

# Vulcanol®

## Renewable methanol from CO2



## CARBON RECYCLING INTERNATIONAL

Renewable methanol is produced by Carbon Recycling International (CRI) in its plant in Iceland based on CRI's proprietary green technology. The methanol is sold in Europe under the registered brand name Vulcanol.

ISCC+ Certified CO2 emissions savings

**Vulcanol** is produced by catalytically reacting CO2 directly with hydrogen obtained from the electrolysis of water using renewable electricity and purified through distillation to a purity of greater than 95,5% w/w suitable for fuel blending and chemical synthesis.

Green raw material for various goods

**Vulcanol** meets strict EU sustainability standards and is certified according to the International Sustainability and Carbon Certification (ISCC) plus system.

Reduction of biodiesel (FAME) life cycle emissions

**Vulcanol** can be substituted in various conventional methanol chemical processes resulting in life cycle emissions reduction of the end-product. It is a low-carbon intensity feedstock for production of various synthetic materials, such as formaldehyde, methyl tert-butyl ether, acetic acid and dimethyl ether.

**Vulcanol** is liquid renewable transport fuel from non-biological sources and as such it does not compete with food production or require large spaces of land for its production.

Renewable liquid fuel for direct use or blending for cars, trucks and ships

**Vulcanol** produced in Iceland reduces carbon emissions by more than 90% compared to fossil fuels, in the complete product life-cycle. Life cycle emissions with 100% electricity from hydro, wind or solar correspond to 99% reduction of GHG emissions.

Clean burning fuel with low NOx, no SOx emissions and no particulate matter

**Vulcanol** is a clean burning, high octane fuel that can be used directly in internal combustion engines, fuel cells, turbines or boilers, for gasoline blending and production of fossil fuel components (MTBE or FAME). Vulcanol is also a sulphur free and low carbon intensity marine fuel.