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CCS
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THE GLOBAL STATUS OF CCS: 2013 – A CALL TO ACTION

Brad Page, CEO – Global CCS Institute

CSLF Ministerial Meeting

7 November 2013, Washington D.C.



Achieving a low carbon future: the vital role of CCS

“ The world needs deep cuts in greenhouse gas emissions ... we can deliver those cuts faster and deeper with CCS in our toolbox. The ENGO Network believes CCS is a necessary part of the toolbox and advocates for its prompt and safe deployment.”

David Hawkins

International ENGO Network on CCS*

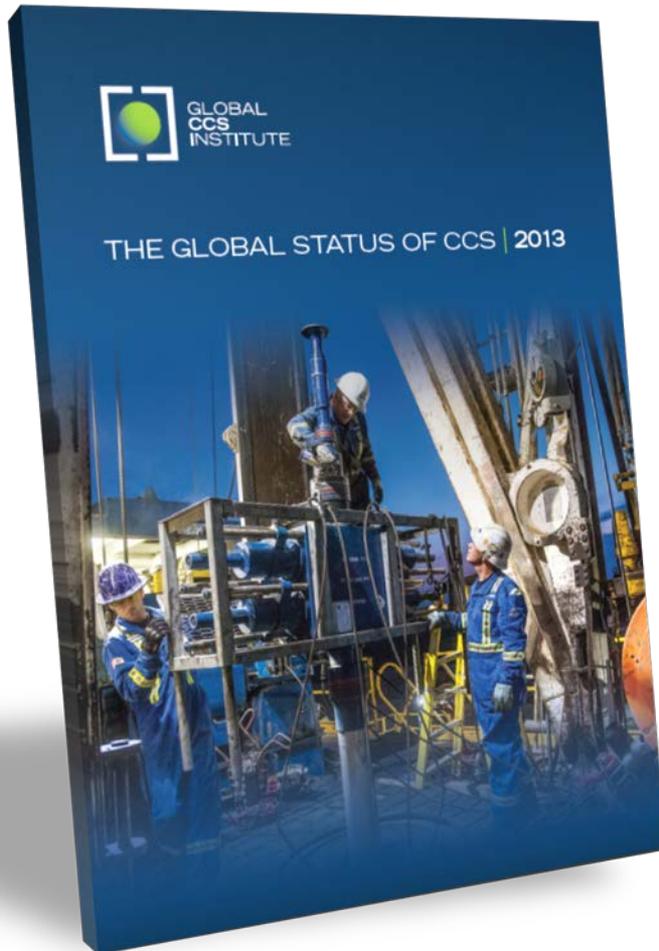
Press conference in Doha, Qatar, 4 December 2012

*The ENGO Network membership comprises: Clean Air Task Force, E3G, Environmental Defense Fund, Green Alliance, Natural Resources Defense Council, The Bellona Foundation, The Climate Institute, The Pembina Institute, World Resources Institute, and Zero Emission Resource Organisation.



