renewable methane creation process

Water is captured from air.

Electrolyser powered by solar energy splits water into H_2 and O_2 .

Oxygen is released, leaving hydrogen.

The Methanation reactor combines the Hydrogen with Carbon Dioxide extracted from the air.

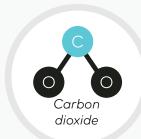
Renewable methane produced.

The renewable methane can be transported and stored in the APA Grid.







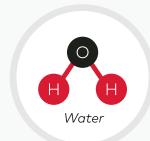












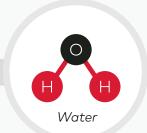


electrolyser



Hydrogen

 $4H_2 + CO_2 \rightarrow CH_4 + 2H_2O$





energy. connected.

Water produced in the methanation reaction is recycled for use in electrolyser