



Australian Government



Commonwealth-Northern Territory Bilateral Energy and Emissions Reduction Agreement

Memorandum of Understanding (version 1.0, 5 April 2022)

Date

This Memorandum of Understanding (**Agreement**) is dated April 2022

Parties

This Agreement is made between the following Parties:

The Commonwealth of Australia (the Commonwealth)

The Northern Territory (the Territory)

Context

- A. This Agreement sets out the objectives and actions that will be delivered through a collaborative partnership between the Commonwealth and the Northern Territory (the Parties) in relation to improving energy security, reliability and affordability, and achieving cost-effective emissions reductions.
- B. Many of these actions will support economic recovery from the impacts of the COVID-19 pandemic, as they will contribute to lower costs for consumers and business. Actions will be designed to reinforce these objectives, where relevant.
- C. This Agreement is intended to achieve the following objectives:
 1. Increase access to, and supply of, gas in the Territory to:
 - i. secure and increase the Territory's capacity as an energy provider;
 - ii. support the broader eastern Australian gas market;
 - iii. maximise the gas going to its highest value use; and
 - iv. create a diverse manufacturing industry in the Territory.
 2. Ensure secure, reliable and low cost power, in the context of increasing renewables penetration, to support Territory and national energy security.
 3. Create jobs and enable industry growth and diversification.
 4. Pursue the development of innovative low emission technology.
 5. Partner on emissions reduction to assist the Territory to sustainably grow, while facilitating transition to net zero by 2050.
 6. Facilitate low-emissions industrial transformation through deployment of low emissions technologies.

- D. The purpose of this Agreement is to record the Parties' agreement on the objectives and actions that will be achieved through this arrangement.

1. Interpretation

- 1.1 This Agreement is not intended to be, and is not, a legally binding or enforceable document.
- 1.2 The Parties will act and cooperate in good faith in accordance with the terms of this Agreement and consistent with its spirit and intention.

2. Term

- 2.1 Unless ended by either Party in accordance with clause 2.2, this Agreement commences on the date on which it is signed by both Parties and will continue until April 2032, or when Parties agree in writing that all objectives and actions outlined in this Agreement have been completed, or by any other mutual agreement.
- 2.2 The Parties may end the arrangements in this Agreement by written agreement.
- a. Either Party may notify its intention to end the arrangements in this Agreement by giving written notice to the other Party.
 - b. If notice is given under clause 2.2.a, the end date of the arrangements in this Agreement will be negotiated between the Parties within a period of 14 calendar days or as otherwise agreed between the Parties.

3. Agreement

- 3.1 The Parties acknowledge that this Agreement records their expectations, understanding and responsibilities as at the date of the Agreement, but does not give rise to legally enforceable obligations.
- 3.2 Each Party will:
- a. Do all things necessary or desirable to give full effect to the arrangements contained or implied in the Implementation Schedules to this Agreement;
 - b. Promptly advise the other of any issue or circumstance that arises that may impact on the Party's ability to implement the actions set out in the Implementation Schedules to this Agreement; and
 - c. Promptly disclose to the other, any interest (other than as a Party to this Agreement) it has or acquires, which is or may be different to the interest of the other Party in connection with this Agreement.
- 3.3 The Agreement is not intended to affect:
- a. Any existing Federation Funding Agreements between the Parties; or
 - b. Any other existing arrangement between the Parties; instead this Agreement aims to complement and facilitate such arrangements, including the Beetaloo Strategic Basin Plan. This Agreement supersedes the former Memorandum of Understanding to support gas industry development in the Territory.
- 3.4 Nothing in this Agreement places any obligations on the Commonwealth or the Territory if those obligations would not be supported by the Constitution, legislative authority or appropriations.

4. Implementation Schedules

- 4.1 The Implementation Schedules will specify the objectives, actions and where applicable, timeframes that both Parties agree to pursue to give effect to the overarching objectives (clause C on page 1) of this Agreement.
- 4.2 The following Implementation Schedules have been included in this Agreement:
- a. Schedule A: Governance of this Agreement;
 - b. Schedule B: Funding allocation;
 - c. Schedule C: Gas;
 - d. Schedule D: Emissions reduction; and
 - e. Schedule E: Generation, networks and storage.

