



15 March 2018

Committee Secretary
Senate Standing Committees on Environment and Communications
PO Box 6100
Parliament House
Canberra ACT 2600
By email: ec.sen@aph.gov.au

Dear Sir/Madam

Clean Energy Finance Corporation Amendment (Carbon Capture and Storage) Bill 2017

The Minerals Council of Australia (MCA) supports the Australian government's sensible policy objective of playing a key role in the world effort to increase investment in carbon capture and storage (CCS) and associated infrastructure. This reflects Australia's role as a supplier of high quality energy resources, including coal and gas, to meet the world's energy needs. Moreover, it builds on successive Australian governments' leadership roles this century in:

- Increasing the understanding of the CO₂ geological storage resource in saline formations
- The development of national geo-sequestration legislation and regulations for large scale CCS projects
- Supporting international efforts to roll out CCS technologies and reduce their costs, including through the Carbon Sequestration Leadership Forum and bilateral initiatives with Japan, China and other countries
- Supporting Australia's world leading R&D and deployment activities in collaboration with industry through:
 - the black coal industry's unique COAL21 Fund
 - the CO2CRC and its world recognised Otway storage and monitoring facility, and
 - Australian National Low Emissions Coal R&D activities to reduce the cost of large-scale CCS projects and improve their suitability for Australian application.

The MCA recognises that meeting Australia's emissions reduction targets will require changes in our energy sector. It is therefore critical that where public funding is utilised, it should be invested in the development and deployment of a portfolio of solutions that will provide a secure, reliable, safe and low-emission energy supply for future generations.

The Australian Energy Market Commission has highlighted the importance of technology neutrality in energy policy noting that 'a policy that allows the greatest number of technology options is likely to minimise costs for consumers.'¹

If the policy goal is to reduce emissions at lowest cost, a technology neutral approach is imperative. That means considering the potential of advanced coal combustion through high efficiency, low emissions (HELE) power generation and CCS technologies.

¹ Australian Energy Market Commission, [Submission to the Review of the Renewable Energy Target](#), 28 May 2014, p.9; and Australian Energy Market Commission, [Making market transformation work – overview 2016-2017](#), 2017, p.3.

1. The Role of the Clean Energy Finance Corporation (CEFC)

The CEFC mission is:

To accelerate Australia's transformation towards a more competitive economy in a carbon constrained world, by acting as a catalyst to increase investment in emissions reduction.²

It 'is committed to transforming clean energy investment to lower Australia's carbon emissions.'³ Under the CEFC Act, its investments include renewable energy, energy efficiency and certain low emissions technologies. The Act specifically excludes CCS from eligibility. To date, the CEFC has invested more than \$3.3 billion in eligible clean energy projects with a total project value of \$8.3 billion.

With some \$7 billion remaining at its disposal, the CEFC has the potential to play a role in delivering low emissions solutions and thereby contribute to the broader objectives of the government's energy and industrial development plans. **The success of the CEFC in realising this potential will be enhanced only if it has the flexibility to invest in all low emissions technologies, including CCS** (see **Attachment 1**)

2. Need for a Balanced View on Australia's Low Emission Strategy

The adoption of a technology neutral approach to the CEFC ambit will strengthen Australia's capacity to achieve lower emissions at lowest cost and remove a distortion introduced during the creation of the CEFC.

It is clear Australians want power that has 24/7 availability with reduced emissions and is affordable, safe, secure and reliable. Coal can offer this through commercially available HELE technologies. HELE technologies can reduce the CO₂ emissions of coal-fired generation by up to 40 to 50 per cent compared with the oldest technology in place.⁴ The adoption of HELE is well established globally and in particular in Asia.⁵

Coal now has an even lower emissions pathway with further reductions in emissions by up to 90 per cent through the addition of CCS.⁶ CCS is not an experimental technology, with leading examples in North America already operating in conjunction with coal fired generation.

In Australia our black coal producers through the COAL 21 Fund have invested \$300 million in significant CCS projects and leveraged another \$550 million from other sources including the Commonwealth Government. The industry has committed to continue this investment including considering opportunities for storage of CO₂ in suitable geological formations, CO₂ capture at a commercial operation and storage hub development (further details are included in **Attachments 2 and 3**).

