

MIDLANDS ENGINE OBSERVATORY ACADEMIC INSIGHTS

Ukraine Conflict affects Green Technology Elements



This summary comes for [this article](#) in The Conversation.

Theme:

Advanced manufacturing supply-chain disruptions from the Russo-Ukrainian conflict.

Area of Focus:

The report focuses on EU imports of fuels, petrochemicals and precious materials from Russia and Ukraine, and their alternatives.

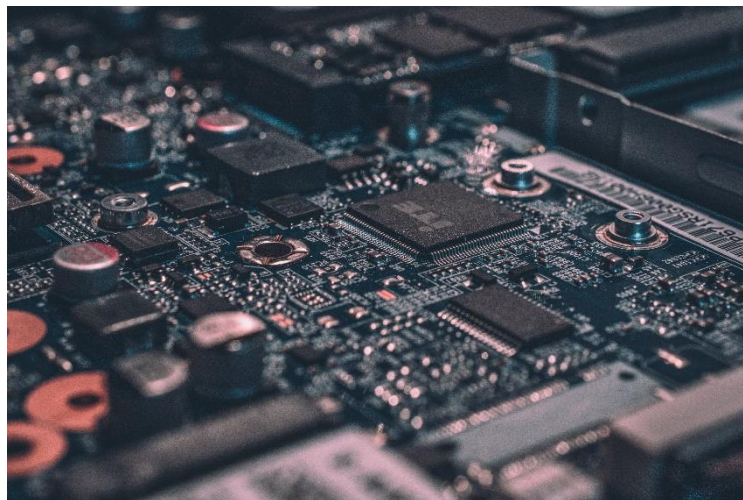
Key Findings:

The EU imports 40% of its natural gas from Russia, and nearly half of the five million barrels of crude oil Russia exports daily go to Europe. Fossil fuel revenue funds Russia's aggression in Ukraine, and thus, the European Commission announced to eliminate Russian fuel imports for this decade.

Likewise, more than 35% of the world's palladium and 12% of the global platinum supply comes from Russia. Materials used to make catalytic converters, devices which reduce concentration of air pollutants in the emissions of vehicles with internal combustion engines. In coming years, these metals will be used in the production of fuel cells used in cars and buses which run on clean-burning hydrogen.

Similarly, lithium, nickel and cobalt are metals used in electric vehicle (EV) batteries. Ukraine's breakaway region of Donbas possesses abundant lithium reserves. Ukraine is not a big producer of lithium currently, but production in the region has stalled due to the war. Russia meanwhile is the second-largest producer of cobalt, responsible for 4% of global supply and 10% of high-quality nickel used in EV batteries.

Supply disruptions because of the war recently forced the London Metal Exchange to suspend trading for the first time since 1985, as the price of nickel topped US\$100,00 (£76,000) a ton. According to bank Morgan Stanley, nickel's price surge could add up to US\$1,000 (£760) to the price of an EV.



Midlands Engine Impact:

- Energy and fuel price rises to exacerbate economy-wide but will hit the Midlands energy-intensive users the most.
- This will put further pressure on businesses in the Midlands which are already dealing with increasing rising labour costs due to skills shortages, the end of Government funded support etc.
- As Russia and Ukraine supply a plethora of raw materials into Europe, which local manufacturers import for wider processing and production; this will hurt automotive, transport/logistics, aerospace, and underpinning metals and material supply chains.
- The impact of war is likely to have dented overall business sentiment with knock-on effects on consumer spending and business investment.

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