5. The Parties' Responsibilities

- 5.1 The Parties will:
- a. work together to achieve the objectives and actions outlined in the Implementation Schedules;
 - b. work together to develop a suitable Reporting Framework for progress against the actions in the Implementation Schedules. The Reporting Framework will also consider public facing communications;
 - c. be responsible for the procurement, selection and performance of any consultants or any other contracts or arrangements required to implement actions for which they are responsible, as identified in the Implementation Schedules;
 - d. regularly share progress and updates on implementing actions identified in the Implementation Schedules;
 - e. invite each other to attend meetings in relation to implementing the actions identified in Implementation Schedules, as required; and
 - f. use all reasonable endeavours to respond promptly to any reasonable enquiries.

6. Funding

- 6.1 Unless otherwise stated in this Agreement, or otherwise agreed in writing by the Parties, anything a Party will do under this Agreement will be done at that Party's cost.

7. Variation

- 7.1 Any variation to this Agreement will be in writing and signed by both Parties.

8. Notices

8.1 The Parties agree they will reduce to writing all formal communications between them in relation to their responsibilities and obligations under this Agreement.

8.2 Unless notified otherwise, the Commonwealth's address for notices is:

Physical Address: Department of Industry, Science, Energy and Resources
10 Binara Street, Canberra, ACT, 2601

Postal Address: GPO Box 2013, Canberra, ACT 2601

Phone number: 02 6213 6000

8.3 Unless notified otherwise, the Territory's address for notices is:

Physical Address: Department of the Chief Minister and Cabinet
Level 14, 22 Mitchell Street, Darwin 0801

Postal Address: GPO Box 4396, Darwin NT 0801

Phone number: 08 8999 7814



Australian Government



Signatures

SIGNED for and on behalf of the
Commonwealth of Australia by the
Prime Minister:



The Honourable Scott Morrison MP
Prime Minister of the Commonwealth of
Australia

07 April 2022

Date

SIGNED for and on behalf of the **Northern**
Territory by the Chief Minister



The Honourable Michael Gunner MP
Chief Minister of the Northern Territory

- 8 APR 2022

Date

Schedule A: Governance of this Agreement

1. Agenda

1. The Parties will work cooperatively and in good faith to implement the terms of this Agreement.
2. Priorities within each of the schedules may change over time, including as technological change, cost shifts and industry maturation lead to new opportunities and focus areas within the context of the broader objectives of this Agreement.
3. The governance of this Agreement will ensure both a pragmatic, short-term, project-based delivery focus and an agile mechanism to enable ongoing strategic collaboration across the term of the Agreement.
4. An Agreement Implementation Committee ('Implementation Committee') will be responsible for implementing this Agreement.

2. Actions

1. The Parties will appoint an Implementation Committee responsible for implementing this Agreement.
2. The Implementation Committee will:
 - a. develop and agree annual priorities for approval by Ministers;
 - b. support business case development and facilitate consideration of funding to deliver on the annual priorities as appropriate;
 - c. be responsible for driving strategic coordination across Governments to ensure collaborative and timely delivery on the objectives of this Agreement; and
 - d. report to the responsible Ministers from each Government.
3. The Implementation Committee will consist of appropriate senior representatives from both Governments.
 - a. The Parties will each appoint a Co-Chair, which will be a Senior Executive with primary responsibility for energy and/or emissions reduction.
 - b. Other representatives will comprise key senior officials with the authority and responsibility to coordinate across their respective Governments to support delivery against the objectives of this Agreement.
4. The Implementation Committee will establish a Terms of Reference, which will guide, inter alia, the frequency of meetings, communications protocols, roles and responsibilities and reporting to the responsible Ministers from each Government.
5. The Implementation Committee will meet at least bi-annually to enable consideration and agreement of the annual work program, timed to ensure relevant information is prepared and delivered to support both Governments' internal decision-making and budgetary processes.
6. The Implementation Committee may be supported by senior officer working groups, as appropriate.

