the center for negative carbon emissions

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WAAS Talks on Science for Human Security February 2025

The New Carbon Economy

Disclosure: Lackner advises several companies in the air capture field



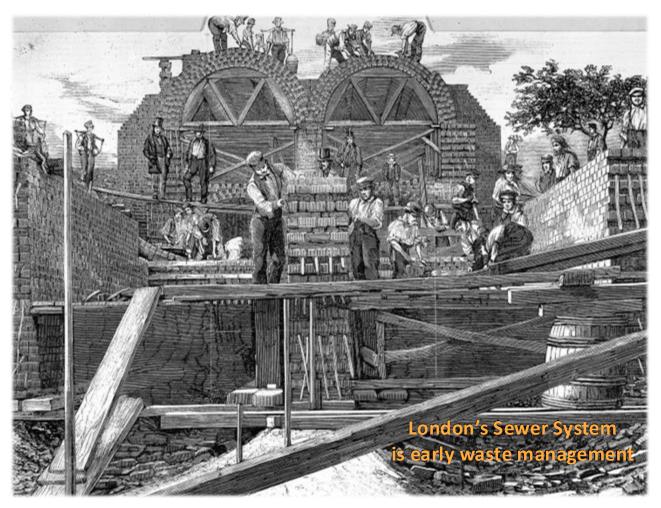
Klaus Lackner

Founding Director, Professor at the School of Sustainable Engineering and the Built Environment February 2025

Energy is critical to the well-being of a developing world

- CO₂ emissions from fossil fuels are unsustainable and unnecessary
 Non-fossil energy alternatives will help, but are too little, too expensive, or too late
- Fossil energy creates a vast carbon waste management challenge
 For every ton of carbon coming out of the ground another will have to be disposed of
- Nascent carbon management technologies exist
 - Carbon storage, point source capture, direct air capture, carbon recycling
- Technologies need demand to improve
 - Demand for disposal and recycle requires regulation

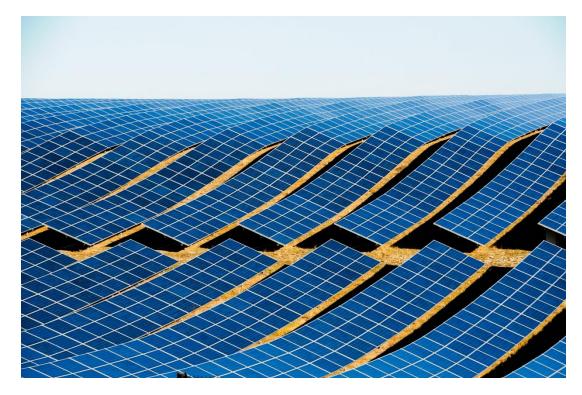
Waste problems have been solved before



- Waste management is a lucrative service industry that need to be built
- CO₂ waste is global and can be addressed globally
- Carbon recycling will be driven by the cost of waste disposal

https://commons.wikimedia.org/wiki/File:The_main_drainage_of_the_Metropolis_Wellcome_M0011720.jpg

Photovoltaic power can challenge fossil energy



• It is the cheapest source of electricity

- Its energy can be stored in liquid fuels
- Cheap storage and easy transport

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