



CLIMEWORKS

Capturing CO₂ from Air

Christoph Gebald

Climeworks AG

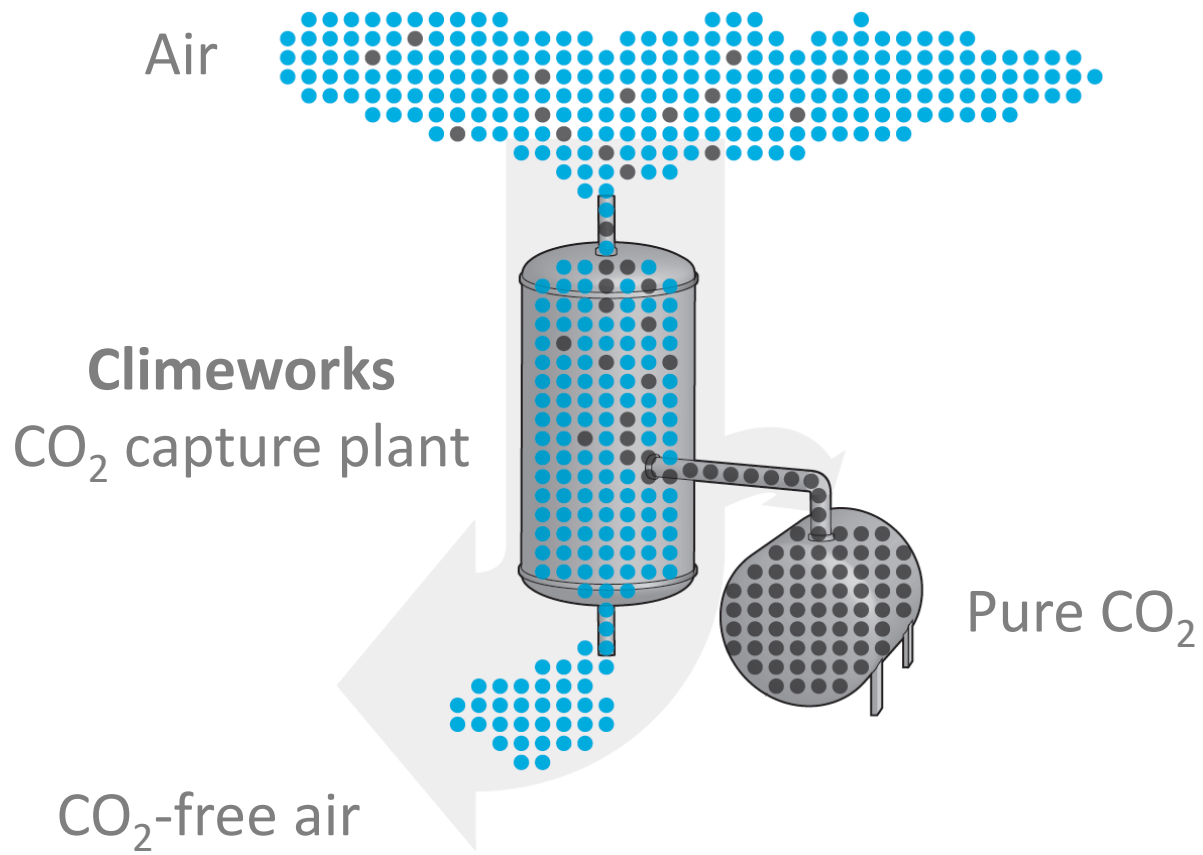
Birchstrasse 155, 8050 Zurich, Switzerland
www.climeworks.com, contact@climeworks.com



