

21 May 2024



Mr Brad Archer  
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Canberra ACT 2601  
Sent via email: [consultation@climatechangeauthority.gov.au](mailto:consultation@climatechangeauthority.gov.au)

Dear Mr Archer,

## 2024 ISSUES PAPER - TARGETS, PATHWAYS AND PROGRESS

The Chamber of Minerals and Energy of Western Australia (CME) is the peak representative body for the resources sector in Western Australia. CME is funded by member companies responsible for 20 per cent of Australia's corporate income tax receipts in 2022-23.<sup>1</sup>

In 2022-23, the WA resources sector accounted for 65 per cent of Australia's resources exports,<sup>2</sup> half of Australia's resources capital expenditure<sup>3</sup> and 53 per cent of Australian resources employment.<sup>4</sup>

Since target setting underpins Australia's decarbonisation journey, CME welcomes the opportunity to respond to the Issues Paper: Targets, Pathways and Progress<sup>5</sup> released by the Climate Change Authority (CCA) which will inform the development of Australia's Net Zero 2050 Plan (Net Zero Plan).

We recently provided feedback to the Department of Climate Change, Energy the Environment and Water (DCCEEW) on the Electricity and Energy Sector Plan (Energy Sector Plan), one of the six decarbonisation sectoral plans being developed under the Net Zero Plan. This submission reiterates key recommendations provided to DCCEEW.

Overarching comments in response to this consultation are provided below, with answers to specific consultation questions that are relevant to the resource sector provided in attachment A.

### Overarching Comments

CME and its members support the Paris Agreement goals of limiting global warming to well below 2 degrees Celsius, and preferably to 1.5 degrees Celsius, by reducing greenhouse gas (GHG) emissions to net zero as soon as possible and no later than 2050.<sup>6</sup> The following principles are important to CME and its members:

- Targets must be achievable and maintain Australia's international cost-competitiveness.
- Targets must be apportioned across multiple sectors of the economy.
- Targets must drive a flexible pathway to least-cost abatement across all sectors of the economy.
- Targets must be considerate of the availability of commercially viable abatement technology, likely commercial development timeline and implementation timeframes.
- Government must assess the environmental, economic and social impacts of future targets and the Net Zero Plan.
- Government must communicate the benefits and costs of future targets to the Australian people, to ensure there is common understanding of what is involved to deliver the Net Zero Plan.
- Targets must align with broader Government policy objectives, and delivery of the Net Zero Plan should not harm the economy and our national prosperity in the interim.

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<sup>1</sup> Includes company tax, fringe benefits tax, petroleum resource rent tax and excise duty. Commonwealth of Australia, [Final Budget Outcome 2022-23](#), The Treasury, 22 September 2023, Note 3: Taxation revenue by type, p 39.

<sup>2</sup> Government of Western Australia, [2022-23 Economic Indicators Resource Data File](#), Department of Energy, Mines, Industry Regulation and Safety (DEMIRS), 9 January 2024. Australian Bureau of Statistics (ABS), [5368 International Trade in Goods](#), Table 32a.

<sup>3</sup> Investment refers to capital expenditure as measured by gross fixed capital formation, current prices. ABS, [5220 Australian National Accounts: State Accounts](#), Table 25. ABS, [5206 Australian National Accounts: National Income, Expenditure and Product](#), Table 34.

<sup>4</sup> ABS, [6291 Labour Force, Australia, Detailed](#), Table 5.

<sup>5</sup> Climate Change Authority, 2024, 2024 Issues Paper: Targets, Pathways and Progress"

<sup>6</sup> CME, [Climate Policy](#), published 24 September 2021.

Given the pace and scale associated with Australia's Net Zero transformation task, it is imperative that there is collaboration and co-ordination across levels of government to ensure the efficient use of resources. Duplication and misalignment of policy settings and/or decarbonisation priorities across state and federal governments will drive up costs, divert focus from priority areas and delay delivery of beneficial outcomes.

In the short term, access to low emission, reliable and affordable electricity, both grid-connected and non-grid connected, will be a key enabler for decarbonisation of the WA resource sector due to limited availability of commercially viable abatement technologies. CME recommends that increasing low emission generation capacity should be prioritised, with improved co-ordination across Australia required to accelerate the transition.

