

CHARTER – INSTITUTE STEERING COMMITTEE

1. Context and Background

The Australian Solar Thermal Research Institute (**ASTRI**) is an eight-year, \$75 million research and development program which commenced in 2012 and receives funding from the Commonwealth through the Australian Renewable Energy Agency (**ARENA**). ASTRI is an unincorporated joint venture comprising CSIRO as the lead organisation partnering with a number of Australia's top universities (**Collaborating Organisations**) including:

- Australian National University
- Flinders University
- Queensland University of Technology
- University of Adelaide
- University of Queensland
- University of South Australia

ASTRI was originally designed to provide an institutional framework for a coordinated, national approach to Concentrated Solar Thermal (**CST**) research in Australia, to build research capability and to encourage international collaboration with overseas research institutions and industry.

Mid-term review

As a result of an extensive mid-term review conducted in 2016 it was recommended that ASTRI:

- become more strategic and outcomes focussed;
- be more flexible and dynamic, particularly in the way milestones are reported;
- focus on clearly articulating ASTRI's value proposition in addressing energy system challenges;
- reorient its focus to the Australian energy market;
- review its governance and operating framework with a view to reform, including by broadening the Institute Steering Committee's (**Steering Committee**) composition with a view to greater diversity of representation, also to establish a technical advisory committee comprising more independent and industry-focussed personnel to provide recommendations in relation to strategy and activities; and to increase the number of dedicated ASTRI management personnel;
- prioritise projects that move CST technology through scale-up demonstrations to deployment, as well as undertake transformational projects;
- not use its own funds to build demonstrations but explore opportunities to build demonstration systems working with engineering, procurement and construction contractors and their customers (e.g. mine-site operators);
- target its research efforts to areas with demonstrated commercial potential/opportunity; and
- undergo more streamlined less detailed annual reviews that focus on outcomes.

New approach (2018 onwards)

To implement recommendations from the mid-term review, ASTRI will develop a research program using the learnings and development from the first four years of ASTRI with an emphasis on commercial engagement and CST deployment (**Research Program**).

The Research Program will be directed by the "Institute Plans" described in the Funding Agreement with ARENA and will set the research direction and guide project development and selection (in particular the Strategic Plan and the Research Plan). Project selection will involve consultation and recommendations from the Steering Committee and liaison with the Technical Advisory Committee (**TAC**). Any Project agreements will

be entered into by CSIRO with the project participants. CSIRO must document reasons in the event it does not follow the recommendations of the Steering Committee.

ASTRI will actively seek out industry perspectives for advice and strategic direction, as well as involving relevant industry players in its planning and direction setting. This will involve both Engineering Procurement and Construction companies (**EPCs**) as well as manufacturing organisations. ASTRI will also work with industry to identify economic pathways where industrial heat can be replaced with Concentrated Solar Thermal heat sources.

The mission of this next phase of ASTRI was stated (in 2017) as follows:

The ASTRI 2.0 main objective is to develop, deploy and demonstrate CST technology and be the leading collaborative research institute and advisor for CST worldwide.

Over the next 4 years ASTRI 2.0 will research, develop and test components and integrated systems to rapidly enable economically feasible CST power generation. This will allow CST to be brought to market as a critical component of Australia's future energy mix. Research and development conducted by ASTRI is in specific support of this main objective. ASTRI will also provide support to Australian industry to encourage longer-term opportunities to utilise CST for a broad range of commercial applications.

CSIRO will constitute a new Steering Committee for this next phase of ASTRI (2018-2021) to oversee the governance and management of ASTRI and to provide strategic guidance to ensure ASTRI addresses the recommendations of the mid-term review and directs its research activities to priority in areas accordance with ASTRI's Strategic Plan.

CSIRO will also constitute a Technical Advisory Committee (**TAC**) to provide strategic technical and scientific advice to the ASTRI management team and on request to the Steering Committee on the activities and content of the Research Program to assist ASTRI achieve its strategic objectives.

The Institute will be managed by an ASTRI Director appointed by CSIRO. The Steering Committee will be led by an independent Chair (**Chair**).

2. Purpose and Role of the Steering Committee

The purpose and role of the Steering Committee is to:

- a. oversee governance and management of ASTRI;
- b. maximise the effectiveness of the Research Program in a way that achieves the program objectives and outcome delivery;
- c. provide strategic guidance to ASTRI regarding allocation of resources (including funding) to priority research areas;
- d. provide advice to ASTRI regarding strategy and direction in CST research;
- e. provide high-level strategic guidance to ASTRI regarding:
 - i. the risks, strengths and weaknesses of the Research Program;
 - ii. potential gaps in the Research Program; and
 - iii. appropriate strategic direction for new and existing research;
- f. provide recommendations to ASTRI on the Institute Plans which are to be submitted by CSIRO to ARENA in accordance with the Funding Agreement;
- g. evaluate performance of ASTRI and conduct regular reviews of ASTRI and the Research Program, including inviting representatives of ASTRI participants to present on the progress, quality and relevance of the Research Program as a whole;

- h. advise ASTRI from time to time regarding:
 - i. emerging technology, policy and industry issues and trends that may impact on the Research Program; and
 - ii. any other issues which may impact the relevance of the Research Program, where the Steering Committee recommends action or improvement is needed;
 - iii. consider and, if satisfied, approve a replacement ASTRI Director in the event that role becomes vacant for any reason during the term of ASTRI.

