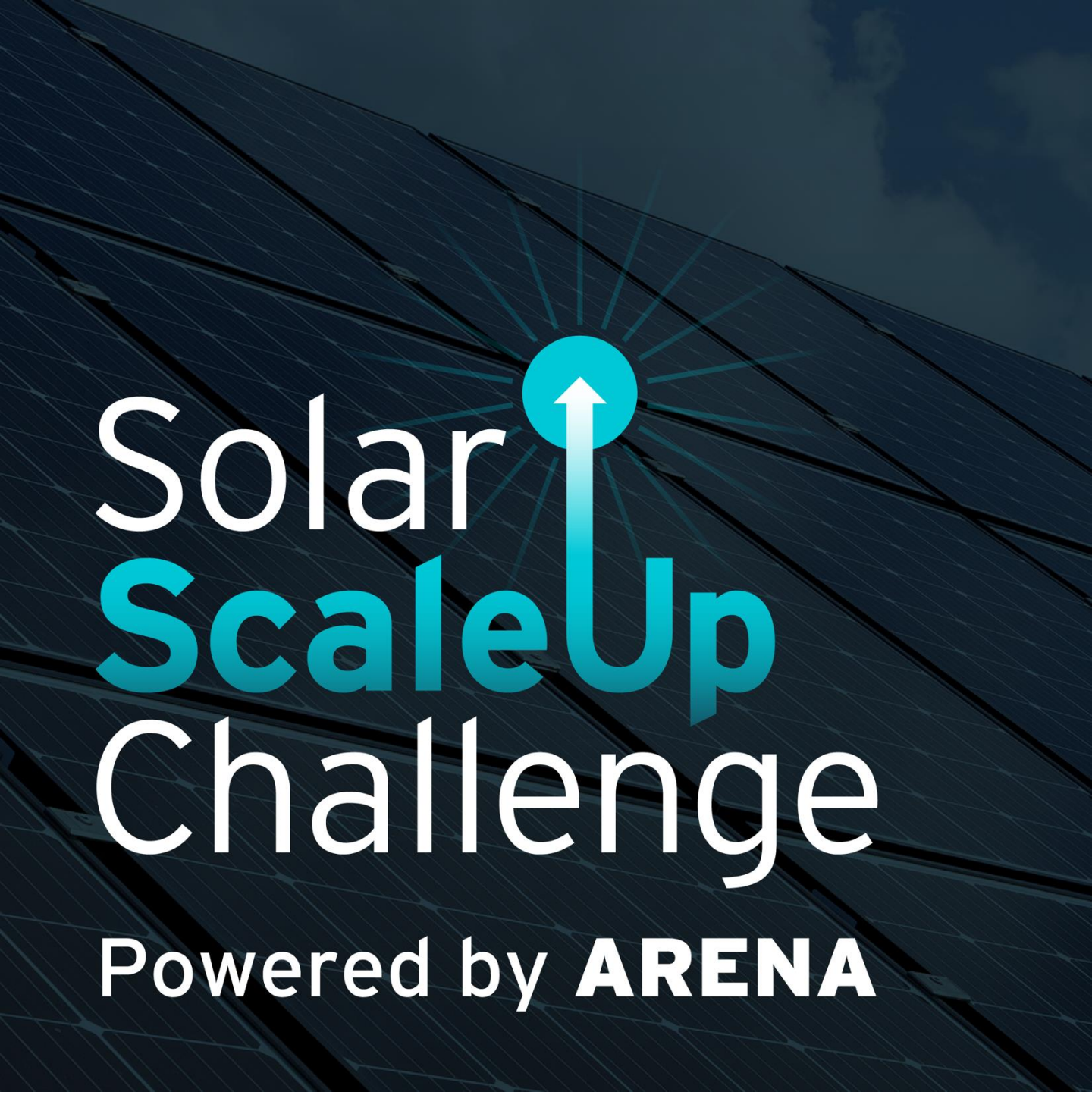


TeamUp Event Brochure
18 July

This brochure has been prepared by the Greenhouse Challenge team and contains publicly available information submitted on the Greenhouse Challenge platform and is provided in this summary form to better allow people to find collaboration opportunities during the TeamUp event. It is accurate as at 08:00 July 8th showing all submissions that are not in draft form.

greenhouse challenge.

Solar ScaleUp Challenge

The Solar ScaleUp Challenge was launched by ARENA, in collaboration with Greenhouse, as part of a global effort to accelerate innovation in large-scale solar. We want to source the best ideas for reducing the cost of large-scale solar PV installation, operations and maintenance.

Objectives of the Challenge

1. Surface new innovations from around the world; and
2. Facilitate connections between participants who can form multi-disciplinary teams.

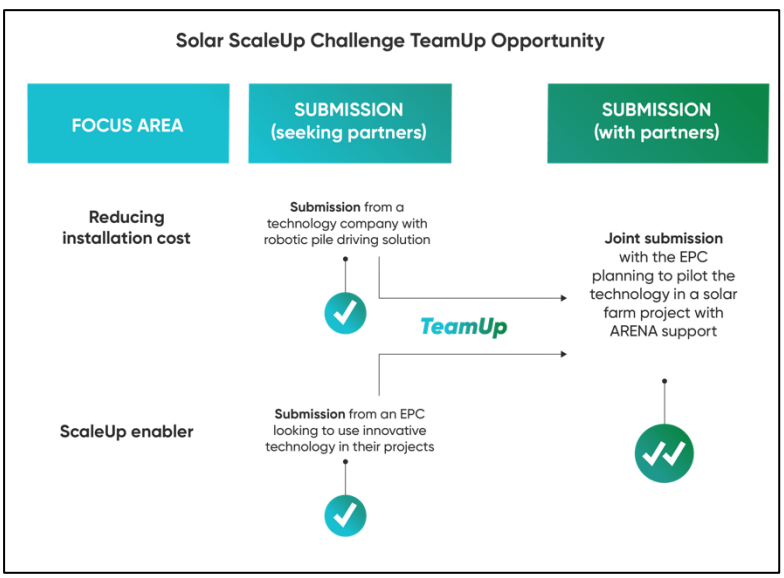
Benefits of participating in the Challenge

1. **Access to exciting funding opportunities:** Should you be successful; you could receive part of a pool of up to AU $100 million of grant funding.
2. **Collaborating with industry leaders and innovators: During the Challenge, including this TeamUp event, there will be several opportunities** to identify partnership opportunities with other stakeholders.
3. **Global exposure for your technology & brand:** Successful applicants will be shared publicly, leveraging the networks of ARENA, Greenhouse and their partners.

