



5 key questions about Direct Air Capture

1

Isn't DAC a distraction from reducing carbon emissions?

The IPCC and scientists have agreed that, whilst reducing emissions is the number one priority, it is not enough. All scenarios to achieve 1.5 degrees include developing carbon removal at scale, through a range of solutions including Direct Air Capture (DAC).

2

Isn't DAC a fig leaf for the fossil fuel industry?

It is important to differentiate between DAC and CCS (Carbon Capture and Storage). In CCS, the CO₂ is captured at the end of an industrial process, for example in a coal-fired power plant. DAC is not connected to a source of emission, it pulls the CO₂ directly from the atmosphere and stores it safely and permanently, helping to restore a healthy carbon balance.

3

Should we not focus on natural solutions, like planting trees?

Most scientists agree that a portfolio of solutions is needed to fight climate change, and these include both nature and tech based solutions. It helps to think of a DAC turbine as a giant mechanical tree, which absorbs up to 2000 times more CO₂ than a single tree. This means that DAC requires much less land space to make a dent in climate change.

4

Is DAC a safe and proven technology?

DAC is an emerging technology, developed by over 20 companies worldwide, some of them with large operational plants. Many corporations such as Microsoft, Stripe, Shopify or Audi support this technology because it is a science-backed, fully measurable, safe and permanent carbon removal solution.

5

Is DAC too expensive to scale?

Most emerging technologies, such as solar panels, computers' hard drives or offshore wind farms, start with very high costs which substantially reduce as they scale. Several studies indicate that DAC costs will reduce through innovation and step change technology, down to competitive levels. Investing in DAC now can make the costs lower in future