Schedule B: Funding allocation

1. Agenda

1. The Parties will provide funding as outlined in this Schedule.
2. Unless specified, Commonwealth investment will aim to be sourced from existing Commonwealth funding mechanisms. The Parties will work together to address barriers to success for eligible proponents in the Northern Territory.
3. Projects submitted to Commonwealth agencies will be assessed according to the guidelines, policies, legislation and any other criteria guiding those mechanisms.
4. Where a project or reform priority is unable to be supported through existing Commonwealth funding mechanisms, will deliver on the objectives of the Agreement and contribute to post COVID-19 recovery, the Commonwealth will endeavour to consider alternative sources of funding.
5. Projects will align with the Technology Investment Roadmap and, where appropriate, with Infrastructure Australia's Infrastructure Priority List. Consideration of projects will include the potential for any adverse environmental, social or economic impact and consider the Parties' joint commitments to net zero by 2050.
6. The Commonwealth contribution to emissions reduction projects funded through the Agreement will achieve low cost and cost-effective abatement. All abatement capable of being captured in the National Greenhouse Accounts will count towards Australia's emission reduction targets, including to achieve net zero by 2050.
7. All investment by the Commonwealth in the Territory, or specifically for the Territory, that contributes to the Agreement objectives counts towards the Commonwealth's contribution during the term of this Agreement.
8. The Implementation Committee provides a mechanism for accelerating consideration of new priorities and their funding requirements and addressing barriers to success. This will enable early and targeted discussions to ensure ongoing collaboration to deliver outcomes over the duration of this Agreement.

2. Actions

Funding allocations

1. The Commonwealth will allocate \$100 million to emissions reduction and energy projects in the Territory.
 - a. Of this, \$75 million will be allocated to activities that reduce emissions in accordance with schedule D and E, to be funded from departmental programs and Commonwealth funds including the Climate Solutions Fund (CSF), Emissions Reduction Fund (ERF) and the Australian Renewable Energy Agency (ARENA), consistent with the legislation and guidelines underpinning those mechanisms.
 - b. In addition, the Commonwealth will target a further \$25 million from the Clean Energy Finance Corporation (CEFC) or ARENA (with a preference for the latter) for projects that reduce emissions and align with priorities identified by both

Governments, consistent with the legislation and guidelines underpinning those mechanisms.

2. As part of its \$7.1 billion Energy Security and Regional Development Plan, the Commonwealth has allocated \$2.6 billion to the Northern Territory.
 - a. As part of this the Commonwealth will invest \$300 million to reduce emissions from liquefied natural gas (LNG) production and support clean hydrogen production in Darwin, together with associated carbon capture, use and storage infrastructure, subject to the completion of business cases that demonstrate net benefits and co-investment by the Territory government and/or the private sector.
3. Ministers will agree annual priorities and the Co-Chairs of each of the Parties will be responsible for coordinating and consolidating how the relevant funding mechanism will report on how they are helping address these priorities.
4. The Territory will allocate \$100 million to support emissions reduction and energy projects in the Territory.
5. The Parties will also use best endeavours to secure additional private sector investment in projects.

Reporting

6. Successful projects will be subject to progress tracking and reporting against the funding targets outlined in this schedule, as part of the Reporting Framework to be developed by the Parties.

Barriers to investment

7. The Commonwealth will seek to ensure there are no unreasonable barriers to the success of eligible Territory projects through existing Commonwealth funding mechanisms.
8. The Parties will work together to address barriers to investment and success for eligible proponents in the Territory, including by ensuring regulations and administrative processes are efficient, effective and risk based.

Schedule C: Gas

1. Agenda

1. National energy security is about ensuring Australians have the energy services needed to meet their social, economic and environmental objectives. The Commonwealth is committed to providing a reliable and affordable supply of gas to Australians.
2. The Territory has the opportunity to develop gas-based industries through its proximity to offshore petroleum reserves and highly prospective onshore gas resources. Securing offshore reserves and proving the commercialisation of onshore resources can help improve security of gas supply to the Territory gas market and Australia's east coast gas market, support the development of new industries within the Territory, and support increased energy security in Asia, including through the export of LNG.
3. The Territory is working to deliver the *Northern Territory Gas Strategy*, and implement all the recommendations of the *Scientific Inquiry into Hydraulic Fracturing in the Northern Territory* (HFI).
4. The Territory is working to grow the Territory's gas sector and support the establishment of advanced manufacturing (including petrochemicals), while also working to decarbonise the Territory's economy to net zero by 2050.
5. The Commonwealth's \$109.3 million Gas-Fired Recovery package focuses on three key areas across the gas supply chain: unlocking supply; delivering efficient transportation; and empowering consumers. This includes \$26.1 million to establish five Strategic Basin Plans over three years from 2020-21. The Strategic Basin Plans Program will accelerate, coordinate and optimise development of high potential resource basins, including the Beetaloo Sub-basin.
6. The Parties are committed to the development of onshore and offshore gas resources while recognising their commitments to achieving net zero emissions by 2050.
7. The Parties recognise the importance of engaging with Traditional Owners and local Aboriginal people in the development of the Territory's onshore gas industry and the importance of Aboriginal economic leadership. The Parties will continue to build strong collaborative relationships to maximise benefits for Traditional Owners and local Aboriginal people.
8. The Parties' commitment to development of the Beetaloo Sub-basin will help provide the reliable and affordable gas feedstock needed to support advanced manufacturing and new industries in the Territory. The Commonwealth is committed to building the scale, resilience and competitiveness of Australia's manufacturing industry through its Modern Manufacturing Strategy and recognises the importance of manufacturing to the growth and modernisation of the Territory's economy.