In parallel to increasing capacity and transmission infrastructure for low emissions electricity, we also recommend that the Government:

- Drive innovation and commercialisation of abatement technologies through financial incentives and government-led programs; and
- Ensure policy settings support commercial application of Carbon Capture and Storage technologies and enable the ongoing operation of a deep, liquid and credible offset market, inclusive of access to credible international offsets.

## Conclusion

Delivering Australia's Net Zero Plan will require increased collaboration between different levels of government, the private sector and key stakeholders. A coordinated approach across Australia is required and should be staged in a way that doesn't imperil our economy or the viability of specific sectors, including the resource sector.

Should you require further information regarding this submission, please contact Ms Anita Logiudice, Manager, Resource Development and Sustainability, on 0448 468632 at [A.Logiudice@cmewa.com](mailto:A.Logiudice@cmewa.com).

Yours sincerely,



**Adrienne LaBombard**  
Director, Policy and Advocacy

Enclosed: Attachment A: CME responses to Questions in CCA 2024 Issues Paper: Targets, Pathways and Progress

## Attachment A: CME responses to Questions in CCA 2024 Issues Paper: Targets, Pathways and Progress

### 1. How should the authority take account of climate science and Australia's international obligations in considering possible emissions reductions targets for 2035?

CME and its members support the Paris Agreement goals of limiting global warming to well below 2 degrees Celsius, and preferably to 1.5 degrees Celsius, by reducing greenhouse gas (GHG) emissions to net zero as soon as possible and no later than 2050.<sup>7</sup>

We note that the Issues Paper includes a comment that CCA considers "...a 2035 target in the range of 65-75% below 2005 levels would be ambitious, and could be achievable and sustainable if additional action is taken...attempting to go much faster could risk significant levels of economic and social disruption and put progress at risk."

While ambitious targets galvanise action and drive innovation, they must be staged sustainably and in a way that does not threaten our economy and the resource sector's viability. Considering the important contribution the resource sector makes to the national economy and the role that mineral commodities play in reducing emissions globally, it is essential that industry is supported to reduce emissions sustainably. **CME recommends that target setting and sectoral pathway development should include an assessment of environmental, economic and social impacts, informed by economic and climate modelling, to ensure that benefits and costs of different scenarios are understood. Outputs should be transparently communicated to the Australian public so there is broad understanding of costs and benefits associated with delivery of the targets and the Net Zero Plan.**

### 2. How should the authority weight the goals of ambition and achievability in considering possible emissions reductions targets for 2035?

In our view, targets and related sectoral pathways, should be set so that the transition:

- Is staged to minimise negative shocks and impacts on our economy and productivity;
- Is technology and innovation led;
- Plays to our national strengths in terms of personnel and skills, but also natural assets including our abundance in land, wind, tide, solar, and critical minerals;
- Optimises opportunities for new industries and jobs and has a net positive effect on economic growth;
- Shares opportunities in a way that is equitable and inclusive, including of Australia's most vulnerable communities - rural and regional Australia and our First Nations peoples; and
- Enables adoption of a flexible pathway to least-cost abatement across all sectors of the economy, recognising that different sectors and different businesses/facilities within a sector have different decarbonisation pathways, based on a range of facility specific variables<sup>8</sup>.

### 3. How can Australia further support other countries to decarbonise and develop sustainably?

There are opportunities for Australia to support other countries to decarbonise, but this may increase Australia's emissions in the short term. For example, WA's export Liquid Natural Gas (LNG) industry could play a role in the decarbonisation pathways of our regional neighbours and trade partners by displacing coal with renewables fired by gas. Similarly, metals and metal ores produced in WA can contribute to decarbonisation in other jurisdictions, for instance as critical minerals used for renewable technologies, and magnetite iron ore for lower carbon steel production.

Beyond export of resources, Australia could provide a pathway for regional partners to decarbonise their emissions, through Carbon Capture and Storage (CCS). CCS is a key technology to address hard to abate emissions. If Australian policy settings allow storage of international emissions, Australia could support other countries to decarbonise.

