Submission — Capacity Investment Scheme

August 2023

Introduction

The Investor Group on Climate Change (IGCC) is a collaboration of Australian and New Zealand institutional investors focused on the impact of climate change on investments. IGCC represents investors with total funds under management of over $3 trillion in Australia and New Zealand and $30 trillion around the world.

As the long-term custodians of trillions of dollars in retirement funds, investors have a fiduciary duty to deliver long-term returns for their beneficiaries that are commensurate with the level of risk taken. Due to the systemic nature of climate change, unless it is addressed in an orderly and just way, the long-term retirement savings of millions of Australians are under threat. IGCC members recognise that the capital they can invest in electrifying Australia will, at a systemic level, help mitigate climate change, thereby assisting in limiting climate damage above 1.5°C degrees global warming above pre-industrial levels.

Lastly, many members have their own net zero investment targets, committing to initiatives such as Net Zero Asset Managers and Climate Action Plans. Their capital is ready to be deployed to meet their members' requirements and assist in the decarbonisaton of the Australian grid and economy.

The Capacity Investment Scheme (CIS) enters the market at a time when investment levels are 50 per cent below, or a billion dollars less, than the rolling 12-month quarterly average[1]. Decarbonising the electricity sector over the next 10–15 years is central to achieving a least cost, orderly and just transition to net-zero emissions for Australia. Around 6GW of additional capacity is required *annually* to 2035 to be in-line with least-cost national emissions pathways to net-zero emissions[2]. Only 699MW have been committed to this year.

There are several reasons why investment is stalling. The Inflation Reduction Act[3] of the United States and Europe's $1.6 trillion AUD Green Deal[4], among others, are drawing capital away from Australia. Social license around energy infrastructure are causing delays in approvals, which dissuade applications for new large-scale supply to replace the aging coal-fired generation fleet. IGCC members have described the sub-optimal risk-return ratios of renewable electricity projects in Australia, which discourage funds from committing capital. **Capital is mobile – and strategic policy is needed to unlock Australia's potential for electrification.**

[1] Renewable Projects Quarterly Report
[2] Accelerating our energy transition with a credible 1.5°C scenario
[3] The Inflation Reduction Act
[4] Delivering the European Green Deal

The Consultation

IGCC supports the objectives of the CIS and welcomes the opportunity to provide feedback on the Department of Climate Change, Energy, the Environment and Water's (DCCEEW's) consultation paper. The purpose of this consultation paper is to present the proposed approach and design of the CIS. As but one lever to encourage investment, this consultation should seek to identify where the CIS fits within established vehicles available to investors for renewable electricity and transmission projects.

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Summary of response

IGCC supports:

- The establishment of a national policies for renewable electricity to deliver net zero emissions by 2050 and electricity grids powered by 82 per cent renewables in Australia by 2030 and >90 per cent by 2035.
- In-principle, awarding CIS tenders to projects that have received Australian Renewable Energy Agency (ARENA) and Clean Energy Finance Corporation (CEFC) support, so long as this leverages private funds and does not undermine support from grid-firming projects that otherwise have no government support.
- The proposed two-stage merit assessment process, emphasising the need for coordination with the national Net Zero Authority on engaging communities around social license. This includes scoping out opportunities where renewable electricity projects can stimulate regional development. In this vein, IGCC recommends that placement within a REZ is not a weighted criteria for CIS applications.
- The technology-agnostic approach to the reliability target and calls for the same principle to be applied to the derating methodology.

IGCC recommends that:

- The CIS has a stronger risk appetite than the Clean Energy Finance Corporation (CEFC) to commercialise otherwise unviable projects.
- DCCEEW provides reasoning for stipulating 6GW as its target.
- A clear schedule (timing and MW) for future auctions and all jurisdictions be released, including how these auctions support the aims of electricity sector decarbonisation plans (national and sub-national).
- The maximum term for CIS contracts is clarified.
- DCCEEW and the Australian Energy Market Operator (AEMO) make demand-side projects eligible under the CIS, so long as they are scalable and can provide grid-firming and reliability functions.

Question responses

Implications for the electricity market

The Department is seeking feedback on what other implications the CIS might have on the energy market, and how the CIS can be designed to mitigate risks while delivering on key policy objectives. AND How can the CIS design be future-proofed for an evolving/changing technology mix?

IGCC response

Climate-proofed grids are dynamic and decentralised

The IGCC understands that the reliability target will set the buildout required to meet overall reliability needs, to be measured in capacity (MW), medium storage (4-hour equivalents). These reliability targets are to be reviewed on an annual basis *"to reflect latest assumptions and changes in market and regulatory settings."*

IGCC welcomes flexible targets and recommends that inputs into the CIS targets include ISP modelling, corporate transition plans and government sector decarbonisation pathways, so that CIS tenders are awarded to projects that deliver long-term decarbonisation goals.