2. Actions

Gas supply and use

1. The Territory commits to maintain availability of at least 50 PJ of gas per annum for local use and supply to the east coast gas market until the Parties undertake a review of gas availability in Q1 2024 and set a new gas supply target for 2030.

2. The Parties commit to support the drilling of 24 gas exploration wells across the Territory by the completion of Q4 2023.
3. The Parties will work together to develop resources in basins of strategic importance identified through the Strategic Basin Plans Program, with a target of first gas production in the Beetaloo Sub-basin in 2023 and increasing production in following years.
4. The Commonwealth is helping unlock the resource potential and accelerate development of the Beetaloo Sub-basin through its \$226 million Beetaloo Strategic Basin Plan, which includes:
 - a. The \$50 million Beetaloo Cooperative Drilling Program provides grants to gas companies to support exploration that occurs before 30 December 2022.
 - b. The \$173.6 million Roads of Strategic Importance corridor will provide the road upgrades necessary for commercial development of the Beetaloo Sub-basin.
 - c. The \$2.2 million to build the Northern Land Council's capacity to facilitate land use agreements and drive economic opportunities in the Beetaloo Sub-basin.
5. The Territory Government is:
 - a. Undertaking a pipeline corridor study to identify a multi user corridor to connect the Beetaloo Sub-basin to the Middle Arm Sustainable Development Precinct.
 - b. Undertaking a Mid-Stream Infrastructure study to identify the physical infrastructure requirements to enable the production of gas across the Beetaloo Sub-basin (including Gathering Systems, Gas and Waste Treatment Facilities); and the policy levers to maximise a common user approach to reduce costs as much as possible from the well head in the Beetaloo Sub-basin to the point of market at Middle Arm.
 - c. Advancing a Business Case with Infrastructure Australia, through their Priority List process, for enabling infrastructure for the Beetaloo Sub-basin.
 - d. Undertaking a range of studies to support the Strategic Regional Environmental Baseline Assessment, a key recommendation of the HFI report required to be completed prior to issuing Production Approvals.
6. Recognising ongoing exploration activity and taking into account the findings of the Commonwealth's National Gas Infrastructure Plan, the Parties will commence an interim review by Q4 2022 to be concluded by Q4 2023 to:
 - a. progress outcomes from the Beetaloo Cooperative Drilling Program and Territory initiatives; and
 - b. identify any barriers to bringing on new gas supply, including the Territory and Commonwealth regulatory processes.
7. The Parties will identify any additional actions or projects required to ensure additional commercial gas production occurs as soon as possible. To facilitate this, the Parties will establish an across-government Beetaloo Forum to work with industry, relevant communities and Traditional Owners to:
 - a. monitor and accelerate gas operators' exploration activities;
 - b. deliver cohesive regional development and maximise benefits for local and Aboriginal communities;
 - c. identify and address regulatory duplication and efficiency opportunities; and
 - d. identify approaches to deliver common user pipeline and mid-stream infrastructure solutions.

Ensuring effective and efficient regulation

8. The Territory will complete implementation of its response to the Recommendations of the HFI by the end of 2022, in line with public commitments to enable consideration of production approvals.
9. The Parties agree to collaborate to continually improve the efficiency of environmental regulation implementation to support new gas exploration and development which ensures appropriate risk management and streamlines processes for industry. This includes having the necessary assessment and regulatory systems in place, working with key stakeholders to understand and address barriers to timely and efficient processes.
10. The Territory commits to ongoing monitoring and evaluation to identify opportunities and implement changes to improve the efficiency and effectiveness of its regulation of the onshore gas industry. Evaluation will include consideration of data gathered through Geological and Bioregional Assessments, the Strategic Regional Environmental Baseline Assessment and onshore gas development activities.
11. The Territory Government will provide an annual update to the Commonwealth-Northern Territory State Deal Implementation Committee on the progress achieved to improve the efficiency and effectiveness of its regulation of the onshore gas industry, including activities being further undertaken to improve the regulatory environment.
12. The Parties commit to pursuing digital solutions to improve the efficiency of regulation of the onshore gas industry.
13. The Commonwealth commits to ensure active tenure management of offshore petroleum retention lease arrangements.
14. The Territory commits to review implementation of its onshore petroleum retention lease arrangements to ensure active tenure management.
15. The Parties agree to work together to enhance gas pipeline regulation and gas market transparency through the Energy National Cabinet Reform Committee.
16. The Parties agree to work collaboratively to facilitate faster, more efficient and more responsive engagement between industry, land councils and Traditional Owners relating to gas development.
17. The Parties will ensure the views of Traditional Owners are considered and seek to maximise benefits to Traditional Owners and local Aboriginal peoples.

