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# A call to action in a critical period

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## THE GLOBAL CCS INSTITUTE

### OUR VISION FOR CCS

- CCS is an integral part of a low-carbon future

### OUR MISSION

- To accelerate the development, demonstration and deployment of CCS globally

### OUR OBJECTIVES

- Knowledge sharing among proponents of CCS
- Fact-based advice and advocacy
- Create favourable conditions to implement CCS



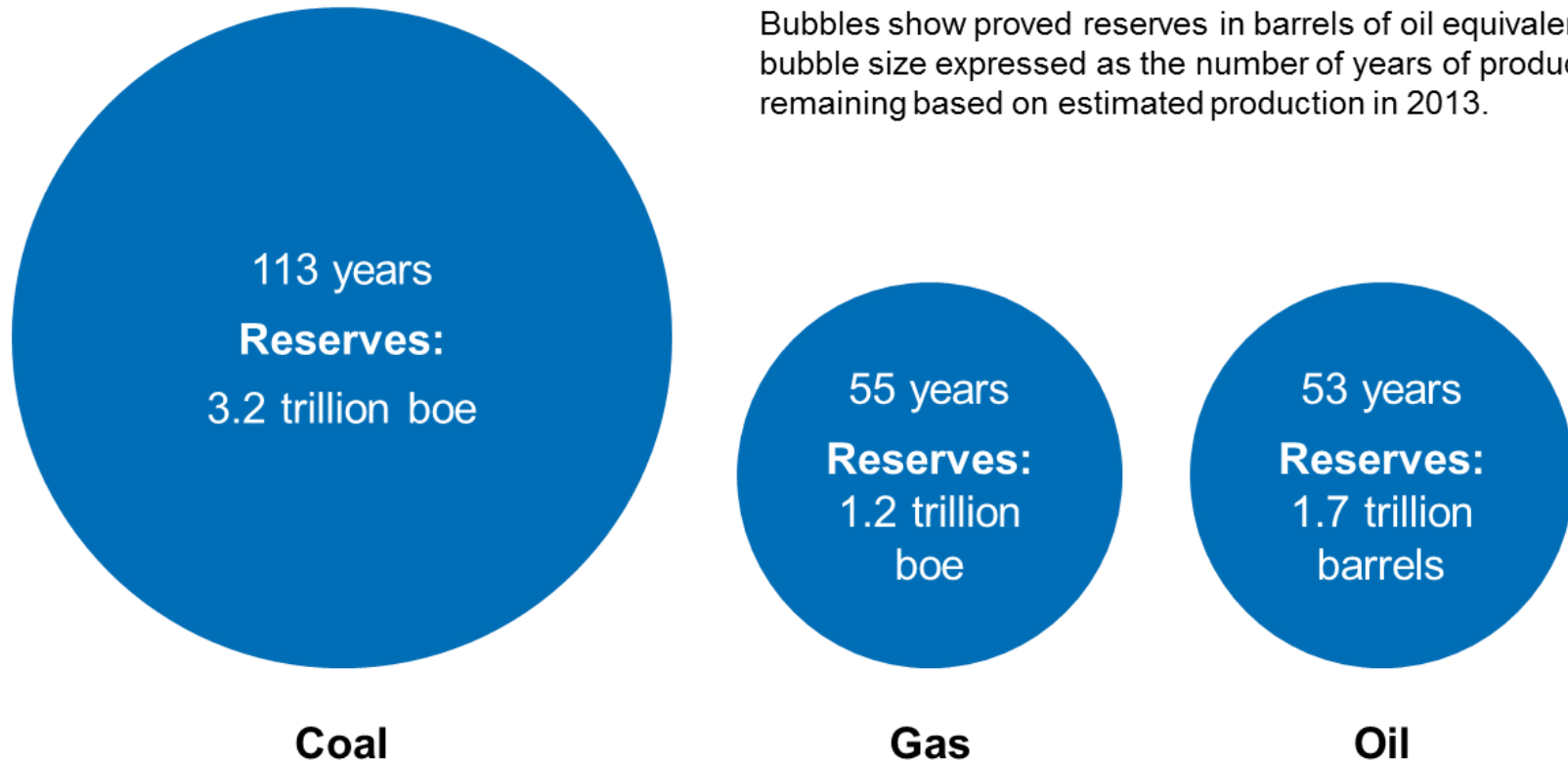
## What are the Key Questions

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- What is the current state of play for CCS?
- What is needed to make CCS happen?
- What can the UN and UNFCCC systems could do to support CCS?