3. Carbon Capture and Storage and Australia's Economic Development

The world's and Australia's electricity supply is reliant on fossil fuels for the dominant share of its energy requirements. Fossil fuels are also key inputs to the manufacture of industrial products such

² Clean Energy Finance Corporation, [Annual Report 2016–17](#), September 2017, p. 2.

³ Clean Energy Finance Corporation, [Media Statement from the CEFC regarding proposed changes to the Clean Energy Finance Corporation Act](#), 30 May 2017.

⁴ Department of Resources, Energy and Tourism, [A cleaner future for power stations](#), Interdepartmental Task Group Discussion Paper, 1 November 2010, p. 5.

⁵ Andrew Minchener, presentation on '[HELE technology: A key step towards near zero emissions](#)', IEA Clean Coal Centre, December 2017; Malgorzata Wiatros-Motyka, 'An overview of HELE technology deployment in the coal power plant fleets of China, EU, Japan and USA', IEA Clean Coal Centre, 2016 and Ian Barnes, 'HELE perspectives for selected countries', IEA Clean Coal Centre, 2016.

⁶ International Energy Agency, [20 years of Carbon Capture and Storage, Accelerating Future Deployment](#), OECD/IEA, Paris, 2016, p. 65. According to the IEA, 'The potential for CCS to generate negative emissions when coupled with bioenergy is integral to energy use becoming CO₂ emissions-neutral in 2060', IEA website: [Carbon Capture and Storage](#), viewed 15 March 2018.

as plastics, chemicals, iron, steel, cement and fertilisers. Fossil fuels are also a major contributor to Australia's economy through export revenue.

The challenge that Australia and the world face is to continue to realise the benefits and value of fossil energy resources without the associated emissions. It is therefore imperative that commercial-scale Carbon Capture and Storage (CCS) is developed and available. This assures that Australia and its trading partners can maintain energy security and meet future emissions reduction targets at the lowest economic cost. ...

Urgent investment in CO₂ storage site characterisation, CCS projects, techno-economic assessments, and public engagement is required to ensure that CCS can be deployed to achieve the deep reduction in greenhouse gas emissions required to meet national and global targets.⁷

The original decision to exclude CCS from accessing the CEFC is inconsistent with the potential of CCS to contribute to Australia's domestic carbon abatement efforts and potentially contrary to Australia's strategic and economic interests as the world's largest exporter of coal and a major exporter of liquefied natural gas (LNG).

CCS is proven at scale and policies that stimulate demand for CCS and further deployment will inevitably deliver technology improvements and cost reductions. This will come through learning by doing, competition between vendors, improved processes, materials and metals, and other developments as has been the case with other technologies.

CCS will also become critical to Australia's export/use of fossil fuels and the associated jobs and investment. It is the most viable technology to reduce emissions from the existing fossil fuel power generation fleet, locally and globally. It will also be required to help reduce emissions from energy-intensive industries that depend on the continued use of fossil fuels.

Including CCS in the CEFC's scope would represent an opportunity for Australia to contribute to the further development of a technology that will be an essential part of a global response to climate change.

4. View of the International Panel on Climate Change and the International Energy Agency

CCS is recognised by the United Nations, International Energy Agency (IEA) and many countries as a crucial technology for both energy security and emission reduction over this century. Modelling by the IEA and International Panel on Climate Change (IPCC) shows that without CCS meeting climate goals will be significantly more expensive.⁸

The IEA's *2018 Review of Australia's Energy Policies* released last month recommends the Australian Government should ensure that low-emission technology support is market-based and guided by locational signals, supported by energy system-wide network planning.

The IEA also states that: 'Australia is well placed to demonstrate cutting-edge technologies, including concentrated solar power, battery storage and carbon capture and storage (CCS)'.⁹ It urges Commonwealth and State Governments to step up support for technology R&D and commercialisation, including through the Australian Renewable Energy Agency (ARENA) and the CEFC, stating:

The proposed change to include CCS as an eligible technology under the CEFC mandate (currently before Parliament) is an important and welcome step which will reduce a significant barrier to CCS investment.¹⁰

⁷ C Greig, G Bongers, C Stott and S Byrom. [Energy Security and Prosperity in Australia: A Roadmap for CCS](#), The University of Queensland, Brisbane, 2016, p. 5.

