

Glossary

Disclaimer

The Industrial Transition Accelerator (ITA) recognises its activities must not be a vehicle for individuals or organisations to reach unlawful business agreements, exchange competitively sensitive information, or engage in other aspects of anti-competitive behaviour. Therefore, ITA’s policy is to take appropriate measures to comply with US antitrust laws and foreign competition laws, and the ITA expects the same from its members when acting on behalf of the ITA or participating in ITA activities.



Key terms

Binder

A material, such as ordinary Portland cement, used in cement production that binds materials together through a chemical process to create a hardened, cohesive structure.

Carbon leakage

The increase in greenhouse gas emissions in one country as a result of government policies in another country that lead to the relocation of production to regions with less stringent environmental regulations.

E-fuels

E-fuels are synthetic fuels such as e-methane and e-methanol that serve as alternatives to fossil fuels and can be used in heavy transport sectors such as aviation and maritime.

Efficiency of Use

Reducing emissions through increasing energy efficiency by improving operational practices.

Embodied carbon

The amount of GHG emissions associated with upstream (extraction, production, transport, and manufacturing) stages of a product's life, as well as its end of life.

Environmental Product Declaration (EPD)

A standardised document that details the life-cycle environmental impact of a product. Other examples of similar documents exist.

Emissions Trading System (ETS)

A "cap and trade" system where an emissions cap is imposed by government on given sectors, actors within scope are allowed to trade emissions credits to meet the cap.

Final Investment Decision

The commitment to allocate capital resources to a project and move from the planning stages to the execution phase (including construction and operations).

Feedstock

The raw materials used to produce materials or fuels.

Fugitive emissions

Fugitive emissions are greenhouse gas emissions that arise from leaks and other irregular releases, usually associated with industry and fossil fuel extraction.

Green premium

The cost difference between lower carbon materials/fuels compared to less environmentally friendly alternatives that are typically made using fossil fuels.

Greenhouse Gas (GHG)

Greenhouse gas (GHG), which can include carbon dioxide, nitrous oxide, methane, are gases that trap heat in the Earth's atmosphere, contributing to climate change.

Grey materials or fuels

Materials or fuels that are produced with the use of fossil fuels.

Key terms

Hydrogen-based direct reduced iron (H₂-DRI)

H₂-DRI is a low-carbon iron produced using iron obtained by removing oxygen from iron ore using low-carbon hydrogen and carbon monoxide.

Life Cycle Assessment (LCA)

Climate mitigation and adaptation plans submitted by national governments under the Paris Agreement.

Mechanical vapor recompression (MVR)

An energy recovery process that uses electricity to power mechanical compression to recycle waste heat from industrial processes, such as aluminium making, and improve energy efficiency and reduce the environmental impact.

Nationally Determined Contributions (NDCs)

Climate mitigation and adaptation plans submitted by national governments under the Paris Agreement.

Power-to-Liquid (PtL)

PtL is a process for producing synthetic fuels by using renewable energy, water and carbon dioxide. These fuels can be used in combustion engines used in transport vehicles such as airplanes, ships, trucks, etc.

Scope 1 emissions

The greenhouse gas emissions that are directly produced and emitted by a company from operational processes that it controls.

Scope 2 emissions

The greenhouse gas emissions associated with the energy or electricity used by a company and supplied by a utility provider.

Supplementary Cementitious Materials (SCMs)

SCMs are byproducts or natural materials that are used with portland cement to create concrete. They improve concrete properties while reducing the amount of portland cement required in the cement mixture.

Strike Price

A reference price that is calculated based on the differences in cost and CO₂ emissions between green materials/fuels and their fossil fuel-based alternative.

Scalable zero-emission fuels (SZEf)

SZEf's are fuels such as green methanol and green ammonia that can be produced in large quantities whilst generating little to no GHG emissions. They can replace fossil fuels in transport sectors, especially maritime.

Technology Agnostic

This is an attribute of a policy that targets a specific material/fuel, regardless of the technology or pathway in which it was produced.

Virgin Steel

Steel that is produced using new raw materials such as iron ore, as opposed to recycled materials.

Willingness to pay (WtP)

WtP is the highest price that customers can afford and are willing to pay for a good or service.