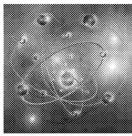


CCUS Alliance of Champions Phase I overview

OGCI CTF
13 August 2019

Gabrielle Walker, Director Valence Solutions Ltd.



Seeds of the Alliance Of Champions

The challenge & hypothesis

Challenge

- IPCC states that without carbon capture, utilization and storage (CCUS) it is now impossible for the world to achieve the Paris Agreement.
- For several sectors it is difficult to envisage decarbonization without CCUS.
- Deployment is not happening at anywhere near the scale needed.

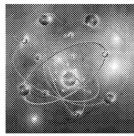
Hypothesis

- The main unaddressed barriers to wide scale CCUS deployment are neither lack of technology nor lack of analysis. They include:
 - Dissonant and fragmented world views in which CCUS deployment is widely perceived as being either inevitable and essential or impossible, unnecessary / actively harmful;
 - Lack of trust between climate campaigners and oil and gas companies;
 - Lack of influential champions;
 - Weariness with an exhausting and demoralizing process.

A fresh approach is required — energising, activating and pooling the insights of influential stakeholders



2



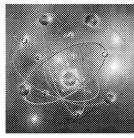
Our approach

Interacting Streams

- Project co-sponsored by **OGCI, Shell and BHP** in interacting workstreams based on specific geographies
 - Phase 1: Europe and Canada
 - Phase 2: USA
- To date ~130 personalised and tailored **interviews** in a wide range of sectors and organisations
 - Oil and Gas, NGOs, policy makers, specialist orgs, heavy industry, finance, academics
 - Majority in **Europe** so far, about 25% in **Canada** and the **USA**
- Two highly interactive **workshops** in London and Paris, another coming up in USA
- The project is **ongoing**



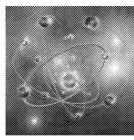
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Key findings



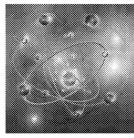
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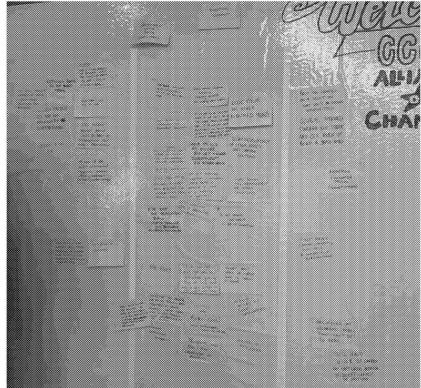
Key findings

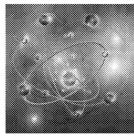


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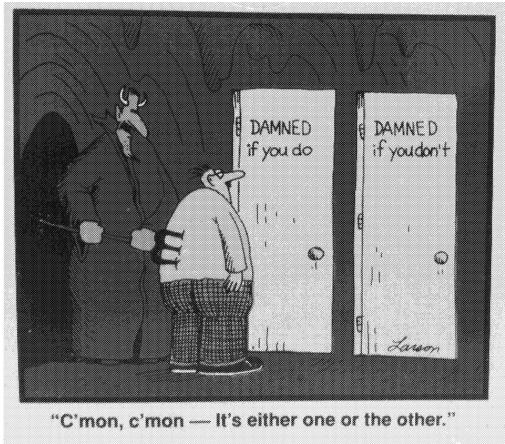


Key findings

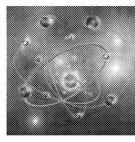




Key findings



7



Key findings: Conversational Grooves

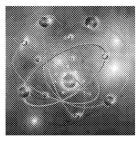
Example

As well as climate change, we need to think about access to energy

You're just trying to keep the fossil fuel industry in business – you don't care about poor people.



