

Consultation on the design of Hydrogen Headstart program

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Introduction

The Australian Hydrogen Council (AHC) is the peak body for the hydrogen industry, with over 100 members from across the hydrogen value chain. Our members are at the forefront of Australia's hydrogen industry, developing the technology, skills and partnerships necessary to ensure that hydrogen plays a meaningful role in decarbonising Australian industry.

AHC welcomes the opportunity to engage with the design of the Hydrogen Headstart program, and to respond to the consultation paper.

Earlier this year, the AHC prepared a discussion paper with a number of policy recommendations for the Australian government as it crafted its response to the investment challenges posed by the US Inflation Reduction Act (IRA). In this document, we called for the Australian government to allocate funding support for at scale production of hydrogen and we are delighted that the May 2023 budget included the \$2B allocation for the Hydrogen Headstart program.

Throughout the consultation, as well as in the public consultation sessions, DCCEEW and ARENA have emphasised that this consultation paper is iterative and that the feedback (written as well as through one-on-one meetings with individual companies) will be used to inform the thinking of policy makers developing the funding mechanism and guidelines.

The AHC is supportive of this approach. The process to develop this first iteration of the support package and initial \$2B tranche of funding is critical. The AHC is hopeful that the process will result in the establishment of robust guidelines that can be rapidly scaled up and rolled out with any additional funding announcements.



Responses to consultation questions

1. Competitive round objectives

The consultation paper notes that the competitive round objectives are to:

- Produce renewable hydrogen at scale in Australia, facilitating an accelerated pathway to the technical and commercial viability of renewable hydrogen production and use at scale in Australia.
- Support domestic decarbonisation, build industry capability and provide for new economic opportunities in our manufacturing and export industries.
- Reduce barriers for future deployments through attracting private sector capital (debt, equity & offtake).
- Develop and retain investment, skilled labour, intellectual property and supply chains for a domestic hydrogen industry.
- Provide price discovery and transparency in relation to the current and projected economics for renewable hydrogen (and its derivative products) technologies, by sharing the actual and forecast economics of applications received as part of the Competitive Round.
- Facilitate knowledge sharing throughout industry to assist with maturing the Australian hydrogen industry.

We note the role the Headstart Program can play in building initial scale and developing early supply chains, and look forward to the broader policy settings, strategic direction and investment attraction that is required to maintain momentum and bridge the gap to hydrogen at scale in Australia. We discuss these issues in detail in the AHC's submission to the revised National Hydrogen Strategy.

Regarding the second point, we note that the remainder of the Consultation Paper does not nominate priority manufacturing and export industries. If this is an overarching objective, it would be beneficial for the Australian government to explicitly nominate its highest priority industries for this initial round of the Headstart Program based upon what will incentivise the greatest amount of additional decarbonisation activity and investment.

On the third point, the proposed term of support (ten years), alongside the conditions for sharing of the upside and the clawback mechanism, is likely to reduce the attractiveness of projects supported under this mechanism, noting that this may be less of an issue for larger proponents.

Finally, whilst the desire to provide transparency and price discovery (as covered in point five) is commendable, the actual and forecast economics of the project will be subject to significant variation as the project proceeds through various stage gates. In addition, some industry members have raised concerns that price discovery could lead to anti-competitive behaviour in the emerging industry and result in price setting.



2. Proposed eligibility requirements

The consultation paper proposes that the Competitive Round be restricted to the following:

- New deployments of electrolysis/renewable hydrogen production facilities. Deployment may utilise existing energy generation or hydrogen end use infrastructure.
- A minimum electrolysis deployment of 50MW Maximum project size
- A single site deployment per project

There will be consideration of the balance between hydrogen production for export and domestic use.

Question 2.1: Please provide any feedback on the proposed eligibility requirements. Are there any other eligibility requirements the Program should consider?

We seek clarification on whether pyrolysis complies with the eligibility criteria as they currently stand.

Question 2.2: Is a minimum deployment size of 50MW appropriate for the Program?