Gas-related enabling infrastructure

18. The Parties commit to working together to facilitate and coordinate efficient infrastructure outcomes that deliver on shared ambitions to:
 - a. reduce production and transportation costs;
 - b. support energy security; and
 - c. strengthen prospects for downstream industrial development.
19. The Parties will take account of the National Gas Infrastructure Plan in identifying priority actions.
20. The Parties will work together to identify, within established rules and limitations and appropriate funding mechanisms, including the principles outlined in the Future Gas

Infrastructure Investment Framework where applicable, industry investment opportunities for any new gas infrastructure needed to reach the agreed gas and exploration drilling targets. Key projects may include:

- a. enabling infrastructure for developing the Beetaloo Sub-basin;
- b. augmentation of existing and construction of new pipelines;
- c. constructing new gas mains to Middle Arm Sustainable Development Precinct to facilitate supply to existing consumers and new industrial consumers;
- d. a Beetaloo Sub-basin centralised common user gas hub and waste water processing facilities;
- e. exploration of carbon capture, use and storage (CCUS) options for gas exports and manufacturing processes; and
- f. facilities and other infrastructure required to facilitate ecosystem and industry development.

Research, innovation and workforce development

21. The Territory will provide an additional \$2.15 million financial support in the period 2021–2025 to the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Gas Industry Social and Environment Research Alliance (GISERA) for additional independent scientific research to improve community awareness of, and confidence in, gas development. This builds on the previous investments from the Parties (as at 1 February 2021):
 - a. the Territory has provided \$480,000 to CSIRO and GISERA; and
 - b. the Commonwealth has committed \$1.6 million to Territory-specific projects.
22. The Territory will take an evidenced based and scalable approach to workforce development and training opportunities required to support gas based industries in the Territory. This will include, where appropriate, supporting infrastructure, and program development to underwrite skills development.

Leveraging gas resources for advanced manufacturing

23. The Parties will collaborate to support the establishment of a petrochemicals complex and advanced manufacturing in the Territory, leveraging the Territory's gas resources.
24. The Parties will collaborate to support the development of the Middle Arm Sustainable Development Precinct. The Commonwealth will assist the Territory to identify sources of funding and will communicate any opportunities for funding and non-financial support.
25. The Commonwealth, through the CSIRO, has committed \$4.8 million to develop a business case and conduct technical studies to explore the viability of a multi-user, multi-access Low Emissions Hub at Middle Arm Sustainable Development Precinct, with a focus on CCUS and hydrogen generation, use and export.
26. The Territory will work with the CSIRO and other partners to develop the business case, conduct studies on possible onshore and offshore carbon storage locations, and explore opportunities for pilot facilities in or near the Middle Arm Sustainable Development Precinct to demonstrate key technologies required for the development of a low emissions hub.

27. To fast-track commercialisation of innovative projects and generate significant co-investment in the Territory's manufacturing industry, the Territory has committed \$8.75 million over five years towards a Territory focussed partnership with the Advanced Manufacturing Growth Centre established by the Commonwealth.

