Capturing CO_2 emissions

CARBON CAPTURE, UTILISATION AND STORAGE (CCUS) CAN PLAY AN IMPORTANT AND DIVERSE ROLE IN MEETING GLOBAL ENERGY AND CLIMATE GOALS.

HERE IS HOW IT WORKS.

1. CAPTURE
The CO_2 is captured from fossil or biomass-fuelled power stations, industrial facilities or directly from the air.

2. TRANSPORT
Captured CO_2 is compressed and transported by ship or pipeline from the point of capture to the point of storage.

3a. UTILISATION
Captured CO_2 can be used as an input to create products and contribute to the circular economy (synthetic fuels and chemicals) or used directly in greenhouses.

3b. STORAGE
Alternatively, captured CO_2 can be permanently stored in underground geological formations.

> ***ACTIVELY REMOVING CARBON FROM THE ATMOSPHERE THROUGH CCUS IS A KEY PART OF KEEPING GLOBAL WARMING TO WITHIN 1.5 AND 2°C.***
> **- IPCC, April 2022**

Strengthened climate goals and new investment incentives are delivering unprecedented momentum for CCUS, with many new plans for such facilities being announced all over the EU.

Click here for an overview of all the CCUS projects around Europe

Waste-to-Energy and CCUS

CARBON CAPTURE, STORAGE AND UTILISATION TECHNOLOGIES ARE THE KEY TO UNLOCK THE CARBON NEGATIVE POTENTIAL OF WASTE-TO-ENERGY.

Carbon capture, utilisation and storage technologies will be **essential to decarbonise otherwise hard-to-abate secors.** According to a report from Eumonia, WtE is one of those sectors.

Waste-to-Energy technologies treat non-recyclable waste while also diverting waste from landfills and generating electricity and heat.

Half of the emissions generated through these processes are of biogenic origin and **equipping WtE plants with CCUS technolgies could make the sector carbon neutral or even carbon negative!**

Thanks to a favourable legislative environment being developed and new financial opportunities, large scale CCUS projects in the WtE sectors are taking off in Europe.

Click on the pictures to learn more about two of these innovative projects.

AVR, DUIVEN

OSLO FORTUM VARME

THE INTEGRATION OF CCS AND WTE COULD ENABLE WASTE TO BE A NET ZERO OR EVEN A NET NEGATIVE EMISSIONS ENERGY SOURCE

- IPCC, April 2022