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Australian Government
**Department of Industry,
Innovation and Science**

Business

Entrepreneurs' Programme Accelerating Commercialisation Grant Application Form

Version March 2017

About Accelerating Commercialisation

Accelerating Commercialisation is an element of the Entrepreneurs' Programme. It is a highly competitive, merit-based programme and only the strongest grant applications will be successful. Accelerating Commercialisation encourages and assists small and medium businesses, entrepreneurs and researchers to commercialise novel products, processes and services.

Completing this form

Please read the Programme Customer Information Guide before filling out this application. This application form contains the following:

Part A – Eligibility

Part B – Applicant Information

Part C – Project Details and Funding

Part D – Merit Criteria

Part E – Contact Details and Applicant Declaration

Part F – Attachment Checklist

Completing an application provides no assurance or guarantee of receiving funding assistance.

Confidentiality and obligations

The Commonwealth's use and disclosure of your information (provided in this application or otherwise) is set out in the [Customer Information Guide](#).

Getting help

If you require assistance completing this form, please contact the Contact Centre on **13 28 46** or contact us at business.gov.au.

Submitting your application

Applications may be submitted at any time by emailing your completed form to your State or Territory Accelerating Commercialisation mailbox:

State	Mailbox
NSW/ACT	ACNSW@industry.gov.au
VIC	ACVIC@industry.gov.au
QLD	ACQLD@industry.gov.au
WA	ACWA@industry.gov.au
SA/NT	ACSANT@industry.gov.au
TAS	ACTAS@industry.gov.au

Part A. Eligibility

A.1. Eligibility Criteria

Indicate the type of organisation making the application:

- ☒ A non tax-exempt company¹ that is registered for GST and has a combined turnover² of less than \$20 million for each of the three financial years prior to lodgement of the application
- ☐ A commercialisation office³
- ☐ An eligible partner entity⁴ that is a company¹
- ☐ An individual who agrees to form a non tax-exempt company¹ if the application for Accelerating Commercialisation funding is successful
- ☐ A researcher who agrees to form a non tax-exempt company¹ if the application for Accelerating Commercialisation funding is successful
- ☐ A partnership who agrees to form a non tax-exempt company¹ if the application for Accelerating Commercialisation funding is successful
- ☐ An unincorporated trustee who agrees to form a non tax-exempt company¹ if the application for Accelerating Commercialisation funding is successful
- ☐ An incorporated trustee applying on behalf of a trust.

If you do not fall into one of the above categories, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the Customer Information Guide.

Do you have a novel product, process or service that you wish to commercialise and trade to customers external to the State or Territory of your place of business⁵?

- Yes ☒
- No ☐ ► If **no**, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the [Customer Information Guide](#).

Is your company listed by the Workplace Gender Equality Agency as an organisation that has not complied with the *Workplace Gender Equality Act 2012*?

- Yes ☐ ► If **yes**, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the [Customer Information Guide](#).
- No ☒

Have you received commercialisation guidance⁶?

- Yes ☒

¹ For Accelerating Commercialisation, a company is:

- Incorporated under the *Corporations Act 2001 (Cth)*; and
- its trading activities
 - form a sufficiently significant proportion of its overall activities as to merit it being described as a trading corporation; or
 - are a substantial and not merely a peripheral activity of the corporation.

² Combined turnover is the annual turnover of the applicant and of each related body corporate (if any).

³ A Commercialisation Office is an entity of a publicly funded research organisation (PFRO) or a company controlled by one or more PFROs, that assists researchers in commercialising their intellectual property. A PFRO is a higher education provider listed in Table A and Table B of the *Higher Education Support Act 2003* as well as Federal, State and Territory Government departments or agencies which undertake publicly funded research.

⁴ An eligible partner entity is an entity whose primary purpose is research but also looks to commercialise the resultant intellectual property.

⁵ Place of business is taken to be the business street address provided in this application.

⁶ Commercialisation guidance is a range of services for which you may receive one or more of the following from AusIndustry or a Commercialisation Adviser:

- Feedback on your eligibility for other activities under Accelerating Commercialisation;
- Referral to other Federal, State or Territory Government programmes;
- Referral to services provided under Business Management or Research Connections (other elements of the Entrepreneurs' Programme);
- Guidance and feedback on your proposed commercialisation project or commercialisation strategy;

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No ☐ ► If **no**, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the [Customer Information Guide](#).

Does your company own, have access to or have beneficial use of the intellectual property that is the subject of, or is necessary to carry out the project?

Yes ☒

No ☐ ► If **no**, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the [Customer Information Guide](#).

Are you able to demonstrate the ability to fund at least 50 per cent of the eligible expenditure of the eligible commercialisation project, other than from government grant sources?

Yes ☒

No ☐ ► If **no**, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the [Customer Information Guide](#).

• Guidance on the application process for other activities under Accelerating Commercialisation. The guidance may be received through submitting an Expression of Interest or discussing your commercialisation project with a Commercialisation Adviser.

Part B. Applicant Information

B.1. Type of Entity

Entity Type

Company ►

If you select trustee applying on behalf of a trust, complete [Part B.2](#) then proceed to [Part B.6](#).

If you select individual, complete [Part B.3](#) then proceed to [Part B.6](#).

If you select commercialisation office or eligible partner entity, complete [Part B.4](#) then proceed to [Part B.6](#).

For all other choices, complete [Part B.5](#) onwards.

If Other, please specify:

B.2. Trustee and Trust Details

Does the Trustee have an Australian Company Number (ACN)? Yes ☐ No ☐

If yes, specify ACN:

Australian Business Number (ABN) of the Trustee (if applicable):

Legal/registered entity name of the Trustee:

Is the trustee registered for GST?

Yes ☐ No ☐

ABN of the Trust:

Legal/registered entity name of the Trust:

Date of registration of the ABN of the Trust:

/ /

Is the Trust registered for GST?

Yes ☐ No ☐

You must attach a copy of the Trust documents showing the relationship of the Trustee to the Trust.

B.3. Individual Details

Full name of the individual:

B.4. Commercialisation Office or Eligible Partner Entity Details

Indicate the type of organisation:

- ☐ An Australian University commercialisation office,
☐ Other publicly-funded research organisation commercialisation office, or
☐ An approved eligible partner entity.

Organisation name:

Australian Company Number (ACN):

Australian Business Number (ABN):

Date of registration of ABN:

/ /

Is the organisation registered for GST?

Yes ☐ No ☐

Name of associated university or research organisation:

Complete the following if applicable:

Name of researcher or individual supported by the commercialisation project:

Researcher's or individual's relationship to the organisation:

Briefly describe the assistance to be provided to the researcher or individual by the organisation in the commercialisation project:

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B.5. Applicant Details

Does your company have an Australian Company Number (ACN)? Yes ☒ No ☐
If yes, specify ACN: 613 924

422

Australian Business Number (ABN):

35613924422

Legal/registered entity name:

Solar and Storage Modelling

Pty Ltd

Trading name (if trading under a name other than the registered business name): Solcast

Date of registration of ABN:

28/7/2016

Is your company registered for GST?

Yes ☒ No ☐

If applicable, list the names of the partners in the partnership:

We need to know whether the applicant or the applicant's parent company has disclosure obligations to the ASX by being listed.

Is your company listed on the Australian Stock Exchange (ASX)? Yes ☐ No ☒

If yes, ASX/other code:

Is your parent company listed on the ASX?

Yes ☐ No ☒

If yes, ASX/other code:

B.6. Address DetailsProvide your **Business Street Address** (Australian Head Office):

Address: 20 Flood Street

Suburb/Town: Leichhardt

State/Territory: NSW

Postcode: 2040

Country: Australia

Provide your **Business Postal Address**:☐ Same as your Business Street Address ► proceed to [Part B.7.](#)☒ Different from your Business Street Address ► provide details below.

Address: 19-23 Moore Street

Suburb/Town: Turner

State/Territory: ACT

Postcode: 2612

Country: Australia

B.7. Project Site Address

Will the project activities occur solely at the above listed Head Office Address?

Yes ☐ ► If yes, proceed to Part B.8.No ☒ ► If no, please provide the project site address(es) below:

Primary Project Site Address – this must be a street address not postal address. This address is where the majority of the project activity will occur.

Site No	Street No.	Street Name	Street Type	Suburb	Post code	State
1						--- Select ---

If there is more than one project site, please describe where the project will be conducted.

Our team is highly distributed and primarily remote (mix of co-working spaces and work from home), using modern collaboration tools. As such, there is no single location where a majority of this project will occur. The single location with the most project activity is expected to be our office at 19-23 Moore St, Turner, ACT, 2612.

200 word limit

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B.8. Website AddressProvide your **Website Address**:**B.9. Related companies****Does your company have an Ultimate Holding Company?**Yes ☐ ► If yes, please complete the below information.No ☒ ► If no, please proceed to [Part B.10](#)

Ultimate Holding Company ABN (if applicable):

Legal/registered entity name of Ultimate Holding Company:

Country of incorporation:

Please list any related bodies corporate⁷ of your company:*It is mandatory to attach a diagram of your company's group structure—showing the legally registered name and country of incorporation of each body corporate, the relationships and relative shareholdings within the group.***B.10. Applicant Corporate Background****If you are applying as a company or an incorporated trustee applying on behalf of a trust, answer the questions below. Otherwise, go to [Part B.11](#).****Has your company existed for a complete financial year?**Yes ☒ ► If yes, enter the latest complete financial year, then complete the table below.No ☐ ► If no, enter the number of months completed in the financial year to-date, then complete the table below:**Financial Information**

Please provide a summary of your company's financial information, excluding any related bodies corporate. Forecasts should include project expenditure as planned and all sales revenue, but should not show the anticipated Accelerating Commercialisation grant as income. All amounts in the table below must show a whole dollar value e.g. \$1 million should be presented as \$1,000,000.

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⁷ Two bodies corporate are related where:

- One is a holding (i.e. parent) company of the other;
- One is a subsidiary of the other;
- Both are subsidiaries of the same holding company.

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Name of shareholder	Role/relationship with applicant	% of issued shares	Australian resident/controlled entity?
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>

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B.11. General Background**Classifications**

What is your company's core business? Development and sale of real time and forecast data relating to solar power plant output variability and weather conditions.

What is your company's main revenue earning activity under the Australian and New Zealand Standard Industrial Classification (ANZSIC)? Code: 6910

Classification: Scientific Research

Services

If your application is successful, key words will assist Expert Network members to identify commercialisation opportunities for your project.

List a maximum of 10 keywords relating to the project that will aid in searching for your project, technology, market or business: Weather, Solar, Energy, Meteorology, Hydrology, Storm, Modelling, Data, API, Forecast

What technology is core to your invention? (*This is the substance of the invention, not its intended use.*) Select only one. Refer to [Appendix A](#) for definitions.

- ☐ Biotechnology
☒ Software
☐ Technology systems and hardware
☐ Manufacturing, engineering and design.

What is the primary target market for the novel product, process or service? Select only one. Refer to [Appendix A](#) for definitions.

- | | |
|--|--|
| <input type="checkbox"/> Automotive, aviation and marine | <input type="checkbox"/> Infrastructure, housing & transport systems |
| <input type="checkbox"/> Business, marketing, communications and finance | <input type="checkbox"/> Mining equipment technology and services |
| <input type="checkbox"/> Defence, security and safety | <input type="checkbox"/> Medical technology and pharmaceuticals |
| <input type="checkbox"/> Education and training | <input checked="" type="checkbox"/> Oil, gas and energy |
| <input type="checkbox"/> Environment and water management | <input type="checkbox"/> Original equipment manufacturer |
| <input type="checkbox"/> Entertainment, tourism and sport/recreation | <input type="checkbox"/> Textiles, clothing and footwear |
| <input type="checkbox"/> Food and agribusiness | <input type="checkbox"/> Other, please specify: |

If applicable, please indicate other target markets for the novel product, process or service. Select all that apply. Refer to [Appendix A](#) for definitions.

- | | |
|--|---|
| <input checked="" type="checkbox"/> Automotive, aviation and marine | <input checked="" type="checkbox"/> Infrastructure, housing & transport systems |
| <input type="checkbox"/> Business, marketing, communications and finance | <input checked="" type="checkbox"/> Mining equipment technology and services |
| <input checked="" type="checkbox"/> Defence, security and safety | <input type="checkbox"/> Medical technology and pharmaceuticals |
| <input type="checkbox"/> Education and training | <input type="checkbox"/> Oil, gas and energy |
| <input checked="" type="checkbox"/> Environment and water management | <input type="checkbox"/> Original equipment manufacturer |
| <input type="checkbox"/> Entertainment, tourism and sport/recreation | <input type="checkbox"/> Textiles, clothing and footwear |
| <input checked="" type="checkbox"/> Food and agribusiness | <input type="checkbox"/> Other, please specify: |

Advanced Manufacturing. Does your product, process or service and/or proposed project involve advanced manufacturing? Refer to [Appendix A](#) for a definition of advanced manufacturing.

- ☐ Yes ☒ No

Part C. Project Details and Funding

If the application is successful, the details you provide below will be published on the departmental website (you may **not** be contacted about the project description before it is used). Published project details will include:

- name of the applicant (and project partner(s), in the case of a collaborative project);
- title of the project;
- a description of the project and its intended outcomes; and
- amount of funding awarded.

C.1. Project Title and Description

If the application is successful, this project title and the publication project description will be used by the Australian Government in published material.