TeamUp Event – 18 July

The event will provide you with the opportunity to:

- Hear about the submissions we've already received, including some quick pitches.
- Receive first-hand feedback from ARENA on existing submissions.
- Connect with potential partners who could bolster your submission or help you submit additional submissions in partnership with others.



TeamUp opportunity explainer from the challenge statement.

Solar ScaleUp Challenge

Tip to get the most out of this brochure

Throughout this document you will see buttons that are hyperlinked to either a company's submission to the Solar ScaleUp Challenge or their website.

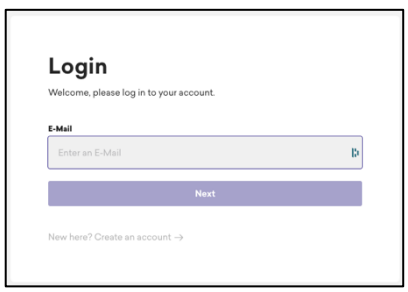
Link to submission

This will link to the company's submission on Greenhouse Challenge platform

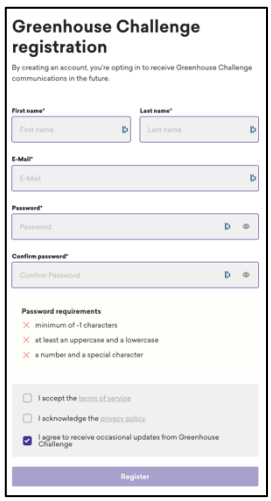
Link to organisation website

This will link to the company's website

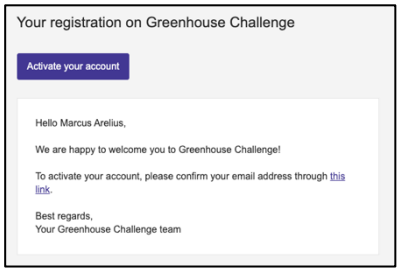
In order to see the submission you have to log in to your Greenhouse Challenge account or simply create an account.



To create an account, you will need to enter your name, email address, and password.



You will then need to validate your email by clicking on the link in the email sent to you by Greenhouse Challenge.



TeamUp registered attendees (1 of 2)

Organisation	First Name	Last Name	Job Title
[ui!] the urban institute	Simon	Kaplan	CEO
5B	Sanaya	Khisty	Head of Strategy and Government Relations
5B	NIcole	Kuepper	CSO
A&B Smart Materials	James	Garnett-Letts	Intern
A&B Smart Materials	Amaury	van Trappen de Buggenoms	CEO
A&B Smart Materials	Aryan	Manocha	Business Development Intern
Above Engineering Service Pty Ltd	Zhangyong	Ma	Director
AJL Tech Consulting Pty Ltd	Alison	Lennon	Scientist
Alta Vision Pvt Ltd	Rachitha	Muthukumarana	COO
ARENA	Darren	Miller	Chief Executive Officer
ARENA	Elicia	Cantelo	Senior Strategy Manager
ARENA	Linda	Zhang	Senior Analyst
ARENA	Dan	Sturrock	Director, BD&T
ARENA	Aiden	Pang	Analyst, BD&T
ARENA	Deb	Chen	Manager, BD&T
Australian Solar Manufacturing	Jain	Lal	Managing Director
Blurgs Innovations Pvt Ltd	Abhishek	Yadav	Client Partnership Architect
ClimAI cleantech Private Ltd	Nikhil	Joy	Director Sales
Coolsheet	Thea	Burhan	Intern
Coolsheet PVT	Doug	Smith	CEO
CQSola	Tony	Schirmer	CEO
CSIRO	Michael	Rae	Team Leader
CSIRO	Michael	Elliott	Software Engineer
CSIRO	Fred	Pauling	Principle Engineer
CSIRO	Mike	Collins	Mechanical Engineer
CSIRO	Graeme	Caplen	Commercialisation Manager
CSIRO	Brad	Wolfgang	Senior Engineer
CSIRO	Sahan	Kuruneru	Research Scientist
CSIRO	Ross	Dungavell	Senior Engineer
DataSCG Technologies and Services Group	Jeff	Hu	MD
Deloitte	Oskar	Klaes	Senior Manager
Digital Sustainability Advisory	Tim	Prosser	Climate Tech Advocate
DigitalX Technology Group	David	Nguyen	CEO
Dimer Technologies	Ming	Liu	Managing Director
EDL	Peter	Hulkenberg	Team Lead Hybrid Development
EDL	Michael	Buzzard	Head of Growth - Remote Energy
Enosi	Grant	McDowell	Head of Strategy and Product | Co-Founder
Equans Solar & Storage AU (Bouygues Group)	Quentin	CRANCEE	Senior Project Engineer
Fortescue	Leigh	Dowie	Senior Manager Decarb Delivery
Fortescue	Deidre	Willmott	Senior Strategic Advisor
Fortescue Energy	Tom	Parkinson	Principal Energy Policy
GHD	Ray	Ma	BD Manager-Clean Energy
Grant Thornton Australia	Shelly	Ngo	Manager
GrantHelper Pty Ltd	Stephen	Dowling	Grant Sherpa
Green Energy Systems	Glenn	Carless	Founder
Greenhouse	Sarah	Bertin	Project Manager
Greenhouse	Mark	Rowland	Chief Collaboration Officer
Greenova8	Ibrahim	Afridi	Founder/CEO
Greenwood	Robbie	Coleman	Head of Brand, Strategy & Academy
Icarus RT	Gourav	Sharma	COO
Impact GPT	Tim	Hodgson	CEO
Intelligent Robotics	Clyde	CAMPBELL	CEO
Intemp Pty Ltd	Laurence	Gonano	Director
ITP Renewables / INNOV8PV	Brett	Hallam	Senior Consultant / Technology Developer
Lab 360 Solar	Thorsten	Trupke	CEO
Lab 360 Solar	Oliver	Kunz	CTO
Marine Wellness	Uri	Sternberg	CEO
Marine Wellness	Gabriel	Wainmann	CTO
Meralli Projects	Ed	Campbell	Director BD
Midwest Agrivoltaic Systems	Tyler	Lloyd	Chief Operations Officer

