



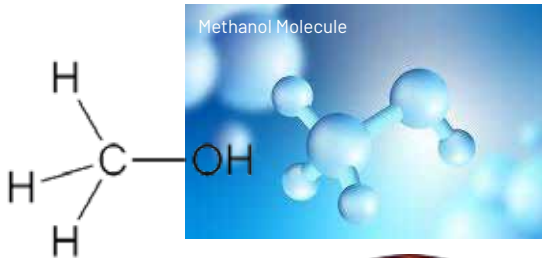
**CIRCULAR
ECONOMY**

BIOMETHANOL TO KILN

The world's annual consumption of methanol is around 92 million tonnes, mostly from natural gas sources, which is directly related to greenhouse gas emissions. Green/Renewable methanol, mainly as biomethanol, currently accounts for less than 0.2 million tonnes. In the future, green methanol production is expected to increase, in order to help reduce the dependency on fossil fuels and mitigate greenhouse gas emissions. Green methanol reduces CO₂ emissions by up to 95% and can be used as a low-carbon liquid fuel, making it a promising alternative to fossil fuels in areas where decarbonisation is still a major challenge, such as shipping.

Biomethanol originates from the gasification of sustainable biomass sources or as a side product from Kraft pulping process. The biomethanol generated in Kraft process is the main volatile organic compound present in black liquor, which is later recovered in the condensates of the evaporation plant. This biomethanol can be recovered and purified and represents an interesting opportunity for our sector.

Currently, Celbi recovers and purifies up to 80% of the biomethanol generated in the kraft process and uses it as fuel in the lime kiln, replacing natural gas.



altri



Altri
Portugal
Gabriel Sousa
gabriel.sousa@altri.pt



Kraft Pulp Mill
- Lime Kiln Renewable Fuel



Road Biofuels



Maritime Biofuels