IGCC's recommends that placement within a REZ is not a weighted criteria for CIS applications. AEMOs decision on queue priority access will create incentive for placement in REZs without this needing to be considered within CIS merit criteria. This avoids introducing additional criteria for the CIS that may cause issues after REZs are developed.

Just transition intrinsic to electricity sector decarbonisation

IGCC understands that merit assessments for project bids will be conducted in two stages, with Stage A including a provision on social license, which we support in-principle. The consultation paper provides some examples, such as apprenticeship quotas and local procurement, but does not consider overarching transition goals for communities. There is also no elaboration on how social license merit is weighted; whether it be based on "offsetting impact" or contributing additional social benefits. At minimum, social license must be obtained with community consultation and be a requirement within the Australian Industry Participation Plans that DCCEEW will assess. The delays caused by an absence of thorough community engagement and subsequent rejection of social license must be avoided for investors to commit capital with certainty of returns.

The closure of coal fired power stations and other fossil fuel infrastructure is as much of a just transition concern as it is an electricity market concern, and the CIS should consider, where appropriate and in coordination with the new Net Zero Transition Authority, the prioritisation of renewable electricity projects to be developed in communities that are undergoing transition from fossil fuels. Placement within communities that currently experience electricity insecurity should also be a weighted consideration. It is government's role to centre communities in sector transition planning, with investors and consumers standing to benefit from vibrant regional economies.

IGCC recommends that DCCEEW and AEMO collaborate with the national Net Zero Authority to ensure that the CISs merit assessments are considerate of the government's overarching policy objectives for just, economy-wide decarbonisation.

CIS tender process and design

What types of demand response would be consistent or inconsistent with the CIS objectives?

IGCC response

Investing in demand

IGCC supports DCCEEW's intention to consider "behavioural changes in both industrial and household consumer demand". A future-proofed grid is one that adapts with consumer electricity needs. Engaging more consumers in electricity security and incentivising sophisticated demand patterns may also create buy-in that could overcome the social license currently stalling projects[5]. Involving consumers as active stakeholders in electricity markets can also contribute to system security, electricity affordability and emissions reductions. For example, and as suggested in the consultation paper, government redistributing profits to taxpayers above the pricing collar will mean that consumers have more free capital. This could be invested in residential electrification. In turn, renewable electricity will become progressively more affordable. Residential electrification is due to be supported by the Household Energy Upgrades Fund, but DCCEEW should consider opportunities for scaled residential and community storage and generation under the CIS.

It is expected that only projects with a capacity of at least 30MW are eligible for the CIS product. Given the scale of firming capacity needed to replace retiring coal generators, appropriate commercial solutions are needed for large-scale, medium-scale and community-scale storage. Reducing the 30MW figure for distributed (but scaled) projects would enable a greater suite of

[5] Accelerating our energy transition with a credible 1.5°C scenario

technologies to be eligible for CIS tendering. This would also support innovative technologies with risk profiles that typically exclude them from other government schemes. The CIS is not a residential electrification scheme; however, it could work in coordination with investors seeking to scale community-level projects with a co-financer such as the CEFC.

While large-scale storage of 4 to 12 hours duration is important for managing daily fluctuations in variable renewable energy output, we note that modelling by AEMO and the Energy Security Board also emphasizes the importance of coordinated distributed energy resources. The 2022 ISP estimates that by 2050, distributed energy resources – of which community and household battery solutions are a critical part – will represent three-quarters of dispatchable capacity[6]. This will reduce the need for utility-scale storage, easing the burden on transmission lines, providing critical system stability and supporting social licence. Under-investment in distributed electricity will require even more investment, at greater cost, in large-scale storage, transmission and other measures to enhance grid stability.

The consultation paper suggests that VPPs used by electricity retailers to manage short-term price volatility are not consistent with capacity reliability aims. However, IGCC encourages DCCEEW and AEMO to consider how VPPs can be scaled to increase system reliability and decentralisation. There is evidence to suggest that VPPs offer significant cost savings compared to gas peaking plants and large-scale batteries, which can be passed onto consumers[7].

Most government funding focuses on supply-side measures. However, supply and demand-side measures should be considered complementary. Demand-side measures of energy efficiency and community-level electrification increase the resilience and responsiveness of electricity systems, reducing the reliance on large-scale supply and associated transmission costs - a significant investment barrier felt by IGCC members.

IGCC recommends that DCCEEW and AEMO make demand-side projects eligible for the CIS product, so long as they are scalable and can provide grid-firming and reliability functions consistent with the aims of the CIS.