Provide a short project title.

This is a short descriptive title for the project. For instance, do not use only the product name as a project description.

Operationalise and globally scale satellite-enabled precipitation and storm forecasting technology

10 word limit

Provide a brief project description for publication on our website.

This description is for the general public, so it should be written in simple terms avoiding technical or industry specific terminology. It should be a brief explanation of the product, process or service to be commercialised, the key target market, the key problem it solves or key market opportunity, and how Accelerating Commercialisation support will be used to assist in commercialisation. In the box below, please complete the description in this format:

Project Description: [Applicant] has developed [innovative product, process or service] for the [target/priority market/industry/application sectors]. This [technology/solution] will [value proposition/customer benefits]. Entrepreneurs' Programme commercialisation support will be used to help [Applicant] commercialise this [product/process/service] and achieve [expected commercial outcomes and/or national/global benefits].

Solcast has developed prototype technology for the forecasting of precipitation and storms tens to hundreds of minutes ahead of time, known as 'nowcasting'. This nowcasting technology offers significant benefits to industries such as transportation, insurance, energy and natural resources. Entrepreneurs' Programme commercialisation support will be used to help Solcast scale and commercialise a highly differentiated global nowcasting offering for storms, precipitation, temperature and wind.

75 word limit

C.2. Project Basis

The subject of the project will be a new (select all that apply):

☒ Product ☐ Process ☒ Service

C.3. Project Summary

Provide a brief description of the project and outcomes addressing the following:

- A brief history of the applicant's business (companies) or a brief history of the applicant (non-companies).
- Describe your product, process or service and the extent to which it is new or innovative.

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- What is the core invention/innovation?
- How far is it from entering the marketplace?
- What are the objectives and key activities of the proposed project?
- If you are undertaking a collaborative project, please describe the activities to be undertaken by each project partner.
- What commercial outcomes do you expect to achieve following the project?

Enter your response below:

Solcast was founded by James Luffman and Dr Nick Engerer in June 2016 to create and commercialise solar forecasting technology. In 2017, it achieved two major milestones: commencement of provision of services to the energy sector and the global scaling of its satellite based solar forecasting technology. At time of writing (January 2018), Solcast's solar data services (which are separate from those proposed for development in this application) have 400+ users across five continents and has established a global network of reseller partnerships covering Europe, North America and Asia. Thus far, Solcast's core technologies have been developed for the short-term prediction (0-4 hours) of cloud cover and solar radiation through application of the fleet of new third generation weather satellites which are currently being deployed globally. These include Himawari 8 (Asia), GOES-R/16 (North & South America) and Fengyun 4 (Central Asia), and soon GOES-S/17 (Western Americas & Central Pacific) in late 2018. These new satellites provide orders of magnitude improvements over the previous generation, including high resolution and rapid-update scan cycles (~1km², updates ~5-10 minutes).

Whilst developing cloud detection and forecasting technologies for solar energy applications, Solcast made a major discovery about the unique capabilities these satellites offer for the short-term predictions of important weather variables over the 0-6 hour time horizon (termed 'nowcasting' herein). Through the fusion of Solcast's cloud nowcasting algorithms with additional novel techniques and data fields representing other weather variables (weather model output, radar imagery, lightning detection networks), we have discovered that we can provide significantly better nowcasting outcomes over existing solutions. Using this approach, Solcast has developed a prototype system for precipitation and storm forecasting which it would like to advance to commercialisation through AC support. For this purpose, Solcast is submitting a two-staged application for the committee's consideration to deploy a suite of new products which are well differentiated from our current solar offerings and have not reached first sale.

In the first stage (2 years, \$598k total value, 50% from AC) Solcast will operationalise and globally scale its precipitation and storm modelling prototypes and deliver them to market through our global network of distribution partners. The focus of this stage will be placed upon the primary tasks of global data acquisition and assimilation and the further refinement of the prototype algorithms where required to accommodate additional climate regions and the local prevailing weather systems. As an outcome from this first stage, Solcast will complete a market analysis of the stage I outcomes in preparation for a second stage (+2 years, \$800k total value), wherein Solcast operationalise additional capability in wind and temperature forecasting and build an API delivery system to enable broad market uptake. We believe that with AC project support, Stage I services are only 12-18 months away from entering the marketplace and conservatively estimate the serviceable

addressable market for precipitation and storm nowcasting at +3y from the project commencement to be AUD\$275m per annum.

500 word limit

C.4. Project Duration

Record the proposed Start and End Dates for the Project for which you are seeking Accelerating Commercialisation support. The maximum project length for this programme is 2 years.

Project Start Date: 01/04/2018 (dd/mm/yyyy)

Project End Date: 31/03/2020 (dd/mm/yyyy)

C.5. Project Budget

Grants will be provided to fund an agreed proportion of eligible expenditure directly associated with implementing an applicant's project.

More information on eligible expenditure and what restrictions apply can be found in the Customer Information Guide.

Eligible expenditure must be outlined in the Accelerating Commercialisation Project Budget Calculator. Please complete the Project Budget Calculator and attach it to your application.

Expenditure should be shown GST exclusive. You may be asked for additional information on expenditure breakdown during the application process.

C.6. Grant Amount Sought

The eligible expenditure below must be the same as in the Project Budget Calculator and exclusive of GST.

Grant amounts cannot exceed \$1 million. Commercialisation Offices or Eligible Partner Entities can only apply for grants of up to \$250,000.

Total expenditure (\$A): \$598,746

Total eligible expenditure (\$A): \$598,746

Accelerating Commercialisation grant (\$A): \$299,373

Grant percentage (% of eligible expenditure): 50% (should be 50% or less)

C.7. Applicant's Contribution

You are required to attach evidence to demonstrate your company has the ability to fund at least 50% of the eligible expenditure of the project, taking into account both eligible and ineligible expenditure. You need to provide details and evidence of your project funding strategy, indicating the sources of funding for your share of the project. This can be in the form of balance sheets, cash flow documents, loan agreements, investor agreements or other documents.

You are also required to attach an Accountant's Declaration (refer [Appendix B](#) for the template). This declaration must be submitted on the accountant's letterhead and be in the format provided.

Your entire share of funding is not needed at the time of application. However, you must show that your company can match the grant progressively at the rate eligible expenditure is to be incurred on the project, and that your company can also fund ineligible expenditure.

Explain how your company will provide all the funds (other than the grant funds) required for the entire project.

Enter your response below:

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C.8. Experienced Executives

Are you claiming expenditure for an Experienced Executive (see Section 4.1 of the Eligible Expenditure Guidelines)?

Yes ☐ ► If yes, please complete the question below.

No ☒ ► If no, proceed to [Part C.9](#).

Describe the role and responsibilities of the Experienced Executive and how he/she will be appointed or recruited. Explain how the Executive will enable you to realise the full commercialisation potential for the proposed product, process or service, including specific key performance indicators (KPIs) and achievements expected from the appointee. How do these KPIs link to the Execution Plan and project milestones?

If you have identified a suitable person, provide a brief summary of that person and attach their CV to the application. Summarise the main terms of employment or engagement (e.g. full/part time, hours of work, permanent/temporary, remuneration, etc.).

Enter your response below:

N/A

300 word limit

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C.11. Project Milestones and Key Activities

Please list the Milestones you plan to achieve for your commercialisation project during the grant period.

- For services you intend to purchase, enter the relevant details under the milestone to which you expect the service to contribute most.
- For an Experienced Executive, list the key activities to be undertaken by him/her against the milestones to which they will contribute most.
- Milestones should be measurable outcomes that can be used by third parties to objectively assess project progress (e.g. final prototype design accepted, trial completed, distributor appointed, independent testing and validation completed).
- Milestones do not have to be sequential, they can and often will overlap in execution.
- Key activities are the key steps needed to reach these milestones.
- Estimated costs are sought for assessment purposes only and should only include eligible expenditure.

Further guidance on what constitutes eligible expenditure is provided in the Customer Information Guide.

D.5. Merit Criterion 5 – Management capability

In addressing this criterion, applicants should address the following.

- Provide a short summary of the skills and expertise of your key personnel including, in relation to the particular stage of the project, what level of expertise the applicant has in:
 - commercialisation management
 - project management
 - business management; and
 - the relevant sector/technology domain.
- Discuss the membership of your board and/or any advisory committee or group that may have been established to help guide senior management.
- Explain any gaps or deficiencies in management expertise and/or resources, and how you intend to address these during and beyond the project, including any recruitment plans (whether funded by the grant or otherwise).

Enter your response below:

Solcast's governance and management structures are summarised in the organisational diagram below. The company is privately held, with its three shareholders represented on the Board of Directors (Dr Nick Engerer, James Luffman, and the Australian National University joining in 2018, represented by Dr Fiona Nelms).

James (CEO) and Nick (CTO) comprise the Solcast Executive Team. Between them they have more than 15 years experience as both subject matter experts and as leaders of teams behind significant projects. In particular, Nick and James understand and thrive at the nexus between meteorology, research and industry application. The drive, passion and purpose of the Executive Team has resulted in a highly talented and skilled software and modelling development motivated by working towards a future powered by solar energy technologies. Altogether, our software teams has over 30 years of combined experience in the development, deployment and maintenance of cloud based solutions.

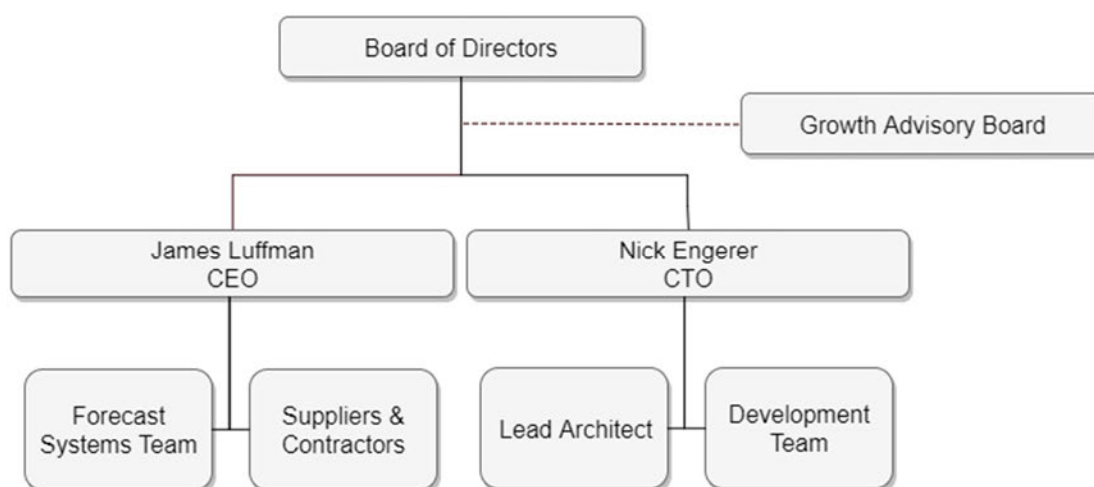


Figure D5.1 - Solcast's organisational structure

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James Luffman
CEO, Chairman

Mr. Luffman has 12+ years of experience in the commercial meteorology domain, including 9+ years commercialising and managing delivery of new forecasting technologies for the energy, transportation, insurance aviation, mining and marine sectors. This includes 10+ years of experience in project management including as a GM/Exec level manager in the weather forecasting industry with 30+ staff and \$20m+ budget responsibility. James has 8 years of business management experience, serving as a company director since 2011. He also brings 5+ years of experience as senior salesperson and sales manager. As CEO, James is responsible for Solcast's administrative functions including Finance (assisted by Ferrari Warner) and HR (with assistance from HR Clarity and Strategic Talent Solutions).



Dr Nick Engerer
CTO, Director

Dr. Engerer is world renowned researcher, known for his development of several radiation and modelling tools which now define the state of the art in the solar energy industry. Over the past 5 years in his role at The ANU he has developed extensive industry partnerships which now include every distribution network in Australia, a majority of its transmission networks, the Australian Energy Market Operator and Energy Networks Australia. Dr. Engerer is experienced in the commercialisation of university IP, and has co-developed and introduced a new model for staged IP licensing as a part of a \$4M

ARENA funded research project delivering state of the art solar modelling technologies to Australian utilities. He has managed research teams of 15+ individuals and is well-respected for his candor and leadership. He is also an award winning lecturer & supervisor (with 20+ student research projects on industry focused topics). Dr. Engerer is now transitioning from the academic environment, into a full-time role at Solcast as a Director and its CTO where he manages technology development, market research/engagement.



Dr Fiona Nelms

Director (to commence 2018)

Fiona is the Director of the Technology Transfer Office at the Australian National University. She brings a long history of technology commercialisation dating back to 1999 over a broad range of disciplines including technology companies and engineering. She has established several spin off companies from ANU that have gone on to raise significant capital nationally and internationally. Fiona will join Solcast's board of Directors in 2018 as part of the IP licensing agreement between Solcast and the ANU.



Mark Hardy

Member, Growth Advisory Board

Mark is an Australian entrepreneur, angel investor and meteorologist. He is the founder of Australia's leading weather forecasting business, Weatherzone (1998). Within a decade he grew it to be Australia's largest commercial weather company, with major clients in Australia, Asia and Africa. Mark is a shareholder and executive director at Weatherzone, and is an active angel investor with a number of technology startups. Mark brings extensive contacts and experience to Solcast's Growth Advisory Board, especially for partnerships, sales and M&A.



