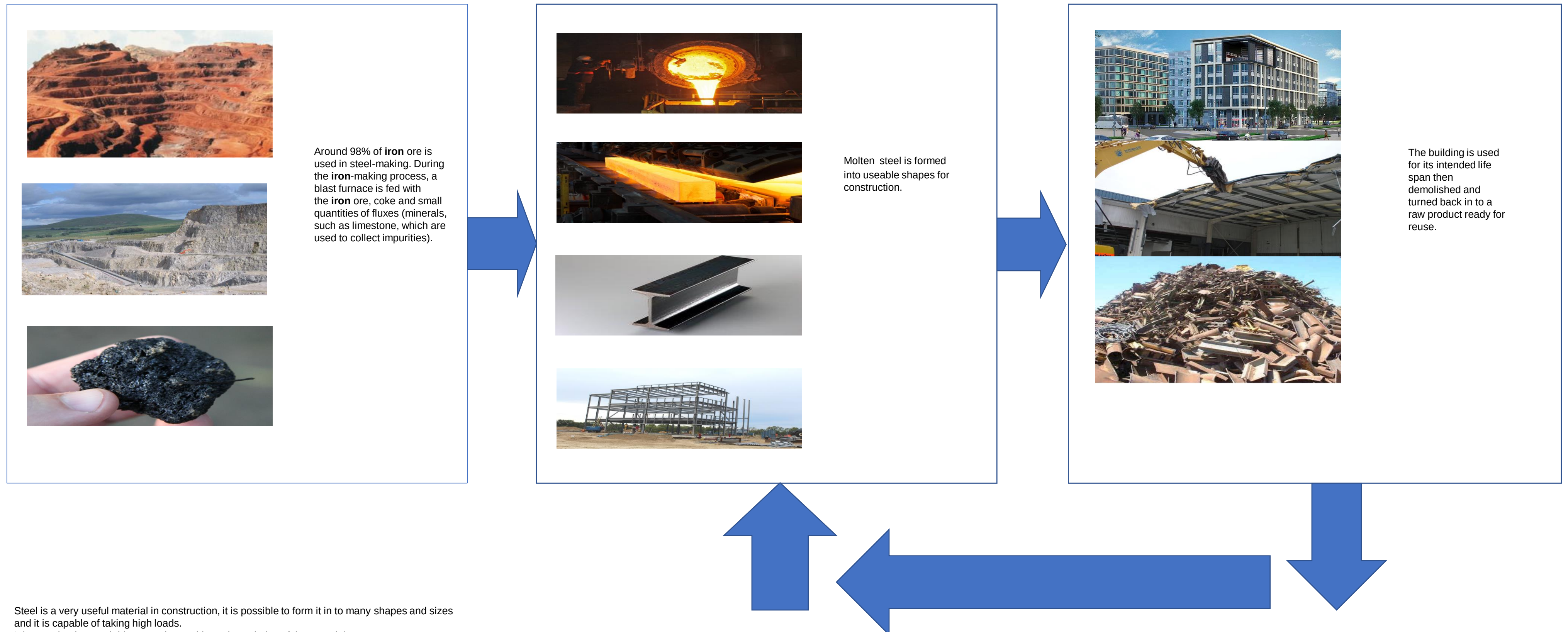


Life cycle of steel in construction.

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Steel is a very useful material in construction, it is possible to form it in to many shapes and sizes and it is capable of taking high loads.
It is completely recyclable many times without degradation of the material.
It is not without its environmental costs however, the iron ore and limestone have to be excavated and transported vast distances such as Australia to South Wales to be smelted and the coke used is coal which has been excavated and heated to transform it into coke, after it is smelted it needs to be formed into the various shapes used which uses vast amounts of energy again, but once it has come to the end of its design life it can be melted back down and turned back into new products. Around 80% of steel is recycled and it forms around 50% of the mass of new steel products making it a sustainable material.
There is a lot of energy used in the initial extraction and forming of steel but as it is recycled many times it does save on the initial energy used in extraction.

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