The minimum 50MW deployment size is not appropriate for a program with ambition to support projects at scale. Globally, project developers are placing orders for significant electrolyser capacity. Recent announcements include:

- RWE's order of two 100MW PEM electrolysers from Linde Engineering (ITM Power) for the GET H2 project in Germany;
- The 100MW Repsol, Enagas and Engie project in Spain;
- Shell's 200MW electrolysis plant at the Port of Rotterdam;
- Woodside's 290MW H2OK facility in Oklahama, utilising NEL electrolysers; and
- The world's largest green hydrogen facility, which commenced operations last year a 150MW electrolyser in the Chinese region of Ningxia.

In order to meet the higher order objectives for the Headstart program (namely, supporting the ambition to reach 1GW of electrolyser deployment), the AHC considers that a suitably ambitious minimum deployment size be nominated. This would set a globally meaningful target for the support of at-scale projects. Projects below this size and scale would also receive a clear signal to seek support via existing ARENA capex grants, for example, or the suite of other funding and programs available at both the Commonwealth and jurisdictional levels, reducing complexity on overall Headstart program design and providing clarity around selection criteria.

The eligibility criteria state that the project size for consideration is unrestricted; however, the \$28 funding is nominally capped at supporting two or possibly three projects (according to public statements made by the Minister at the time of the May budget announcements) and the criteria also note that any additional capacity will not be subsidised.

Consideration needs to be given to how will this impact project design (building to scale, ensuring capacity for expansion and for securing additional offtake).



Question 2.3: Are there benefits to considering a suite of project sizes, with both large and smaller scale projects (for example less than 50MW) being eligible?

See our response above.

Question 2.4: Are there benefits to considering projects that may only have scale if aggregated across multiple, but related sites?

Given the costs (infrastructure in particular) associated with transporting hydrogen, there are limited cases where producing hydrogen across multiple locations would be cost competitive. Should it remain, the criterion does not impact the overall design of the scheme.

Question 2.5: Other international schemes have sought to implement additional requirements of the renewable energy used in hydrogen projects such as new-build or time matched renewable energy. Please provide your views on any additional requirements the Government should consider for the Program in relation to renewable energy.

If the Australian Government is keen to only incentivise the production of hydrogen using renewable energy (rather than set carbon intensity thresholds), then the scheme should establish criteria on additionality and time matching so that the hydrogen produced is demonstrably zero carbon.

In terms of requirements for new build, we note that significant additional funding incentives such as the extension of the RET should be rolled out concurrent with this program in order to enable compliance.

Further to this, we note that if not appropriately supported via additional funding and support, this type of additional requirement may end up stymying progress on investments. We have seen, for example, the EU walk back some of the initial requirements for geographic and temporal matching and progress towards the setting of tight carbon intensity thresholds instead.

Question 2.6: Some international schemes have limitations on proposed end uses of hydrogen such as the UK scheme which specifically excludes gas blending. Should any limitations be placed on the end uses eligible for the Program?

It would be better for the scheme to clarify preferred uses rather than proscribe some uses. Given the above discussion in question 2.5 regarding the sufficient availability of renewable energy, it would seem important to set out preferred uses for the hydrogen.

Related to this, we note that the draft criteria state that the hydrogen must be for a valid commercial case, but this is not further specified. The intent of this restriction could be clarified.

Question 2.7: Other international schemes consider both export and domestic use of hydrogen as eligible while others specifically exclude export projects. How should the Program consider projects with proposed export offtake and the extent to which this offtake may support the development of an Australian hydrogen industry or other additional benefits to Australia?

Globally, Australia is seen as having great potential to become an exporter of choice for hydrogen and its derivatives. The timely development and scale up of domestic production in Australia (which



also benefits domestic offtakers) is significantly aided by the attraction of foreign direct investment and international offtakers.

In the current global context, importing countries (whether that be in Asia or in Europe) are establishing support schemes for the introduction of alternative fuels into their economies. It is in Australia's interest to leverage this significant funding to develop the large-scale export and related infrastructure that will enable additional future investment.