The Global Status of CCS: 2013

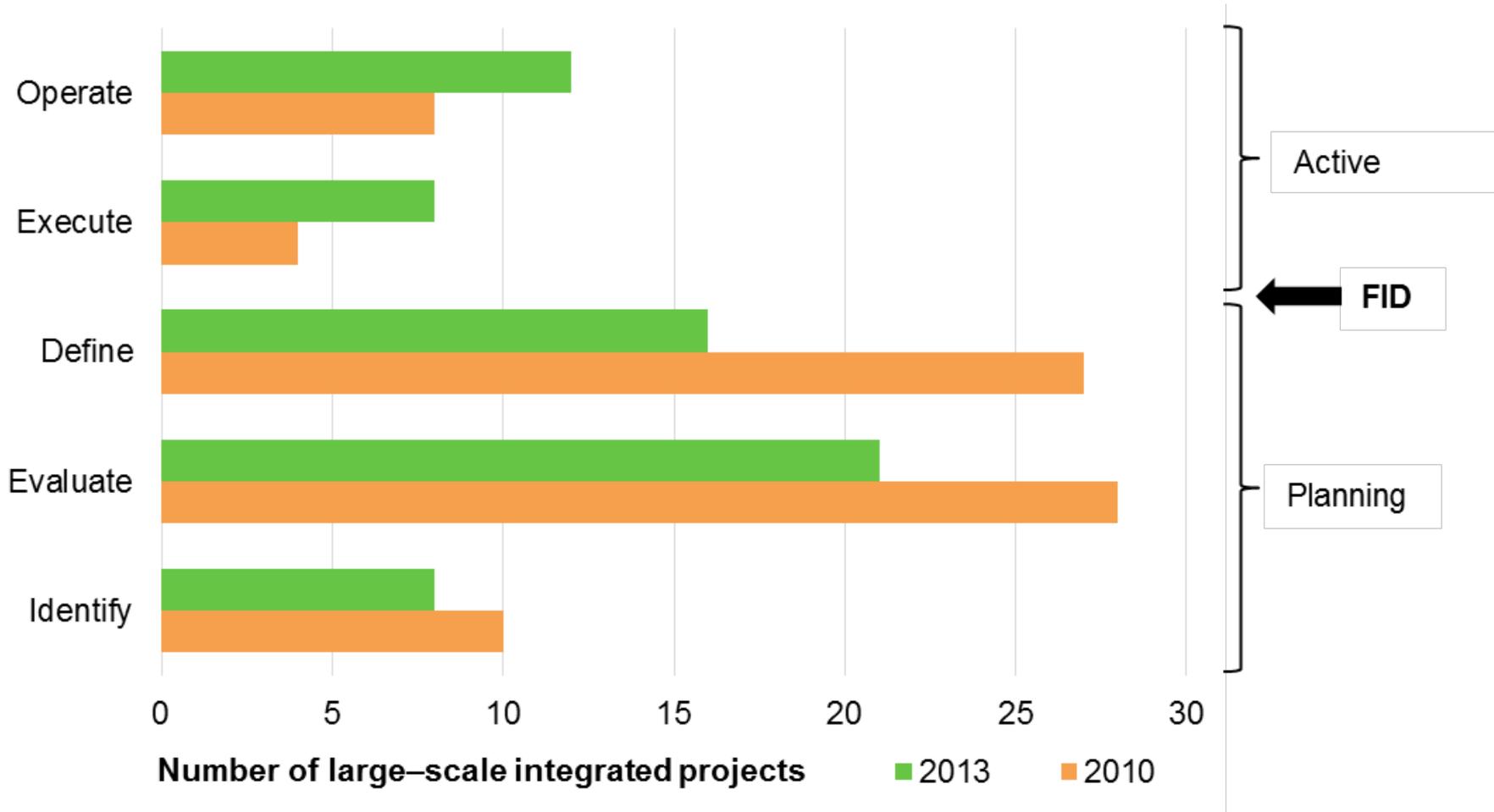
Most comprehensive source on the status of CCS – key points



- CCS technology is a reality – 20 projects, many benefiting from early support, now in operation or construction.
- But progress is too slow for CCS to play its full part in climate change mitigation.
- Policy and regulatory enhancements are vital for a momentum shift.
- Robust R&D and infrastructure support are also key enablers.