TeamUp registered attendees (2 of 2)

Organisation	First Name	Last Name	Job Title
Monford Group	Brian	Rafferty	Chief Technology & Innovation Officer
My Net Zero	Richard	Harding	Head of Experience
Monsol	Alexander	May	Founder-inventor
Mornington Shire Council	Susan	Jacups	Grants writer
Murdoch University	Farhad	Shahnia	A/Professor
Oak and Reed Energy	Danny	De Schutter	Director
PHNXX	Wei-Chi	Lee	COO
PlasmaLeap Technologies	Adel	Rezaeimotlagh	R&D Project Manager
Positive Deviancy	Jade	Garrett	Owner
Powerpeak	Muhammad	Ismail	Power systems engineer
Prisma Vitral C.A Architecture & Planning	Daniel	Guerra	CEO
Proa	Beatriz	Toribio Lopez	Head of Product
Pumpkin Engineering	Joshua	Lai	Engineer
Pumpkin Engineering	Peter	Beasley	Director
PV2+ GmbH	Katharina Franziska	Braig	COO/CFO
PVHardware	Lorna	Charro	Sales Manager
Quantified Energy Labs Pte. Ltd.	Yan	WANG	CEO
Reswitch	Kate	Osaze	Founder
Rocksbridge Pty Ltd	Paul	Pacino	Adviser
SE	Mark	Maj	Manager
Share IT Energy	Hannah	Watts	Business Manager
Sktes	Sandeep	Verma	Sr client partner
Smart Commercial Solar	Kealy	Day	Head of Solutions and Performance
Smart Commercial Solar	Lauren	Hamilton	Head of Marketing
Solar Energy Robotics	Alan	Fenelon	CEO
SOLPOD	James	Larratt	CEO
Solstice AI	Julian	de Hoog	Cofounder and CEO
SPD Energy	Steven	Ducat	Founder & CEO
SPREE, UNSW	John	Rodriguez	Project Manager
SunBioSys	Stephan	Ong	Co-Founder
Sundrive Solar	daniel	chen	Head of module R&D
SYSTEMS	peter	key	Technical Manager
Techko Pty Ltd	David	Barshevski	managing Director
Trinano Technologies	Dr Harsh	Sethi	CEO & Founder
University of New South Wales	Abhnil	Prasad	Senior Research Fellow
University of New South Wales	Brendan	Wright	Postdoctoral Research Fellow
University of Wollongong	Xingchen	Hu	PhD student
University of Wollongong	Xiaoxiao	Bu	Student
University of Wollongong	Jun	Shen	Prof
UNSW	Ziv	Hameiri	Prof
UNSW	Renate	Egan	ACAP Centre Director
UNSW	Merlinde	Kay	Associate Professor
UNSW	Ahilan	Kanagasundaram	PostDoc
UNSW	Jim	Joseph John	Senior Research Fellow
UNSW	Ali	Shakiba	Research Fellow
UNSW	Colin	Zhou	Researcher
UNSW	Bram	Hoex	Professor
UOW	Aiai	Ren	PhD
UOW	Xu	ZHOU	Ph.D
USP	Pamella	S Arakaki	MBA candidate
UTS	Jahangir	Hossain	Professor
VOLT FARMER PTY LTD	Stephen	Todd	Project Developer
Volta Advisory	Emily	Belleville	Senior Consultant
Western Sydney University	Elizabeth	Smith	Research Partnership Development Manager
Worley	Peter	Israel	Director Power
Worley	Blanca	Rodriguez	Power And New Energy Consultant
Zenaji Pty Ltd	Hans	van Pelt	Interim CEO
	Peter	Majewski	Advisor

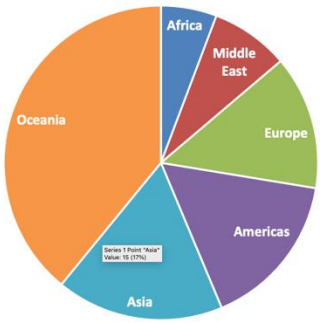
Key stats from the challenge submissions

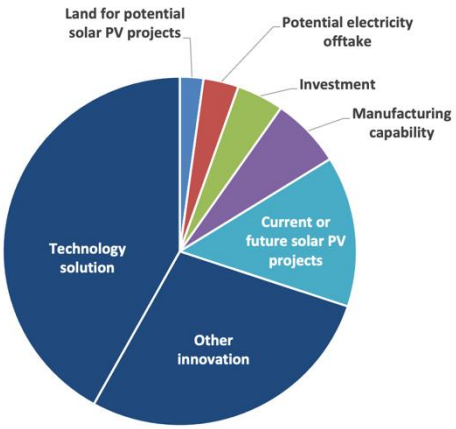
(accurate to 08:00 July 18th AEST)

43 submissions received

9 In draft form

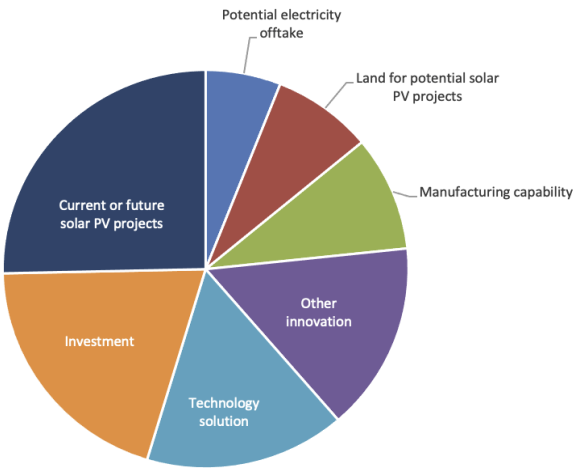
This is truly a global challenge with solutions operating on all continents .