As noted by many other analysts, unlike traditional fossil fuels, the production of hydrogen does not require exploration and site development – once supply chains are developed, a very significant competitive advantage is gained, which among many other benefits will increase the availability of clean molecules to local industry, aiding and enhancing decarbonisation activity.

On the other hand, if export focused projects are excluded from the Hydrogen Headstart funding, this will have a chilling effect on investment unless a separate, dedicated pool of funding to be negotiated bilaterally between Australian and importing countries was announced.

If export projects remain eligible, clarification must be provided regarding the way that the program will weight and score export focused projects versus those that have only domestic offtake. Consideration could also be given to having separate criteria for domestic and export focused projects.

Question 2.8: The proposed GO Scheme will be used to support the verification of hydrogen production. Are there projects where this would not be suitable? Should the Program apply a maximum emissions intensity for hydrogen production on a project lifecycle basis?

Projects must comply with the GO scheme to verify carbon intensity and the parameters around renewable energy generation. However, the GO and REGO scheme timelines and methodology are unclear and still under development. The timing for development and implementation of these schemes should be released as a matter of priority.

Even though the GO scheme is currently voluntary and the Headstart Program is only supporting a nominal number of projects, the parameters set under the Program will influence project design more broadly.

3. Total funding allocation

We note that the total funding allocation for this round is \$2 billion, and that an amount less than this may be allocated if proposals are not considered to be of sufficient merit to support an offer of funding.

Whilst we understand the intent of this clause, it is unlikely that that it will eventuate. As noted, it is the expectation of industry that this is the first of several funding allocations so it will be important to not only aim to get this right in terms of the support provided to projects throughout the funding process and to apply lessons learned to subsequent processes.



4. Proposed funding mechanism

The paper outlines the proposed funding mechanism, noting that recipients will receive a Hydrogen Production Credit (HPC) for each kilogram of renewable hydrogen produced by the facility, and that among other things, applicants will nominate an HPC value that represents the difference between the expected sales price to each offtaker and the applicant's cost of production.

Question 4.1: Please provide any feedback on the proposed funding mechanism.

The proposed scheme appears to presuppose that project proponents submitting an HPC price have progressed sufficiently in contract and offtake negotiations to be able to nominate a price with some certainty. This is not realistic for the vast majority of projects under development in Australia (and perhaps globally).

We have assumed that the production credits are likely to be subject to taxation, as most government payments to industry are usually subject to taxation unless specifically excluded. The proposed Hydrogen Headstart funding model appears to be based on a pre-tax payment structure which reduces the funding available to proponents and increases tax liability. It is proposed that any support is provided as a non-tax assessable payment to ensure the maximum funding is available to supported projects.

In addition, the description of the proposed funding mechanism is more closely aligned to grant support payments against set and agreed milestones, rather than reflective of the more complex agreements that are likely to emerge as the industry scales. An alternative mechanism proposed by AHC industry members is a contract for difference type mechanism.

For example, applicants under the Program are asked to nominate an HPC for each offtaker. Working on the assumption that the hydrogen or derivatives that are sold by the applicant will be used by offtakers to displace fossil fuel feedstocks, the HPC could be pegged to an existing commodity price (for example, coking coal for steel offtake, gas for ammonia production). The quarterly subsidy could be calculated to take into consideration price shifts in the reference commodity. This could serve to reduce the risk that projects aren't locked into contracts that become uncompetitive over time. This type of mechanism can also improve the bankability of projects as it can provide reassurance to lenders that the subsidy will realistically support production over the term of the contract.

It is also unclear from the criteria how production of hydrogen derivatives will be fairly weighted against hydrogen production – to the point above, given there is no reference price that accounts for this difference, is ammonia / methanol production disadvantaged by the criteria?

Finally, the proposed length of timing of support (ten years) is likely to be inadequate as it is unlikely to cover the period of offtake and is likely to be too short to satisfy lenders providing debt financing.

Question 4.2: Are there other design features or structures for the proposed Program that you think could be more impactful or efficient to catalyse large-scale hydrogen production in Australia?