⁸ Intergovernmental Panel on Climate Change, [Climate change 2014 synthesis report Summary for Policymakers](#), Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)], IPCC, Geneva, Switzerland, p. 25; and IEA, *Energy technology perspectives 2016: Towards sustainable urban energy systems*, Paris, OECD/IEA, 2016.

⁹ International Energy Agency, [Energy policies of IEA countries: Australia 2018 Review](#), Paris, OECD/IEA, 2018, p. 18.

¹⁰ Ibid p. 194.

This is consistent with the long-held view of the Australian minerals industry that technology neutrality and competitive markets should underpin Australia's energy policy.

A competitive energy market is the best way to deliver affordable, secure, reliable and lower emissions energy. However, over the past decade successive Federal and State government policy interventions have distorted market signals and led to increased prices and reduced security and reliability.

As a result Australia has moved from having some of the lowest to some of the highest energy costs in the developed world. Australia needs to restore its international comparative advantage of secure, reliable, low-cost energy while meeting its emissions reduction targets.

5. Funding Low Emission Technologies

Given the enormous potential of CCS in Australia, it is surprising that it has received considerably less funding support than other low emission technologies. Renewable technologies have access to over \$2 billion in funding managed by the Australian Renewable Energy Agency,¹¹ \$1 billion from the Clean Energy Innovation Fund (jointly managed by ARENA and the CEFC)¹² and an estimated \$20 billion¹³ in indirect support provided by the Renewable Energy Target. The exclusion of CCS from the CEFC exacerbates the current funding imbalance and handicaps the development of a key low emission solution.

Including CCS within the CEFC's scope would enable it to adopt an open, competitive and technology-neutral approach to its investments. This will have the dual-benefit of allowing the CEFC to select the best investment opportunities across all technology options while contributing to the development of the full portfolio of technologies that will play an important role in Australia's energy future.

6. CEFC Investments: A Stage-Gated Approach

The CEFC will necessarily invest in projects which are higher risk and therefore unable to secure commercial financing. Consequently financing provided by the CEFC should therefore be staged-gated where appropriate to allow the Board to monitor the progress and viability of investments over time.

7. Linkage to Australia's Nationally Determined Commitment under the Paris Agreement

During his presentation in Parliament House, Canberra, in February 2018, the Executive Director of the IEA, Dr Fatih Birol, described the enduring dominance of fossil fuels in global energy supply. In 1987, when the Brundtland Commission released *Our Common Future* (also known as the Brundtland Report), the share of energy produced using fossil fuels was about 81 per cent. Today, with all we know about energy options and technology, it still accounts for the same share at 81 per cent.

Dr Birol said the IEA projects that coal demand will continue to grow although at a much slower pace than previously. He also said the IEA sees Australia as one of the cornerstones of the world electricity market due to its coal, uranium and LNG assets. It was in this context that he called on Australia to become a world leader in CCS. He emphasised that government support is needed around the world to boost investment in this technology.

On the world stage there will be over 20 large scale CCS projects operating by 2020 including Western Australia's Gorgon Carbon Dioxide Injection Project. This meets the G8's 2008 objective of 20 such projects by 2020. But there is a need for a new commitment to expand this number to deliver the required increase in CCS deployment.

¹¹ Australian Renewable Energy Agency, [ARENA welcomes new commitment to renewable innovation](#), Media statement 24 March 2016.

¹² Department of the Environment, [Fact Sheet – Clean Energy Innovation Fund](#), 23 March 2016.

¹³ The Hon Martin Ferguson AM MP, [Australia's Resources and Energy Future](#), speech, June 2010.

Projects operating in the United States, Canada, Norway and elsewhere show that commercial-scale, first-generation CCS technology works. Deployment of the next generation will require governments and industry to develop projects that distribute risk and cost in a way that is consistent with the level of public and private benefit achieved.

To help achieve this, the IEA's Coal Industry Advisory Board (CIAB) has complimented Australia on its COAL21 initiative (see **Box 1**). It says COAL21 provides a potential structure to replicate in other countries.¹⁴

The CIAB argues that if governments implement well-designed policies and associated incentives, a market environment will be created where public and private banks would finance CCS projects, industry would drive a wave of CCS deployments, innovation would drive down the cost and commercial risk of CCS and climate goals would be achieved at the lowest possible cost. This has been done for renewables; it can be done for CCS.

The CIAB also says industry has learnt it is more effective to focus on smaller-scale, lower-cost projects with replicable scalable units that can incorporate innovations more effectively.