**Australia's capability to reduce emissions beyond our own borders should be reflected by our national targets and policies.**

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<sup>7</sup> CME, *Climate change*, policy areas, published 24 September 2021.

<sup>8</sup> For resource sector projects, different facilities have different decarbonisation opportunities and challenges based on a range of facility specific factors including commodity type, processing technology, availability of abatement technology, infrastructure (e.g. grid/non-grid connected, replacement stage etc) and local environmental considerations. This means that a one-size fits all approach to resource sector decarbonisation is not possible.

#### 4. What technologies are important for each sector's pathway to net zero and why?

A net zero future represents a significant transition from business-as-usual (BAU) for the WA resource sector. The transition will require considerable innovation and technology development to reduce emissions associated with transport, energy generation, onsite operations, process-related emissions and consumption of thermal energy for processing activities.

There are current limitations on commercially viable abatement technologies for the resource sector. **We recommend that Government incentivises abatement technology development to support innovation and commercialisation.** Funding incentives, like matched funding for research programs and grants for early stage technology development, can support the roll-out of new abatement technologies. Due to the timeframe associated with the net zero transition, CME suggests that government financial support is required to bring new or emerging technologies to commercial viability for widespread adoption by business and industry.

In the meantime, increasing the supply of low emission, affordable and reliable electricity is critical for decarbonisation of the resources sector. Many members advise that facility decarbonisation pathways to the mid-2030's predominantly involve process electrification, which is reflected in the significant increase in forecast industry electricity demand over the next decade<sup>9</sup>. **CME recommends that increasing low emission generation capacity should be prioritised, with improved co-ordination across Australia required to accelerate the transition.**

While renewable electricity is currently the most accessible decarbonisation strategy for many applications, there are emissions that cannot be abated by electrification. Abatement technology gaps and/or prohibitive costs exist for many of our members to decarbonise (for example, high-temperature heat for bauxite-alumina, ammonia and other industrial processes). In these cases, alternative low emission fuel sources will be required to decarbonise in the long-term.

Members advise that CCS will be a key technology to remove emissions. CCS has a role in enabling the production of lower-carbon energy/products for domestic consumption and export and providing a pathway for regional partners to decarbonise.

Technology readiness is only one part of the decarbonisation challenge. Deployment is also challenging for many resource sector projects, with significant infrastructure engineering, design, piloting and installation also required to implement new abatement technologies. For example, in the case of battery electric trucks, the fleet itself is only one part of the infrastructure required. Dynamic and flexible charging infrastructure is also required to support constantly evolving mine plans. The transition to an electric mining fleet requires charging infrastructure development to occur in parallel with abatement technology development and be underpinned by access to reliable low emission energy sources and systems.

**In parallel to increasing capacity and transmission infrastructure for low emissions electricity, we also recommend that the Government:**

- **Drive innovation and commercialisation of abatement technologies through financial incentives and government-led programs; and**
- **Ensure policy settings support commercial application of Carbon Capture and Storage technologies and enable the ongoing operation of a deep, liquid and credible offset market, inclusive of access to credible international offsets (refer to question 9).**

#### 5. How can governments use mandates, rules, and standards to accelerate Australia's decarbonisation? Is more planning by governments needed? If so, how should this be coordinated and how can this be done while making the transition inclusive, adaptive, and innovative?

The need for practical, competitive and sustainable policy settings to progress the shared objective of decarbonisation is a critical priority for the WA resource sector. It is vital that government policies support a cost-effective transition for existing and future facilities to maintain our competitiveness.

Given the pace and scale associated with Australia's net zero transformation task, there must be collaboration and co-ordination across all levels of Government to remove regulatory duplication. **For the resource sector, we recommend that facilities regulated under the Safeguard Mechanism, should be exempted from other state and federal emission reduction and reporting obligations to avoid uncertainty, duplication and**

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<sup>9</sup> Government of WA, May 2023, SWIS Demand Assessment, Energy Policy WA.

additional administrative costs. There is also opportunity to expand the Safeguard Mechanism to incentivise renewable and low carbon electricity imports from the grid (currently out of scope).<sup>10</sup>

A coordinated approach to the net zero transition across Australia is required. The recently developed WA emission targets and Sectoral Emissions Reduction Strategy for Western Australia<sup>11</sup> must align with those being developed as part of the Net Zero Plan to ensure the plans are complimentary and scarce resources (materials, finance and skills) are used to deliver priority outcomes across Australia.