See our response above.



Question 4.3: How should the Program treat additional Commonwealth or State Government funding or other support for the same project?

Providing projects with the ability to stack any and all funding support provided to the project – including from jurisdictions outside of Australia – will enhance the commerciality of projects under development.

Question 4.4: How should the Program treat a project that has been able to attract international government investment such as that under H2Global? How can the Program best leverage this support?

See our response above.

In terms of how the program can best leverage this support, see our response to question 2.7.

Questions 4.5: How should the HPC consider inflation?

The question around inflation, particularly in the current climate, is critical and requires careful consideration of the types of support required across project life – for example, construction cost blowouts, and significant increases in the cost of critical technology. The proposed structure for the Program is silent on how these potential cost fluctuations will be managed within the scheme, providing the impression that all risk should be borne by the project proponent. If this is the case, then this risk is likely to be factored into the production price and HPC tendered under the scheme, resulting in a greater drawdown of government funding for potentially lower volumes of production.

In addition, the document makes clear that changes to the HPC are not allowed once the project has been selected. This is unrealistic given that the HPC tendered could become void long before contracts are awarded, particularly given the very lengthy timelines for project award proposed by the scheme.

5. Proposed upside sharing or reduction in funding

The consultation paper proposes upside sharing from decreased operating costs or increased sales price on a 50/50 basis, if realised upside exceeds a certain value. To access quarterly HPC payments, recipients will be required to report on the quantity of production, emissions intensity of the hydrogen and renewable electricity use through certificates created under the proposed GO Scheme. Further, in the event the sales price materially exceeds the level of support required within the 10-year period, recipients will be required to pay back an amount of the Government support received in previous years. There will be no sharing in any potential downside.

Question 5.1: Other international schemes have varying upside sharing arrangements such as the UK scheme which requires projects to share 90% of upside back to the Government. Please provide your views on the proposed upside sharing arrangements for the Program, including with reference to the methodology for sharing upside (a reduction in the HPC).

Given the current size of the bankability gap for renewable hydrogen, there is low probability of strong upside outcomes in early mover projects over the term of the ten-year support period under



the Hydrogen Headstart program. The inclusion of this requirement introduces high financeability risk to proponents while offering little likely reward to government.

In negotiating debt financing, the proposed upside sharing and the proposal for clawback of support will serve to decrease lender appetite and increase risk to projects. For example, even though material sales price increases are unlikely over the ten-year period and therefore a payback is equally unlikely, project developers will need to ensure that they can demonstrate contingency to their investors and lenders that, in the event that this clause is enacted, sufficient funds would be available to repay the required amount.

The Australian Government has also stated that it will not share in any potential downside. One of the options the Australian Government may want to consider is taking an equity stake in supported projects. This would enable the sharing on the upside as well as appropriately sharing in the risk of the downside. It would demonstrate commitment to the success of the emerging industry as well as signal a commitment to developing new funding and finance mechanisms more in line with the required pace and scale of change to respond to the climate emergency and the energy transition. The CEFC is able to take equity positions and could be the lead in such a proposal. One example model for consideration is the Singaporean state investment company Temasek Holdings' model for debt and equity investments on behalf of the Singapore Ministry of Finance (Temasek's largest shareholder).

Alternative models that have also been proposed by members include a sliding scale for profit sharing based on the project's current IRR, or the setting of a higher threshold for profit sharing, or the limitation of the profit sharing to the latter half of the Headstart program's period of support.

Question 5.2: Please provide any additional feedback on the proposal for recipients to repay Government support in the event the sales price increases materially during the 10 year period.

See our response above.

6. Volume risk support

The consultation paper notes that some international programs include volume risk support as a contractual component. This protects the recipient by providing a top-up payment on qualifying volumes when total volumes sold are less than forecast and supports servicing of debt repayments. Alternatively, volume risk support is paid to recipients through an increased HPC credit for each kilogram of hydrogen produced.

Question 6.1: Do you think the Program should include volume risk support? If so, why?