Schedule D: Emissions reduction

1. Agenda

1. The Parties are committed to the global goals of the Paris Agreement and to achieving their respective targets of net zero greenhouse gas emissions by 2050 as outlined in Australia's Long Term Emissions Reduction Plan and the Territory's Economic Reconstruction Agenda.
2. The Commonwealth will work with the Territory on its commitment to seek to ensure there is no net increase in greenhouse gas emissions in Australia associated with the production of gas in the Territory.
3. This will be achieved through the use of appropriate technologies and policies to support industry to avoid, mitigate or offset emissions produced in Australia from gas produced in the Beetaloo Sub-basin, as well as from existing gas production facilities in the Territory in line with commitments in the HFI and where the Parties have jurisdiction to facilitate these outcomes.
4. The Parties recognise that economic growth in the Territory will benefit from significant investment in new and emerging low emissions technologies and practices. The Territory's Economic Reconstruction Agenda aims to unlock economic opportunities for the Territory in transitioning to a low carbon future.
5. The Commonwealth's Technology Investment Roadmap brings a strategic and system wide approach to investment in low emissions technologies. The Technology Investment Roadmap and its annual Low Emissions Technology Statements are a cornerstone of Australia's Long Term Emissions Reduction Plan released in October 2021.
6. To support the development and deployment of low emissions technologies, the Commonwealth expects to invest over \$22 billion in low emissions technologies in the decade to 2030, including clean hydrogen and CCUS and livestock feed technologies.
7. The Territory is committed to developing interim targets to ensure progress towards its 2050 net zero target and prioritising work to advance net zero economy opportunities as part of the Territory's Economic Reconstruction Agenda. This work includes assessing the feasibility of low emissions critical minerals processing, the application of CCUS and improving the north's access to appropriate methods under the Emissions Reduction Fund (ERF) including for land management practices.
8. The Parties agree the Commonwealth is solely responsible for setting national emissions reduction targets and policies to meet those targets, as well as the negotiation of international treaties on climate change mitigation and adaptation.
9. Emissions must be accurately calculated and reported consistent with Australia's National Greenhouse Accounts Framework.
10. The Parties acknowledge that meeting their respective net zero targets will require dedicated focus, including on research and development and collaboration with industry and other key stakeholders to identify and realise abatement opportunities specific to the Territory.

2. Actions

1. The Parties have identified the following priority areas of investment, in accordance with the Commonwealth's funding contribution outlined in Schedule B, noting this clause does not limit the type of projects the Territory could put forward for consideration:
 - a. hydrogen;
 - b. carbon capture, use and storage;
 - c. electric vehicles;
 - d. land-based abatement; and
 - e. energy efficiency measures.
2. The Parties will collaborate, including by sharing knowledge and expertise, and provide funding for priority projects that can achieve one or more of the following objectives:
 - a. capturing the jobs, economic growth, energy equity and cost of living benefits from emissions reduction activities over the next decade, including in remote and regional contexts;
 - b. maximising the emissions abatement delivered by those investments to meet Australia's commitments under the Paris Agreement and to achieve emissions reductions targets;
 - c. investing in innovative technologies, practices and services needed to reduce emissions before and beyond 2030, in line with the Low Emissions Technology Statements; and
 - d. facilitate industry development to manage emissions from onshore gas development.
3. Actions outlined in schedule E will also help reduce emissions by supporting renewable energy industry development and supply.

Hydrogen technology

4. The Parties jointly recognise the National Hydrogen Strategy and the Territory's Renewable Hydrogen Strategy and Masterplan as the vehicles to implement national and Territory objectives for developing new hydrogen opportunities.
5. Consistent with actions agreed in these strategies and the requirements of relevant funding mechanisms, the Parties will make funding and non-financial support (where relevant) available to facilitate the development of a clean hydrogen industry in the Territory.
6. As part of the \$7.1 billion Energy Security and Regional Development Plan, the Commonwealth will invest \$300 million to reduce emissions from LNG production and support clean hydrogen production in Darwin, together with associated CCUS infrastructure, subject to the completion of business cases that demonstrate net benefits and co-investment by the Territory government and/or the private sector.

Carbon capture, use and storage

7. The Commonwealth will communicate any available funding opportunities for the feasibility, engineering, design and development of CCUS projects.

8. The Parties will encourage CCUS technology in the Territory to support emissions reduction, create new employment and foster emerging industries that store, use or recycle carbon dioxide, including low emissions LNG production.
9. The Parties will work cooperatively to further explore the opportunities for CCUS to support industry to manage its greenhouse gas emissions. The Parties note that the ERF recognises abatement from CCUS projects and a method to support certain types of carbon dioxide utilisation activities has been developed in 2022.

New vehicle technologies

10. The Parties jointly recognise the Commonwealth's Future Fuels and Vehicles Strategy and the Territory's Electric Vehicles Strategy and Implementation Plan as the guiding frameworks to implement national and Territory objectives for addressing barriers to the roll out of new vehicle technologies.
11. Consistent with actions agreed in these strategies and the requirements of relevant funding mechanisms, the Parties will make funding available to support the uptake of hydrogen and electric vehicles and related infrastructure.