The majority of submissions are 'Offering' technology solutions and other innovations.

Submissions in all areas of technology and innovative solutions have been received.



The 'Asks' from submitters are also distributed.

Index of submissions

Index of submissions

Solution Id	Page #	Title	FOCUS AREAS				
			Balance of plant costs	Installation costs	Ops and maintenance	Other LCOE reduction	ScaleUp enablers
647	9	Design and planning of solar parks from a perspective of 75 years in the Urban plan.	■	■	■	■	■
668	9	APSYN AI Design Engine: Accelerated Solar Farm Design	■	■	■	■	■
631	10	Automated Staging of Solar Tracker Components	■	■			■
661	10	Solar 2.0: Automated rack and panel assembly	■	■			■
652	11	5B Maverick – rapidly deployable prefabricated solar solution	■	■		■	
673	11	ASM Wireless PV Module and Plug & Play Combiner Box	■	■	■	■	
632	12	Fully autonomous pile installation for large scale solar improving efficiency & reducing costs		■			
626	12	Green Energy Systems - Solar Waves	■		■	■	■
664	13	Automated Lightweight Rapid Deployment Solar Farms	■	■	■		
634	13	Nexo Enegetic Prefab Construction & Infra System	■	■	■	■	■
669	14	PHNXX Modular Microgrid Systems	■	■	■	■	
665	14	Patented silver-free high efficiency solar cell technology to be implemented by manufacturers		■			
680	15	SOLPOD - utility scale prefabricated solar solution	■	■	■	■	
676	15	Modular Prefabricated Nano-Grid Solar System with Rapid Deployment	■	■	■	■	■
662	16	DHOOP AI: For Predictive Solar Panel Analysis and Maintenance			■		
672	16	Realtime Monitoring - what's measured gets managed	■		■	■	■
659	17	Daylight Photoluminescence Imaging of Utility Scale Solar Farms			■	■	
640	17	Use of AI based System PV fields Operations and Maintennace using Fully Autonomous Drones			■	■	
637	18	Enhancing Solar PV Lifecycle Asset Management through Autonomous Drone Electroluminescence Mapping			■		■
651	18	PVWatch: AI-driven automated detection, classification and prediction of faults in utility PV plants			■	■	
654	19	PVChat - Future of Solar Asset Management -Conversational AI for PV plant Operation and Maintenance			■		
648	19	Solar Farm Module Level Power Control for Lowering cost of maintenance and alternative to repowering		■	■	■	
635	20	Remove Solar Inverter, with module power control. Build a Solar Farm with a DC Motor and Generator			■	■	
681	20	Extending PV module lifespan and reducing LCOE by lowering module operating temperatures			■	■	
684	21	ELITE SURFACE PROTECTION		■	■		■
674	21	Empowering Multi-Tenanted Communities with Renewable Energy - REIS Platform			■	■	■
666	22	AI-Based Solar Energy Forecasting			■	■	■
660	22	Innovative Solar Energy Management Platform with Energy Auto Bidding Feature	■		■		■
683	23	PV Maps: AI-driven soiling prediction and automated cleaning optimiser			■	■	
653	23	Trinano Coating optimizes performance of every solar panel regardless of make, type, age or location		■	■		
675	24	Decarbonising Remote Mines & Communities	■	■	■	■	
678	24	Equans Solar & Storage AU - Large-scale solar EPC		■	■		
644	25	Greenova8 - GreenPay			■	■	■
657	25	Increva - third-party management service for providers and resource companies for solar projects	■	■	■	■	
679	26	Integrated Vertical Solar System				■	■
663	26	Integrated Vertical Solar System					■
649	27	REplace	■	■			

ID 647

Link to submission

Submission Title: Design and planning of solar parks from a perspective of 75 years in the Urban plan.

Organisation name: Prisma Vitral C.A Architecture & Planning

Geographic location: Venezuela

Contact name: Daniel Guerra

Contact title: CEO

Contact email prismavitral@hotmail.com

Continents of operation

- [ ] Oceania
- [ ] Asia
- [ ] Europe
- [x] Americas
- [ ] Africa
- [ ] Middle East

Ask from a partner		Offer to a partner
[x]	Technology solution	[ ]
[x]	Other innovation	[ ]
[x]	Current or future solar PV projects	[x]
[x]	Land for potential solar PV projects	[ ]
[x]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[x]	Manufacturing capability	[ ]

Focus Areas

- [x] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [x] ScaleUp enablers

Overview

Provide a 75-year planning design for the urban plan. Operation and maintenance services until 2050. Through intelligent design, artificial intelligence, satellite remote sensing, and materials research, ensure and prevent global warming, avoid lethal heat waves and fires, and conserve materials.

ID 668

Link to submission

Submission Title: APSYN AI Design Engine: Accelerated Solar Farm Design

Organisation name: Scimita Ventures

Geographic location: Australia, NSW

Contact name: Mobin Nomvar

Contact title: CEO

Contact email: ali@scimitaventures.com

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[x]	Other innovation	[x]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[x]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [ ] New component design
- [x] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

APSYN is an AI-powered design tool that optimises solar farm designs considering technology, performance targets, and constraints. It simplifies design using advanced simulation and optimisation, offering precise solutions. Key features:

- AI-assisted system design and performance simulation
- Comprehensive ROI financial analysis
- Integration with business tools for seamless management
- Compatibility with existing equipment suppliers (PV, battery, etc.)