The next decade is likely to see significant volatility in production and use cases for future fuels/low carbon feedstock. Even where offtake has been successfully negotiated, should this deal falter or volumes of offtake decrease, the nascency of the market means that there is no guarantee that an offtaker of similar size will easily be found. There may also be challenges at commissioning or ramp up where volume support will be important.

In more established industries, demand side risk should perhaps be wholly borne by the proponent. However, in this instance, volume risk support (for a set time period of sufficient length, to enable negotiation of additional offtake) should be supported to maximise the chance of project success



and to minimise the upfront project risk for project developers which can impact overall project bankability.

Question 6.2: If volume risk support is required, what is the preferred structuring of the mechanism?

One of the ways that this mechanism can be structured is to provide a government loan guarantee to debt funders of the project; that is, that in the event that the project temporarily ceases or reduces output, the government will guarantee loan repayments for a set period of time.

An alternative mechanism for consideration is the Low Carbon Hydrogen Business Model out of the UK, which contains a sliding scale volume support mechanism which provides additional support if the sales volumes fall below fifty per cent for reasons outside of the producer's control. This formula incentivises greater production volumes with additional support tapering as volume/revenue increases.

7. Proposed payment frequency and term

The consultation paper proposes that HPC payments will be made quarterly in arrears with funding available from FY27, and that projects will be eligible for HPC funding over a maximum 10-year term.

Question 7.1: Please provide any feedback on the proposed payment frequency and term.

Regarding the quarterly payment structure, feedback from AHC members has suggested that this mechanism is likely to result in the project continuously having issues with cashflow. However, members are also keen to minimise the administrative burden associated with data and reporting as part of compliance under the scheme, and so recognise that shortening the time between payments may also not be ideal. Further consultation and discussion with likely proponents on this element of program design is recommended. One of the mechanisms for consideration may be to consider the payment of an agreed flat monthly payment, with half-yearly or annual level up to account for variations in production volumes.

In addition, all other criteria proposed for the program suggest that the only projects that will be considered are those that are sufficiently progressed. This would perhaps be better managed by instead specifying that eligible projects need to take FID and commence operations by particular deadlines. Not only would this send a signal regarding urgency and timeliness, it would also align Australia's program with global efforts, such as Singapore's ammonia tender, Korea's hydrogen auctions, Japan's contract for difference scheme, and the US IRA.

With regard to the proposed ten-year term of support, as discussed elsewhere, this is unlikely to be sufficient support – however, if the condition for extending support to 15 years results in dilution of the existing funding pool, it would be preferable to keep the shorter timeframe.

8. Proposed assessment process

The consultation paper proposes that the Competitive Round will have an expression of interest (EOI) stage followed by a full application stage. Guidelines will be issued. Only EOI applications assessed as being of high merit against the program merit criteria (to be provided in guidelines) will be invited to submit a full application.



We are keen to understand the process for those projects that submit expressions of interest that are well regarded but do not progress to full application. AHC also recommends a separate process for the Australian Government (including ARENA and CEFC) to consider further support for projects that are invited to submit full applications but do not receive funding in this competitive round.

9. Proposed Merit Criteria

The consultation paper sets out a range of proposed merit criteria for the program, with detailed requirements for each of the following:

- Merit Criterion A: Alignment to Competitive Round Objective
- Merit Criterion B: Capability and Capacity
- Merit Criterion C: Scope, Methodology, Deliverability and Risk
- Merit Criterion D: Financial Capability
- Merit Criterion E: Knowledge Sharing

Question 9.1: Please provide any feedback on the proposed merit criteria.

The items under merit criterion A are broadly in line with the stated overall program objectives, with the exception of bullet point 3 (cost competitiveness and efficiency of the project) which more closely aligns with the elements in criterion D.

The items under merit criterion B are reasonable and would form part of an assessment of risk.

Merit criterion C is too broad and some of the elements contradict the terms discussed in previous sections. For example, this criterion implies that projects yet to enter FEED are eligible to apply, provided they provide a pathway to complete FEED, whilst the program description and expectations described in the other merit criteria (securing of site, risk management plans, identification of supply chains, etc) imply a level of project maturity unlikely to be achieved by projects in feasibility study phase.