Land-based abatement

12. The Parties will work together to realise the potential to grow the Territory's carbon industry, building on the world-class savanna fire management industry, the Territory's existing broader industry base and its environmental and economic context.
13. The parties will support research and development to address current gaps in scientific knowledge required to facilitate industry development and to ensure ongoing market integrity.
14. The Parties will collaborate to identify land-based opportunities suited to the Territory context that will deliver abatement, additional revenue streams and jobs, especially in remote and regional contexts. This will include:
 - a. identifying opportunities to increase the uptake of ERF methodologies in the Territory, such as developing new or refined methods and supporting greater participation in current methods; and
 - b. identifying opportunities to participate in voluntary market mechanisms.
15. Informed by this collaborative effort, the Territory will establish a Northern Territory Land-Based Abatement Program. The Program will support primary producers and other land managers to undertake required research and commercialise low emission technologies and land management practices to improve productivity and reduce emissions.
16. The Commonwealth will support the Territory's land and emissions management capabilities by sharing available data from earth observation platforms and modelling of emissions from agronomic activities, vegetation changes and savanna fires.

Energy efficiency

17. The Parties will collaborate to identify energy efficiency and demand management measures that are suitable for the Territory context and can deliver on emission reduction to develop a Territory-specific Energy Efficiency Program.
18. As part of this work, the Territory will augment and expand its commitments to energy efficiency and demand management in its government operations and programs facilitating

energy efficiency and demand management outcomes for business, industry, not-for-profit organisations, local government and the community.

Implementation of the HFI Recommendation 9.8

19. Working with the Commonwealth, the Territory will finalise its approach to recommendation 9.8 by the end of 2022. The Parties are focussed on an economy-wide approach to emissions reduction consistent with their respective emission reduction targets.
20. The Territory has been progressing commitments to support delivery against recommendation 9.8 of the HFI including:
 - a. requiring consideration of greenhouse gas emissions in environmental assessment and approvals of onshore gas activities;
 - b. developing a greenhouse gas emissions offsets policy;
 - c. releasing the Greenhouse Gas Emissions Management for New and Expanding Large Emitters policy; and
 - d. commencing work to undertake feasibility studies to develop the carbon industry within the Territory context.
21. The Commonwealth will work with the Territory to support its implementation of recommendation 9.8 of the HFI using available technology and policies, including by:
 - a. supporting the use of Australian Carbon Credit Units to offset emissions and identifying opportunities to increase supply and participation in the ERF;
 - b. supporting the development and deployment of CCUS, including to reduce emissions from gas production in the Territory;
 - c. reducing the cost of clean hydrogen production, transport and use, and other low emissions technologies through investment under Australia's Technology Investment Roadmap and Long Term Emissions Reduction Plan; and
 - d. investigating non-regulatory, incentive-based approaches to reduce fugitive emissions from onshore gas activities.

Regulatory environment and emerging carbon industry

22. The Parties will collaborate to ensure the regulatory environment is efficient and effective with respect to the emerging carbon industry to ensure barriers to participation are removed or minimised wherever possible and appropriate.

National emissions accounting and reporting

23. The Commonwealth will provide detailed annual data for the Territory each year from Australia's official National Greenhouse Accounts, incorporating the latest data from the National Greenhouse and Energy Reporting Scheme.
24. The Territory will ensure existing and future Territory-based emissions reductions projects, programs and initiatives assist the Commonwealth to demonstrate Australia's progress under the Paris Agreement.
25. The Parties will work together to ensure that voluntary emissions reduction programs and certifications deliver additional abatement capable of being captured in the National Greenhouse Accounts and counted towards Australia's emissions reduction targets.