Under the Paris Agreement 10 countries, representing 33 per cent of global emissions, include CCS in their Nationally Determined Contributions (NDCs). Australia's NDC involves a reduction of 26 to 28 per cent below 2005 levels by 2030. This can be seen as a first step as it only extends to 2030 and neither HELE nor CCS technologies are currently included.

As the CIAB points out:

The Paris Agreement should provide fresh impetus to efforts in Australia and globally to deploy CCS. As NDCs are reviewable periodically, there is an opportunity for Australia to add further initiatives into its NDC over time. CCS is paramount if Australia is to achieve its ambitions in 2030, 2050 and beyond at the lowest-possible cost. The inclusion of CCS would also help ensure that the requisite CCS infrastructure becomes available over time, consistent with achieving the country's CO₂-reduction ambitions.¹⁵

Box 1 Australia's COAL21 initiative

In order to generate funding for CCS and other low-emissions coal technologies the Australian black-coal industry established the COAL21 Fund as a ten year initiative in 2007. COAL21 co-invests with other stakeholders (governments, electricity generators, equipment suppliers and other investors), complementing similar international efforts. It is funded by a voluntary equal levy on coal production.

Thanks to funding by governments and COAL21, finding and proving up storage in Australia is well under way and the search for storage sites in Queensland, NSW and Victoria has been intensified.

At Callide in Queensland, Australia and Japan have successfully demonstrated the Oxyfuel capture technology through retrofit of an entire power plant unit. Australia has also adapted post combustion capture (PCC) for deployment in Australian conditions.

In addition, COAL21 and the Australian Government jointly fund the A\$150 million Australian National Low Emissions Coal R&D (ANLEC R&D) program – a unique, world standard research initiative.

COAL21 also supports the CO2CRC, whose aims are to develop CCS as a socially, technically and commercially viable option. Its A\$100 million research facility is one of the world's leading research and geo-sequestration demonstration projects involving injection, storage and monitoring of CO₂.

COAL21 recently committed to fund a range of projects over another 10 years to 2027, this represents a tangible indication of the strong industry commitment to pursuing CCS. In particular with support from the Australian and state Governments, COAL21 aims to support the development of the Surat Basin CCS Hub in Queensland as well as the ongoing developments in the Darling Basin of NSW.

¹⁴ International Energy Agency's Coal Industry Advisory Board, [An International Commitment to CCS: Priority Actions to Enable CCS Deployment](#), Paris, November 2017, p. 4.

¹⁵ Ibid, p. 28.

8. Summary and Recommendations

In summary, Australia should take a technology-neutral approach to all low emissions energy sources, including renewables, gas, nuclear and advanced coal technologies such as high efficiency, low emissions (HELE) generation plant and carbon capture and storage (CCS).

CCS will be a particularly important part of Australia's domestic abatement efforts. It is the only technology available to reduce significantly emissions from the use of coal and gas, which account for most of Australia's electricity generation, as well as from industrial processes such as cement, manganese, synthetic rutile, alumina and steel production and natural gas processing associated with LNG production.

The MCA therefore recommends:

1. The Committee support the Bill given it adopts a technology-neutral approach to investment opportunities, including CCS.
2. Where appropriate, the CEFC adopt a stage-gated approach to financing capital intensive, low emissions technology projects.
3. The operation and effectiveness of the CEFC be improved by the CCS amendments proposed in the Bill.

The MCA would welcome the opportunity to discuss this submission with the Committee.

Yours faithfully

GREG EVANS
EXECUTIVE DIRECTOR – COAL
MINERALS COUNCIL OF AUSTRALIA

ATTACHMENT 1



MEDIA RELEASE MINERALS COUNCIL OF AUSTRALIA

GOVERNMENT TAKES BALANCED VIEW WITH LOW EMISSION STRATEGY

Statement by Greg Evans, Executive Director – Coal, Minerals Council of Australia

The Australian coal industry supports the government's sensible policy which recognises the role of our high quality coal in helping to curb emissions.

If the policy intent is all about reducing emissions we should have a technology neutral approach and that means considering the opportunity coal offers when utilising both high efficiency low emission (HELE) and carbon capture and storage (CCS).

Including CCS in the Clean Energy Finance Corporation (CEFC) ambit strengthens our capacity to lower emissions in the supply of electricity.