Some of the items in merit criterion C, for example those related to monitoring of jobs created, apprenticeships, etc, are likely to create administrative burden on recipients should reporting on this be required under the funding agreement. These types of outcome reports are typically seen in grant funding agreements, less so in commercial agreements such as those proposed under Headstart. General feedback from AHC members is that the program design should minimise reporting to focus on the requirements to satisfy the HPC terms rather than the higher order policy aims and intentions of DCCEEW and ARENA, which may be better undertaken via a midterm and post hoc evaluation of the Headstart Program, for example.

Merit criterion D relates to financial capability. The criteria listed are sensible, though some are duplicative, for example the criteria related to the ability and capacity of the bidding company or consortium to deliver are very similar to those under merit criterion B, capability and capacity.

Similar comments apply to merit criterion E. The desire for knowledge sharing is understandable, but it is unclear why this is presented as a significant element of the assessment, nor what the aim and intention of a Knowledge Sharing Plan would be, given that these are not pilot projects with shorter, fixed timeframes for operations. In addition, the projects likely to be supported under the Headstart



program will generate significant commercial and technical IP, unlikely to be readily shared by proponents.

Question 9.2: How should merit criteria be structured or weighted to ensure the success of delivery of hydrogen from projects? (For example, by adding weighting to criteria that deal with: the capability and capacity of a project proponent to deliver its proposal; the credibility and level of conditionality of the offtake agreement, the extent to which the project has already undergone project planning processes including feasibility/FEED studies, the identification of sustainable water sources, other environmental aspects and community engagement; and/or the unique attributes of the project.)

AHC members have a range of views on the structuring of the proposed criteria, but the majority seek greater clarity and tighter definitions. For example:

- Rather than simply stating that a project must have gone through certain stage gates, it may be beneficial to provide direction on the acceptable level of class estimates sought for each stage, in particular FEED.
- The program design could address government expectations on land acquisition and access, level of planning and approvals, discussions with potential lenders, experience in gaining social license on previous projects, and experience in engaging with Traditional Owners.
- Some members are also seeking to better understand how technology risk (including interface and integration risk) will be assessed and weighted.

Question 9.3: Should an applicant be required to have at least a conditional offtake arrangement in place before applying to the Program? What standard should be applied to determine the reliability of such an arrangement?

If this was made a threshold question for applications under the scheme, it may serve to reduce the number of applicants. It should be noted that if this was a critical requirement, DCCEEW and ARENA should adjust the merit criteria accordingly; for example, to take into account the likelihood that the only projects able to satisfy this criterion are likely to already be at FEED stage.

In terms of assessment of reliability, due diligence should be undertaken on the offtaker and the terms of the offtake agreement and be assessed against the overall project development plan and timelines.

It is also the strong position of the AHC that projects submitting full applications should undertake to progress firm offtake agreements prior to FID, with the only acceptable condition precedent being the award of the Headstart funding.



Question 9.4: What additional outcomes should be incorporated into the formal merit criteria for the Program in order to deliver broader benefits? (For example: level of private investment leveraged; number of jobs created; number of apprentices supported; level/value of common user infrastructure supported; level/value of social infrastructure supported; level/value of local suppliers; use of hydrogen towards existing or new manufacturing industries; level of knowledge shared with the broader industry.)

The consultation papers on the refreshed NHS and the Hydrogen Headstart program are largely silent on infrastructure funding and buildout. Project proponents – whether focused on domestic or export offtake – are likely to require supporting infrastructure. Whether this is an element that should sit under the merit criteria or not, it is an important consideration that is not covered in the documents under review.

Question 9.5: What other aspects of an export-oriented proposal should be assessed to ensure the Program funds demonstrate tangible benefits to Australians?

Export projects and the investment that they attract can be expected to provide numerous tangible economic benefits to Australians, such as jobs, economic uplift, supply chain benefits, and technology transfer.