# Fossil Fuels are not going away



Source: *BP Statistical Review of World Energy* (2014)

- 134 GW coal capacity added in 2013 – at least double that of any other fuel
- In many industries CCS is the only option
- IEA predicts that 123Gt CO<sub>2</sub> needs to be captured and stored between 2015 and 2050



# CCS is technically viable and can be economically feasible

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## While progress in CCS has been slower than expected

- CCS is pre-commercial
- 55 large-scale CCS projects
- 22 projects in the 'active' stage (12 operational)
- Cumulative capture by 'active' projects is 40MtCO<sub>2</sub> per annum by 2017 (equivalent to 5GW of coal-based electricity)
- Most active CCS relies on EOR
- CCS requires a strong political will and commitment



## CCS is a crucial part of the solution

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- Renewable technologies are not the sole answer:
- CCS is significantly less expensive than replacing coal power plants with renewable energy
  - Decarbonising power without CCS would cost 40% more than with CCS
  - A single CCS project can store millions of tonnes for many decades
- In many industrial processes there is no alternative to CCS
- CCS is important in all countries and regions



## CCS is achievable

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- CCS will likely remain pre-commercial pre-2020
  - Wide scale deployment possible 2020+
- EOR will play an important role in the short term, to facilitate:
  - Technology Development
  - Infrastructure development
  - Policy and Regulatory Developments
  - Reduced costs
- Ultimately dedicated Geological Storage will be required



## What is needed?

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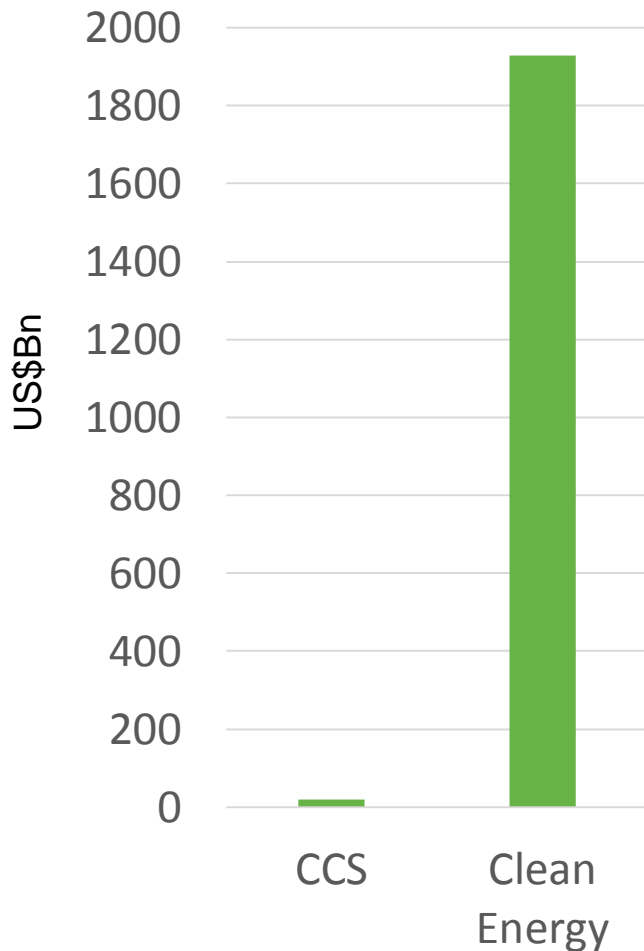
- Policy Support
- Political Will
- Policy Parity





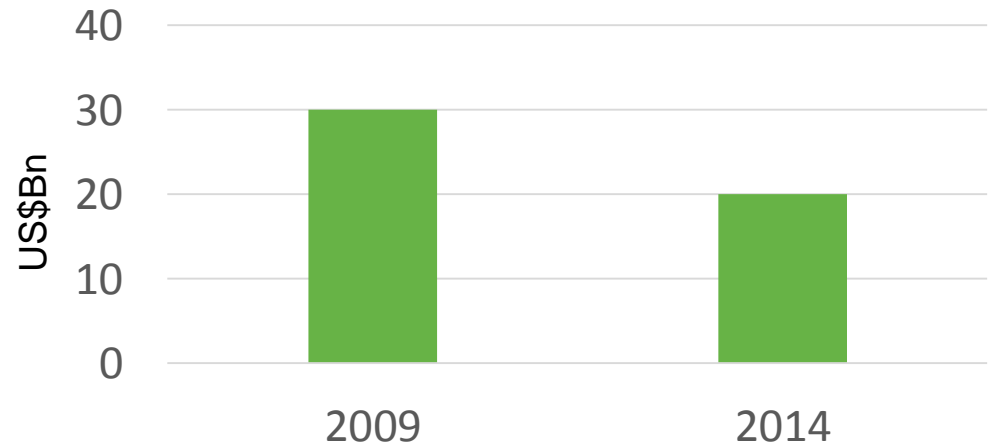
# Policy Parity in Figures

## Investment 2004-2013



Bloomberg NEF 2013

## CCS Public Funding



- CCS requires an additional investment of over US\$2.5 to US\$3 trillion from 2010 to 2050
- This is 6% of total investment to reduce emissions by 50% by 2050



## The UN System and UNFCCC can support CCS

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- Technology Mechanism and Financial Mechanism must equally support all clean energy technologies
- CTCN and GFC relationship is critical
- CCS should feature within the TECs current work plan
- Trans-boundary issues need to be resolved
- CCS needs a UN Institutional Champion organisation
- The Paris agreement needs to enable deployment of a suite of clean energy technologies (inc CCS) to move through the demonstration phase.



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