production in Japan was due to stabilise at the end of this year, however the recent earthquake has shut down production again.
- The chips take three months to manufacture, therefore there is no quick solution to the shortage and subsequent backlog.
- There is also the political impact being felt between the US and China. An example is Huawei, which supplies to US chip-makers, has been blacklisted by the US government, thus adding further pressures to the market.
- Semiconductors are a vital component of many building and infrastructure systems.
- The risk to timely delivery of projects has been growing as the chip crisis has intensified.
- For buildings in particular, MEP installations and fit-out elements are exposed.
- The Construction Leadership Council's Products Availability Group has recently warned about the limited availability and long lead-in times for key elements such as boilers, white goods and lighting systems.
- Critical systems including fire detection and alarms are also at risk.
- Concern around oil and any potential sanctions that may be employed by the US, EU and others against Russia, the world's second-largest producer of crude oil.
- The world leader in semi-conductor production, Asia, rely heavily on Russian oil.

Key sustainability risks

RAG Status: RED

Risks

- Materials from Russia and Belarus used on projects since the outbreak of war in Ukraine. Russian timber accounts for a sizeable section of UK softwood, hardwood and plywood imports.
- Material substitution.
- Use of the same product, but supply chain switch sourcing to an unverified supply chain.
- As labour shortages increase (in the UK), supply chain partners could be forced to seek labour from unverified sources. This then raises concerns over competency of labour, legality of labour and the practices from 'employers' with the supply chain.

Current market position

- PEFC has deemed all timber originating from Russia and Belarus as "conflict timber" – this will be in place for initially six months. FSC has yet to act but has said what is occurring goes against their values and more information on what they propose will be released in the coming days.
- Price increases could lead to supply chain partners seeking alternative solutions.
- Material shortage could lead supply chain partners seeking alternative solutions, to avoid delays. Arnold Laver has already stated that *'due to major shortages we are having to plug gaps with any grade / certification we can find….it's very difficult in the current climate to give any guarantee of certification.'*
- Use of alternative supply chains which are unverified could lead to quality issues and concerns over lack of sustainability certification, e.g., non CARES or BES 6002 certified steel and non FSC or PEFC certified timber.
- Non-certified materials not only impact the ability for project teams to achieve Build Sure but they can jeopardise the achievement of building standards such as BREEAM.
- Use of alternative supply chains could increase risk of the presence of unethical / illegal labour practices.
- Chinese and Middle Eastern rebar is now under consideration for import, however, the Chinese and Middle Eastern mills do not hold UK CARES sustainability credentials

Mitigation measures

- Sustainability team has been made aware of the update to PEFC classification, timber originating from Russia and Belarus.
- Promote the use of SRM Strategic Material Framework Agreements to ensure our subcontract supply chain are working with pre-vetted and approved suppliers who hold all of the relevant certifications for their sector.
- Encourage forward forecasting and scheduling of required materials to secure continuity of supply and mitigate any potential bottlenecks or shortages of materials.
- Ensure certification (CARES, FSC, PEFC, etc.) is obtained before material order and checked with each delivery arriving on site – direct and via our subcontractors.
- AH has raised the risk with the Build Sure Sustainability Team.
- Third-party supply chain audits (supply chain partners processes and procedures in regard to labour practices are assessed).