

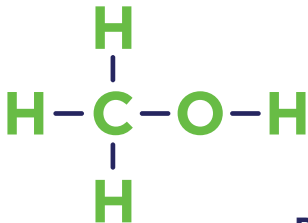


METHANOL

RECYCLING WASTED ENERGY

The flared methane gas in the Niger Delta could provide enough cooking energy for all of Africa.





PRODUCTION

Methanol, also known as wood alcohol, is the simplest alcohol molecule. Today, **methanol is mostly produced from natural gas, but any carbon source can be used for its production.** New technologies producing methanol from recycled waste, biomass and even captured CO₂ are becoming more mainstream each year. Methanol holds the promise of being an important part of combating climate change, including the harmful practice of gas flaring. More than 150 billion cubic meters of natural gas are being flared every year, mostly at oil and gas production sites. This wasted energy can be captured and converted cheaply into methanol, a liquid fuel.

SAFETY

Methanol is toxic to humans if ingested, inhaled, or absorbed through the skin. In cases of direct methanol exposure, medical assistance should be sought immediately. Methanol is not found to be a mutagen or carcinogen in humans, unlike components in fossil fuels and wood smoke such as benzene. **Although there are some safety concerns with methanol, Project Gaia has strict protocols for fuel handling that mitigate these risks.** Project Gaia recommends a supply-chain model that allows adsorptive, non-pressurized canisters to be refilled safely at fuel depots by trained individuals and sealed for delivery. The canister is placed by the consumer directly into the stove. Once contained, methanol fuel is safely stored and handled and will not pose a risk to the user.

OUR PROJECTS

Methanol is a perfect fuel for alcohol stoves. It burns cleanly, easily and is safe to handle under our protocols. It can be mixed with ethanol fuel. To begin a project, we look for regions where methanol is produced or where there is gas to harness for methanol. Our project in Nigeria is one of our oldest and most promising. **We are working with Nigerian partners to create a supply-chain that will provide safe handling and usage at affordable prices.** This business will create a market for methanol and in turn a commercial opportunity for the use of flare gas. Our goal is to provide enough clean-burning, affordable alcohol fuel for families to encourage the switch from wood, charcoal and kerosene.



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