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Key findings: Conversational Grooves

Example

Oil & Gas companies believe CCUS is crucial for reaching climate goals

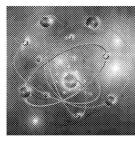
Climate is not your real motivation for supporting CCUS – you just want to keep business as usual but the world has moved on

You have promised to introduce CCUS on power plants before – but never followed through

Why can't you just say up front that it is essential for the future of your business?



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Key findings: Conversational Grooves

Example

We can't act without a business model -- we need a carbon price

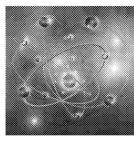
That's just an excuse for not taking action – it's a delaying tactic

So why do you fight against a carbon price every time any government puts it on the table?

If you truly want CCUS, why don't you ask for a mandate?



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Key findings: Conversational Grooves

Example

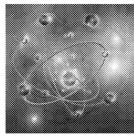
I don't believe there's enough safe storage -- look at fracking, or nuclear waste

We know the subsurface better than anyone – why can't you understand that and just leave it to us?

We have loads of research on this and are already storing 35 million tonnes of CO2 every year

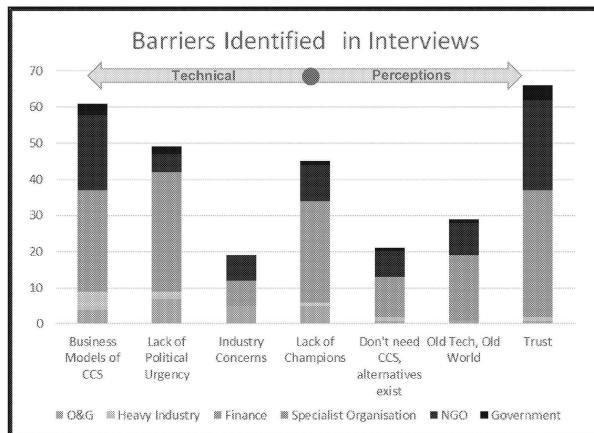


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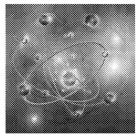


Key findings

Barriers – both technical and perception

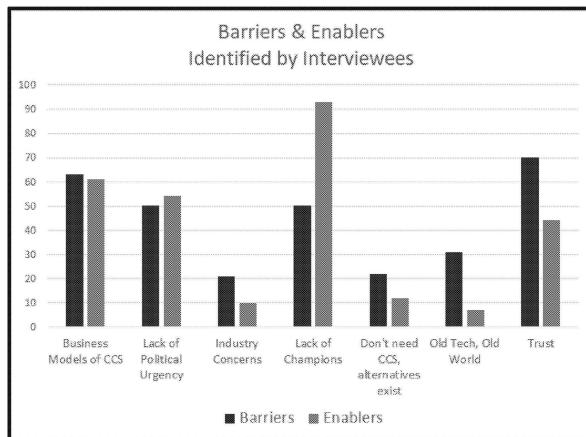


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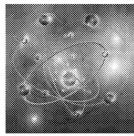


Key findings

It is easier to find enablers for technical than for perception barriers



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Key findings: Perception Map

"What is the relevance of CCUS to climate change?"

CCUS will solve climate issues

CCUS is essential to solve climate change

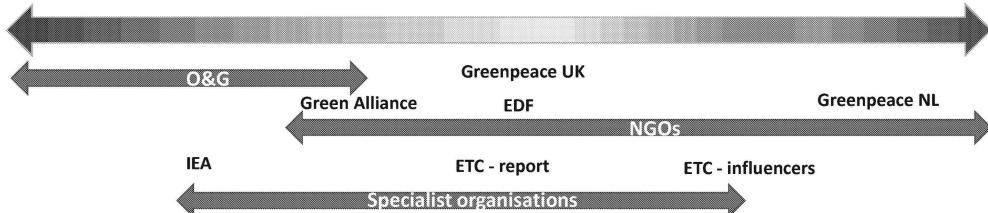
CCUS complements renewables as part of the climate solution

CCUS might help with climate change as a temporary measure / limited scope

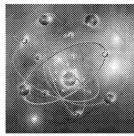
CCUS takes resources away from real climate solutions

CCUS is just a delaying tactic

CCUS will stop climate issues from being tackled



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Key findings: Perception Map

"What is the relevance of CCUS to O&G companies?"

