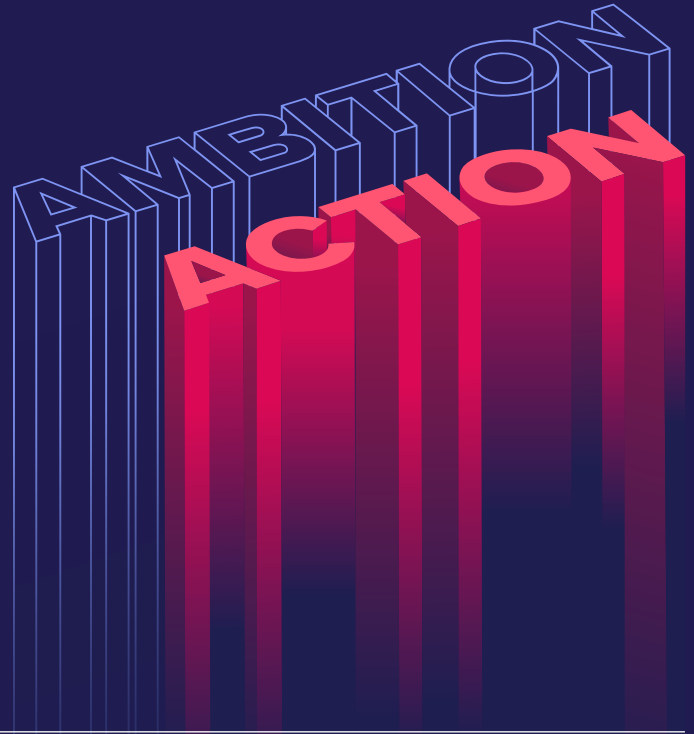


GLOBAL CLIMATE AMBITION MUST TRANSLATE TO URGENT, BROAD, AND LARGE-SCALE ACTION IF WE ARE TO ACHIEVE OUR SHARED CLIMATE GOALS.



The response to climate change continues to escalate and net-zero greenhouse gas emissions by mid-century is now accepted as the objective. A transition from ambition to action is clear in the data on CCS investment. In 2022, the total capacity of CCS projects in development was 244 million tonnes per annum of carbon dioxide.



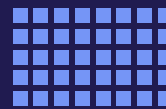
WHAT IS CCS?

Carbon capture and storage captures CO₂ emissions at the source and from the atmosphere, making it vital to climate mitigation efforts. The IPCC and International Energy Agency, among many other credible organisations, have outlined a critical role for CCS in achieving net zero emissions by mid-century.

HOW CCS HELPS MITIGATE CLIMATE CHANGE

-  **DEEP DECARBONISATION OF INDUSTRY**
-  **LOW-CARBON HYDROGEN PRODUCTION**
-  **NEGATIVE EMISSIONS**
-  **LOW-CARBON DISPATCHABLE POWER**