The Steering Committee serves in an advisory capacity only. The Steering Committee and Steering Committee members do not have any executive powers, supervisory functions or decision-making authority in relation to the operations of CSIRO or ASTRI by virtue of their appointment to the Steering Committee.

3. Membership

The Director of CSIRO Energy Business Unit (**Energy Director**), or their nominee, will appoint the external members of the Steering Committee in consultation with the Steering Committee and with ARENA and in accordance with the Funding Agreement.

Membership of the Steering Committee will comprise of not fewer than seven (7) and not more than ten (10) members as follows:

- a. a Chair who may vote but who will not have a casting vote;
- b. the ASTRI Director, who will be a non-voting member;
- c. a senior representative of ARENA, who will be a non-voting member. The ARENA representative, while representing ARENA on the Steering Committee, is not a decision-maker and does not have the ability to bind ARENA to any decision. The ARENA representative will be involved principally in an observer capacity and will assist and support the Steering Committee to achieve its objectives;
- d. a senior representative of CSIRO, who may vote;
- e. a single senior representative on behalf of all Collaborating Organisations (University participants in ASTRI), who may vote;
- f. a senior representative from an international organisation active in CST, who may vote; and
- g. one or more senior representatives from stakeholder groups other than those above, who may vote.

Members of the Steering Committee must be Fit and Proper Persons (as defined under the Funding Agreement), with formal qualifications and experience, including the Chair. A declaration in the form at Attachment A is to be signed by all members.

Members of the Steering Committee will be selected based on:

- a. their capacity to contribute to the Role and Purpose of the Steering Committee;
- b. their personal experience and expertise; and
- c. in a way that seeks to achieve balance across relevant experiences and backgrounds.

A majority of the voting members of the Steering Committee must be independent of CSIRO and the Collaborating Organisations.

The term of appointment to the Steering Committee will commence when the member accepts appointment to the Steering Committee and will conclude at the earlier of: August 2021; the time when ASTRI expires or is terminated; when the member resigns from the Steering Committee, or when CSIRO notifies the member in writing that their appointment is terminated.

4. Role of the Chair

The Chair must be independent of CSIRO and each Collaborating Organisation and the role of the Chair is to:

- a. chair meetings of the Steering Committee in accordance with this Charter;
- b. give notice of Steering Committee Meetings and prepare and circulate the agenda for each meeting in accordance with Part 5 (Meetings) below;
- c. ensure minutes of Steering Committee Meetings are kept and provided to the ASTRI management team in accordance with Part 5 (Meetings) below;
- d. manage the administration of the Steering Committee and arrange secretarial support for the Steering Committee; and
- e. provide feedback to the Steering Committee from ASTRI and CSIRO in respect to the advice received from the Steering Committee. ASTRI and CSIRO are not bound by advice or recommendations received from the Steering Committee but will consider it appropriately in the context of the overall strategy and direction of the Research Program. If ASTRI or CSIRO choose not to follow the advice of the Steering Committee they must document their reasons for doing so and provide a copy of those reasons to ARENA where required under the Funding Agreement.

5. Meetings

- a. The Steering Committee will meet at least twice a year (in or around July and December), or more regularly as determined by the Chair, during the ASTRI term.
- b. Notice of a Steering Committee meeting must be given by the Chair (or their nominee) to each member of the Steering Committee no less than 7 days prior to the proposed date of the meeting.
- c. The agenda for the meeting will be set by the Chair. Agenda papers must be circulated to all members of the Steering Committee in advance of the meeting and must include details of topics for discussion and voting.
- d. The meeting will be chaired by the Chair. If the Chair is not able to attend the meeting, the meeting will be chaired by another member of the Steering Committee on agreement of the members of the Steering Committee.
- e. A quorum consists of at least four Steering Committee members (including the Chair).
- f. ASTRI participants or other persons approved by the ASTRI Director or the Chair who are not members of the Steering Committee may be invited to attend and contribute to the meeting as observers (but will not be entitled to a vote).
- g. Meetings can be conducted by video conference, telephone, email, internet or any other method decided upon by the Chair.
- h. Resolutions and proceedings of the Steering Committee must be treated as confidential (see part 8 'Confidential Information').
- i. Records of all resolutions and proceedings of the Steering Committee must be kept by a Secretary appointed by the Chair, and maintained in accordance with any directions of CSIRO. At the end of a meeting of the Steering Committee, the Chair may require that all notes of and other documents relating to, the meeting (including the agenda and notices of meeting, if required) be handed in to the Chair.