Nick Morley

(Invited, Preliminary Acceptance) Member, Growth Advisory Board

Nick Morley is an engineer who is passionate about solar power, storage, and electric vehicles, and is currently lead technical support for First Solar in the Asia-Pacific region. Nick played a key role in the commissioning, validation, and ongoing operation of the 150MW Solar Flagships projects in Australia and has completed technical due diligence services on over 100MW of commercial solar power plant projects in Japan. Nick is known for his highly developed international business acumen and joins the advisory board to help with Solcast development on nowcasting products for the energy industry, with a focus on solar farms.



David Peterson

(Invited, Preliminary Acceptance) Member, Growth Advisory Board

David is the CTO and Director of the KILN Incubator in Canberra. He is an experienced technology entrepreneur and consultant, with a strong technical background in software development, systems engineering and business analysis. He is particularly interested in new venture creation and collaboration with a focus on infrastructure design, scaling security. David will join Solcast to bring expertise in the rapid scaling of software based technological solutions as well as the various business structures required to achieve these aims.

Gaps and deficiencies in management expertise for this project

Through its Board of Directors, Growth Advisory Board and Executive Team, we believe Solcast has a suitable mix of management expertise for this project. However, we realise that for Nick and James in particular, their time is stretched. Therefore, as mentioned in the project execution plan, the project management function for this project includes the utilisation of project management resource from professional project services provider ANU Enterprise. Solcast has had a successful working relationship with ANU Enterprise for over 12 months.

1000 word limit

D.6. Merit Criterion 6 – National benefits

In addressing this criterion, applicants should address the following:

- Explain how the project will benefit Australia (for example, new direct or indirect jobs, reduction in healthcare costs, environmental benefits) and/or promote economic growth and competitiveness.
- Explain what significant spill-over benefits will accrue to Australia through conduct of the project and/or successful commercialisation including: diffusion of knowledge and skills, diffusion of new products, processes or services and/or increased collaboration between businesses and/or businesses and research institutions.

Enter your response below:

Australia is prone to a wide variety of severe weather events, which have been established to have multi-billion dollar impacts on its productivity each year. Notably, severe convective storms and tropical cyclones cause flooding, wind and hail damage and generally disrupt economic activity for hundreds of thousands of Australians. Recent reporting from insurance provider IAG¹ estimates that severe weather events cost Australia on average up to \$5b pa, with projected growth to over \$30b pa by 2050, impacting nearly half of its population.

While the proposed nowcasting technologies in this project can do nothing to prevent or disrupt severe weather events, they can enable more effective preventative actions, by partially addressing the issues surrounding predictability of severe weather events. Better short-term forecasting outcomes with tens to hundreds of minutes of lead time for major precipitation and storm events will allow for better protection of life and property in Australia (e.g. insurance agencies to forewarning customers of hail damage, to move their cars under cover via alerts on their phones). Improved nowcasting of precipitation, lightning, temperature and wind velocities will provide the Australian economy with tools to improve security and resilience via better risk management outcomes and will partially promote economic growth through better management of loss/risk.

National Benefits: the oil, gas and energy resources sector:

Given the widespread benefits outlined above, Solcast would like to more directly address the key area of expected greatest national benefit: the oil, gas and energy sector. While there are marginal benefits to oil (drilling platform weather impacts) and gas (operational planning) within this trifecta, the energy sector stands out as the chief beneficiary. Solcast is well-networked in this area, and its executive team brings many years of experience addressing key challenges in the sector, specifically in Australia's electricity networks and energy market operations. Two notable recent events illustrate how more accurate, robust and accessible nowcasting information would have contributed to Australian energy security quite well: the September 2016 South Australia blackout and the February 2017 Heatwave.

South Australia Blackout (Precipitation and Storm Nowcasting): *The 28th of September 2016 was the most significant severe thunderstorm outbreak for the region in several decades. After an exceptionally strong low pressure system rapidly formed and deepened over the Australian Bight, several supercell thunderstorms with destructive wind speeds generated seven tornadoes along with large hailstones and intense rainfall. This resulted*

in wind speeds of 190–260 km/h² and simultaneously damaged two regions of 275kV transmission lines, which along with a number of other factors resulted in 850,000 SA customers losing electricity supply, impacting businesses, transport and major industries. Investigations into the event result in a series of recommendations for the future prevention of recurrence, amongst them³, including that:

“AEMO develop a more structured process for information exchange and reclassification decisions when faced with risks due to extreme wind speeds, which may include development of more sophisticated forecasting systems for extreme wind conditions including tornadoes. This proposal will be put forward for consultation with participants and other relevant parties such as weather service providers.”

However, as previously discussed in detail in this proposal, the current suite of tools available on the market from weather services providers do not entail robust and accurate nowcasting solutions for convective storms nor for the extreme wind speeds that result. At present, AEMO does not have access to any known product or service in the global marketplace which could have more accurately forecast the evolution of these high-impact convective storm events. The nowcasting solutions proposed within this project would undoubtedly enable improved electrical network management for AEMO under such a scenario, as our storm prediction product would become available on the weather services market, thereby partially addressing the needs of networks and markets to ensure energy security in similar future scenarios.

February 2017 Heatwave Event (Temperature and Wind Nowcasting):

Over the period between 8 and 12 February 2017, a record setting heatwave settled over much of the eastern half of Australia. This led to near record demand in NSW, record demand in QLD and rolling blackouts across South Australia. This event began most notably on 8 February 2017 in South Australia with AEMO directing a series of load shedding (blackout) events, first dropping 100 megawatts (MW) of load in the afternoon, which was then followed by an additional interruption of 300 MW shortly thereafter, leading to loss of power across local industry, particularly its resources sector. Two days later, further economic impacts were realised in New South Wales as AEMO directed Transgrid to load shed one of the Tomago Aluminium smelter potlines (290 MW) to meet supply-demand balance in the extreme heat⁴. Subsequent review would reveal that in both instances, the total demand was higher than was forecast, due to underforecasting the maximum temperatures, and that in the 8th February SA scenario, additional problems were introduced through overestimation of wind energy generation (a 100MW+ shortfall). In response, a June 2017 report focusing on AEMO summer readiness was produced⁵, which outlined plans to:

- *“Collaborate with weather forecasting suppliers to obtain detailed alerts on weather-related events that could impact power system operation, such as sudden changes in wind or cloud conditions.”*
- *“Develop tools and systems to provide real time alerts when weather events cause forecasting uncertainty to increase”*
- *Develop new forecasting tools based on machine learning (or artificial intelligence) to enhance AEMO’s operational forecasting models, particularly during extreme weather events”*

However, Solcast notes that AEMO already had access to the current suite of state of the art wind and temperature forecasting tools from Australia's commercial weather providers and that none of these have nowcasting solutions which could have captured the evolving weather conditions underlying the higher than expected temperatures and below than expected wind speeds. These conditions were complex, requiring up-to-date tracking of warm air advection and subtle air mass boundaries which are beyond the capability of today's nowcasting algorithms, but could be reconciled through the developments proposed in this project, particularly in the stage II outcomes.

Collaboration with Researchers, Australian Bureau of Meteorology

In the spirit of collaboration, Solcast will agree to provide open and free access nowcasting outputs to Australian Universities and their international partnerships for the purposes of facilitating their research into environmental impacts, atmospheric science, risk management and security. Solcast will also consider a heavily discounted version of the products to be made available to the Australian Bureau of Meteorology for in-house purposes, such as improvement of their convective storm warnings and hydrological forecasting products.

References

1. IAG Report, *At What Cost*. Available at: <https://www.iag.com.au/sites/default/files/Documents/Business%20sustainability/At%20what%20cost%20-%20mapping%20where%20natural%20perils%20impact%20economic%20growth%20and%20communities.pdf>
2. Australian Bureau of Meteorology, *Severe Thunderstorm and Tornado Outbreak 28 September 2016*. Available at:
3. AEMO, *Power System Incident Reports: Integrated Final Report SA Black System 28 September 2016*. Available at: https://www.aemo.com.au/-/media/Files/Electricity/NEM/Market_Notices_and_Events/Power_System_Incident_Reports/2017/Integrated-Final-Report-SA-Black-System-28-September-2016.pdfhttp://www.dpc.sa.gov.au/__data/assets/pdf_file/0007/15199/Attachment-3-BoM-Severe-Thunderstorm-and-Tornado-Outbreak-28-September-2016.pdf
4. AEMO, *System Event Report South Australia 8 February 2017*, Available at: https://www.aemo.com.au/-/media/Files/Electricity/NEM/Market_Notices_and_Events/Power_System_Incident_Reports/2017/System-Event-Report-South-Australia-8-February-2017.pdf
5. https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEM_ESOO/2017/2017-Energy-Supply-Outlook.pdf

1000 word limit

If applicable, summarise the extent to which the project targets and/or participates in any of the Growth Sectors (refer [Appendix A](#) for definitions):

- advanced manufacturing
- food and agribusiness
- medical technologies and pharmaceuticals
- mining equipment, technology and services
- oil, gas and energy resources.

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Enter your response below:

Yes, please see the above summary regarding the participation of this project directly within the Oil, Gas and Energy Resources sector.

250 word limit

Part E. Contact Details

E.1. Details of Primary Contact

Person authorised to act on behalf of the applicant. (Note: At least one phone number or mobile number must be entered and all the remaining fields below are mandatory unless stated otherwise.)

Provide details of the primary contact.

Title: s22

Given Name:

Family Name:

Position Title:

Phone Number:

Mobile Number:

Email Address:

Postal Address:

Provide the registered business street address of the primary contact.

Address: s22

Suburb/Town:

State/Territory:

Postcode:

Country:

s22

E.3. How did the applicant hear about the programme?

Word of Mouth
If Other, please specify:

E.4. Commercialisation Adviser

Name of your Commercialisation Adviser: s22

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E.5. Applicant Declaration

- ☒ I declare that I have read and understood the Customer Information Guide.
- ☒ I declare that the proposed application, project and/or any associated expenditure has been endorsed by the applicant's Board or person with authority to commit the applicant to this project.
- ☒ I declare that the information contained in this application together with any statement provided is, to the best of my knowledge, true, accurate and complete. I also understand that the giving of false or misleading information is a serious offence under the Criminal Code 1995 (Cth).
- ☒ I understand that I may be requested to provide further clarification or documentation to verify the information supplied in this form and that the Department of Industry, Innovation and Science may, during the application process, consult with other government agencies, including State and Territory government agencies, about the applicant's claims and may also engage external technical or financial advisers to advise on information provided in the application.
- ☒ I acknowledge that if the Department is satisfied that any statement made in an application is incorrect, incomplete, false or misleading, the Department may, at its absolute discretion, take appropriate action. I note such action may include excluding an application from further consideration; withdrawing an offer of funding; using the information contained in the application for a fraud investigation that would be consistent with the Australian Government's Investigations Standards and Fraud Control Guidelines; and for management purposes and/or terminating any Agreement between the Commonwealth and the recipient including recovering funds already paid.
- ☒ I agree to participate in the periodic evaluation of the services undertaken by the Department.
- ☒ I declare that I am authorised to complete this form and to sign and submit this declaration on behalf of the applicant.
- ☒ I approve of the information in this application being communicated to the Department of Industry, Innovation and Science in electronic form.
- ☒ By including my name in this application it is deemed to be my signature for the purpose of this application.

Is your company an individual, partnership or unincorporated trustee?

Yes ☐ ► Complete the next declaration

No ☒ ► If **no**, sign the declaration.

☐ I warrant that, if the applicant is:

- an individual or researcher, and not applying through an Eligible Partner Entity or a Commercialisation Office of a publicly funded research organisation, or
- a partnership or unincorporated trustee,

the applicant will establish a non-tax exempt company incorporated under the *Corporations Act 2001 (Cth)* and that the company will be the signatory to the funding agreement with the Commonwealth.

Applicant's signature

Name of signatory

James Luffman

Date 1/01/2018

Part F. Attachment Checklist

F.1. Mandatory Attachment 1 – Incorporated trustees

This is only for applicants where an Incorporated Trustee is applying on behalf of a Trust:

Part of Application Form	Type of Attachments	Attached?
Part B.2 - Trustee and Trust Details	A copy of the Trust documents showing the relationship of the Incorporated Trustee to the Trust.	<input type="checkbox"/> Yes, attached.

F.2. Mandatory Attachment 2 – Applicant group structure

This is only for applicants that have related bodies corporate.

Part of Application Form	Type of Attachments	Attached?
Part B.9 – Related companies	A diagram of your company group structure—showing the legally registered name and country of incorporation of each body corporate, the relationships and relative shareholdings within the group.	<input type="checkbox"/> Yes, attached.

F.3. Mandatory Attachment 3 – Financial statements and cash flow

Part of Application Form	Type of Attachments	Attached?
Part B.10 – Financial statements and cash flow	<p>The following are required:</p> <ul style="list-style-type: none"> Financial statements (statement of financial performance/profit and loss; statement of financial position/balance sheet) for the previous 3 financial years (or for as many years company has been in existence if 3 years is not available) Interim (year-to-date) financial statements for the current financial year Cash flow forecast covering the project period. 	<input checked="" type="checkbox"/> Yes, attached.

F.4. Mandatory Attachment 4 – Intellectual Property

Part of Application Form	Type of Attachments	Attached?
Part B.13 – Intellectual Property (IP)	Evidence of the project IP protection and/or licence agreement(s)	<input type="checkbox"/> Yes, attached.