Question 9.6: How should emissions abatement calculations consider the different end uses of hydrogen and greenfield vs brownfield facilities?

It is difficult to answer this question meaningfully without having resolved the issues raised earlier regarding whether the program will be amended to propose preferred uses of the hydrogen produced and supported under the Headstart Program. Once this is settled, assessors can take into consideration the different parameters for each use case. For example, the abatement calculations for hydrogen for DRI or bauxite or urea production may be weighted differently than those proposing offtake for industries that are easier to decarbonise.

10. Portfolio approach

The consultation paper states that a portfolio approach may be taken when offering funding under the competitive round, meaning that diversity of projects will be sought. At its discretion, the Program may elect to fund more or less than two projects depending on applications received.

It is the AHC's strong position that the Headstart funding not be diluted to support a range of smaller projects unlikely to have the impact required to kickstart hydrogen production and utilisation in Australia.

11. Funding agreement

The consultation paper advises that the program proposes to use a template Funding Agreement which will be developed as part of the program. In our view, a one size fits all funding agreement template is unlikely to be the appropriate mechanism for negotiating a support package for what are likely to be complex projects undertaken by a range of commercial entities.



12. Knowledge sharing plan

We note that the program proposes to use a template Knowledge Sharing Plan which will be published at the commencement of the EOI Stage on the ARENA website.

See our comments above on merit criterion E.

13. Project confirmation

The consultation paper advises that upon award of funding, projects will be required to agree to a development timeline and provide monthly confirmation that the project remains on track to reach financial close and commissioning by the proposed dates, otherwise an offer of funding may be withdrawn.

The requirement for monthly monitoring or reporting is reasonable, however as noted in previous responses, construction timelines across multiple industries are currently in flux and the expectation is that extenuating circumstances will be appropriately considered during the assessment of project progress, with withdrawal of funding treated as a very last resort for critical project failure.

14. Bid bond and support for development costs

We note that the Australian Government is considering the use of bid bonds, where the bid bond will be forfeited where the project does not reach financial close within the date specified in the Offer to Negotiate letter. It is proposed that shortlisted applicants invited to the Full Application stage that are unsuccessful in receiving funding may be eligible to claim up to 50% of external development costs incurred during the Full Application period.

As noted in the response above and also our response to question 15.1, the lengthy timeframes for assessment, the impact of inflation on project costings and the nascency of green hydrogen offtake introduce uncertainty and a level of volatility around timing for financial close. Reiterating our response to section 13, our expectation is that extenuating circumstances will be appropriately considered during the assessment of project progress, with withdrawal of funding treated as a very last resort.

Consideration should be given to reimbursing 100% of the external development costs during the full application period, up to a reasonable cap. This measure appropriately values the costs associated with developing a comprehensive proposal, particularly given the tight twelve-week timeframe.

15. Proposed timetable

The consultation paper outlines the timetable as follows:

- EOI Open Date: Q4 CY23/Q1 CY24
- EOI Due Date: To be determined (estimated minimum 8 weeks from EOI Open Date)
- Assessment of EOIs and notification to applicants within 45 business days of EOI Due Date



- Full Application Due Date: Q3 CY24 date to be determined and subject to change following EOI stage (estimated minimum 12 weeks from Invitation to Full Application)
- Decision outcome: Q4 CY24 date to be determined and subject to change following EOI stage.

Question 15.1: Does the timing proposed for the Program outlined below appear appropriate? If not, please note in your view an appropriate alternative.

In our view the proposed timeline should be accelerated to the greatest extent possible, not only to better align the Headstart program with the timing proposed by key importing nations, but also to demonstrate the requisite level of urgency in our response to the global investment challenge posed by the US IRA and the range of policies already announced by other jurisdictions.

More specifically, in the worst-case scenario the EOI process would not start until March 2024, closing after a 12 week period in late May 2024, and with invitations to proceed to full application sent some time in July 2024 – a full year from this initial consultation.

Although it is noted that decisions will be announced within Q4 of 2024, it is unlikely to be the case given the complexity of the due diligence to be undertaken on the full applications, as well as the internal administrative and other processes within DCCEEW and ARENA required to make a final decision.