6. Voting

- a. Where the Steering Committee has been requested by CSIRO or the ASTRI Director to make a recommendation in relation to a particular matter, the members of the Steering Committee that are present at the meeting will discuss the matter.
- b. Based on the views expressed during discussions of the Steering Committee in relation to a particular matter, the Chair will propose a recommendation to be made to the ASTRI Director, which will be voted upon by the members of the Steering Committee in attendance.
- c. Each member of the Steering Committee with voting rights that is present at the meeting (including the Chair) will be entitled to one vote per recommendation.
- d. If a majority of Steering Committee members present at the meeting vote in favour of the recommendation, then the recommendation will be taken to have been passed. In the event that the number of votes in favour of and against the recommendation is equal, the recommendation has not been passed.
- e. A resolution of the Steering Committee may be passed without holding a meeting if a majority of the members (including the Chair) entitled to vote on the proposed decision indicate in writing that they are in favour of the resolution. The resolution will be taken to be passed at the time the last member (or Chair, as the case may be) indicates their vote in writing. The Chair must ensure that a record of each member's written vote to a resolution is kept.

7. Conflicts of Interest

- a. A member of the Steering Committee (including the Chair) who has a material direct or indirect pecuniary or other interest (whether personal or as a result of that person's employment by an organisation which has an interest) (**Interest**) in a matter that is being, or is about to be considered by the Steering Committee, must disclose that Interest to the Steering Committee as soon as possible.
- b. A member of the Steering Committee who has disclosed an Interest in a matter may, at the direction of the Chair, be present during discussion of the matter but is not entitled to be present for the vote on the matter. However, the CSIRO representative and the ASTRI Director will not be excluded from discussion or voting (as relevant) where the CSIRO representative/s has an Interest by virtue of the following:
 - i. where CSIRO might be seen to be in a position of conflict simply because they are responsible for making payments under a Project Agreement; and/or
 - ii. where CSIRO might be seen to be in a position of conflict because they are required to perform research tasks (whether or not as the lead researcher),
- c. If a member of the Steering Committee does not participate in the vote in accordance with part 7(b) above, this must be noted in the minutes of the meeting.

8. Use of Confidential Information

- a. Contributions and recommendations of the Steering Committee are to be communicated by the Chair (or their nominee) to the ASTRI management team and to CSIRO. It is not the role of the Steering Committee (or any individual member of the Steering Committee) to advise or communicate with any other person or organisation regarding the activities, recommendations or views of the Steering Committee, unless previously directed by the ASTRI management team. All advice or correspondence issued by the Chair on behalf of the Steering Committee must be marked confidential.
- b. Members of the Steering Committee must not directly or indirectly disclose to any person any confidential information of CSIRO, ASTRI or of any other person which comes into their knowledge or possession as a result of, or in the course of their activities as a member of the Steering Committee, except with the prior written approval of the Chair, the ASTRI Director and the discloser of that confidential information, unless disclosure is required by law. This obligation survives the termination of the individual's appointment as a member of the Steering Committee.

- c. It is acknowledged that some members of the Steering Committee are appointed in a representative capacity for their employers (or on behalf of all research participants). Such members are able to share non-confidential information with the organisations they represent, subject always to the policies and procedures adopted by the Steering Committee, including their conflict of interest procedures.
- d. At the end of the term of a member's appointment to the Steering Committee, the member must, if requested by the Chair or by CSIRO, return or destroy any confidential information which is in the possession of the member and which came into their possession as a result of, or in the course of, their activities as a member of the Steering Committee.
- e. Members of the Steering Committee must not:
 - i. make improper use of information obtained through their role in the Steering Committee in order to gain an advantage for themselves or any other person, either directly or indirectly; or to cause detriment to CSIRO, ARENA, ASTRI participants or any other person; or
 - ii. make improper use of their role in the Steering Committee in order to gain an advantage for themselves or any other person, either directly or indirectly; or to cause detriment to CSIRO, ASTRI participants or any other person.

9. Review and amendment of the Charter

This Charter will be reviewed by CSIRO on an annual basis in consultation with the Steering Committee and ARENA.

Charter prepared August 2018

Version reference: 1.0

Record of review: Prepared by CSIRO

Accepted and agreed by:

Name of Appointee:

Title and employer:

Date:

ATTACHMENT A

PERSONAL DECLARATION

I declare that, as at the date of this declaration, I am a “Fit and Proper Person” which is defined as follows under the ASTRI Funding Agreement:

“Fit and Proper Person means a person that:

- (a) has not been:
 - (i) convicted of an offence against a law of the Commonwealth or of a State or Territory equivalent of a Serious Commonwealth Offence as defined in section 15 GE of the *Crimes Act 1914 (Cth)*; or
 - (ii) disqualified from managing corporations under Part 2D.6 of the *Corporations Act 2001*; and
- (b) is not a current undischarged bankrupt, or has not applied to take the benefit of law for the benefit of bankrupt or insolvent debtors, compounded with his or her creditors or assigned his or her remuneration for the benefit of creditors;
- (c) the public is likely to have confidence in having regard to the person’s reputation and suitability to be involved in an organisation that has access to public monies; and
- (d) is of sufficiently good fame and character that association with ARENA or the Commonwealth would not bring ARENA or the Commonwealth into disrepute if the person were a member of the Institute Committee.”

I will promptly notify CSIRO in the event that I cease to fall within the definition of a Fit and Proper Person for any reason.

Signed

Date