F.5. Mandatory Attachment 5 – Project budget calculator

Part of Application Form	Type of Attachments	Attached?
Part C.5– Project budget	You must attach a completed Accelerating Commercialisation Project Budget Calculator.	<input checked="" type="checkbox"/> Yes, attached.

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F.6. Mandatory Attachment 6 – Evidence of applicant's funding strategy and Accountant's Declaration

Part of Application Form	Type of Attachments	Attached?
Part C.7 – Applicant's Contribution	You must provide an Accountant's Declaration (refer Appendix B). Further evidence of their project funding strategy, indicating the sources of funding for their share of the project, should also be provided. This can be in the form of balance sheets, cash flow documents, loan agreements, investor agreements or other documents.	<input checked="" type="checkbox"/> Yes, attached.

F.7. Mandatory Attachment 7 – Experienced Executive

Part of Application Form	Type of Attachments	Attached?
Part C.8 – Experienced Executive	CV of proposed Experienced Executive where you have identified a suitable candidate	<input type="checkbox"/> Yes, attached.

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F.8. Optional Attachments

If you wish to include additional documents, these should be limited to those directly relevant to and supporting the application. Please limit attachments to 10 pages (or 2MB), unless your Commercialisation Adviser has agreed there is additional material of particular relevance. If applicable, please list additional attachments:

Form question No.	Name of document	Description of attachment
D1	Investor Engagements	A collection of emails documenting a selection of our engagements with investment opportunities for Solcast.
D4	Travel Expenditure	Detailed travel expenditure plans (excel file).
	(Document cell working incorrectly, skipping line)	
F3	Additional Financial Information	\$100k of AWS Credits, supporting our cloud compute and database operations

Appendix A: Definitions

Core technology definitions

Core technology	Definition
Biotechnology	Application of science and technology to living organisms, as well as parts, products and models thereof, to alter living or non-living materials for the product of knowledge, goods and services.
Software	Programs, procedures and data associated with the operation of a computer system, and includes website design.
Technology Systems and Hardware	Physical computer, peripheral input and output devices, combination of software and hardware components interacting in a systematic way.
Manufacturing	Technology that assists in the fabrication and/or assembly of goods or services; does not have a biotechnology basis; does not contain significant innovation in software or hardware necessary for the successful running of the innovation.
Engineering and Design	Broad classification capturing innovations that do not fall within other categories. May include (but not be limited to) mechanical engineering, electrical engineering, civil engineering, chemical engineering, food engineering, food technologies and manufacturing, materials engineering, process engineering (including process enhancements), minerals processing, product design enhancements, industrial design, industrial processing.

Market sector definitions

Market sector	Definition
Automotive, Aviation and Marine	Including but not limited to: Products and components for automotive/aviation/marine transport (boats, submarines etc.), novel manufacturing process related to Automotive, Aviation and Marine, services targeting Automotive, Aviation and Marine.
Business, Marketing, Communications and Finance	Including but not limited to: banking, insurance and management systems, communications and media.
Defence, Security & Safety	Including but not limited to: Defence related products and services, products for home and public safety, security products and services, including software and communications security, industrial safety equipment not related to a specific sector.
Education & Training	Including but not limited to: Education programs, tools, on-line tools to aid in learning, delivery aids, innovations to improve teaching.

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Market sector	Definition
Environment & water management	Including but not limited to: recycled products, remediation, emission reduction products, waste management systems, water management and recycling products and systems.
Entertainment, Tourism and Sport/Recreation	Including but not limited to: products, processes and services for use in entertainment, tourism, sport & recreation, both for use immediately in these sectors and supporting sectors.
Food and Agribusiness*	Businesses that undertake food or beverage production, or supply integral services or technologies to support food or beverage production. Businesses that provide integral services, technologies or inputs to support primary production of food and beverages. This definition excludes businesses that are food retailers (including restaurants and cafes) or primary producers, except where they can demonstrate they also substantially undertake the above activities.
Infrastructure, Housing & Transport systems	Including but not limited to: transport systems (Roadways, rail lines etc.), building and construction, products for the construction and building industry (e.g. new type of air conditioners), processes and services that support construction, building, housing, infrastructure or transport systems.
Medical Technologies & Pharmaceuticals*	Developing, producing or producing therapeutic, medical or pharmaceutical products or technologies, including complementary medicines. Providing integral services, technologies or inputs to the development and production of therapeutic, medical or pharmaceutical products or technologies. This definition excludes businesses that are hospitals, medical and other health care services, residential care services, social assistance services and retailers of medical and pharmaceutical goods, except where they can demonstrate they also substantially undertake the above activities.
Mining Equipment Technology and Services*	Mineral exploration, extraction and mining supply chains, including providing integral services, technologies and equipment for mining and minerals extraction.
Oil, Gas & Energy*	Engaging in the exploration, development and extraction of energy and fuels from oil, gas, coal and uranium. Providing integral services, technologies and equipment for use in oil, gas and energy resource sectors.
Original Equipment Manufacturer	Products that are manufactured for use in a broad range of products in non-sector specific target markets. E.g. Computer chips, wiring setups.

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Market sector	Definition
Textiles, Clothing and Footwear	Including but not limited to: clothing, footwear, industrial textiles and related services, processes and products.

Growth Sectors

Advanced Manufacturing; Food and Agribusiness; Medical Technologies and Pharmaceuticals; Mining Equipment, Technology and Services; and Oil, Gas and Energy Resources.

**asterisk sectors represent the growth sectors that receive priority through additional credit under Accelerating Commercialisation's National Benefit merit criterion.*

Advanced manufacturing* definition

Businesses that adopt innovative technologies or business practices to improve or develop manufactured products processes or services. This includes the adoption of improvements or innovations across any of a range of manufacturing steps, such as concept, research and development, design, production, logistics, marketing and after-sales services, in order to achieve high value products, services or business outcomes, including improved responses to market demands.

Businesses that supply services, technologies or inputs to the manufacturing processes of businesses described above.

Appendix B: Accountant's Declaration

This is the mandatory attachment that is the minimum requirement to demonstrate the applicant's ability to fund up to 50 per cent of the cost of the eligible project.

Commercialisation Office or Eligible Partner Entity

Where the applicant is a Commercialisation Office or Eligible Partner Entity, and the relevant university or research organisation will fund the applicant's share of project costs, the applicant must provide an original letter prepared and signed by an authorised person within the organisation, for example, the Chief Financial Officer. The letter should confirm:

- that the organisation will be able to fund the applicant's share of project costs; and
- include the critical underlying assumptions, e.g. estimated total project costs.

Companies and Individuals agreeing to form a company

All other applicants must provide a declaration in the format set out below, on the accountant's letterhead and signed by a person who:

- is not a director, other office holder, or employee of the applicant or related body corporate of the applicant;
- has not been engaged by the applicant for the purpose of preparing the Accelerating Commercialisation application;
- has no financial interest in the applicant; and
- is a current member of:
 - CPA Australia with a Public Practice Certificate;
 - Institute of Chartered Accountants in Australia with a Certificate of Public Practice; or
 - Institute of Public Accountants with a Professional Practice Certificate.

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[PRINT ON ACCOUNTANT'S LETTERHEAD]**Accountant's Declaration****For the purpose of a grant application under Accelerating Commercialisation**

Applicant's Name	
Applicant's ABN:	
Title and employer of signatory	SEE ATTACHED COMPLETED FORM FROM SOLCAST ACCOUNTANTS FERRARIWARNER
Contact Details	
Qualification	<input type="checkbox"/> CPA Australia member with a Public Practice Certificate <input type="checkbox"/> Institute of Chartered Accountants in Australia member with a Certificate of Public Practice <input type="checkbox"/> Institute of Public Accountants member with a Professional Practice Certificate
Membership Number:	

Based on a review, which is not an audit, of the evidence listed below that the applicant has supplied to me:

[insert list of evidence]

- I consider that nothing has come to my attention that causes me to believe that the assumptions, which provide the basis on which the applicant expects to be able to fund its share of the eligible expenditure and all of any ineligible expenditure required for the project from the following source(s) of funding - [insert sources of funding], as set out in the application, are unreasonable.
- This opinion is based on the applicant's share being [Insert amount] out of total project expenditure of [Insert amount] (excluding GST).
- Nothing has come to my attention to indicate that the historical revenue of the applicant and any related bodies corporate as set out in question B.10 of the application, for the years ending [financial year e.g. '2012 -2013'], [financial year e.g. '2011 -2012'] and [financial year e.g. '2010 -2011'], are not presented fairly, in all material respects, in accordance with the definition of 'turnover' in the Accelerating Commercialisation Customer Information Guide.

This declaration is intended solely for use by the applicant and the Commonwealth for the applicant's grant application and as a result, may not be suitable for another purpose. We disclaim and do not accept any responsibility or liability to any party other than the applicant and the Commonwealth for any consequence of reliance on this declaration for any other purpose.

Signature

Signed on this day of 20



Australian Government
Department of Industry,
Innovation and Science

Business

Accelerating Commercialisation – Application Tracking Sheet

1. Application Details

CSM to complete

Project no: AC66414

Applicant name: SOLAR AND STORAGE MODELLING PTY LTD

Project title: Operationalise and globally scale satellite-enabled precipitation and storm forecasting technology

Grant amount sought: \$299,373

Project period: 01 April 2018 to 31 March 2020

Date Application Received: 16 January 2018

Date Application Accepted: 22 January 2018

Customer Service Manager: s22

CSM contact details: P: s22
E: s22 @industry.gov.au

CSM state: NSW State Office

Commercialisation Adviser: s22

CA email: s22 @ep.industry.gov.au

Is this a re-submission? No

Previous AC grant? No

Is this a major variation seeking an extension of funds over 10%? No

Financial year split of grant funds

Provide financial year split, taking into account project duration and period for retention amount payment.

Year	Amount by year
2017/18 FY	\$31,662
2018/19 FY	\$140,708
2019/20 FY	\$127,003
Total	\$299,373

Overseas Expenditure	\$34,749
Amount of overseas expenditure	\$34,749
Proportion of eligible project expenditure (excl. additional 5%)	6%
PMP/SMP expenditure	\$0
Amount of PMP expenditure	\$0
Amount of SMP expenditure	\$0

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Business

Summary of eligible project expenditure/use of proceeds

s47G(1)(a)

Project description

From application

Solcast has developed prototype technology for the forecasting of precipitation and storms tens to hundreds of minutes ahead of time, known as 'nowcasting'. This nowcasting technology offers significant benefits to industries such as transportation, insurance, energy and natural resources. Entrepreneurs' Programme commercialisation support will be used to help Solcast scale and commercialise a highly differentiated global nowcasting offering for storms, precipitation, temperature and wind.

Applicant details

E.g. corporate structure, core business, market sector, history

Solar and Storage Modelling Pty Ltd ("Solcast") was founded by James Luffman and Dr Nick Engerer in June 2016 to create and commercialise solar forecasting technology (IP licencing arrangement with The Australian National University). In 2017, it achieved two major milestones: commencement of provision of services to the energy sector and the global scaling of its satellite based solar forecasting technology business. Solcast's solar data services have 400+ users across five continents and have established a global network of reseller partnerships covering Europe, North America and Asia. The Solcast business model uses reseller arrangements with incumbent weather companies' in key geographical locations to distribute their services.

Thus far, Solcast's core technologies have been developed for the short-term prediction (0-4 hours) of cloud cover and solar radiation through application of the fleet of new third generation weather satellites which are currently being deployed globally. Solcast recently made a major discovery about the unique capabilities these third generation satellites offer for the short-term predictions of important weather variables over the 0-6 hour time horizon (termed 'nowcasting'). Through the fusion of Solcast's cloud nowcasting algorithms and with additional novel techniques and data fields, they can provide significantly better nowcasting outcomes over existing solutions. Using this approach, Solcast has developed a prototype system for precipitation and storm forecasting.

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s47G(1)(a)

2. Eligibility criteria

CSM to complete

Applicant meets eligibility criteria

☒ Yes ☐ No

Project meets eligibility criteria

☒ Yes ☐ No

Has the applicant provided evidence that they can meet their share of the project costs?

☒ Yes☐ Yes, with concerns – provide comments below.☐ No

Please provide brief details of the sources of funding to be provided by the applicant.

The total eligible expenditure of the Solcast project amounts to \$598,746 and the applicant's share of matched funding is \$299,373. s47G(1)(a)

s47E(d)

Please provide a brief comment on the following:

IP arrangements

s47G(1)(a)

s47G(1)(a)

Proposed project expenditure

s47E(d)

3. Executive summary of the application

CA to complete

CAs must identify where you copy and paste content from the application (ie by reference and/or using italics, text in another colour).

If this application is the second stage of a project, CAs to include discussion of:

- why the applicant has progressed to a second stage;
- the success or otherwise of the first stage of the project;
- whether a variation had been sought or considered for the first stage; and
- the outcomes of the variation where sought.

Summary of CA recommendation:

CA to list the three key overall strengths and weaknesses of the application and list key challenges and deal breakers for the project.

s47E(d)

Executive summary

Background & Context:

Nowcasting, (in a meteorological context as opposed to the same term used in economic forecasting¹), is a relatively new market opportunity with global impact only emerging in 2016/17 with the advent of the localised passive sensing capabilities provided by the latest generation of satellites, extensive mobile data acquisition and internet infrastructure more broadly available these days.