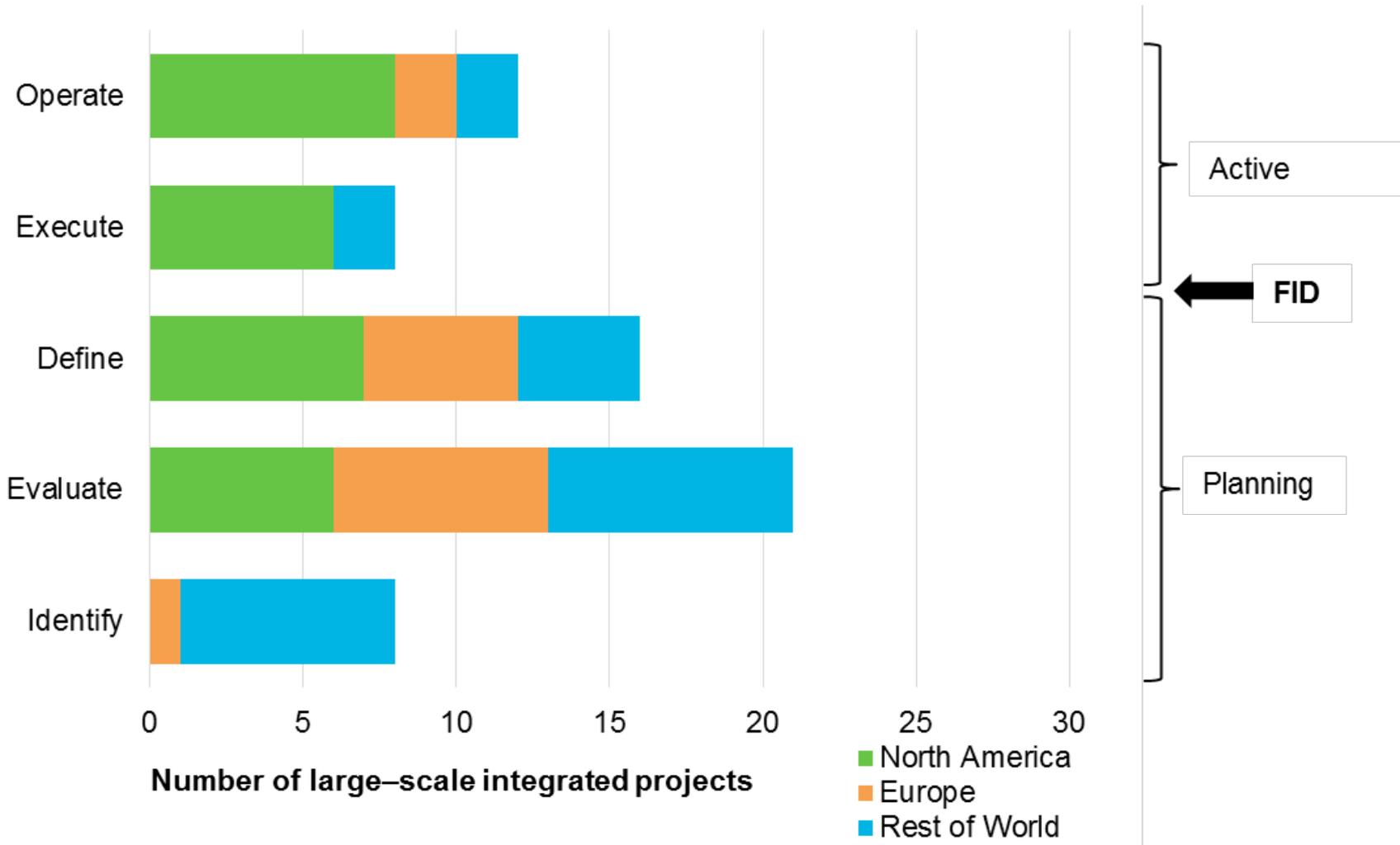
Important gains but project pipeline diminished



More than 50% increase in Active projects since 2010 but progress is slow and pipeline is not renewing. Momentum must be accelerated.



