

PRESS RELEASE

## COP22: Climeworks presents CO<sub>2</sub> Capture from Air

- At COP22 (Marrakech, November 7<sup>th</sup> to 16<sup>th</sup>) Climeworks is chosen as one of 20 startups presenting their technologies at the “Low-Emissions Solutions conference”

During the COP22 Climate Change Conference in Marrakech, for the first time ever a “large-scale technical-solutions conference” for senior delegates by UNFCCC and experts of technology of the 196 states will take place. Focus during the three-days “[Low-Emissions Solution Conference](#)” is a presentation by 20 chosen cleantech start-ups that introduce their scaleable technologies. Climeworks will show its efficient solution to filter CO<sub>2</sub> from ambient air and share the potential for climate protection.

The Climeworks CO<sub>2</sub> Direct Air Capture (DAC) technology is based on a cyclic capture-regeneration process and a novel filter. During the capture process, atmospheric CO<sub>2</sub> is chemically bound to the surface of the filter. Once the filter is saturated, the CO<sub>2</sub> is released by heating it to a temperature of about 100 degrees Celsius, thereby delivering high-purity gaseous CO<sub>2</sub>. The CO<sub>2</sub>-free filter can be re-used for thousands of capture-regeneration cycles. DAC allows a significant emissions reduction through the production of low-carbon fuels and eventually enabling negative emissions when combined with a permanent carbon storage solution.

The Climeworks founders have set themselves an ambitious goal: capturing one percent of global CO<sub>2</sub> emissions by 2025. Simply by changing the number of modules, Climeworks’ DAC technology can be freely scaled to meet the demands of any application and has a carbon removal potential that is relevant for achieving climate targets agreed upon in the Paris Agreement.

Climeworks’ products have several commercial applications: In the short-term the company targets large merchant markets by selling air-captured CO<sub>2</sub> to customers like greenhouse operators or the beverage industry, which currently receive their CO<sub>2</sub> primarily as an industrial waste product and often from the combustion of fossil fuels.

In the mid-term, Climeworks seeks to close the carbon cycle by providing atmospheric CO<sub>2</sub> for the production of low-carbon fuels, which allows large-scale storage of renewable energies and which further allows to address CO<sub>2</sub> sources which are otherwise hard to capture, e.g. emissions from the past or mobile sources. By that reason, the company is in a close partnership with carmaker Audi.

In the long-term and in combination with storage technology, DAC is one of only few technologies with the potential to capture and permanently remove several gigatons of atmospheric CO<sub>2</sub> per year. The usage of so-called Negative Emission Technologies (NET) is considered necessary in more than 85% of IPCC climate scenarios consistent with the goal of limiting global warming to 2 degrees Celsius.

## **About Climeworks AG**

**Climeworks AG** was founded at the end of 2009 as a spin-off company of the ETH Zurich and has since then developed its proprietary Direct Air Capture (DAC) technology from laboratory to industrial scale. In late 2014, Climeworks commissioned its first industrial scale CO<sub>2</sub> capture unit - called 'CO<sub>2</sub> Collector' - with a capacity of capturing 50 tons CO<sub>2</sub> per year. Since then, the CO<sub>2</sub> Collector has proven to operate successfully, thus standing for the final development step of Climeworks' technology. The company is currently assembling the worldwide first commercial DAC plant with a capacity of capturing 900 tons of CO<sub>2</sub> per year which will be commissioned in spring 2017.

## **Contacts:**

Climeworks AG, Birchstrasse 155, 8050 Zurich, Switzerland

Dominique Kronenberg, [contact@climeworks.com](mailto:contact@climeworks.com), +41 44 533 29 99 [www.climeworks.com](http://www.climeworks.com) - [www.facebook.com/climeworks](http://www.facebook.com/climeworks) - Twitter: @climeworks