Nowcasting comprises the detailed description of the current weather along with forecasts obtained by extrapolation for a period of 0 to 6 hours ahead. Current popularly used weather forecasting tools (eg: Commonwealth Bureau of Meteorology Radar) primarily utilise Radar imagery analysis to predict the weather event path and intensity. The limitation of this approach is that it uses past radar data to predict future results. This means when you look at the current radar image it is showing you what happened over the past 30 minutes (-30 min to now) which means the weather event has already formed and commenced whereas with Nowcasting, the primary goal in 0-6 hour time range, is to forecast granular weather features such as individual localised storms and intensity prediction with reasonable accuracy ahead of their formation as an early warning measure. Nowcasting is therefore a powerful tool in warning the public of hazardous, high-impact weather including tropical cyclones, thunderstorms and tornados which cause flash floods, lightning strikes, hail and destructive winds. In broad terms, Nowcasting contributes to the:

- reduction of fatalities and injuries due to weather hazards;
- reduction of private, public, and industrial property damage; and to
- improved efficiency and savings for industry, transportation and agriculture.

In addition to using Nowcasting for warning the public of hazardous weather, it is also used for aviation weather forecasts in both the en-route and terminal environments, marine safety, water and power management, off-shore oil drilling, construction industry and leisure industry. The strength of Nowcasting lies in the fact that it provides location-specific forecasts of storm initiation, growth, movement and dissipation, which allows for specific preparation for a certain weather event by people in a specific location.

The technological challenge presented is that the Nowcasting horizon (0-6 hours) remains largely unimproved over the past 25 years as current “*numerical weather prediction*” (NWP) models are limited to twice daily updates, requiring many hours to source, ingest and assimilate relevant data, execute to derive the predictions and

¹ [https://en.wikipedia.org/wiki/Nowcasting_\(meteorology\)](https://en.wikipedia.org/wiki/Nowcasting_(meteorology))

disseminate the output. Hourly forecasts from more rapidly updating weather models are in limited use, but these generally only provide further detail to the previous day-ahead forecast. In many situations (particularly convective storms) these rapid-update models produce poor forecast outcomes when real atmospheric conditions begin to differ from the previous day-ahead background forecast. These challenges mean that existing efforts at Nowcasting for high-risk assets most likely involve either manual analysis by forecasters, which is expensive, slow and un-scalable; or early statistical systems that analyse current conditions and linearly project them forward on a probabilistic base. However, these early statistical approaches are constrained by limited scalability because of manual intervention reliance, lack of local focus granularity and simplistic statistic approaches that ignore the presence of rapid localised weather changes driven by compounding climatic conditions at the time, such as an unstable convective air mass rapidly producing unpredicted large hail and electrical storm at a specific location.

Application Summary:

Solcast is a multi-founder company created in June 2016 to create and commercialise solar forecasting technology s47G(1)(a). Solcast has established a global solar radiation Nowcasting data service company with 400+ commercial users across 5 continents and a reseller network covering Europe, North America and Asia.

Based on relatively recent availability of a new generation of weather satellites, (Himawari 8 (Asia), GOES-R/16 (North & South America), Fengyun 4 (Central Asia), and in late 2018, GOES-S/17 (Western Americas & Central Pacific), that provide orders of magnitude improvements in resolution and rapid-update scan cycles over the previous generation, (~1km² scale with ~5-10 minutes updates), s47G(1)(a)

Solcast is seeking a grant of \$229,373k as 50% of a \$598,746 for a two year staged project to commercialise its storm and precipitation Nowcasting SaaS prototype.

s47G(1)(a)

s47G(1)(a)

- Estimated AC total project cost: AU\$ 598,746
- Grant sought: \$AU\$299,373 for a 2 year staged project

s47G(1)(a)

Comments:

Outline the reasons why the applicant does or does not meet this criterion, taking into account how the applicant proposes to fund its share of project costs.

- ASIC checks indicate that Solcast was founded in July 2016 and is controlled by James Luffman, an Australian citizen, as the majority shareholder and thus is an Australian owned and controlled entity.

s47E(d)

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6. Examiner details**Commercialisation Adviser:** s22

As Commercialisation Adviser, I have completed Sections 3, 4, and 5.

Signed: s22 Date: 19/01/2018

As CSM, I have completed Sections 1 and 2.

s22

Signed: Date: 24/01/2018

As Manager of the CSM, I endorse the material completed by the CSM.

s22

Signed: Date: 25/1/18

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Australian Government
**Department of Industry,
Innovation and Science**

Business

Entrepreneurs' Programme Accelerating Commercialisation Grant Application Form

Version March 2017

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About Accelerating Commercialisation

Accelerating Commercialisation is an element of the Entrepreneurs' Programme. It is a highly competitive, merit-based programme and only the strongest grant applications will be successful. Accelerating Commercialisation encourages and assists small and medium businesses, entrepreneurs and researchers to commercialise novel products, processes and services.

Completing this form

Please read the Programme Customer Information Guide before filling out this application. This application form contains the following:

- Part A – Eligibility
- Part B – Applicant Information
- Part C – Project Details and Funding
- Part D – Merit Criteria
- Part E – Contact Details and Applicant Declaration
- Part F – Attachment Checklist

Completing an application provides no assurance or guarantee of receiving funding assistance.

Confidentiality and obligations

The Commonwealth's use and disclosure of your information (provided in this application or otherwise) is set out in the [Customer Information Guide](#).

Getting help

If you require assistance completing this form, please contact the Contact Centre on **13 28 46** or contact us at business.gov.au.

Submitting your application

Applications may be submitted at any time by emailing your completed form to your State or Territory Accelerating Commercialisation mailbox:

State	Mailbox
NSW/ACT	ACNSW@industry.gov.au
VIC	ACVIC@industry.gov.au
QLD	ACQLD@industry.gov.au
WA	ACWA@industry.gov.au
SA/NT	ACSANT@industry.gov.au
TAS	ACTAS@industry.gov.au

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Part A. Eligibility

A.1. Eligibility Criteria

Indicate the type of organisation making the application:

- ☒ A non tax-exempt company¹ that is registered for GST and has a combined turnover² of less than \$20 million for each of the three financial years prior to lodgement of the application
- ☐ A commercialisation office³
- ☐ An eligible partner entity⁴ that is a company¹
- ☐ An individual who agrees to form a non tax-exempt company¹ if the application for Accelerating Commercialisation funding is successful
- ☐ A researcher who agrees to form a non tax-exempt company¹ if the application for Accelerating Commercialisation funding is successful
- ☐ A partnership who agrees to form a non tax-exempt company¹ if the application for Accelerating Commercialisation funding is successful
- ☐ An unincorporated trustee who agrees to form a non tax-exempt company¹ if the application for Accelerating Commercialisation funding is successful
- ☐ An incorporated trustee applying on behalf of a trust.

If you do not fall into one of the above categories, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the Customer Information Guide.

Do you have a novel product, process or service that you wish to commercialise and trade to customers external to the State or Territory of your place of business⁵?

- Yes ☒
- No ☐ ► If **no**, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the [Customer Information Guide](#).

Is your company listed by the Workplace Gender Equality Agency as an organisation that has not complied with the *Workplace Gender Equality Act 2012*?

- Yes ☐ ► If **yes**, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the [Customer Information Guide](#).
- No ☒

Have you received commercialisation guidance⁶?

- Yes ☒

¹ For Accelerating Commercialisation, a company is:

- Incorporated under the *Corporations Act 2001 (Cth)*; and
- its trading activities
 - form a sufficiently significant proportion of its overall activities as to merit it being described as a trading corporation; or
 - are a substantial and not merely a peripheral activity of the corporation.

² Combined turnover is the annual turnover of the applicant and of each related body corporate (if any).

³ A Commercialisation Office is an entity of a publicly funded research organisation (PFRO) or a company controlled by one or more PFROs, that assists researchers in commercialising their intellectual property. A PFRO is a higher education provider listed in Table A and Table B of the *Higher Education Support Act 2003* as well as Federal, State and Territory Government departments or agencies which undertake publicly funded research.

⁴ An eligible partner entity is an entity whose primary purpose is research but also looks to commercialise the resultant intellectual property.

⁵ Place of business is taken to be the business street address provided in this application.

⁶ Commercialisation guidance is a range of services for which you may receive one or more of the following from AusIndustry or a Commercialisation Adviser:

- Feedback on your eligibility for other activities under Accelerating Commercialisation;
- Referral to other Federal, State or Territory Government programmes;
- Referral to services provided under Business Management or Research Connections (other elements of the Entrepreneurs' Programme);
- Guidance and feedback on your proposed commercialisation project or commercialisation strategy;

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No ☐ ► If **no**, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the [Customer Information Guide](#).

Does your company own, have access to or have beneficial use of the intellectual property that is the subject of, or is necessary to carry out the project?

Yes ☒

No ☐ ► If **no**, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the [Customer Information Guide](#).

Are you able to demonstrate the ability to fund at least 50 per cent of the eligible expenditure of the eligible commercialisation project, other than from government grant sources?

Yes ☒

No ☐ ► If **no**, you are ineligible to apply for a grant under Accelerating Commercialisation. Please refer to the [Customer Information Guide](#).

• Guidance on the application process for other activities under Accelerating Commercialisation. The guidance may be received through submitting an Expression of Interest or discussing your commercialisation project with a Commercialisation Adviser.

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Part B. Applicant Information

B.1. Type of Entity

Entity Type

Company ►

If you select trustee applying on behalf of a trust, complete [Part B.2](#) then proceed to [Part B.6](#).

If you select individual, complete [Part B.3](#) then proceed to [Part B.6](#).

If you select commercialisation office or eligible partner entity, complete [Part B.4](#) then proceed to [Part B.6](#).

For all other choices, complete [Part B.5](#) onwards.

If Other, please specify:

B.2. Trustee and Trust Details

Does the Trustee have an Australian Company Number (ACN)? Yes ☐ No ☐

If yes, specify ACN:

Australian Business Number (ABN) of the Trustee (if applicable):

Legal/registered entity name of the Trustee:

Is the trustee registered for GST?

Yes ☐ No ☐

ABN of the Trust:

Legal/registered entity name of the Trust:

Date of registration of the ABN of the Trust:

/ /

Is the Trust registered for GST?

Yes ☐ No ☐

You must attach a copy of the Trust documents showing the relationship of the Trustee to the Trust.

B.3. Individual Details

Full name of the individual:

B.4. Commercialisation Office or Eligible Partner Entity Details

Indicate the type of organisation:

☐

An Australian University commercialisation office,

☐

Other publicly-funded research organisation commercialisation office, or

☐

An approved eligible partner entity.

Organisation name:

Australian Company Number (ACN):

Australian Business Number (ABN):

Date of registration of ABN:

/ /

Is the organisation registered for GST?

Yes ☐ No ☐

Name of associated university or research organisation:

Complete the following if applicable:

Name of researcher or individual supported by the commercialisation project:

Researcher's or individual's relationship to the organisation:

Briefly describe the assistance to be provided to the researcher or individual by the organisation in the commercialisation project:

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B.5. Applicant Details

Does your company have an Australian Company Number (ACN)? Yes ☒ No ☐
If yes, specify ACN: 613 924

422

Australian Business Number (ABN):

35613924422

Legal/registered entity name:

Solar and Storage Modelling

Pty Ltd

Trading name (if trading under a name other than the registered business name): Solcast

Date of registration of ABN:

28/7/2016

Is your company registered for GST?

Yes ☒ No ☐

If applicable, list the names of the partners in the partnership:

We need to know whether the applicant or the applicant's parent company has disclosure obligations to the ASX by being listed.

Is your company listed on the Australian Stock Exchange (ASX)? Yes ☐ No ☒

If yes, ASX/other code:

Is your parent company listed on the ASX?

Yes ☐ No ☒

If yes, ASX/other code:

B.6. Address DetailsProvide your **Business Street Address** (Australian Head Office):

Address: 20 Flood Street

Suburb/Town: Leichhardt

State/Territory: NSW

Postcode: 2040

Country: Australia

Provide your **Business Postal Address**:☐ Same as your Business Street Address ► proceed to [Part B.7.](#)☒ Different from your Business Street Address ► provide details below.

Address: 19-23 Moore Street

Suburb/Town: Turner

State/Territory: ACT

Postcode: 2612

Country: Australia

B.7. Project Site Address

Will the project activities occur solely at the above listed Head Office Address?

Yes ☐ ► If yes, proceed to Part B.8.No ☒ ► If no, please provide the project site address(es) below:

Primary Project Site Address – this must be a street address not postal address. This address is where the majority of the project activity will occur.

Site No	Street No.	Street Name	Street Type	Suburb	Post code	State
1						--- Select ---

If there is more than one project site, please describe where the project will be conducted.

Our team is highly distributed and primarily remote (mix of co-working spaces and work from home), using modern collaboration tools. As such, there is no single location where a majority of this project will occur. The single location with the most project activity is expected to be our office at 19-23 Moore St, Turner, ACT, 2612.

