

Turning CO₂ into energy storage



first-ever Ionic Liquid sorbent Methanol synthesis In order To Enable over 80% yield

Technology:

- Uses ionic liquid sorbents to capture and convert CO₂
- Achieves over 80% methanol single pass yield, surpassing the 60% state of the art

- Features a 3D-printed reactor for improved fluid dynamics

Impact:

- Enables low-pressure methanol synthesis from biogas-derived CO₂
- Positions wastewater plants as potential biorefineries
- By 2030, implement small-scale CO₂ and electrical energy storage and utilization systems

Total Budget € 3 578 568.06

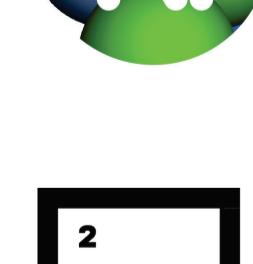
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Coordinated by

National Institute of Chemistry,

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NATIONAL INSTITUTE
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ARISTOTLE
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global omnium



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