It is clear Australians want power that has 24/7 availability and is affordable. Base load coal offers this and it now has a low emissions pathway.

The adoption of HELE is well established globally and in particular in Asia where some 725 plants are already operating and 1142 are under construction or planned. These plants reduce emissions by up to 40% to 50% compared with the oldest technology in place.

The next step is CCS which can reduce greenhouse emissions by up to 90%. This is real-world technology, with leading examples in North America already operating in conjunction with coal fired generation.

In Australia our coal producers through the COAL 21 Fund have invested \$300 million in significant CCS projects and leveraged another \$550 million from other sources including the Commonwealth Government. This industry investment will continue including considering opportunities for storage of CO₂ in suitable geological formations.

CCS is very much part of the future here and internationally if we are to maintain affordable energy and other key industries including steel making and cement production. In fact in 2014 the United Nation's IPCC saw its indispensable role and concluded that achieving 430 to 480 ppm CO₂ equivalent levels would be 138% more costly without CCS.

We will now pursue the key priorities for CCS adoption with the Commonwealth government especially given the renewed impetus through the CEFC mechanism.

In the past many informed environmental groups have supported CCS approaches and we would encourage this support with this latest Commonwealth initiative.

30 May 2017

ATTACHMENT 2

MEDIA STATEMENT



COAL21 FUND LOOKS TO FUTURE

Statement from Greg Evans - Chief Executive COAL21 Fund

The COAL21 Fund has announced its continuation and a strong commitment to fund a range of projects over the next 10 year period to 2027.

The Fund is the cornerstone of the black coal industry's contribution to the research, development and demonstration (RD&D) of low emissions coal technologies.

It is a unique vehicle which is owned by Australian coal producers and operates on a voluntary levy based on coal production. Its day to day operations are managed by ACA Low Emissions Technologies Ltd.

Since the Fund's inception in 2006 it has invested over \$300 million in a range of significant projects and these funds have leveraged a further \$550 million from other sources including from the Commonwealth Government, State Governments and industry.

Chairman of the COAL21 Fund and Director of Centennial Coal, Mr David Moulton, speaking on the announcement the Fund's extension, said: "I am pleased to see that the work of the Fund is helping to secure the future value of Australia's black coal resources. It is also building wider support for the country's second largest export industry through its commitment to a low emissions pathway."

Mr Moulton noted the following highlights over the past decade:

- CO₂ has been successfully captured at Queensland's Callide coal-fired power plant – the largest demonstration of oxy-fuel technology in the world so far
- 65,000 tonnes of CO₂ have been sequestered in a depleted gas field in Victoria's Otway Basin through the CO₂ Cooperative Research Centre (CO2CRC)
- R&D activities have been undertaken through Australian National Low Emissions Coal Research & Development Ltd (ANLEC), (jointly funded by the Australian Government and COAL21 Fund) – this is helping reduce the investment risk associated with the demonstration of low emissions coal technologies in Australia thereby accelerating the technology development cycle
- Improved understanding of the CO₂ storage resource in Australia and assisting in intensifying the search for storage.

Mr Moulton said: "The next 10 years offers many opportunities to build on our achievements and to further solidify the place of coal in Australia as both a strategic export and underpinning domestic energy supply."

With learnings from the Fund's first 10 years informing new investments, the industry has committed a further \$255 million and endorsed participation in a range of ongoing and new initiatives to support the Fund's objectives of building confidence in carbon capture & storage (CCS) technology and demonstrating CO₂ storage capacity within Australia.

16 August 2017

ATTACHMENT 3



MEDIA RELEASE MINERALS COUNCIL OF AUSTRALIA

MAINTAINING MOMENTUM ON CARBON CAPTURE AND STORAGE

Statement from Greg Evans, Executive Director – Coal, Minerals Council of Australia

Australia has been urged to build on work to date on carbon capture and storage (CCS) by playing a lead role and contributing to world efforts to massively reduce the cost of meeting international climate goals.

A [submission](https://www.iea.org/ciab/papers/International_CCS_commitment.pdf) [https://www.iea.org/ciab/papers/International_CCS_commitment.pdf] by the Coal Industry Advisory Board to the International Energy Agency said deployment of CCS is critical to meet global emissions targets.