GLOBAL STATUS OF CCS 2022



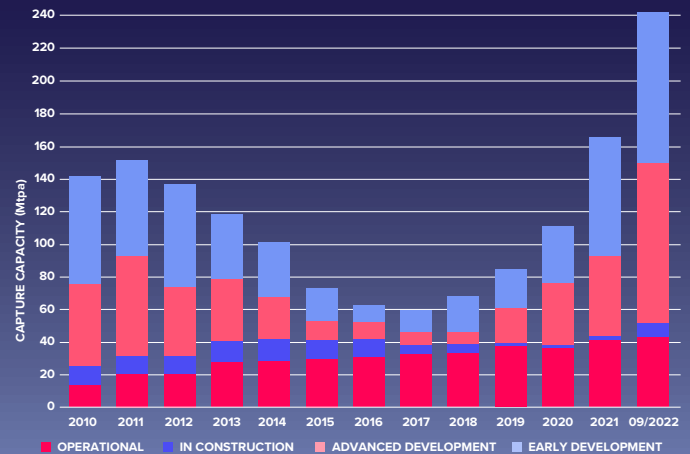
244 Mt CAPTURE CAPACITY



61 NEW CCS FACILITIES ANNOUNCED

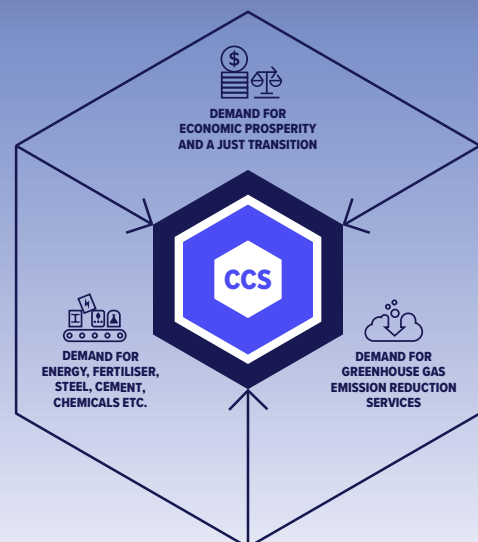


196 CCS FACILITIES WORLDWIDE



AMBITION TO ACTION: WHY CCS CONTINUES TO GROW

The growth in CCS is a response from the private sector and governments to growing expectations from the broader public to meaningfully act on climate change. For some businesses, CCS is a critical tool in reducing their exposure to CO₂ emissions, mitigating a strategic business risk. For others, CCS is an opportunity to supply a new and growing industry. Similarly, governments seeking to chart the lowest-cost, most efficient pathway toward net-zero are identifying CCS alongside all other mitigation options as essential to meeting climate targets, while ensuring a just transition for their communities.





THE ECONOMIC AND SOCIAL BENEFITS OF CCS

VITAL FOR REDUCING CO₂ EMISSIONS, INVESTMENT IN CCS PROVIDES SEVERAL ECONOMIC AND SOCIAL BENEFITS

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CREATES AND SUSTAINS HIGH-VALUE JOBS

CCS facilities begin as large engineering and construction projects that require a significant workforce. For example, at its peak the Boundary Dam CCS facility in Canada employed a construction workforce of 1,700 people. Ongoing jobs are then created to run and maintain CCS facilities. A commercial CO₂ capture facility may employ about 20 operators and maintainers, while supporting jobs in firms that provide its goods and services. The global CCS industry must grow by more than one-hundred-fold by 2050 to achieve the Paris Agreement climate targets, meaning 100,000 construction jobs and ongoing jobs for 30-40,000 people.
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FACILITATES A JUST TRANSITION FOR COMMUNITIES RELIANT ON EMITTING INDUSTRIES

Emissions intense industries often develop in clusters due to resource, infrastructure, transport, workforce and supplier availability. Many local communities rely on these clusters to support their employment and local economy. They would suffer severe economic and social dislocation if their emissions intense industries were shut down. CCS can help transform these emissions-intense industries to near-zero emissions industries, protecting jobs and communities.
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ENABLES INFRASTRUCTURE RE-USE


Where oil or gas production fields are at the end of their lives, there may be opportunities to re-use existing oil and gas infrastructure by repurposing it for CO₂ transport and storage. This could provide a range of benefits, including reducing the cost of building transport and storage infrastructure and potentially reducing permitting time. The re-use of infrastructure could also defer the costs and the environmental impact of decommissioning, freeing-up resources that can be invested in other value generating activities.
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SUPPORTING ECONOMIC GROWTH THROUGH INNOVATION


CCS could also be a source of high-value innovation spillovers and therefore play a role in supporting innovation-led economic growth alongside other technologies.


NET ZERO BY 2050 REQUIRES STRONG POLICY ACTION


The International Energy Agency’s Sustainable Development Scenario defines a pathway where fifteen per cent of global emissions reductions are delivered by CCS. Within this scenario, the installed capacity of CCS needs to increase one hundred-fold by 2050. The pathway to wide-scale CCS deployment will require private sector financing. Governments will play a key role in creating an enabling environment for private sector investment. Government’s can take several steps to realise investment in CCS.


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1 DEFINE THE ROLE OF CCS IN MEETING NATIONAL EMISSION REDUCTION TARGETS AND COMMUNICATE THIS TO INDUSTRY AND THE PUBLIC.
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2 CREATE A LONG-TERM, HIGH VALUE ON THE STORAGE OF CO₂.
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3 SUPPORT THE IDENTIFICATION AND APPRAISAL OF GEOLOGICAL STORAGE RESOURCES.
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4 DEVELOP SPECIFIC CCS LAWS AND REGULATIONS THAT INCLUDE THE TRANSFER OF LIABILITY TO THE GOVERNMENT SUBJECT TO ACCEPTABLE PERFORMANCE AND BEHAVIOUR OF THE STORED CO₂.
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5 ENSURE EMISSIONS ABATEMENT POLICIES ARE INCLUSIVE OF ALL OPTIONS (INCLUDING CCS) TO ENABLE AN OPTIMUM MIX OF TECHNOLOGIES TO MAXIMISE ABATEMENT AND MINIMISE COST.
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6 IDENTIFY OPPORTUNITIES FOR CCS HUBS AND FACILITATE THEIR ESTABLISHMENT.
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7 PROVIDE CAPITAL GRANTS, LOW-COST FINANCE AND/OR GUARANTEES TO REDUCE THE COST OF CAPITAL FOR CCS INVESTMENTS.