ID 631

Link to submission

Submission Title: Automated Staging of Solar Tracker Components

Organisation name: Solar Farm Constructions

Geographic location: Australia, VIC

Contact name: Kai Musgrove

Contact title: Mechanical Operations Manager

Contact email: kai@solarfc.com.au

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [ ] Ops and maintenance
- [ ] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[x]
[x]	Other innovation	[x]
[x]	Current or future solar PV projects	[x]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[ ]	Manufacturing capability	[x]

Types of technology/innovation: TRL: 6

- [ ] New component design
- [ ] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

Traditionally, small quantities of components on solar farms were moved to their location in the back of a truck. Over many projects, we have developed specialised handling equipment to improve productivity significantly. To further improve productivity, we are integrating GPS machine control into this specialised equipment, improving efficiency and accuracy in the construction stage.

ID 661

Link to submission

Submission Title: Solar 2.0: Automated rack and panel assembly

Organisation name: Worley

Geographic location: Australia, NSW

Contact name: Joachim Meister

Contact title: Group SVP Power & New Energy

Contact email joachim.meister@worley.com

Continents of operation:

- [x] Oceania
- [x] Asia
- [x] Europe
- [x] Americas
- [x] Africa
- [x] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [ ] Ops and maintenance
- [ ] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[x]
[x]	Other innovation	[x]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[ ]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [x] New component design
- [x] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

The pre-assembly cell consists of a gantry robot and six 3-axis robots, which apply automotive technology to pre-assemble solar table tops for fixed tilt-solar PV plants. We have also identified joining technologies from the automotive sector to enable full automation ofthe joining of rack structures and panel-to-rack connections.

ID 652

Link to submission

Submission Title: 5B Maverick – rapidly deployable prefabricated solar solution

Organisation name: 5B Holdings Pty Ltd

Geographic location: Australia, NSW

Contact name: Dr Nicole Kuepper-Russell

Contact title: Chief Strategy Officer

Contact email: sanaya.khisty@5b.com.au

Continents of operation:

- [x] Oceania
- [x] Asia
- [ ] Europe
- [x] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [ ] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
☐	Technology solution	☑
☐	Other innovation	☐
☑	Current or future solar PV projects	☐
☑	Land for potential solar PV projects	☐
☐	Potential electricity offtake	☐
☑	Investment	☐
☐	Manufacturing capability	☐

Types of technology/innovation: TRL: 7-8

- [x] New component design
- [x] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

5B has demonstrated the 5B Maverick in 140MW across 90 sites globally and is seeking scale opportunities. This commercial solar solution makes it faster and safer and more land, labour, and cost-efficient to deploy solar, from off-grid to GW-scale projects. 5B also brings the expertise of its technology and production teams, with significant experience designing and delivering projects using the 5B Maverick and insights for educating buyers about the benefits of this technology.

ID 673

Link to submission

Submission Title: ASM Wireless PV Module and Plug & Play Combiner Box

Organisation name: Australian Solar Manufacturing Pty Ltd

Geographic location: Australia, SA

Contact name: Jain Lal

Contact title: Managing Director

Contact email: jainlal@jlelectrics.com.au

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
☑	Technology solution	☑
☑	Other innovation	☑
☑	Current or future solar PV projects	☑
☐	Land for potential solar PV projects	☐
☐	Potential electricity offtake	☐
☐	Investment	☐
☑	Manufacturing capability	☑

Types of technology/innovation: TRL: 4-5

- [x] New component design
- [ ] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

ASM's newly designed range of products Made in Australia will reduce delivery time [ETA] and shipping costs with an improved quality backed by Product Warranty & Liability Insurance.

ASM Wireless PV Module will save hundreds of hours installing negative run in the field, thousands of meters of 4mm²/6mm² cables not required, estimated 40,000m for every 100MW X $1.20/m. Our Plug & Play Combiner Box is also vital in terminating those Strings; 20 Minutes to install a 20 X Dual Protection CB.

ID 632

Link to submission

Submission Title: Fully autonomous pile installation for large scale solar improving efficiency & reducing costs

Organisation name: Built Robotics Australia Pty Ltd

Geographic location: Australia, QLD

Contact name: Paul Kelly

Contact title: General Manager

Contact email: paul@builtrobotics.com

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [x] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [ ] Ops and maintenance
- [ ] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[x]	Other innovation	[ ]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[ ]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 7-8

- [ ] New component design
- [ ] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

The RPD 35 is a fully autonomous robotic pile driver that combines four steps — surveying, pile distribution, pile driving, and data collection — into a single robot. Every RPD 35 pairs with an RPS 25. The robotic pile stabiliser ensures driven piles exceed the most stringent tracker tolerances and produce consistently placed piles every time: accurate z-heights, perfect plumbness, and unrotated piles.

ID 626

Link to submission

Submission Title: Green Energy Systems - Solar Waves

Organisation name: Green Energy Systems Pty Ltd

Geographic location: Australia, NSW

Contact name: Glen Carless

Contact title: Founder & CEO

Contact email: glen@nbsystemsgroup.com

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [x] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [x] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[ ]	Other innovation	[x]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 7-8

- [x] New component design
- [x] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [x] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

We have combined the two rather than treating the solar panel as separate from the mounting system. Our new system locks 5 panels together, forming a larger, stronger assembly interconnected with a structural frame in a continuous hinge system, allowing all panels to be folded into compact concertinaed blocks of power. 50 KW. By eliminating all nuts, bolts, clamps & screws, we have simplified the system, made it stronger as well as dramatically reducing the cost. A Win, Win, Win.

ID 664

Link to submission

Submission Title: Automated Lightweight Rapid Deployment Solar Farms

Organisation name: Monsol

Geographic location: Australia, VIC

Contact name: Alexander May

Contact title: Founder

Contact email: info@monsol.energy

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [ ] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[ ]	Other innovation	[ ]
[x]	Current or future solar PV projects	[ ]
[x]	Land for potential solar PV projects	[ ]
[x]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[x]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [x] New component design
- [x] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

The Concertina PV is a lightweight glass-less solar array designed for rapid deployment. Imagine windrows of solar arrays deployed across mounds providing a tilt to achieve optimal angle for energy generation. Utilising industry-leading semiflexible panels that are powerful, waterproof, lightweight, durable, and highly resistant to harsh conditions. It uses less than 50% of the materials, 40% Shipping volume & 30% install labour compared to conventional glass panel solutions.