Core design elements and delivery stages

How could the CIS eligibility criteria and assessment methodology change and adapt over time?

[6] Integrated System Plan 2022
[7] Real Reliability The Value of Virtual Power

IGCC response

Coherent policy is the strongest pull-factor for investment

A central government body acting as an entry-point for investors seeking to finance renewable electricity projects would eliminate the significant burden of navigating jurisdictional policy and funding vehicles.

IGCC recommends that DCCEEW, in collaboration with the national Net Zero Authority, consider how ARENA, CEFC and CIS, as well as other funding streams at the national and sub-national level, can be streamlined for applicants.

IGCC recommends that DCCEEW collaborates with AEMO for optimal ISP 2024 compatibility, considering it and the CIS are currently under review.

As the scheme evolves over time, the IGCC urges DCCEEW to only consider co-located and time-matched renewable generation be eligible for the scheme. Energy stored (and then dispatched) that is 100 per cent covered by Large-scale Generation Certificates (or other recognised renewable energy certificates) does not produce the correct long-term investment incentive for dispatchable renewable power. Rather, it risks creating an incentive for emissions-intensive dispatchable power offset by LGCs – worse still if the technology is underwritten by government under the guise of it being renewable.

IGCC recommends that DCCEEW prioritise co-located and time-matched renewable generation over renewable generation covered by LGCs or Renewable Energy Certificates.

Core design elements and delivery stages

The Department is seeking feedback on each of the eligibility requirements including: the technology risk appetite of the CIS.

IGCC response

Public funds unlock private capital

IGCC supports the establishment of a national CIS that leverages private capital with public funds, supporting *additional* investments in dispatchable renewable electricity. Renewable electricity projects often have high risk-return profiles, which is even more relevant for innovative new technologies. The role of the public sector is to provide supports that de-risk private investment, which unlocks greater investment than the public sector could allocate. Transition to grids powered

by renewables will require innovative technologies that are not yet commercially viable to enter the market[8].

IGCC calls for the CIS to have a stronger risk appetite than the Clean Energy Finance Corporation (CEFC) to bring projects to market that would not otherwise be commercially viable. CEFC currently operates closely to commercialisation for de-risking emergent technologies.

IGCC strongly recommends that the competitive mechanism for awarding tenders prioritises the projects that are less commercially viable but have greater firming capacities – especially in the case that other supports, such as ARENA and CEFC finance, are not available to them.

IGCC supports the renewable technology-agnostic approach to the reliability target and calls for the same principle to be applied to the derating methodology. IGCC notes that for the purposes of the 6GW allocation to jurisdictions, the ISP forecasts will be converted into MW of medium-storage equivalents using derating factors. The derating methodology that enables that conversion needs to be robust and ensure 'fair competition' across all technology types, so that a technology-bias does not develop when ranking applications.

Core design elements and delivery stages

The Department is seeking feedback on each of the eligibility requirements including: the impact of participation in other government schemes on CIS eligibility. AND The eligibility of existing projects to bid into the CIS, and questions of CIS additionality that result from this approach.

IGCC response

Public funds could "crowd-out" private capital

The consultation paper does not consider support from ARENA or CEFC to be revenue support, and so projects that have been involved with these two bodies are eligible for the CIS product. This itself is not an issue, however, delineating the roles for State and Federal Governments in the planning, co-financing and underwriting of renewable energy firming projects across their lifetime should be considered. DCCEEW should consider the likelihood of projects routinely accessing ARENA+CIS or CEFC+CIS support – and whether a streamlined process for applications should be developed. Reducing application and reporting burden for entities and packaging support will ease engagement for investors.

[8] Accelerating our energy transition with a credible 1.5°C scenario

IGCC notes that the pilot round of tenders was undertaken in NSW where Long-Term Energy Service Agreements (LTESAs) already operate. LTESAs operate in a similar way to the CIS with their underwriting component. DCCEEW should release scheme methodology for the other jurisdictions it will operate in, particularly as the CIS is, at this stage, intended to be compatible with existing practice. There may be unforeseen consequences of offering the CIS product to jurisdictions with markets different to NSW; particularly where a large proportion of supply is publicly owned. There should be careful consideration of how the scheme interacts with existing policy, to achieve the stated policy aims across all jurisdictions.

DCCEEW should consider whether the additionality that existing projects may be able to prove with the use of the CIS product outweighs the benefit of bringing emergent technologies to market.

IGCC recommends that the CIS prioritises projects that bring emergent technologies to market in its merit assessments, but does not exclude existing projects from being awarded CIS tenders should they be able to prove genuine additionality.