6. How can governments stimulate private finance needed for the net zero transition – are there innovative instruments that could be deployed or new business models that governments could support? Is there a bigger role for governments to play in coordinating the investment needed to transition the economy?

A stable and certain operating environment is one of the greatest incentives for attracting investment. Regulatory uncertainty caused by duplicated, inconsistent, or unclear regulations is one of the major barriers to investor decision-making. This impacts a range of projects that are important for the net zero transition.

Members advise that extended project environmental assessment timeframes at both State and Federal levels is delaying decarbonisation projects and proving a barrier to securing international investment.<sup>12</sup> **CME recommends that the Australian Government works closely with state and local governments to simplify the regulatory landscape for business operators to deliver strong outcomes in a timely manner.**

7. How can governments better support markets, including carbon markets, to deliver emissions reduction outcomes?

**Policy certainty and stability:** Governments should provide clear and stable policy frameworks to provide certainty for market participants and investors. Long-term policy commitments, backed by legislation, can reduce investment risks and incentivise businesses to pursue emissions reduction opportunities within carbon markets.

**Market design and regulation:** Governments should design and regulate carbon markets to ensure their effectiveness, integrity, and transparency. Additionally, market rules should be designed to prevent market manipulation and ensure fair competition among participants.

Government can support markets to achieve net emissions reductions by improving the availability of high-quality credits required by Safeguard Mechanism entities and others. This includes ensuring the Australian Carbon Credit Unit (ACCU) scheme gives purchasers and investors reasonable assurance of the credibility and availability of credits, and confidence in their use towards decarbonisation efforts.

The proponent-led method development approach for new ACCU methods can accelerate timelines and boost liquidity whilst maintaining high quality and transparency around method development, project approval and ACCU issuance and retirement.

**Price signals and incentives:** Governments can support carbon markets by setting a meaningful and gradually increasing price on carbon emissions. Price signals provide a powerful economic incentive for businesses to invest in low-carbon technologies and practices. Revenue generated from carbon pricing mechanisms can be reinvested in further emissions reduction initiatives or returned to citizens as dividends.

**Market linkages and collaboration:** Governments should explore opportunities for linking carbon markets across jurisdictions to create larger, more liquid markets. Linking carbon markets (for example under Article 6 of the Paris Agreement) can help achieve cost-effective emissions reductions by expanding trading opportunities and increasing market efficiency. Moreover, international collaboration on carbon pricing can promote global emissions reductions and facilitate the transition to a low-carbon economy.

**Community-led equity approach:** Governments should ensure that carbon pricing mechanisms consider the potential impacts on vulnerable communities and industries, including those dependent on the resources sector. Measures should be implemented to address any adverse impacts and ensure a fair transition to a low-carbon economy, including support for affected workers and communities.

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<sup>10</sup> The current SGM production variables disincentivise opportunities to reduce emissions through the import of renewable or lower-carbon electricity from a separate facility. This is because power import would also reduce the facility's baseline, due to a reduction in the electricity produced on site. Reducing site-based electrical emissions could provide significant opportunities for decarbonising and should continue to be incentivised in order to promote all opportunities for decarbonisation.

<sup>11</sup> Department of Water and Environmental Regulation, December 2023, Sectoral Emissions Reduction Strategy for Western Australia: Pathways and priority actions for the state's transition to net zero emissions, Government of Western Australia.

<sup>12</sup> In Western Australia assessment timeframes for significant proposals assessed under the Environmental Protection Act 1986 (State) are taking in excess of 2.5 years. For projects that also require assessment under the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth), assessments exceeding 4 years are not uncommon.

8. What further actions can be taken by governments (e.g. through public funding), the private sector and households to accelerate emissions reductions, including in relation to the deployment of technologies and access to new opportunities in the transition to net zero? What barriers stand in the way and how could they be overcome?