200 word limit

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B.8. Website AddressProvide your **Website Address**:**B.9. Related companies****Does your company have an Ultimate Holding Company?**Yes ☐ ► If yes, please complete the below information.No ☒ ► If no, please proceed to [Part B.10](#)

Ultimate Holding Company ABN (if applicable):

Legal/registered entity name of Ultimate Holding Company:

Country of incorporation:

Please list any related bodies corporate⁷ of your company:*It is mandatory to attach a diagram of your company's group structure—showing the legally registered name and country of incorporation of each body corporate, the relationships and relative shareholdings within the group.***B.10. Applicant Corporate Background****If you are applying as a company or an incorporated trustee applying on behalf of a trust, answer the questions below. Otherwise, go to [Part B.11](#).****Has your company existed for a complete financial year?**Yes ☒ ► If yes, enter the latest complete financial year, then complete the table below.No ☐ ► If no, enter the number of months completed in the financial year to-date, then complete the table below:**Financial Information**

Please provide a summary of your company's financial information, excluding any related bodies corporate. Forecasts should include project expenditure as planned and all sales revenue, but should not show the anticipated Accelerating Commercialisation grant as income. All amounts in the table below must show a whole dollar value e.g. \$1 million should be presented as \$1,000,000.

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⁷ Two bodies corporate are related where:

- One is a holding (i.e. parent) company of the other;
- One is a subsidiary of the other;
- Both are subsidiaries of the same holding company.

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Name of shareholder	Role/relationship with applicant	% of issued shares	Australian resident/controlled entity?
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>
	--Please Select--	%	Yes <input type="checkbox"/> No <input type="checkbox"/>

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B.11. General Background**Classifications**

What is your company's core business? Development and sale of real time and forecast data relating to solar power plant output variability and weather conditions.

What is your company's main revenue earning activity under the Australian and New Zealand Standard Industrial Classification (ANZSIC)? Code: 6910

Classification: Scientific Research

Services

If your application is successful, key words will assist Expert Network members to identify commercialisation opportunities for your project.

List a maximum of 10 keywords relating to the project that will aid in searching for your project, technology, market or business: Weather, Solar, Energy, Meteorology, Hydrology, Storm, Modelling, Data, API, Forecast

What technology is core to your invention? (*This is the substance of the invention, not its intended use.*) Select only one. Refer to [Appendix A](#) for definitions.

- ☐ Biotechnology
☒ Software
☐ Technology systems and hardware
☐ Manufacturing, engineering and design.

What is the primary target market for the novel product, process or service? Select only one. Refer to [Appendix A](#) for definitions.

- | | |
|--|--|
| <input type="checkbox"/> Automotive, aviation and marine | <input type="checkbox"/> Infrastructure, housing & transport systems |
| <input type="checkbox"/> Business, marketing, communications and finance | <input type="checkbox"/> Mining equipment technology and services |
| <input type="checkbox"/> Defence, security and safety | <input type="checkbox"/> Medical technology and pharmaceuticals |
| <input type="checkbox"/> Education and training | <input checked="" type="checkbox"/> Oil, gas and energy |
| <input type="checkbox"/> Environment and water management | <input type="checkbox"/> Original equipment manufacturer |
| <input type="checkbox"/> Entertainment, tourism and sport/recreation | <input type="checkbox"/> Textiles, clothing and footwear |
| <input type="checkbox"/> Food and agribusiness | <input type="checkbox"/> Other, please specify: |

If applicable, please indicate other target markets for the novel product, process or service. Select all that apply. Refer to [Appendix A](#) for definitions.

- | | |
|--|---|
| <input checked="" type="checkbox"/> Automotive, aviation and marine | <input checked="" type="checkbox"/> Infrastructure, housing & transport systems |
| <input type="checkbox"/> Business, marketing, communications and finance | <input checked="" type="checkbox"/> Mining equipment technology and services |
| <input checked="" type="checkbox"/> Defence, security and safety | <input type="checkbox"/> Medical technology and pharmaceuticals |
| <input type="checkbox"/> Education and training | <input type="checkbox"/> Oil, gas and energy |
| <input checked="" type="checkbox"/> Environment and water management | <input type="checkbox"/> Original equipment manufacturer |
| <input type="checkbox"/> Entertainment, tourism and sport/recreation | <input type="checkbox"/> Textiles, clothing and footwear |
| <input checked="" type="checkbox"/> Food and agribusiness | <input type="checkbox"/> Other, please specify: |

Advanced Manufacturing. Does your product, process or service and/or proposed project involve advanced manufacturing? Refer to [Appendix A](#) for a definition of advanced manufacturing.

- ☐ Yes ☒ No

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Part C. Project Details and Funding

If the application is successful, the details you provide below will be published on the departmental website (you may **not** be contacted about the project description before it is used). Published project details will include:

- name of the applicant (and project partner(s), in the case of a collaborative project);
- title of the project;
- a description of the project and its intended outcomes; and
- amount of funding awarded.

C.1. Project Title and Description

If the application is successful, this project title and the publication project description will be used by the Australian Government in published material.

Provide a short project title.

This is a short descriptive title for the project. For instance, do not use only the product name as a project description.

Operationalise and globally scale satellite-enabled precipitation and storm forecasting technology

10 word limit

Provide a brief project description for publication on our website.

This description is for the general public, so it should be written in simple terms avoiding technical or industry specific terminology. It should be a brief explanation of the product, process or service to be commercialised, the key target market, the key problem it solves or key market opportunity, and how Accelerating Commercialisation support will be used to assist in commercialisation. In the box below, please complete the description in this format:

Project Description: [Applicant] has developed [innovative product, process or service] for the [target/priority market/industry/application sectors]. This [technology/solution] will [value proposition/customer benefits]. Entrepreneurs' Programme commercialisation support will be used to help [Applicant] commercialise this [product/process/service] and achieve [expected commercial outcomes and/or national/global benefits].

Solcast has developed prototype technology for the forecasting of precipitation and storms tens to hundreds of minutes ahead of time, known as 'nowcasting'. This nowcasting technology offers significant benefits to industries such as transportation, insurance, energy and natural resources. Entrepreneurs' Programme commercialisation support will be used to help Solcast scale and commercialise a highly differentiated global nowcasting offering for storms, precipitation, temperature and wind.

75 word limit

C.2. Project Basis

The subject of the project will be a new (select all that apply):

☒ Product ☐ Process ☒ Service

C.3. Project Summary

Provide a brief description of the project and outcomes addressing the following:

- A brief history of the applicant's business (companies) or a brief history of the applicant (non-companies).
- Describe your product, process or service and the extent to which it is new or innovative.

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- What is the core invention/innovation?
- How far is it from entering the marketplace?
- What are the objectives and key activities of the proposed project?
- If you are undertaking a collaborative project, please describe the activities to be undertaken by each project partner.
- What commercial outcomes do you expect to achieve following the project?

Enter your response below:

Solcast was founded by James Luffman and Dr Nick Engerer in June 2016 to create and commercialise solar forecasting technology. In 2017, it achieved two major milestones: commencement of provision of services to the energy sector and the global scaling of its satellite based solar forecasting technology. At time of writing (January 2018), Solcast's solar data services (which are separate from those proposed for development in this application) have 400+ users across five continents and has established a global network of reseller partnerships covering Europe, North America and Asia. Thus far, Solcast's core technologies have been developed for the short-term prediction (0-4 hours) of cloud cover and solar radiation through application of the fleet of new third generation weather satellites which are currently being deployed globally. These include Himawari 8 (Asia), GOES-R/16 (North & South America) and Fengyun 4 (Central Asia), and soon GOES-S/17 (Western Americas & Central Pacific) in late 2018. These new satellites provide orders of magnitude improvements over the previous generation, including high resolution and rapid-update scan cycles (~1km², updates ~5-10 minutes).

Whilst developing cloud detection and forecasting technologies for solar energy applications, Solcast made a major discovery about the unique capabilities these satellites offer for the short-term predictions of important weather variables over the 0-6 hour time horizon (termed 'nowcasting' herein). Through the fusion of Solcast's cloud nowcasting algorithms with additional novel techniques and data fields representing other weather variables (weather model output, radar imagery, lightning detection networks), we have discovered that we can provide significantly better nowcasting outcomes over existing solutions. Using this approach, Solcast has developed a prototype system for precipitation and storm forecasting which it would like to advance to commercialisation through AC support. For this purpose, Solcast is submitting a two-staged application for the committee's consideration to deploy a suite of new products which are well differentiated from our current solar offerings and have not reached first sale.

In the first stage (2 years, \$598k total value, 50% from AC) Solcast will operationalise and globally scale its precipitation and storm modelling prototypes and deliver them to market through our global network of distribution partners. The focus of this stage will be placed upon the primary tasks of global data acquisition and assimilation and the further refinement of the prototype algorithms where required to accommodate additional climate regions and the local prevailing weather systems. As an outcome from this first stage, Solcast will complete a market analysis of the stage I outcomes in preparation for a second stage (+2 years, \$800k total value), wherein Solcast operationalise additional capability in wind and temperature forecasting and build an API delivery system to enable broad market uptake. We believe that with AC project support, Stage I services are only 12-18 months away from entering the marketplace and conservatively estimate the serviceable

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addressable market for precipitation and storm nowcasting at +3y from the project commencement to be AUD\$275m per annum.

500 word limit

C.4. Project Duration

Record the proposed Start and End Dates for the Project for which you are seeking Accelerating Commercialisation support. The maximum project length for this programme is 2 years.

Project Start Date: 01/04/2018 (dd/mm/yyyy)

Project End Date: 31/03/2020 (dd/mm/yyyy)

C.5. Project Budget

Grants will be provided to fund an agreed proportion of eligible expenditure directly associated with implementing an applicant's project.

More information on eligible expenditure and what restrictions apply can be found in the Customer Information Guide.

Eligible expenditure must be outlined in the Accelerating Commercialisation Project Budget Calculator. Please complete the Project Budget Calculator and attach it to your application.

Expenditure should be shown GST exclusive. You may be asked for additional information on expenditure breakdown during the application process.

C.6. Grant Amount Sought

The eligible expenditure below must be the same as in the Project Budget Calculator and exclusive of GST.

Grant amounts cannot exceed \$1 million. Commercialisation Offices or Eligible Partner Entities can only apply for grants of up to \$250,000.

Total expenditure (\$A): \$598,746

Total eligible expenditure (\$A): \$598,746

Accelerating Commercialisation grant (\$A): \$299,373

Grant percentage (% of eligible expenditure): 50% (should be 50% or less)

C.7. Applicant's Contribution

You are required to attach evidence to demonstrate your company has the ability to fund at least 50% of the eligible expenditure of the project, taking into account both eligible and ineligible expenditure. You need to provide details and evidence of your project funding strategy, indicating the sources of funding for your share of the project. This can be in the form of balance sheets, cash flow documents, loan agreements, investor agreements or other documents.

You are also required to attach an Accountant's Declaration (refer [Appendix B](#) for the template). This declaration must be submitted on the accountant's letterhead and be in the format provided.

Your entire share of funding is not needed at the time of application. However, you must show that your company can match the grant progressively at the rate eligible expenditure is to be incurred on the project, and that your company can also fund ineligible expenditure.

Explain how your company will provide all the funds (other than the grant funds) required for the entire project.

Enter your response below:

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C.8. Experienced Executives

Are you claiming expenditure for an Experienced Executive (see Section 4.1 of the Eligible Expenditure Guidelines)?

Yes ☐ ► If yes, please complete the question below.

No ☒ ► If no, proceed to [Part C.9](#).

Describe the role and responsibilities of the Experienced Executive and how he/she will be appointed or recruited. Explain how the Executive will enable you to realise the full commercialisation potential for the proposed product, process or service, including specific key performance indicators (KPIs) and achievements expected from the appointee. How do these KPIs link to the Execution Plan and project milestones?

If you have identified a suitable person, provide a brief summary of that person and attach their CV to the application. Summarise the main terms of employment or engagement (e.g. full/part time, hours of work, permanent/temporary, remuneration, etc.).

Enter your response below:

N/A

300 word limit

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C.11. Project Milestones and Key Activities

Please list the Milestones you plan to achieve for your commercialisation project during the grant period.

- For services you intend to purchase, enter the relevant details under the milestone to which you expect the service to contribute most.
- For an Experienced Executive, list the key activities to be undertaken by him/her against the milestones to which they will contribute most.
- Milestones should be measurable outcomes that can be used by third parties to objectively assess project progress (e.g. final prototype design accepted, trial completed, distributor appointed, independent testing and validation completed).
- Milestones do not have to be sequential, they can and often will overlap in execution.
- Key activities are the key steps needed to reach these milestones.
- Estimated costs are sought for assessment purposes only and should only include eligible expenditure.

Further guidance on what constitutes eligible expenditure is provided in the Customer Information Guide.

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D.5. Merit Criterion 5 – Management capability

In addressing this criterion, applicants should address the following.

- Provide a short summary of the skills and expertise of your key personnel including, in relation to the particular stage of the project, what level of expertise the applicant has in:
 - commercialisation management
 - project management
 - business management; and
 - the relevant sector/technology domain.
- Discuss the membership of your board and/or any advisory committee or group that may have been established to help guide senior management.
- Explain any gaps or deficiencies in management expertise and/or resources, and how you intend to address these during and beyond the project, including any recruitment plans (whether funded by the grant or otherwise).

Enter your response below:

Solcast's governance and management structures are summarised in the organisational diagram below. The company is privately held, with its three shareholders represented on the Board of Directors (Dr Nick Engerer, James Luffman, and the Australian National University joining in 2018, represented by Dr Fiona Nelms).