ID 634

Link to submission

Submission Title: Nexo Enegetic Prefab Construction & Infra System

Organisation name: NEXOFAB Europe BV

Geographic location: Belgium

Contact name: Jan Pee

Contact title: CEO

Contact email: jan@nexofab.eu

Continents of operation:

- [x] Oceania
- [x] Asia
- [x] Europe
- [x] Americas
- [x] Africa
- [x] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[x]	Other innovation	[x]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[x]
[x]	Investment	[ ]
[x]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 4-5

- [x] New component design
- [x] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [x] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [x] Other

Solution description

Advanced Nexo Technology 3D-prints energetic prefab construction elements for enhanced sustainability and efficiency. Key components include embedded renewable energy and durable sustainable materials. We offer Building-as-a-Service integration for scalability and cost-effectiveness, with rapid production enabled by automation. Our system includes EMS for efficient energy management, ensuring optimal performance and longevity.

ID 669

Link to submission

Submission Title: PHNXX Modular Microgrid Systems

Organisation name: PHNXX

Geographic location: Australia, VIC

Contact name: Wei-Chi Lee

Contact title: Co-founder and Chief Operating Officer

Contact email: weichi.lee@phnxx.io

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[x]
[ ]	Other innovation	[x]
[x]	Current or future solar PV projects	[x]
[x]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 9

- [x] New component design
- [x] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [x] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description

Our solution integrates modular, mobile solar and battery-powered systems designed for quick deployment and scalability. We use patented prefabricated mounting, AI-driven site planning, and intelligent monitoring systems. Key components include angle-adjustable solar panels, advanced battery storage, and AI-based software for optimisation. We bring expertise in renewable energy, proven pilot performance, and a strong track record in improving operational efficiency across remote operations.

ID 665

Link to submission

Submission Title: Patented silver-free high efficiency solar cell technology to be implemented by manufacturers

Organisation name: PV2+ GmbH

Geographic location: Germany

Contact name: Katharina Braig

Contact title: COO/CFO

Contact email: katharina.braig@pv2plus.com

Continents of operation:

- [ ] Oceania
- [ ] Asia
- [x] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [ ] Ops and maintenance
- [ ] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[ ]	Other innovation	[ ]
[x]	Current or future solar PV projects	[ ]
[x]	Land for potential solar PV projects	[ ]
[x]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[x]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 4-5

- [x] New component design
- [ ] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

PV2+ can solve the silver issues the solar industry faces by uniquely substituting silver with copper with unprecedented cost-efficiency for mass production. Our solution secures the supply of raw materials for the solar industry, as copper is 1000 times more abundant than silver. This allows the emerging Australian solar industry to set itself up independently of conflicts over raw materials and ensures a short and secure supply chain. Recycled copper is abundant all over the world.

ID 680

Link to submission

Submission Title: SOLPOD - utility scale prefabricated solar solution

Organisation name: SOLPOD

Geographic location: Australia, VIC

Contact name: James Larratt

Contact title: CEO / Co-Founder

Contact email: jamesl@solpod.com.au

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[x]
[ ]	Other innovation	[ ]
[x]	Current or future solar PV projects	[ ]
[x]	Land for potential solar PV projects	[ ]
[x]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[x]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [x] New component design
- [ ] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

A Solpod encompasses 10 panels, which are folded flat, stacked, and packaged in containers. A 40' container can transport ~380 kWp, similar to shipping panels only. At site, our pods are deployable with a 5-minute cycle time by a 4-person team.

We are launching our new utility pod and manufacturing line in late 2024 with a Phase 1 capacity of 100 MW per annum.

We bring capacity across solar engineering, manufacturing, development, funding and operations.

ID 676

Link to submission

Submission Title: Modular Prefabricated Nano-Grid Solar System with Rapid Deployment

Organisation name: SPD ENERGY PTY LTD

Geographic location: Australia, NSW

Contact name: Steven Ducat

Contact title: Founder & CEO

Contact email: steven@spd.energy

Continents of operation:

- [x] Oceania
- [x] Asia
- [x] Europe
- [x] Americas
- [x] Africa
- [x] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[ ]	Other innovation	[x]
[ ]	Current or future solar PV projects	[ ]
[x]	Land for potential solar PV projects	[ ]
[x]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[ ]	Manufacturing capability	[x]

Types of technology/innovation: TRL: 6

- [x] New component design
- [x] Planning / deployment optimisation
- [x] Robotics / automation
- [x] Vegetation management
- [x] Fault detection / management
- [x] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description

- Our modular nano-grid solar system revolutionises solar PV design, deployment, and operation.
- Advanced power electronics, intelligent energy management, and innovative structural and electrical interconnection solutions create a highly efficient, flexible, and scalable system.
- It significantly reduces installation costs, improves performance, and integrates modular battery storage.
- Our software-defined platform dynamically optimises energy flows, ensuring optimal performance and reliability.

ID 662

Link to submission

Submission Title: DHOOP AI: For Predictive Solar Panel Analysis and Maintenance

Organisation name: Blurgs Innovations Pvt Ltd

Geographic location: India

Contact name: Abhishek Yadav

Contact title: Client Partnership Architect

Contact email: abhi.yadav@blurgs.com

Continents of operation:

- [ ] Oceania
- [x] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [ ] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[x]
[ ]	Other innovation	[ ]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation:

- [ ] New component design
- [ ] Planning / deployment optimisation
- [x] Robotics / automation
- [x] Vegetation management
- [x] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description

DHOOP AI uses advanced drone technology equipped with thermal cameras & AI/ML algorithms to perform solar panel inspections. It detects faults & anomalies, providing precise locations and actionable insights. Key components include AI-driven analysis, real-time monitoring, and a user-friendly interface, which collectively enhance operational efficiency & reduce maintenance costs. This approach supports large-scale installations, promoting sustainable & cost-effective green energy production.

ID 672

Link to submission

Submission Title: Sustainable production of Ammonia using Power-2-X initiative

Organisation name: DigiMesh

Geographic location: Australia, QLD

Contact name: Anthony Asplin

Contact title: Systems Engineer / Director

Contact email: anthony@asplin.com.au

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [x] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[x]
[ ]	Other innovation	[x]
[ ]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[ ]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [x] New component design
- [ ] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [x] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [x] Other

Solution description

Using commercial off-the-shelf products (to date), we've demonstrated real-time monitoring capability, power generation control, and community battery capture.