Therefore, in the worst-case scenario, the decision may be delayed until after the January holiday period of 2025, and only announced in February or March of that year.

By any measure, waiting over a year and a half for an announcement of funding support for two projects seen as critical to establishing a future industry is far too slow.

The danger of these timeframes is that, beyond the issue of perception, they will have a chilling effect on the progress of industry negotiations. Given that there is currently no other funding support provided to hydrogen producers, all viable projects that see themselves able to comply with the selection criteria will put in an EOI.

Even if only half of the projects currently under development in Australia put in an application (a likely scenario if the merit criteria are not significantly tightened), over 50 companies and consortia will be waiting until around May 2024 to know their fate. For the handful selected to progress through to full application, the delay is prolonged – even though they will be negotiating with potential offtakers, all agreements are likely to include as condition precedent the requirement for the hydrogen producer to secure backing under the Headstart program.

This could mean that around ten of the most prospective projects in the country will be waiting until 2025 for a decision around funding outcomes. That puts project developers in an impossible position – no one wants to tie their hands for that long, but nor do they want to exclude themselves from the only funding support on offer. The condition is more dire still for those projects that are export focused, as the timing for decisions in import nations does not coincide with the proposed timelines under Headstart.

In addition, AHC members have noted that the lengthy processing and decision-making timeframes mean that many of the costs – in particular, electrolyser costs – are unlikely to be valid should the



final decision take longer than a month following submission of the full application. Developers have also noted that lengthy delays may impact the EPC contract, financing contracts and port access.

The AHC proposes that in order to expedite the proposed timeframes and avoid the worst-case scenario presented above, ARENA and DCCEEW should look to tighten the criteria for projects submitting EOI and ensure that there are sufficient resources available for assessment and review of projects at this stage.

AHC also proposes that, once projects have been selected for progression to full application, a case management approach be utilised whereby a representative from ARENA alongside a representative from the CEFC will lead the conduct of assessment and due diligence of the projects, ensuring that both agencies are able to assess the projects simultaneously and are therefore able to provide projects a more comprehensive range of financial supports beyond that offered by the Hydrogen Headstart program.

Where possible, assessment and due diligence should encourage "fast fail" – that is, if a project is unlikely to meet the threshold criteria, that the proponent be advised early and where applicable either be referred to alternative programs at ARENA or continue to have financing discussions with the CEFC.

Appendix A: Information Requirements at EOI and Full Application

Question: Do the above EOI information requirements seem reasonable? Are there any additional items you would add to the EOI information list, or items that may be subject to different interpretations / challenging to provide?

The EOI requirements are reasonable and sufficiently detailed. The information sought constitutes standard information that would be under development by any credible project.

We note, however that bullet point 4 of the proposed project plan specifically asks for a note on the equipment supplier's demonstrated experience in Australia and internationally. This requirement may have the effect of disadvantaging or perhaps even disqualifying new, innovative manufacturers of electrolyser or other production technology.

Question: Do the above Full Application information requirements seem reasonable? Are there any additional items you would add to the Full Application information list?

The criteria under the full application appear to be structured under the assumption that a significant length of time has elapsed between EOI and full application, rather than the 45 business days specified under section 15. Selected applicants will then have 12 weeks to finalise the application.

For example, under the EOI stage, evidence of offtake is sought as: "*MOU with third party for offtake* or hydrogen use. The MOU should specify timing, volume, price and any specific conditions. In the case of self consumption, applicants should provide comprehensive detail on the use case for the hydrogen."

At the full application phase, evidence for offtake is sought as: "Detailed term sheet for offtake or hydrogen use. The term sheet should specify timing, volume and price and any specific conditions. In



the case of self consumption, applicants should provide comprehensive detail on the use case for the hydrogen."

The same example can be provided across many parameters – the criteria for term sheet for energy supply, equity and debt financing etc. The AHC recommends that the criteria for the EOI need to be tightened in order to more accurately reflect the requirements for the full application.