CCUS is existential for the O&G industry

O&G will be highly constrained without CCUS

CCUS helps keep methane in the energy mix beyond the transition

O&G could become the carbon managers of the world

CCUS is essential for Heavy Industry & O&G benefits from a society in which they succeed

CCUS may be commercially viable at some point & we should be ready

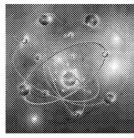
We will not do CCUS until there is a clear commercial return



There is a range of views between and even within different O&G companies



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Key findings: Perception Map

"What is the relevance of CCUS to heavy industry?"

CCUS is essential – we have no alternatives to decarbonize over the next few decades

We are ready – we have developed the capture technologies and are waiting for the necessary policies and CO2 T&S storage providers

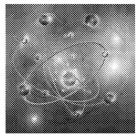
Don't talk about storage - we are focused on usage as it gives us a revenue stream

We do not want to discuss CCUS – we are afraid governments may impose it upon us making us uncompetitive

There is no role for CCUS - we are focused on developing and implementing transformative solutions - CCUS is an expensive distraction



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Key findings

Sample Quotes

The days of asking government to pay for CCUS are gone
(Oil & Gas)

Nobody likes CCUS – it's the technology of yesterday
(Industry)

We need to work out how not to blame collectively but how to act collectively
(NGO)

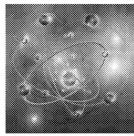
We don't fully understand storage risks & O&G companies are downplaying them
(NGO)

If we want CCUS to happen, we have to work towards making it mandatory
(NGO)

"It's now or never for oil and gas companies to take action on CCS."
(NGO)

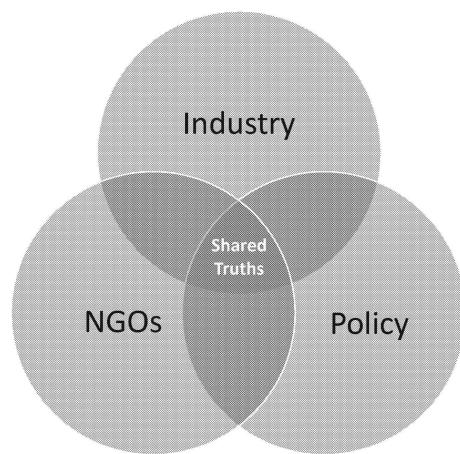


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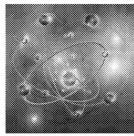
Key findings

Widely Shared Truths



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Not official policy – pushing everyone to an uncomfortable space



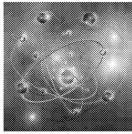
Key findings

Widely Shared Truths - samples

- This is not about CCUS, it's about climate
- We need to act urgently on climate
- We need at least some CCUS to reach 2 degrees or below
- CCUS needs to be embedded in a net zero emissions strategy
- To solve climate change we will need many different solutions
- The place to start with CCUS is where it is hard to abate in other ways
- CCUS is needed for at least some industrial processes
- CCUS on power is not desirable in Europe and Canada, especially for coal. It might be needed in China/India if renewables cannot advance quickly enough to displace coal
- If the oil and gas industry want CCS to happen, they need to step up, invest serious money and make it happen – otherwise they will get something they don't want, as happened to coal



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New Enabling Narratives

- Based on **widely shared truths**
- Address **perceived weaknesses** in current narratives
- Include: **why dialogue is difficult** and **recommendations from stakeholders** about how to advance CCUS at scale
- **Living documents**

What We Heard About...
The relevance of CCUS to climate change

What We Heard About...
The relevance of CCUS to the oil & gas industry

What We Heard About...
The relevance of CCUS to heavy industry



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