CCS prevents carbon dioxide from entering the atmosphere when fuels such as coal, oil and natural gas are used. The process captures CO₂ at a power station or industrial facility such as a steel, LNG or cement plant and stores it in deep underground geological structures.

The CCS process is used widely overseas, with 21 large-scale CCS facilities in operation or under construction around the world including in Canada and Texas, and can reduce emissions from coal-fired generation plants by up to 90 per cent.

The United Nations Intergovernmental Panel on Climate Change has said if the world is to succeed in constraining CO₂ emissions to levels consistent with a 2°C rise in global temperatures, then CCS will need to contribute about one-sixth of CO₂ emission reductions in 2050.

“Without CCS, the cost of achieving a 2°C goal increases by a mean estimate of 138%. This increase in cost equates to ~3% of cumulative global GDP for the rest of the century,” the CIAB submission warned.

The submission outlines a number of CCS-enabling projects being undertaken in Australia, including the successful commercial demonstration of capture technology at Queensland’s Callide Power Station.

The submission recommends the Australian Government should implement additional policies to promote CCS investment and work with industry to co-develop CCS technology projects that are industrially scalable. In addition, the submission calls on the Government to adopt energy policies, including low-emission coal technologies, that provide the right settings to close the gap between carbon reduction ambitions and current emissions.

CCS is important if Australia is to help contribute to global emissions reduction goals at the lowest possible cost. It will also help decarbonise energy-intensive industries that depend on the continued use of fossil fuels.

Case studies cited in the submission, including from Australia, show that commercial-scale projects of first-generation CCS technology work effectively. Next-generation deployment will require co-operative efforts between governments and industry to develop projects that distribute risk and cost consistent with the level of public and private benefit achieved.

The submission cites Australia’s COAL21 initiative – established to generate funding for CCS and other low-emission coal technology projects – as a model for other countries to follow. The COAL21 Fund, which co-invests with government, electricity generators, equipment suppliers and other investors, is funded by a voluntary levy on coal production and has so far committed \$300 million to projects.

23 January 2018

ATTACHMENT: COAL21 Fund achievements over the past decade and future plans

COAL21 Fund achievements over the past decade and future plans

Achievements to date

- CO₂ has been successfully captured at Queensland's Callide coal-fired power plant – the largest demonstration of oxy-fuel technology in the world to date
- 65,000 tonnes of CO₂ have been sequestered in a depleted gas field in Victoria's Otway Basin at the Cooperative Research Centre for Greenhouse Gas Technologies' (CO2CRC) world-leading Otway research facility
- Undertaken research and development activities through Australian National Low Emissions Coal Research & Development Ltd (ANLEC), jointly funded by the Australian Government and COAL21 Fund – helping to reduce the investment risk associated with the demonstration of low emissions coal technologies in Australia, and accelerating the technology development cycle
- Improved the understanding of the CO₂ storage resource in Australia and assisting in intensifying the search for storage in Queensland and New South Wales.

Future Plans

The black coal industry has committed to ongoing and new initiatives to support the Fund's objectives of building confidence in carbon capture & storage (CCS) technology and developing CO₂ storage capacity within Australia. The plan over the next ten years includes:

- CO₂ capture at a commercial operation;
- Geological storage hub development; and
- Abatement of fugitive emissions from coal mines.

Specific projects include:

- Delivering an industrial-scale CCS development by 2025 through the extension of the current Carbon Transport and Storage Company (CTSCo) injection trial in Queensland's Surat Basin. The initiative would use the geological storage identified and a commercial post-combustion capture module to capture CO₂ at a nearby High Efficiency, Low Emission (HELE) power station
- A CCS Hub development is proposed through the CTSCo Project and the University of Queensland Surat Deep Aquifer Appraisal Project
- NSW Storage development project in conjunction with Coal Innovation NSW
- Further supporting R&D through ANLEC and the CO2CRC
- Safe abatement of methane in ventilation air from underground coal mines.

BACKGROUND

The Coal Industry Advisory Board (CIAB) is a group of high-level executives from coal-related organisations established by the International Energy Agency (IEA) in July 1979 to provide advice to the IEA on a wide range of issues relating to coal. The submission to the IEA builds on a 2016 CIAB report *An International Commitment to CCS: Policies and Incentives to Enable a Low-Carbon Energy Future* that provides a set of policy recommendations to support the deployment of CCS.

ENDS.