Key barriers to decarbonisation of the resource sector in WA include lack of commercially viable abatement technology, persistent skills shortage and high infrastructure development costs (which are compounded in regional areas where resource sector projects predominantly exist, due to increased labour and transport costs). WA facilities directly compete in global markets against facilities that produce the same commodities without similar emission reduction requirements and against facilities that are being provided significantly more fiscal support<sup>13</sup> to aid them in the net zero transition. This reduces our competitiveness and our ability to attract funding to decarbonise.

From a resource sector perspective, **governments** can help accelerate emissions reduction by:

- Coordinating the identification and development of common-user infrastructure (including generation assets, transmission networks, decarbonisation hubs and carbon dioxide (CO<sub>2</sub>) pipelines);
- Conducting early stage consultation for common user infrastructure and projects critical to Australia's decarbonisation pathway, to streamline processes and reduce the burden on communities and First Nations stakeholders;
- Investing in research and development to accelerate the deployment of breakthrough abatement technologies, clean energy technologies, energy efficiency and sustainable practices;
- Adjusting ARENA and Powering the Regions Fund grant application processes and criteria to reduce the administrative burden for applicants and fund early stage research and development projects;
- Supporting regional economic activity and job creation;
- Strengthening environmental assessment processes to deliver strong outcomes in a timely manner;
- Remove duplicative and inconsistent greenhouse gas management and reporting obligations across federal and state jurisdictions; and
- Coordinating the delivery of the Net Zero Plan.

The **Private sector** can help to accelerate emissions reductions through investment in clean technologies; introduction of corporate sustainability initiatives; and partnering with Government, research sector and other stakeholders (eg. Traditional Owners) to develop and deploy innovative solutions.

9. How should governments decide upon the appropriate allocation of resources towards reducing emissions, removing carbon from the atmosphere, and adapting to climate change impacts?

The allocation of resources should be done through the determination of national priority, effectiveness (including cost-effectiveness) and impact (environmental, social and economic) of those measures. Ideally this would prioritise mitigation first, followed by sequestration and lastly offsets. Climate adaptation will need to be progressed in parallel to mitigate risks associated with physical impacts of climate change that may occur during the transition. Policy development should be collaborative, taking account of state and territory-based considerations, as well as data, climate science and econometric modelling outputs.

It is worth noting that projects across all sectors in WA are facing material delays due to current skills shortages, which is predicted to persist in the short to medium term. Clear national priorities will need to be established to coordinate delivery of the Net Zero Plan across Australia in light of these shortages.

During the transition period, it is likely that many resource sector facilities will utilise offsets to deliver net zero targets. **Policy settings must enable the ongoing operation of a deep, liquid and credible offset market.** CME considers the facilitation of access to credible international offsets will be a key pillar to delivering the stability and consistency required for the market to remain price competitive.

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<sup>13</sup> Including United States' *Inflation Reduction Act* which will mobilise over USD360 billion (approximately AUD520 billion) by 2032, Japan's green transformation aims to raise up to JPY20 trillion (approximately AUD 21 trillion) and the European Union will provide EUR40 billion (approximately AUD62 billion) in Innovation Fund grants to support development and first-of-a-kind deployment of technologies to decarbonise intensive industry, EUR20 billion (approximately AUD31 billion) in grants to Member States to promote greening of industry (and will match financial aid offered by a third country to minimise the risk of specific industries being relocated to third countries) in addition to the EUR372 billion (approximately AUD576 billion) in project financing available for net zero investments.

**10. How can governments, businesses and people, including First Nations people, help ensure the benefits and burdens of the net zero transition are equitably shared?**

Government should play a lead role in:

- Communicating the economic, environmental and social impact of the Net Zero Plan;
- Developing and implementing programs that facilitate a 'just transition' for affected communities;
- Coordinating agreement-making with First Nations rightsholders associated with implementation of the plan; and
- Exploring partnership models, which could include equity sharing that supports local and regional economies.

**11. How can governments better ensure First Nations people are empowered to play a leading role in the development and implementation of climate change policies and actions, including as they relate to the ongoing curation of the Indigenous estate?**

In WA, resource sector projects that are critical to decarbonisation, including critical minerals, hydrogen, CCS, large scale renewable electricity generation and associated transmission projects will occur predominantly on First Nations land and waters. Cultural heritage considerations are not bound by WA tenure frameworks which means that robust relationships with indigenous stakeholders are essential for project development.

