

What is CCS and why do we need it?

Tips and tricks for describing CCS and its benefits



Photo: A Bartlett

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cags

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CCS as one way to decrease carbon dioxide emissions

- CCS explained in the context of delivering energy and reducing carbon dioxide emissions – what are effective ways to do this?



Photos: A Bartlett



Introducing CCS – some challenges

- Complex science needs to be explained without adding to misunderstandings
- Access to CCS sites is limited
- In some countries, there is already opposition to CCS
- “Uncertainty” and “risk” – part of the CCS landscape but can generate negativity

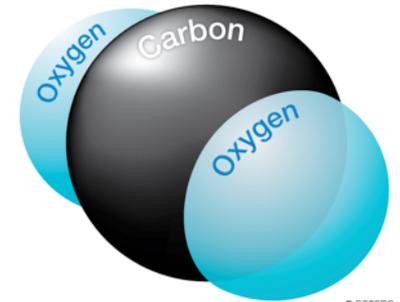


Image courtesy of CO2CRC
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Talking about CCS

- Diagrams/text

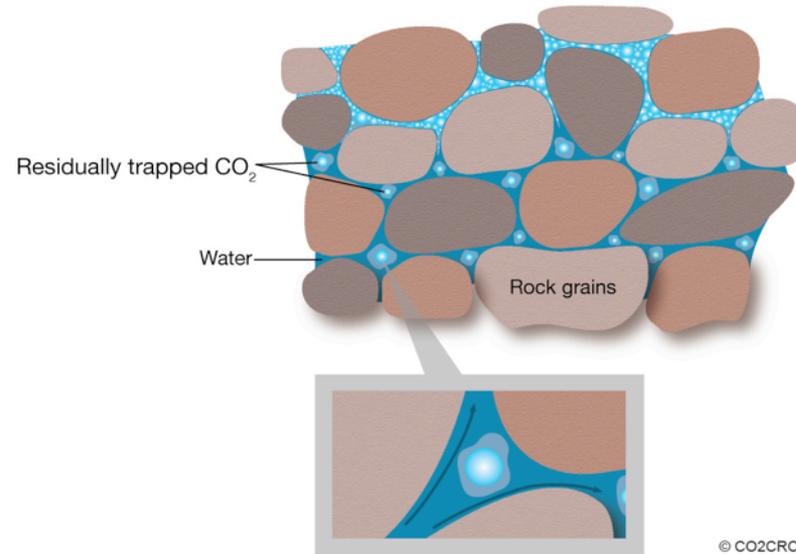


Image courtesy of CO2CRC
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- Videos

- Physical props
(rocks/core, carbonated water/balloons etc)



Hands-on activities

- Talk to your science/communication advisors
- Try to use materials that are easy to find
- We can only provide a representation of storage at depth
- Words and objects used to describe CCS for the first time may be taken literally
- Provide opportunities for concepts to be re-told by the participants – correct misunderstandings



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Videos for discussion

Big CCS – excellent animation of the contribution of CCS to emission reduction

<http://www.sintef.no/Projectweb/BIGCCS/Animation/>

CCS in five minutes - Bellona

<http://bellona.org/ccs/bellona-and-ccs/bellona-studies/why-do-we-need-ccs.html>

ZEP (Zero emissions platform) - The Hard Facts behind Carbon Capture and Storage – CCSa

<http://www.zeroemissionsplatform.eu/>



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Videos for discussion

Australian Coal Association, why we can't just stop using coal. Middle of the video 1:27 to 2:05

<http://www.newgencoal.com.au/videos.aspx?video=vE2oP489BSM>

Australian Coal Association 1st minute

<http://www.youtube.com/watch?v=ROEFaHKVmSs>

Construction of capture facilities

<http://www.youtube.com/watch?v=KDtC5DCA4Bg&feature=related>



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Videos for discussion

CCUS from the energy institute.

<http://www.youtube.com/watch?v=3dm1esCpzR0>

LBNL animated video

<http://www.youtube.com/watch?v=gr9cznZFulc&feature=related>

NETL – animation of storage

<http://www.youtube.com/watch?v=svAHlYdkoks&feature=related>



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Videos for discussion

Alberta CCS

<http://www.youtube.com/watch?v=R0i6dhEPSwU>

CCS by Atticus (10 minutes)

<http://www.youtube.com/watch?v=3hdghPdYEyo&feature=endscreen>

CO2CRC – subsurface trapping

http://www.co2crc.com.au/imagelibrary2/vid_otway_leading_storage_research.html

CO2CRC – storage rocks and sealing rocks

http://www.co2crc.com.au/imagelibrary2/vid_chocolate_ccs.html



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Images for discussion

CO2CRC

<http://www.co2crc.com.au/imagelibrary/>

Scottish Carbon Capture & Storage Centre

<http://www.geos.ed.ac.uk/sccs/public/teachers/>

CO₂ Capture Project

[http://www.co2captureproject.org/
image_library.html](http://www.co2captureproject.org/image_library.html)



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谢谢

Thank you