swisscleantech, 20 September 2016



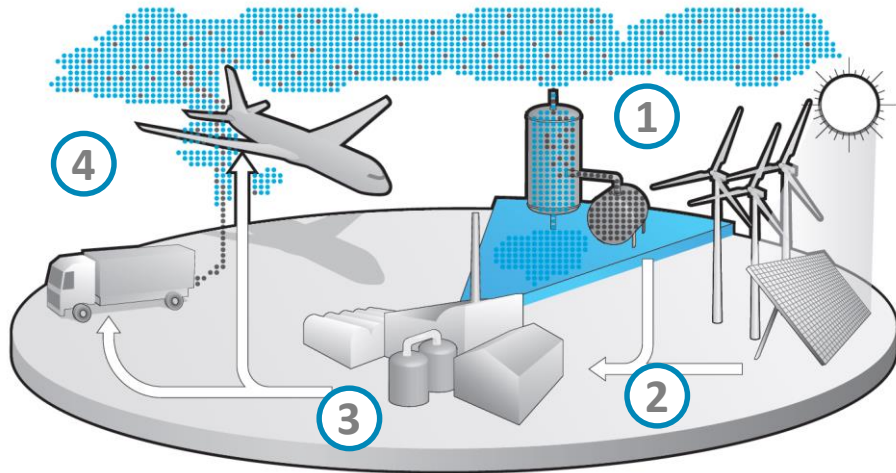
EARTH
CHALLENGE





Why Direct Air Capture

CO₂-Neutral Fuels

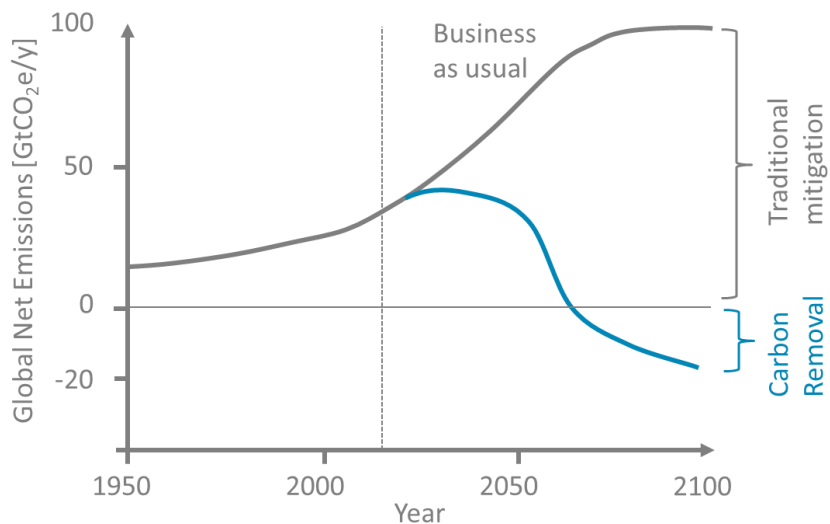


1. Capture CO₂ from air
2. Produce hydrogen with renewable electricity
3. Combine hydrogen and CO₂ to form hydrocarbon fuel (gasoline, kerosene, methane)
4. Use CO₂-neutral fuel in existing energy infrastructure and re-capture CO₂

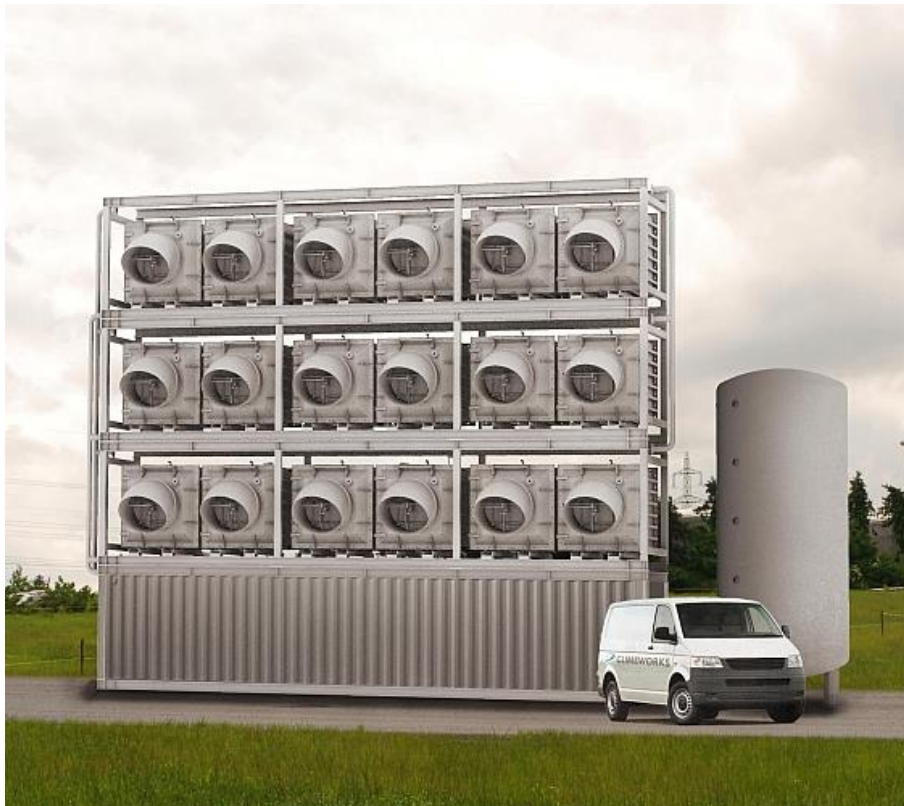


Why Direct Air Capture

Paris Climate Convention Calls for Negative Emissions



87% of IPCC modeling scenarios consistent with 2°C of warming involve large scale deployments of CO₂ removal from air



- Mass-producible
- Worldwide first commercial supply of atmospheric CO₂

Technology Review
DAS MAGAZIN FÜR INNOVATION

Frankfurter Allgemeine
ZEITUNG FÜR DEUTSCHLAND

gasworld

theguardian

Neue Zürcher Zeitung

FORTUNE

WIRED

Bloomberg Business

nature

Wirtschafts Woche

SWISS Magazine

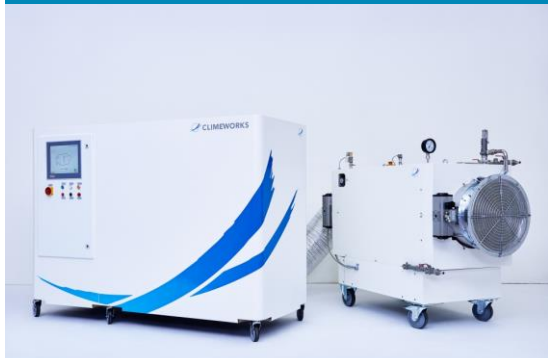
SPIEGEL ONLINE

FAST COMPANY



Products

Demonstrator



- 2 t CO₂/y
- Online since 12/2012

CO₂ Collector



- 50 t CO₂/y
- Full scale module
- Online since 08/2014

CO₂ Capture Plants



- 1'000+ t CO₂/y
- Modular, turnkey, standalone

Markets



Merchant Market



- Onsite CO₂-supply for bottlers, greenhouses, etc.
- **10-15Mt CO₂/y**

Renewable Fuels



- Onsite CO₂-supply for renewable fuel synthesis
- **120Mt fuel/y (by 2020)**

Carbon Dioxide Removal



- Large-scale CO₂ (and other pollutants) removal from air
- **10Gt CO₂/y (by 2050)**



Birchstr.155 • 8050 Zürich • Switzerland

Tel.: +41 44 533 29 99

E-Mail: contact@climeworks.com • Web: www.climeworks.com