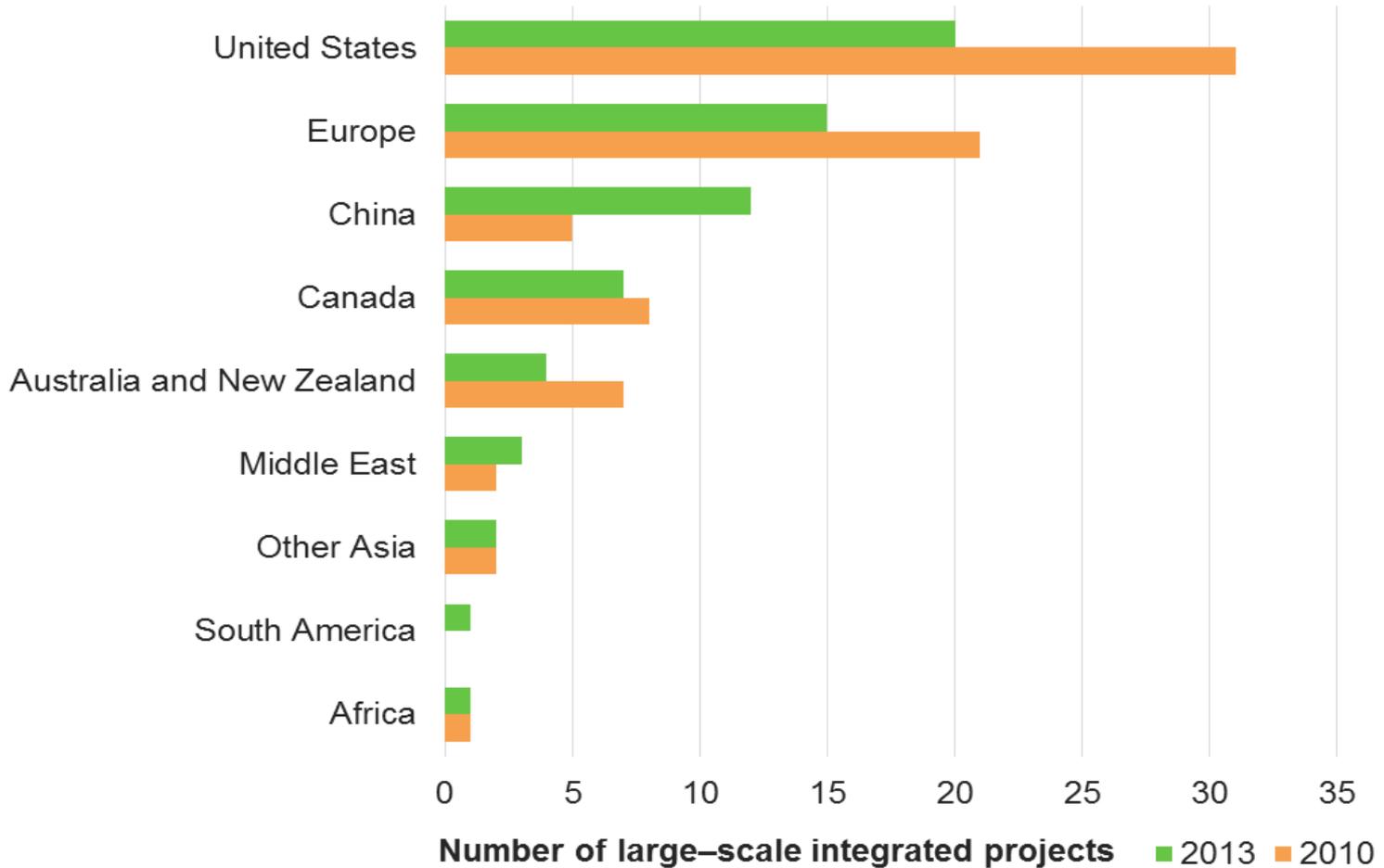
Skewed regional distribution needs attention



North America dominates Active projects. No new projects passed FID in Europe in over a decade. Projects in non-OECD countries critical.