James (CEO) and Nick (CTO) comprise the Solcast Executive Team. Between them they have more than 15 years experience as both subject matter experts and as leaders of teams behind significant projects. In particular, Nick and James understand and thrive at the nexus between meteorology, research and industry application. The drive, passion and purpose of the Executive Team has resulted in a highly talented and skilled software and modelling development motivated by working towards a future powered by solar energy technologies. Altogether, our software teams has over 30 years of combined experience in the development, deployment and maintenance of cloud based solutions.

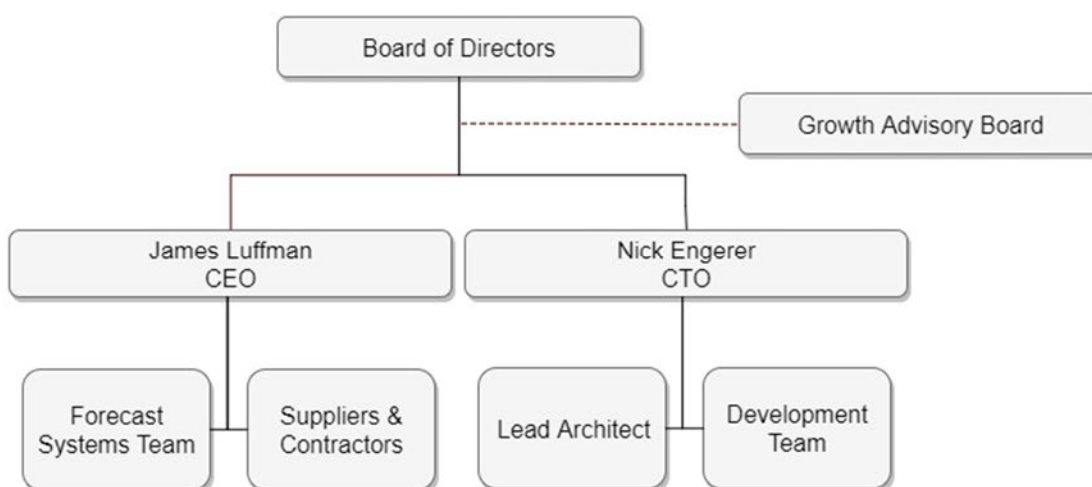


Figure D5.1 - Solcast's organisational structure

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James Luffman
CEO, Chairman

Mr. Luffman has 12+ years of experience in the commercial meteorology domain, including 9+ years commercialising and managing delivery of new forecasting technologies for the energy, transportation, insurance aviation, mining and marine sectors. This includes 10+ years of experience in project management including as a GM/Exec level manager in the weather forecasting industry with 30+ staff and \$20m+ budget responsibility. James has 8 years of business management experience, serving as a company director since 2011. He also brings 5+ years of experience as senior salesperson and sales manager. As CEO, James is responsible for Solcast's administrative functions including Finance (assisted by Ferrari Warner) and HR (with assistance from HR Clarity and Strategic Talent Solutions).



Dr Nick Engerer
CTO, Director

Dr. Engerer is world renowned researcher, known for his development of several radiation and modelling tools which now define the state of the art in the solar energy industry. Over the past 5 years in his role at The ANU he has developed extensive industry partnerships which now include every distribution network in Australia, a majority of its transmission networks, the Australian Energy Market Operator and Energy Networks Australia. Dr. Engerer is experienced in the commercialisation of university IP, and has co-developed and introduced a new model for staged IP licensing as a part of a \$4M

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ARENA funded research project delivering state of the art solar modelling technologies to Australian utilities. He has managed research teams of 15+ individuals and is well-respected for his candor and leadership. He is also an award winning lecturer & supervisor (with 20+ student research projects on industry focused topics). Dr. Engerer is now transitioning from the academic environment, into a full-time role at Solcast as a Director and its CTO where he manages technology development, market research/engagement.



Dr Fiona Nelms

Director (to commence 2018)

Fiona is the Director of the Technology Transfer Office at the Australian National University. She brings a long history of technology commercialisation dating back to 1999 over a broad range of disciplines including technology companies and engineering. She has established several spin off companies from ANU that have gone on to raise significant capital nationally and internationally. Fiona will join Solcast's board of Directors in 2018 as part of the IP licensing agreement between Solcast and the ANU.



Mark Hardy

Member, Growth Advisory Board

Mark is an Australian entrepreneur, angel investor and meteorologist. He is the founder of Australia's leading weather forecasting business, Weatherzone (1998). Within a decade he grew it to be Australia's largest commercial weather company, with major clients in Australia, Asia and Africa. Mark is a shareholder and executive director at Weatherzone, and is an active angel investor with a number of technology startups. Mark brings extensive contacts and experience to Solcast's Growth Advisory Board, especially for partnerships, sales and M&A.

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**Nick Morley*****(Invited, Preliminary Acceptance) Member, Growth Advisory Board***

Nick Morley is an engineer who is passionate about solar power, storage, and electric vehicles, and is currently lead technical support for First Solar in the Asia-Pacific region. Nick played a key role in the commissioning, validation, and ongoing operation of the 150MW Solar Flagships projects in Australia and has completed technical due diligence services on over 100MW of commercial solar power plant projects in Japan. Nick is known for his highly developed international business acumen and joins the advisory board to help with Solcast development on nowcasting products for the energy industry, with a focus on solar farms.

**David Peterson*****(Invited, Preliminary Acceptance) Member, Growth Advisory Board***

David is the CTO and Director of the KILN Incubator in Canberra. He is an experienced technology entrepreneur and consultant, with a strong technical background in software development, systems engineering and business analysis. He is particularly interested in new venture creation and collaboration with a focus on infrastructure design, scaling security. David will join Solcast to bring expertise in the rapid scaling of software based technological solutions as well as the various business structures required to achieve these aims.

Gaps and deficiencies in management expertise for this project

Through its Board of Directors, Growth Advisory Board and Executive Team, we believe Solcast has a suitable mix of management expertise for this project. However, we realise that for Nick and James in particular, their time is stretched. Therefore, as mentioned in the project execution plan, the project management function for this project includes the utilisation of project management resource from professional project services provider ANU Enterprise. Solcast has had a successful working relationship with ANU Enterprise for over 12 months.

1000 word limit

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D.6. Merit Criterion 6 – National benefits

In addressing this criterion, applicants should address the following:

- Explain how the project will benefit Australia (for example, new direct or indirect jobs, reduction in healthcare costs, environmental benefits) and/or promote economic growth and competitiveness.
- Explain what significant spill-over benefits will accrue to Australia through conduct of the project and/or successful commercialisation including: diffusion of knowledge and skills, diffusion of new products, processes or services and/or increased collaboration between businesses and/or businesses and research institutions.

Enter your response below:

Australia is prone to a wide variety of severe weather events, which have been established to have multi-billion dollar impacts on its productivity each year. Notably, severe convective storms and tropical cyclones cause flooding, wind and hail damage and generally disrupt economic activity for hundreds of thousands of Australians. Recent reporting from insurance provider IAG¹ estimates that severe weather events cost Australia on average up to \$5b pa, with projected growth to over \$30b pa by 2050, impacting nearly half of its population.

While the proposed nowcasting technologies in this project can do nothing to prevent or disrupt severe weather events, they can enable more effective preventative actions, by partially addressing the issues surrounding predictability of severe weather events. Better short-term forecasting outcomes with tens to hundreds of minutes of lead time for major precipitation and storm events will allow for better protection of life and property in Australia (e.g. insurance agencies to forewarning customers of hail damage, to move their cars under cover via alerts on their phones). Improved nowcasting of precipitation, lightning, temperature and wind velocities will provide the Australian economy with tools to improve security and resilience via better risk management outcomes and will partially promote economic growth through better management of loss/risk.

National Benefits: the oil, gas and energy resources sector:

Given the widespread benefits outlined above, Solcast would like to more directly address the key area of expected greatest national benefit: the oil, gas and energy sector. While there are marginal benefits to oil (drilling platform weather impacts) and gas (operational planning) within this trifecta, the energy sector stands out as the chief beneficiary. Solcast is well-networked in this area, and its executive team brings many years of experience addressing key challenges in the sector, specifically in Australia's electricity networks and energy market operations. Two notable recent events illustrate how more accurate, robust and accessible nowcasting information would have contributed to Australian energy security quite well: the September 2016 South Australia blackout and the February 2017 Heatwave.

South Australia Blackout (Precipitation and Storm Nowcasting): *The 28th of September 2016 was the most significant severe thunderstorm outbreak for the region in several decades. After an exceptionally strong low pressure system rapidly formed and deepened over the Australian Bight, several supercell thunderstorms with destructive wind speeds generated seven tornadoes along with large hailstones and intense rainfall. This resulted*

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in wind speeds of 190–260 km/h² and simultaneously damaged two regions of 275kV transmission lines, which along with a number of other factors resulted in 850,000 SA customers losing electricity supply, impacting businesses, transport and major industries. Investigations into the event result in a series of recommendations for the future prevention of recurrence, amongst them³, including that:

“AEMO develop a more structured process for information exchange and reclassification decisions when faced with risks due to extreme wind speeds, which may include development of more sophisticated forecasting systems for extreme wind conditions including tornadoes. This proposal will be put forward for consultation with participants and other relevant parties such as weather service providers.”

However, as previously discussed in detail in this proposal, the current suite of tools available on the market from weather services providers do not entail robust and accurate nowcasting solutions for convective storms nor for the extreme wind speeds that result. At present, AEMO does not have access to any known product or service in the global marketplace which could have more accurately forecast the evolution of these high-impact convective storm events. The nowcasting solutions proposed within this project would undoubtedly enable improved electrical network management for AEMO under such a scenario, as our storm prediction product would become available on the weather services market, thereby partially addressing the needs of networks and markets to ensure energy security in similar future scenarios.

February 2017 Heatwave Event (Temperature and Wind Nowcasting):

Over the period between 8 and 12 February 2017, a record setting heatwave settled over much of the eastern half of Australia. This led to near record demand in NSW, record demand in QLD and rolling blackouts across South Australia. This event began most notably on 8 February 2017 in South Australia with AEMO directing a series of load shedding (blackout) events, first dropping 100 megawatts (MW) of load in the afternoon, which was then followed by an additional interruption of 300 MW shortly thereafter, leading to loss of power across local industry, particularly its resources sector. Two days later, further economic impacts were realised in New South Wales as AEMO directed Transgrid to load shed one of the Tomago Aluminium smelter potlines (290 MW) to meet supply-demand balance in the extreme heat⁴. Subsequent review would reveal that in both instances, the total demand was higher than was forecast, due to underforecasting the maximum temperatures, and that in the 8th February SA scenario, additional problems were introduced through overestimation of wind energy generation (a 100MW+ shortfall). In response, a June 2017 report focusing on AEMO summer readiness was produced⁵, which outlined plans to:

- *“Collaborate with weather forecasting suppliers to obtain detailed alerts on weather-related events that could impact power system operation, such as sudden changes in wind or cloud conditions.”*
- *“Develop tools and systems to provide real time alerts when weather events cause forecasting uncertainty to increase”*
- *Develop new forecasting tools based on machine learning (or artificial intelligence) to enhance AEMO’s operational forecasting models, particularly during extreme weather events”*

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However, Solcast notes that AEMO already had access to the current suite of state of the art wind and temperature forecasting tools from Australia's commercial weather providers and that none of these have nowcasting solutions which could have captured the evolving weather conditions underlying the higher than expected temperatures and below than expected wind speeds. These conditions were complex, requiring up-to-date tracking of warm air advection and subtle air mass boundaries which are beyond the capability of today's nowcasting algorithms, but could be reconciled through the developments proposed in this project, particularly in the stage II outcomes.

Collaboration with Researchers, Australian Bureau of Meteorology

In the spirit of collaboration, Solcast will agree to provide open and free access nowcasting outputs to Australian Universities and their international partnerships for the purposes of facilitating their research into environmental impacts, atmospheric science, risk management and security. Solcast will also consider a heavily discounted version of the products to be made available to the Australian Bureau of Meteorology for in-house purposes, such as improvement of their convective storm warnings and hydrological forecasting products.

References

1. IAG Report, *At What Cost*. Available at: <https://www.iag.com.au/sites/default/files/Documents/Business%20sustainability/At%20what%20cost%20-%20mapping%20where%20natural%20perils%20impact%20economic%20growth%20and%20communities.pdf>
2. Australian Bureau of Meteorology, *Severe Thunderstorm and Tornado Outbreak 28 September 2016*. Available at:
3. AEMO, *Power System Incident Reports: Integrated Final Report SA Black System 28 September 2016*. Available at: https://www.aemo.com.au/-/media/Files/Electricity/NEM/Market_Notices_and_Events/Power_System_Incident_Reports/2017/Integrated-Final-Report-SA-Black-System-28-September-2016.pdfhttp://www.dpc.sa.gov.au/__data/assets/pdf_file/0007/15199/Attachment-3-BoM-Severe-Thunderstorm-and-Tornado-Outbreak-28-September-2016.pdf
4. AEMO, *System Event Report South Australia 8 February 2017*, Available at: https://www.aemo.com.au/-/media/Files/Electricity/NEM/Market_Notices_and_Events/Power_System_Incident_Reports/2017/System-Event-Report-South-Australia-8-February-2017.pdf
5. https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEM_ESOO/2017/2017-Energy-Supply-Outlook.pdf

1000 word limit

If applicable, summarise the extent to which the project targets and/or participates in any of the Growth Sectors (refer [Appendix A](#) for definitions):

- advanced manufacturing
- food and agribusiness
- medical technologies and pharmaceuticals
- mining equipment, technology and services
- oil, gas and energy resources.