With our solution, a distributed communications / compute network could monitor and control community networks, provide immutable, verifiable, auditable energy provenance and emissions tracking, and provide real-time billing. This is an enabling function for monitoring carbon emissions and investing.

ID 659

Link to submission

Submission Title: Daylight Photoluminescence Imaging of Utility Scale Solar Farms

Organisation name: Lab 360 Solar Pty Ltd

Geographic location: Australia, NSW

Contact name: Thorsten Trupke

Contact title: CEO

Contact email: trupke@gmail.com

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[x]
[x]	Other innovation	[ ]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [ ] New component design
- [x] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [x] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description

We successfully demonstrated DPL imaging, including from drones, at multiple utility-scale PV farms, with unique outcomes, including quantitative degradation analysis. This project will develop stable commercial solutions, including thermal/visual imaging from ground-based robots and real-time module level IV monitoring. We are undisputed world leaders in DPL hardware development and in the semiconductor and device physics underlying luminescence data capture and analysis.

ID 640

Link to submission

Submission Title: Use of AI based System PV fields Operations and Maintenance using Fully Autonomous Drones

Organisation name: Marine Wellness

Geographic location: Australia, NSW

Contact name: Gabriel Wainmann

Contact title: CTO

Contact email: gwainmann@marine-wellness.com

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[x]	Other innovation	[x]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[x]	Manufacturing capability	[x]

Types of technology/innovation: TRL: 6

- [x] New component design
- [ ] Planning / deployment optimisation
- [x] Robotics / automation
- [x] Vegetation management
- [x] Fault detection / management
- [x] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description

- Autonomous drones with water-cleaning systems reduce manual labour and improve panel efficiency.
- Drones with high-resolution imaging detect issues early, minimising downtime.
- Drones provide continuous security monitoring.
- AI analyses data to predict failures and optimise maintenance.
- Crawling robots to clean panels without water.

ID 637

Link to submission

Submission Title: Enhancing Solar PV Lifecycle Asset Management through Autonomous Drone Electroluminescence Mapping

Organisation name: Quantified Energy Labs Pte. Ltd. ("QE-Labs")

Geographic location: Singapore

Contact name: Dr. Yan WANG

Contact title: CEO and co-founder

Contact email: yan.wang@qe-labs.com

Continents of operation:

- [x] Oceania
- [x] Asia
- [x] Europe
- [ ] Americas
- [ ] Africa
- [x] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [ ] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[x]	Other innovation	[ ]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[ ]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [ ] New component design
- [ ] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [x] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description

Our drone EL solution features a custom-built EL camera payload, autonomous flight control, AI-powered analytics, and a cloud-based digital-twin platform. Among all PV module field inspection offerings, we provide the best value for money, achieving unparalleled benefits to the user in terms of diagnostic throughput, cost-effectiveness, and level of detail. Under this initiative and partnership, we will demonstrate holistic lifecycle quality management with a fully autonomous drone EL system.

ID 651

Link to submission

Submission Title: PVWatch: AI-driven automated detection, classification and prediction of faults in utility PV plants

Organisation name: The University of New South Wales

Geographic location: Australia, NSW

Contact name: Ziv Hameiri

Contact title: Professor

Contact email: ziv.hameiri@unsw.edu.au

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[ ]	Other innovation	[x]
[ ]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 4-5

- [ ] New component design
- [x] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [x] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

We developed several ML algorithms that identify and classify degradation and failures and predict failures before they occur. These algorithms will be integrated into an automated maintenance decision-making platform that will reduce the LCOE of Australian PV plants. We bring an experienced team of researchers with strong backgrounds in PV and computer science and leading developers and asset management companies.

ID 654

Link to submission

Submission Title: PVChat - Future of Solar Asset Management - Conversational AI for PV plant Operation and Maintenance

Organisation name: UNSW / ForesightPV

Geographic location: Australia, NSW

Contact name: Jim Joseph John

Contact title: Senior Research Fellow

Contact email: j.joseph_john@unsw.edu.au

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [ ] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[ ]	Other innovation	[ ]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [ ] New component design
- [x] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [x] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description

PVChat addresses inefficiencies in O&M monitoring software by introducing a conversational AI-powered platform. This intuitive interface enables users to access critical information with minimal training, including text response, real-time plots and detailed insights through cutting-edge modelling tools. PVChat empowers informed decision-making and drives cost-effective O&M activity recommendations, leading to improved energy production, reduced maintenance costs, and increased efficiency.

ID 648

Link to submission

Submission Title: Solar Farm Module Level Power Control for Lowering cost of maintenance and alternative to repowering

Organisation name: CQSola

Geographic location: Australia, QLD

Contact name: Tony Schirmer

Contact title: CEO

Contact email: tony@cqsola.com

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[ ]	Other innovation	[x]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[ ]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [x] New component design
- [ ] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [x] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description

CQSola module-level power controllers detect bad panels and prevent the need to replace them. They also extract additional energy and reduce panel degradation.

The system also allows new panels to be used with old panels and provides a better alternative to re-powering sites where problem panels are reducing overall energy. As small as one string can be rolled out at a time.

ID 635

Link to submission

Submission Title: Remove Solar Inverter, with module power control. Build a Solar Farm with a DC Motor and Generator

Organisation name: CQSola

Geographic location: Australia, QLD

Contact name: Tony Schirmer

Contact title: CEO

Contact email: tony@cqsola.com

Continents of operation:

- [x] Oceania
- [x] Asia
- [ ] Europe
- [ ] Americas
- [x] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[x]	Other innovation	[x]
[x]	Current or future solar PV projects	[ ]
[x]	Land for potential solar PV projects	[ ]
[x]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [x] New component design
- [ ] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [x] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description

We can supply our power controllers and data analytics software, which we've developed to detect issues with solar farms.