To activate new investment in projects, we consider there is a need for significant additional government investment in First Nations capacity building, collaboration and governance, to both support communities, but also to explore project development opportunities.

**12. How can Australian governments support the wellbeing of workers, communities and regions as the nation decarbonises, including in relation to cost of living, workforce and industry transition and access to low emissions technologies and services?**

Australia needs to be proactive in attracting and retaining the workforce required for the energy transition, given intense global competition for talent. The Australian Government should ensure migration settings are competitive and attractive, domestic training programs are industry-led and well-funded, and sufficient infrastructure (including housing) is developed to support workforce needs, including in regional areas.

The energy transition will have skilling and training implications for the 50,000+ individuals employed as traditional automotive mechanics, electricians, fitters and machinists across WA. The tooling requirements and spare parts for servicing battery, hybrid, plug-in or hydrogen fuel cell electric vehicles are significantly less but will instead require dual or hybrid trades in electro-technology specialisations. Work-integrated learning projects, which provides exposure to these changing technologies, can support skills development between industry and education providers. Both the Australian and WA Governments should work with existing industry-led Jobs and Skills Councils and the proposed TAFE Centres of Excellence to shape the education and migration policy settings needed for our future workforce. Industry insights gleaned by CME<sup>14</sup> indicate:

- Australia will likely need around 32,000 more Electricians in the next seven years and around 85,000 by 2050. This represents 27% more than the projected supply. Other electrical related trade roles are also likely to be in short supply including electrical engineering draftspersons and technicians, air-conditioning and refrigeration mechanics, electronics and telecommunications trade workers.
- Shortages are forecast for all building and engineering trades critical to building and maintaining renewable electricity generation, including metal fitters and machinists, structural steel and welding trades workers, architectural, building and surveying technicians, civil engineering draftspersons and technicians. We have enough engineers for the transition; but mining engineers are an exception.
- Shortages are expected for chemical, gas, petroleum and power generation plant operators from 2030. In the next 20 years we will need more metal fitters and machinists, structural steel and welding trades workers, architectural, building and surveying technicians and civil engineering draftspersons and technicians. In all, 2 million more workers in building and engineering trades by 2050.

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<sup>14</sup> Clean Energy Generation Report, Jobs and Skills Australia, October 2023: <https://www.jobsandskills.gov.au/publications/the-clean-energy-generation>

Australia-wide, professional, scientific and technical services are projected to grow by 116,900 persons to 2028 and by 233,600 persons to 2033, with its share of total employment rising from 9.4% in 2023 to 9.7% in 2033<sup>15</sup>.

**CME supports recommendations for greater consideration of overlapping skills and training requirements between sectors such as low-emissions energy, transmission, mining, manufacturing and infrastructure to build capacity in the future workforce. There is an opportunity in the servicing supply chain to redeploy similar skills between different projects with different durations and locations. Any emphasis in the VET, university and skilled migration systems to build capacity should take a whole-of-economy approach.**

There is also a requirement to develop a range of professional skills related to the transition, including climate reporting, emissions accounting, climate related risk assessment for financial disclosures and auditing. For example, members report that there is a shortage of auditors to meet the increased audit requirements associated with the 2023 reforms to the Safeguard mechanism. Upskilling of existing accounting, auditing and management skills should be considered to support the transition.

### **13. How can governments help Australians prepare for and respond to the impacts of climate change?**

CCA should consider the submissions and advice provided by DCCEEW in the preparation of the National Adaptation Plan.

### **14. What else should the authority be considering in its advice to government?**

CCA should consider carbon leakage and Australian exports in the context of our trading partners decarbonisation pathways. Cooperation may allow for greater collective ambition even if this requires short term increase in domestic emissions to produce the goods and services required to achieve decarbonisation (critical minerals, coal to gas switching, hydrogen exports, CO<sub>2</sub> imports for CCS).

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<sup>15</sup> Jobs and Annual Skills Report, Jobs and Skills Australia, 2023: <https://www.jobsandskills.gov.au/publications/towards-national-jobs-and-skills-roadmap#:~:text=This%20inaugural%20Jobs%20and%20Skills,the%20coming%20year%20and%20beyond>.