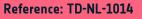


Direct Air Capture Technology for On-Site CO₂ Utilsation





TECHNOLOGY DESCRIPTION

Skytree's direct air capture (DAC) technology removes CO_2 directly from ambient air using proprietary sorbent materials and an energy-efficient desorption process. The high-purity CO_2 collected can be used on-site for various industrial applications, including: controlled environment agriculture (enhancing plant growth in greenhouses); water treatment (adjusting pH levels for efficient water purification); sustainable building materials; food and beverage (carbonation of drinks and packaging processes); and eFuels (producing synthetic fuels for sustainable transportation). The modular and scalable design ensures adaptability across diverse industrial sectors and varying CO_2 demands.





INNOVATIVE ASPECTS

- On-site production: Reduces dependency on transported CO2, minimising logistics costs and carbon emissions
- High purity: Consistently delivers high purity gaseous CO₂ suitable for many applications
- Energy-efficient design: Optimised for minimal energy usage in capturing and processing CO₂
- Scalable deployment: Modular design allows customisation to meet specific industrial needs
- Liquefaction add-on: to deliver food grade CO2 for the food and beverage market



TECHNOLOGY READINESS

COUNTRY OF ORIGIN

LATEST UPDATE

TRL 9 (2025)

Netherlands

03/2025

TAGS	#DirectAirCapture	#CarbonDioxide Utilisation	#Sustainable CarbonDioxide Supply	#CarbonRecycling	#Industrial Applications	#Circular CarbonDioxide	
APPLICATION	Agriculture	Energy	Food &	Chemical Engineering	Life	Robotics &	



CONTACT