Schedule E: Generation, networks and storage

1. Agenda

1. The Parties are committed to lowering electricity prices and increasing reliability and security in the energy system, while also reducing emissions.
2. The Territory has committed to a renewable energy target of 50 per cent of the electricity consumed from grid-connected installations by 2030.
3. The Parties will work together to ensure that electricity systems in the Territory are capable of supporting growing renewables generation and deliver lower cost electricity to enable Territory industry growth, diversification and jobs creation.
4. The Parties recognise that while the Territory has an abundant solar resource, there are otherwise currently limited cost-effective alternative renewable energy options.
5. The Commonwealth has established the \$1 billion Grid Reliability Fund (GRF) to be administered by the CEFC that will focus on increasing the affordability, reliability and security of electricity supply.
6. The Parties jointly recognise the importance of a strong cost-benefit analysis for proposed projects to ensure that any costs passed onto consumers are necessary and proportionate.
7. The Parties agree that timely investment in appropriate generation, networks and storage infrastructure is necessary to position the Territory to:
 - a. manage system security and reliability to cater for the increasing uptake of renewables technologies; and
 - b. capture economic and industry development opportunities from a reliable, secure and cost efficient renewable energy resource.
8. A nationally consistent approach to policy governance and regulation is preferred to ensure energy affordability and energy security policies work together to achieve results, acknowledging that the Territory's electricity system is not part of the interconnected system and would therefore require a modified approach to reflect the Territory context.
9. The parties are committed to working together to establish a new energy export industry for Australia through the transmission of electricity via cables to regional markets.

2. Actions

Energy reliability

1. Territory projects will be considered for GRF funding, subject to CEFC funding criteria. The fund will include a focus on projects where there is State or Territory policy alignment or financial support for this objective, and the delivery of the Commonwealth's energy policy objectives and targets.
2. The Territory has developed and published the Darwin Katherine Electricity System Plan to provide strategic guidance on achieving a lower cost pathway to the Territory's 50 per cent

Renewable Energy Target in the largest Territory electricity system. This plan identifies key focus areas for development and progress, including:

- a. solar generation and renewable energy hubs;
- b. energy storage;
- c. hydrogen capable thermal generation;
- d. high specification batteries for system security services in a low inertia system;
- e. Virtual Power Plants; and
- f. Demand Management.

Similar development plans are also currently being developed in the Alice Springs region.

Transmission links

3. The Territory has committed \$1.2 million to pre-feasibility studies into an electricity highway based on transmission links between Darwin and Alice Springs and the potential for a link between the Territory and the national electricity grid to support electricity security and reliability.
4. The Parties commit to considering the results of the studies and collaborating on potential next steps.
5. The Parties are working with Sun Cable to develop the Australia-Asia Power Link (AAPL) to supply power to the Territory and Singapore. AAPL will establish a new energy export industry for Australia and provide large scale energy to accelerate economic development in the Northern Territory.

Renewable energy

6. The Parties will work together to identify and deliver de-risking activities that maximise non-government investment in renewable energy, especially in remote and regional contexts.
7. The Commonwealth supports renewable energy investment through its Renewable Energy Target, which provides incentives for installations of renewable energy systems in remote communities.
8. The Parties will seek to support renewable energy zones and hubs, including energy storage, in the Territory where there is strong community support.

Utility scale, high specification battery systems

9. The Territory through Territory Generation has completed a feasibility study and committed \$30 million to acquire essential system services through development of a utility scale high specification battery.
10. Territory Generation has completed a competitive tender process and identified Hitachi Energy as a suitable supplier for an initial 32.6 MW battery in the Darwin to Katherine electricity system, which will help maintain security and reliability with growing levels of variable renewable energy.
11. The Commonwealth will provide up to \$15 million to support construction of the initial 32.6 MW big battery.

12. In developing, operating or managing the initial utility scale high specification battery the Territory will use best endeavours to ensure it provides essential system services when needed at a competitive price.

Remote power systems

13. The Territory plans to roll out remote power system and microgrid projects across 72 remote Aboriginal communities, targeting 70 percent renewables penetration on average with preliminary estimates of costs in the order of \$400 million. This will maximise displacement of the current diesel generation while recognising that until long duration storage technology becomes more economically efficient, some level of reliance on diesel generation will be necessary.
14. The Territory committed an initial amount of \$70 million to support remote power systems and microgrid projects in Aboriginal communities and will seek to identify and advance opportunities for non-government investment, including by investing in de-risking activities.
15. The Commonwealth, including through the Regional and Remote Communities Reliability Fund, Regional Australia Microgrid Pilots Program, ARENA, and the CEFC, will continue to support remote power system and microgrid projects in remote communities.
16. The Commonwealth will provide up to \$15 million for microgrid projects in remote Aboriginal communities in the Territory. Commonwealth funding for remote power system and microgrid projects will be used for feasibility studies, or for design and deployment provided projects have already undertaken a feasibility study and been found to be feasible.
17. The Territory will seek to ensure the remote power system projects deliver low emission energy that is reliable and affordable.