

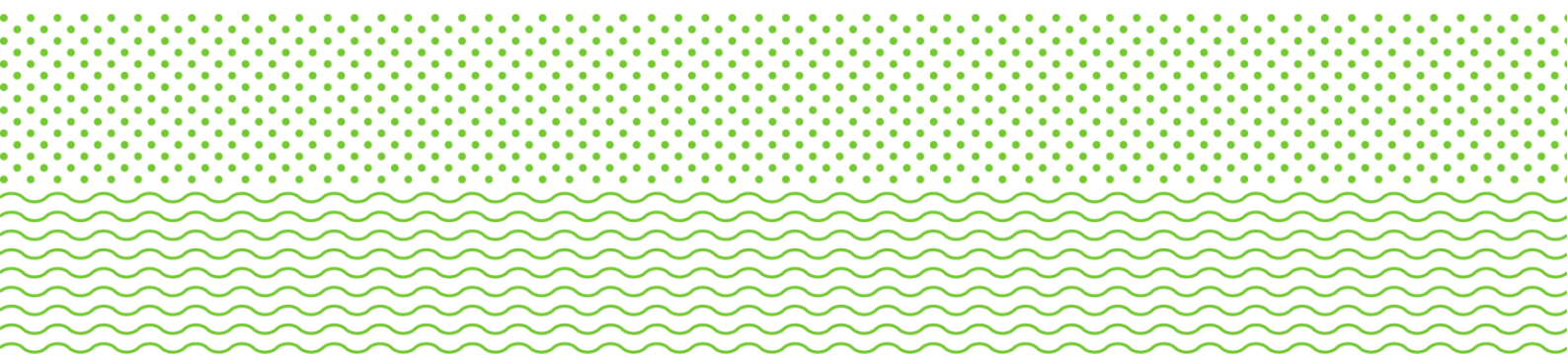


GLOBAL
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CCS: A solution to climate change right beneath our feet

Global CCS Institute's participation to the
Talanoa Dialogues

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BONN, GERMANY



A CCS story

Hello,

My name is John Scowcroft and I work for the Global CCS Institute in Brussels. Here is my story:

I have spent some 20 years working on energy, sustainability and decarbonization issues with the European power industry, particularly working on the EU ETS.

Over the years, one thing that puzzled and frustrated me was the inability to find a way of incentivizing the deployment of **carbon capture and storage (CCS)** as a climate mitigation technology.

It is a fact: CCS has a pivotal role to play in the global climate response.

Six years ago, I joined the Global CCS Institute, a member-driven organisation whose members include governments, small, large and small companies and research and academic institutions.

During my time at the Institute, I quickly learnt that CCS was not some unproven technology. It is a proven and commercialised technology. The first large-scale plant started operation 40 years ago, about the same time as Apollo moon landing. Since the early 1970s, an estimated 220 million tonnes of CO₂ have been safely captured and stored.

Today, there are some 22 projects either in operation or under construction around the world, capturing and storing 37 million tonnes of CO₂ per year.

Figure: Key CCS facility developments globally



What role for CCS in climate action

First, you might ask, do we need CCS? The answer is yes. Here's why:

Both the IPCC 5th Assessment Report and various reports from the International Energy Agency (IEA) show that, without CCS, meeting the Paris Agreement objectives would be both difficult and the cost of climate mitigation efforts would increase by 138%.

The IEA also estimates that to meet the Paris targets, CCS would need to contribute to 32% of global cumulative CO₂ reductions.

A huge scale-up in CCS deployment is required, mainly in non-OECD countries. Nearly half of that needs to be deployed in the industrial sector.

Why?

Because the industrial sector contributes 21% of global CO₂ emissions and there is currently no other alternative than CCS to mitigate emissions coming from industrial sources such as cement, steel and aluminium.

We know that the technology is proven and versatile. So this leads us to look elsewhere to understand why its deployment has not taken off to the degree that both science and climate require.

To answer this, the story of renewables is instructive.

The rapid driving of renewable energy systems (RES) is a result of various government policies which have given constructors and investors policy predictability to invest in such technologies.

The latest IEA figures show that in 2016 some \$850 billion were invested in clean energy. This compared to \$1.2 billion going to CCS.

Whilst, decarbonizing the power sector will largely be driven by RES, dispatchable power, probably gas, which will need to be fitted with CCS. Remember that significant components of renewable technologies are steel and cement. The production process of these materials can only be decarbonized with capture technology.

Indeed, we cannot decarbonise fully without decarbonising the industrial sector.

To conclude my story: The Paris targets are achievable but CCS must be an important component of the suite of measures that have to be deployed to reach these goals. CCS has enormous environmental, economic and societal value. It is also currently the cheapest way to launch a hydrogen economy.

But for CCS to be deployed at scale, we need to get policy right. This is particularly true for the transport and storage component. This means giving contractors and investors the predictability that enables them to finance and build this important contribution to tackling this great societal challenge.

We look forward to continuing this dialogue. Thank you for listening to our contribution.

John Scowcroft
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You can read the Global CCS Institute's submission to the Talanoa Dialogue [here](#).