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Part E. Contact Details

E.1. Details of Primary Contact

Person authorised to act on behalf of the applicant. (**Note:** At least one phone number or mobile number must be entered and all the remaining fields below are mandatory unless stated otherwise.)

Provide details of the primary contact.

Title: s22 If other, please specify:

Given Name: s22

Family Name: s22

Position Title: s22

Phone Number: s22

Mobile Number: s22

Email Address: s22

Postal Address: s22

Provide the registered business street address of the primary contact.

Address: s22

Suburb/Town: s22

State/Territory: s22

Postcode: s22

Country: Australia

s22

E.3. How did the applicant hear about the programme?

Word of Mouth

If Other, please specify:

E.4. Commercialisation Adviser

Name of your Commercialisation Adviser: s22

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E.5. Applicant Declaration

- ☒ I declare that I have read and understood the Customer Information Guide.
- ☒ I declare that the proposed application, project and/or any associated expenditure has been endorsed by the applicant's Board or person with authority to commit the applicant to this project.
- ☒ I declare that the information contained in this application together with any statement provided is, to the best of my knowledge, true, accurate and complete. I also understand that the giving of false or misleading information is a serious offence under the Criminal Code 1995 (Cth).
- ☒ I understand that I may be requested to provide further clarification or documentation to verify the information supplied in this form and that the Department of Industry, Innovation and Science may, during the application process, consult with other government agencies, including State and Territory government agencies, about the applicant's claims and may also engage external technical or financial advisers to advise on information provided in the application.
- ☒ I acknowledge that if the Department is satisfied that any statement made in an application is incorrect, incomplete, false or misleading, the Department may, at its absolute discretion, take appropriate action. I note such action may include excluding an application from further consideration; withdrawing an offer of funding; using the information contained in the application for a fraud investigation that would be consistent with the Australian Government's Investigations Standards and Fraud Control Guidelines; and for management purposes and/or terminating any Agreement between the Commonwealth and the recipient including recovering funds already paid.
- ☒ I agree to participate in the periodic evaluation of the services undertaken by the Department.
- ☒ I declare that I am authorised to complete this form and to sign and submit this declaration on behalf of the applicant.
- ☒ I approve of the information in this application being communicated to the Department of Industry, Innovation and Science in electronic form.
- ☒ By including my name in this application it is deemed to be my signature for the purpose of this application.

Is your company an individual, partnership or unincorporated trustee?

Yes ☐ ► Complete the next declarationNo ☒ ► If **no**, sign the declaration.☐ I warrant that, if the applicant is:

- an individual or researcher, and not applying through an Eligible Partner Entity or a Commercialisation Office of a publicly funded research organisation, or
- a partnership or unincorporated trustee,

the applicant will establish a non-tax exempt company incorporated under the *Corporations Act 2001 (Cth)* and that the company will be the signatory to the funding agreement with the Commonwealth.

Applicant's signature

Name of signatory

James Luffman

Date 1/01/2018

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Part F. Attachment Checklist

F.1. Mandatory Attachment 1 – Incorporated trustees

This is only for applicants where an Incorporated Trustee is applying on behalf of a Trust:

Part of Application Form	Type of Attachments	Attached?
Part B.2 - Trustee and Trust Details	A copy of the Trust documents showing the relationship of the Incorporated Trustee to the Trust.	<input type="checkbox"/> Yes, attached.

F.2. Mandatory Attachment 2 – Applicant group structure

This is only for applicants that have related bodies corporate.

Part of Application Form	Type of Attachments	Attached?
Part B.9 – Related companies	A diagram of your company group structure—showing the legally registered name and country of incorporation of each body corporate, the relationships and relative shareholdings within the group.	<input type="checkbox"/> Yes, attached.

F.3. Mandatory Attachment 3 – Financial statements and cash flow

Part of Application Form	Type of Attachments	Attached?
Part B.10 – Financial statements and cash flow	<p>The following are required:</p> <ul style="list-style-type: none"> Financial statements (statement of financial performance/profit and loss; statement of financial position/balance sheet) for the previous 3 financial years (or for as many years company has been in existence if 3 years is not available) Interim (year-to-date) financial statements for the current financial year Cash flow forecast covering the project period. 	<input checked="" type="checkbox"/> Yes, attached.

F.4. Mandatory Attachment 4 – Intellectual Property

Part of Application Form	Type of Attachments	Attached?
Part B.13 – Intellectual Property (IP)	Evidence of the project IP protection and/or licence agreement(s)	<input type="checkbox"/> Yes, attached.

F.5. Mandatory Attachment 5 – Project budget calculator

Part of Application Form	Type of Attachments	Attached?
Part C.5– Project budget	You must attach a completed Accelerating Commercialisation Project Budget Calculator.	<input checked="" type="checkbox"/> Yes, attached.

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F.6. Mandatory Attachment 6 – Evidence of applicant's funding strategy and Accountant's Declaration

Part of Application Form	Type of Attachments	Attached?
Part C.7 – Applicant's Contribution	You must provide an Accountant's Declaration (refer Appendix B). Further evidence of their project funding strategy, indicating the sources of funding for their share of the project, should also be provided. This can be in the form of balance sheets, cash flow documents, loan agreements, investor agreements or other documents.	<input checked="" type="checkbox"/> Yes, attached.

F.7. Mandatory Attachment 7 – Experienced Executive

Part of Application Form	Type of Attachments	Attached?
Part C.8 – Experienced Executive	CV of proposed Experienced Executive where you have identified a suitable candidate	<input type="checkbox"/> Yes, attached.

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F.8. Optional Attachments

If you wish to include additional documents, these should be limited to those directly relevant to and supporting the application. Please limit attachments to 10 pages (or 2MB), unless your Commercialisation Adviser has agreed there is additional material of particular relevance. If applicable, please list additional attachments:

Form question No.	Name of document	Description of attachment
D1	Investor Engagements	A collection of emails documenting a selection of our engagements with investment opportunities for Solcast.
D4	Travel Expenditure	Detailed travel expenditure plans (excel file).
	(Document cell working incorrectly, skipping line)	
F3	Additional Financial Information	\$100k of AWS Credits, supporting our cloud compute and database operations

ferrariwarner

CHARTERED ACCOUNTANTS & BUSINESS ADVISERS

Accountant's Declaration**For the purpose of a grant application under Accelerating Commercialisation**

Applicant's Name	Solar And Storage Modelling Pty Ltd
Applicant's ABN:	35 613 924 422
Title and employer of signatory	s22 Partner, Ferrari Warner Accountants
Contact Details	s22
Qualification	Institute of Chartered Accountants in Australia member with a Certificate of Public Practice
Membership Number:	s22

Based on a review, which is not an audit, of the evidence listed below that the applicant has supplied to me:

s47G(1)(a)

- I consider that nothing has come to my attention that causes me to believe that the assumptions, which provide the basis on which the applicant expects to be able to fund its share of the eligible expenditure and all of any ineligible expenditure required for the project from the following source(s) of funding - s47G(1)(a) as set out in the application, are unreasonable.
- This opinion is based on the applicant's share being s47G(1)(a) out of total project expenditure of s47G(1)(a)
- Nothing has come to my attention to indicate that the historical revenue of the applicant and any related bodies corporate as set out in question B.10 of the application, for the years ending [financial year e.g. '2016-2017'], are not presented fairly, in all material respects, in accordance with the definition of 'turnover' in the Accelerating Commercialisation Customer Information Guide.

This declaration is intended solely for use by the applicant and the Commonwealth for the applicant's grant application and as a result, may not be suitable for another purpose. We disclaim and do not accept any responsibility or liability to any party other than the applicant and the Commonwealth for any consequence of reliance on this declaration for any other purpose.

s22

Signature

Signed on this 11th day of January 2018

From: s22 <s22 @solcast.com.au>
Sent: Monday, 23 July 2018 3:15 PM
To: s22
Cc:
Subject: Re: Quarterly report feedback - SOLAR AND STORAGE MODELLING - AC66414 [DLM=For-Official-Use-Only]

Hi s22 apologies - does this help:

s22

On 23 Jul 2018, at 12:34, s22 [@industry.gov.au](#)> wrote:

Hi s22 ,

Thanks for this and your explanation of 5.1 is fine.

Please be advised that I cannot progress your payment until I have received evidence that you can match the grant payment amount.

Match Funding Evidence

Please provide me evidence that you can match a grant payment of \$^{s47G(1)(a)}. A bank statement that shows your company name and account number in the same screen shot should be fine.

Thanks

Kind regards

s22

Accelerating Commercialisation Program

AusIndustry – Support for Business

Level 18 Darling Park Tower 3, 201 Sussex Street, Sydney

GPO Box 2013 Canberra ACT 2601

Ph. s22 @industry.gov.au

Internet: www.business.gov.au

Department of Industry, Innovation and Science – NSW Office

ABN 74 599 608 295

The department acknowledges the traditional owners of the country throughout Australia and their continuing connection to land, sea and community.

We pay our respect to them and their cultures and to the elders past and present.

From: s22 [mailto:s22 @solcast.com.au]

Sent: Friday, 20 July 2018 1:11 PM

To: s22 @industry.gov.au>

Cc: s22 @solcast.com.au>; s22 @ep.industry.gov.au>

Subject: Re: Quarterly report feedback - SOLAR AND STORAGE MODELLING - AC66414 [DLM=For-Official-Use-Only]

Many thanks s22

See attached updated signed report PDF and PBC XLS. If your amended docs already got passed up the chain that's fine, there were no changes other than exactly what you suggested below. Tried to call you regarding 5.1 commentary but got your voicemail - I am now on leave for about 11 days so let me know if this is urgent and I'll find a time to call you. The comments in 5.1 were to be transparent and clear that during the travel (both trips had this project as top focus, and two other trips where the project was discussed have not been included since the project was not the #1 focus of those trips) there were some non-project focussed meetings, hence why I have allocated the percentages of the total travel costs to ensure there is not a sense of inappropriate expenses.

s22

s22

www.solcast.com.au

On Wed, Jul 18, 2018 at 5:30 PM, s22 @industry.gov.au> wrote:

Hi s22 ,

Thanks for your quarterly report. My feedback is as follows:

Report

Section 1.1 – The aim here is to write an overarching narrative of project activities between 01/04/2018 to 30/06/2018 that can be understood by someone with medium level technical knowledge. Please include views about what went well, what did not and your response to issues raised.

Section 1.2 – Very good.

Section 2.1 - Very good.

Section 4.2 – I think you missed this section. I have reviewed your PCB and agree that you would have nothing to report here but please add in some notes to this affect.

Section 5.1 – Your content here is a little unclear to me. Can we discuss this on the phone tomorrow ?

Section 6.1, 6.2, 6.3 – This section is related to the Expert Network and not to your Commercialisation Advisor (s22). Referrals to the Expert Network are made to you by s22 on a 'needs' basis. At a guess, your answer here would be 'no'.

The other parts of your report are fine.

s47E(d)

Match Funding Evidence

Please provide me evidence that you can match a grant payment of ^{s47G(1)(a)}. A bank statement that shows your company name and account number in the same screen shot should be fine.

Kind regards

s22

Accelerating Commercialisation Program

AusIndustry – Support for Business

Level 18 Darling Park Tower 3, [201 Sussex Street, Sydney](#)

GPO Box 2013 Canberra ACT 2601

Ph. s22 [@industry.gov.au](mailto:s22@industry.gov.au)

Internet: www.business.gov.au

Department of Industry, Innovation and Science – NSW Office

ABN 74 599 608 295

The department acknowledges the traditional owners of the country throughout Australia and their continuing connection to land, sea and community. We pay our respect to them and their cultures and to the elders past and present.

From: s22 [mailto:s22 [@solcast.com.au](mailto:s22@solcast.com.au)]

Sent: Wednesday, 18 July 2018 9:57 AM

To: s22 [@industry.gov.au](mailto:s22@industry.gov.au)>

Cc: s22 [@solcast.com.au](mailto:s22@solcast.com.au)>; s22 [@ep.industry.gov.au](mailto:s22@ep.industry.gov.au)>

Subject: Re: Quarterly report template - SOLAR AND STORAGE MODELLING - AC66414 [DLM=Sensitive]

s22 , I think I have got this correct. As its the first quarterly report, do let me know of any obvious things that I have missed.

Attached:

-Signed report PDF

-Report DOC

-Updated PBC XLS

s22

s22

www.solcast.com.au

On Mon, Jul 16, 2018 at 3:11 PM, s22 <s22 [@solcast.com.au](mailto:s22@solcast.com.au)> wrote:

Thanks s22 and thanks also for the chat.

s22

s22

www.solcast.com.au

On Mon, Jul 16, 2018 at 2:59 PM, s22 <s22 [@industry.gov.au](mailto:s22@industry.gov.au)> wrote:

Hi s22

Here is your quarterly report template.

Any questions, please feel free to call.

s22

Accelerating Commercialisation Program

AusIndustry – Support for Business

Level 18 Darling Park Tower 3, [201 Sussex Street, Sydney](#)

GPO Box 2013 Canberra ACT 2601

Ph. s22 | s22 [@industry.gov.au](mailto:s22@industry.gov.au)

Internet: www.business.gov.au

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The department acknowledges the traditional owners of the country throughout Australia and their continuing connection to land, sea and community. We pay our respect to them and their cultures and to the elders past and present.

Sensitive

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