***Material Transition in an Energy Transition World***

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## Overview

Material transition plays on the petrochemical industry role as carbon transformer into valuable end-consumer products, such as wind turbine, solar panels, housing insulations and transportation vehicles. It focuses on the “carbon vault” potential of petrochemical products and also as an enabler of a low-carbon solutions. The “carbon vault” describes not only the role in achieving energy-saving solution but also the benefit of storing carbon in long life end-consumer products. For example, for every ton of GHG emitted by the global chemical industry its products and technologies enable over 2 ton of GHG emissions savings. However, if this is coupled with further emission policies, GHG emissions savings enabled by the chemical industry could increase to over 4 ton for every 1 ton of emissions by 2030 . Even recovered plastics can be used in other applications such as construction materials for road and pavements.