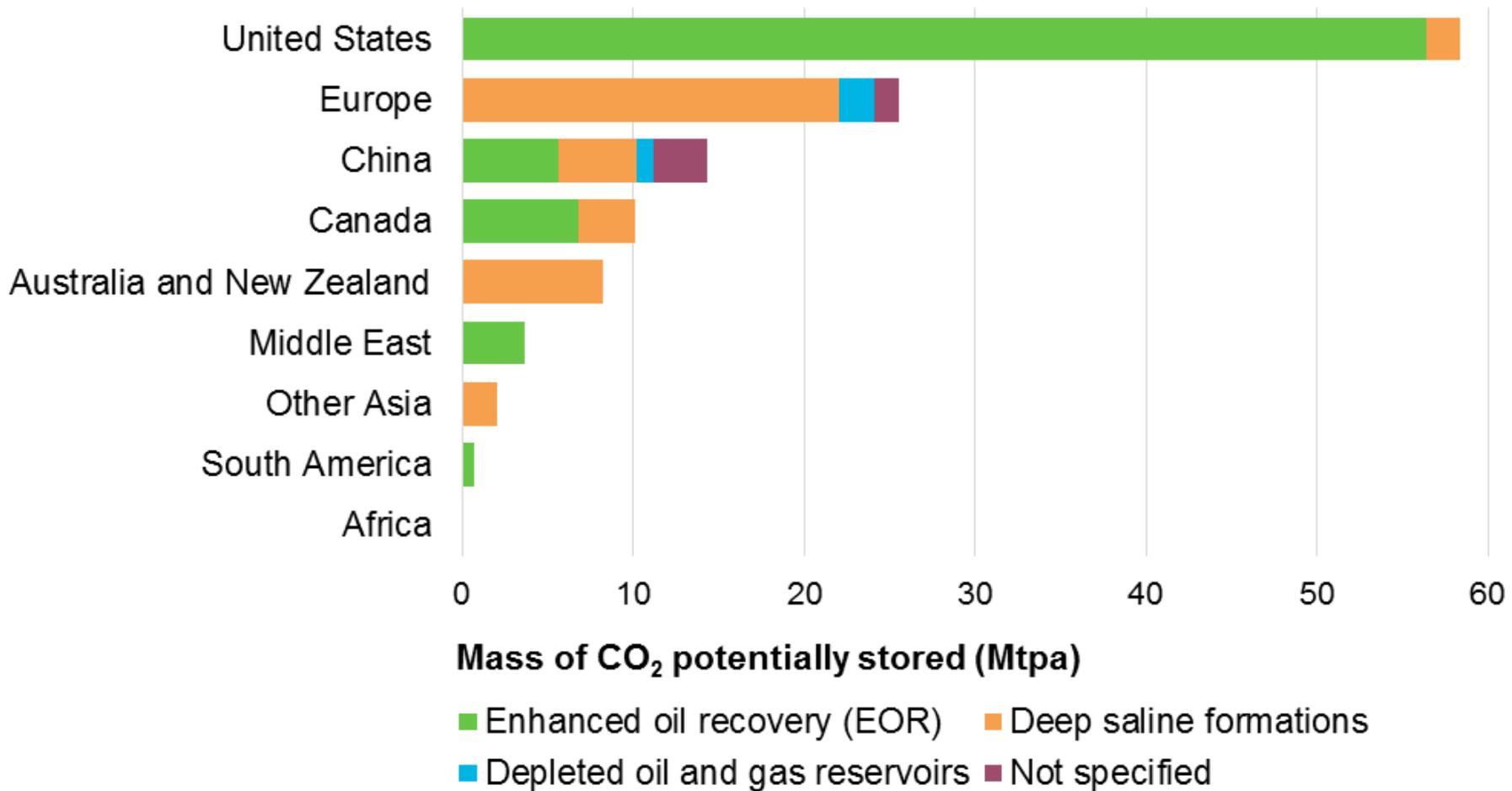
Growing importance of China



China is well positioned to influence the future of CCS. It accounts for half the projects outside North America and Europe but these are still in the Planning stages.



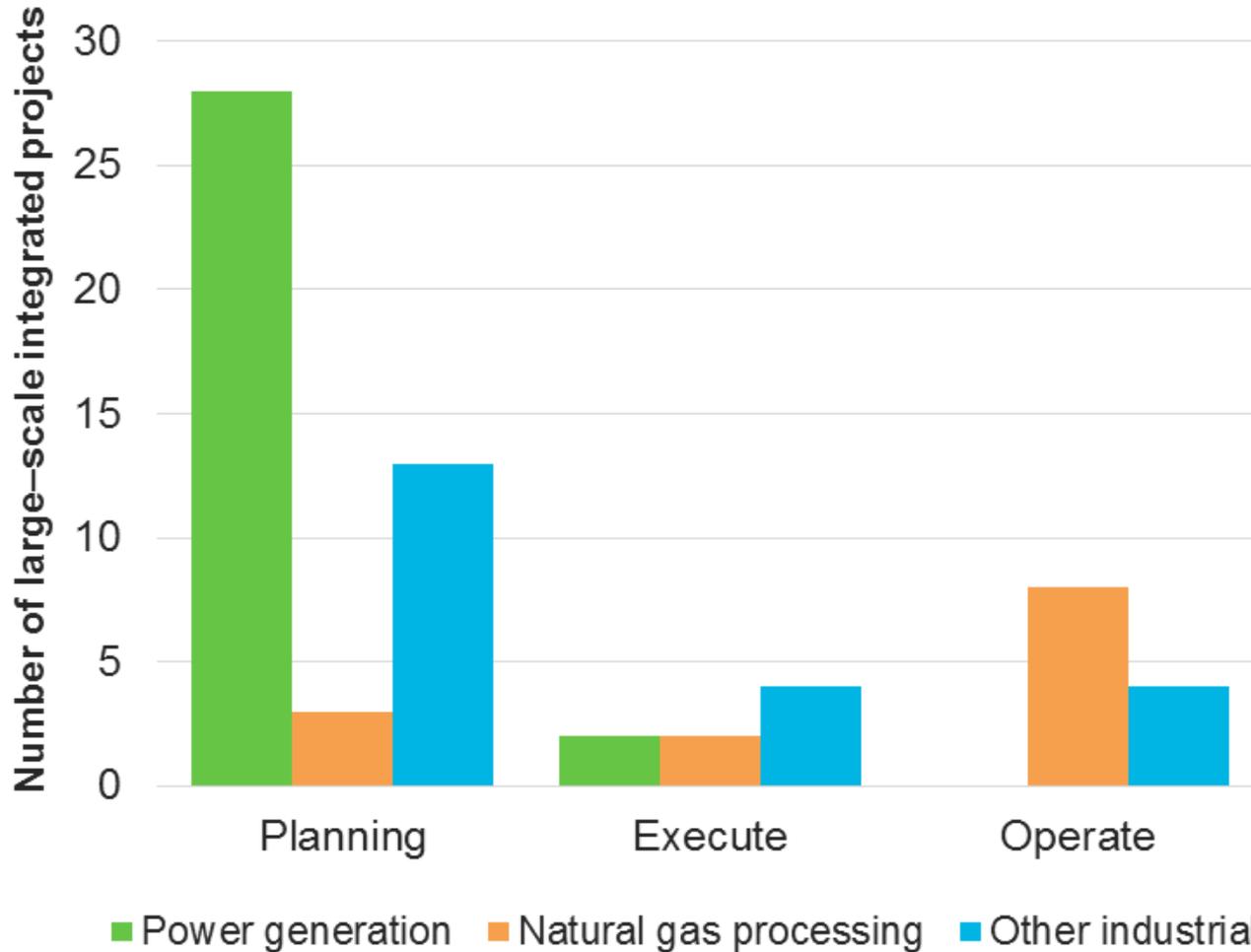
EOR continues to drive development



CCS is progressing fastest where opportunities for additional revenue are strongest. Existing policy support on its own has generally not been enough.



Power generation – some progress but needs help



Almost all Active projects are in areas where CO₂ is already removed or produced at high concentrations in the production process. In power and energy-intensive industries, momentum beyond the planning stage is sluggish and must be accelerated.



Action to progress the business case for CCS: policy

- 70 per cent of respondents to the Institute's projects survey indicate policy uncertainty is a major risk.
- Pipeline of projects could shrink further, placing climate change targets at risk.
- Need to implement sustained policy support/incentives and market based mechanisms ensuring CCS is not disadvantaged.
- Short term support needed for first mover projects, especially in power and energy-intensive industry sectors, to demonstrate CCS at scale.



Action to progress the business case for CCS: regulatory

- Some important legal and regulatory progress made.
- □ □ Despite this several issues persist.
- Includes post-closure stewardship and cross-border movement of CO₂.
- GHG accounting for CO₂EOR storage must be clarified.
- Tackle critical regulatory uncertainties to boost progress.



Action to progress the business case for CCS: R&D support and collaboration

- Current CCS demonstration projects are vital for ‘learning curve’ benefits but can only take us so far.
- Much can be learnt from large pilot projects testing advanced technologies.
- Globally collaborative R&D most cost effective.
- Connecting pipeline of new technology with ‘learning by doing’ serves multiple aims – reduces costs and strengthens investor and stakeholder confidence.



Action to progress the business case for CCS: storage

- While CO₂EOR is very important, there is also a need to focus on maturing deep saline storage sites.
- Full characterisation of greenfield sites can take 5-10 years or more.
- Currently limited incentives for industry to undertake costly exploration programs.
- Advance plans for storage site selection to create pathway.



Actions needed

- Encouraging progress with 20 projects in operation and construction – but must deal with the decline in the project pipeline and speed of implementation.

Recommendations:

- Short term support to help demonstration projects proceed and to build confidence, especially in power and energy-intensive industries.
- Above all, action on long-term climate change mitigation commitments is key to the deployment of CCS technology.
- Must tackle regulatory, policy and storage issues.
- Robust R&D on advanced, low-cost capture technology.
- Need to act now to ensure CCS can play its full role.