- Controllers can safely shut down the plant at the module level. This allows cheaper staff to commission, with all contacts being ELV until energising.
- Our module-level data collection system enables instant diagnostics, transforming maintenance from reactive and urgent to proactive and planned, providing a reliable and efficient solution for your solar farm.
- Modules last longer by all the energy in the module.

ID 681

Link to submission

Submission Title: Extending PV module lifespan and reducing LCOE by lowering module operating temperatures

Organisation name: ITP Renewables / INNOV8PV

Geographic location: Australia, ACT

Contact name: Brett Hallam

Contact title: Senior Consultant

Contact email: bhallam@itpau.com.au

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[x]
[ ]	Other innovation	[ ]
[ ]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[ ]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 4-5

- [x] New component design
- [ ] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description:

Module temperatures will be reduced through:

1) Improved tracker operation; and **2)** Improved module design

Resources will include background intellectual property (IP), PVSyst access, a solar farm operator and tracker supplier who brings the required facilities and technical capability, additional in-house models for determining operating temperatures, prototype commercial PV modules, and local and international module manufacturers with module testing facilities and links to material suppliers.

ID 684

Link to submission

Submission Title: Elite Surface Protection

Organisation name: Nanotech Coatings
Geographic location: Australia, NSW
Contact name: John Malaspina
Contact title: CO - Founder CEO
Contact email: John@nanotechcoatings.com.au

Ask from a partner:

- [x] Technology solution
- [x] Other innovation
- [x] Current or future solar PV projects
- [x] Land for potential solar PV projects
- [ ] Potential electricity offtake
- [x] Investment
- [x] Manufacturing capability

Offer to a partner:

- [x] Technology solution
- [x] Other innovation
- [x] Current or future solar PV projects
- [x] Land for potential solar PV projects
- [x] Potential electricity offtake
- [x] Investment
- [ ] Manufacturing capability

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Types of technology/innovation: TRL: 9

- [ ] New component design
- [ ] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [x] Panel cleaning
- [ ] Asset Management
- [ ] Other

Focus Areas:

- [ ] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [ ] Other LCOE reduction
- [x] ScaleUp enablers

Solution description
Using Nanotech Coatings, the solar panels will stay cleaner for longer from Mould, Bacteria, Dirt and dust without having toclean the solar panels.

ID 674

Link to submission

Submission Title: Empowering Multi-Tenanted Communities with Renewable Energy - REIS Platform

Organisation name: Share IT Energy
Geographic location: Australia, QLD
Contact name: Hannah Watts
Contact title: Co-Founder - Business Manager
Contact email: hannah@shareitenergy.com.au

Ask from a partner:

- [ ] Technology solution
- [ ] Other innovation
- [x] Current or future solar PV projects
- [ ] Land for potential solar PV projects
- [ ] Potential electricity offtake
- [x] Investment
- [ ] Manufacturing capability

Offer to a partner:

- [x] Technology solution
- [x] Other innovation
- [ ] Current or future solar PV projects
- [ ] Land for potential solar PV projects
- [ ] Potential electricity offtake
- [ ] Investment
- [ ] Manufacturing capability

Continents of operation:

- [x] Oceania
- [x] Asia
- [x] Europe
- [x] Americas
- [x] Africa
- [x] Middle East

Types of technology/innovation: TRL: 9

- [ ] New component design
- [ ] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [x] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [ ] Other

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [x] ScaleUp enablers

Solution description
The REIS platform is an advanced energy management solution optimising solar energy use in multi-tenanted sites. It integrates with existing or new solar infrastructure, using NMI-approved metering for accurate billing. Built-in algorithms distribute and sell renewable energy alongside grid power, maximising cost savings. Our software offers real-time monitoring, predictive maintenance, and dynamic load balancing to ensure the system's optimal performance and sustainability.

ID 666

Link to submission

Submission Title: AI-Based Solar Energy Forecasting

Organisation name: Solstice AI

Geographic location: Australia, VIC

Contact name: Julian de Hoog

Contact title: Cofounder and CEO

Contact email: julian@solstice-ai.com

Continents of operation:

- [x] Oceania
- [ ] Asia
- [x] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[ ]	Other innovation	[ ]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[ ]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [ ] New component design
- [ ] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description

We apply a new type of AI to satellite imagery to forecast cloud movement. This enables highly accurate solar generation forecasting, which optimises energy market participation and increases asset utilisation. Our forecasts can be readily applied to individuals or groups of assets in any location and are made available in real-time via API or any other preferred delivery mechanism.

ID 660

Link to submission

Submission Title: Innovative Solar Energy Management Platform with Energy Auto Bidding Feature

Organisation name: SynCo Global

Geographic location: Australia, QLD

Contact name: Haoran Li

Contact title: IT Engineer/Project Manager

Contact email: harry.li@synco-global.org

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [x] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [ ] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[x]
[x]	Other innovation	[x]
[x]	Current or future solar PV projects	[x]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[ ]	Investment	[ ]
[x]	Manufacturing capability	[x]

Types of technology/innovation: TRL: 4-5

- [ ] New component design
- [ ] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

Our solution integrates solar power monitoring and AI algorithms, using smart sensors, data analysis tools, machine learning models, and NILM technology for real-time energy flow management and auto-bidding. This enables detailed analysis and distribution of energy consumption, identifying and eliminating waste to reduce overall consumption. By managing solar system performance, we ensure optimal conditions and reduced downtime, improving solar usage efficiency.

ID 683

Link to submission

Submission Title: PV Maps: AI-driven soiling prediction and automated cleaning optimiser

Organisation name: The University of New South Wales

Geographic location: Australia, NSW

Contact name: Ziv Hameiri

Contact title: Professor

Contact email: ziv.hameiri@unsw.edu.au

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[x]
[x]	Other innovation	[x]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 4-5

- [ ] New component design
- [x] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [x] Fault detection / management
- [x] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

We have developed ML-based models that use freely available data to predict soiling in any location worldwide. These models optimise cleaning by considering electrical losses, electricity selling prices, and cleaning costs. Our models support the design phase by estimating soiling losses in a specific location and determining the optimal cleaning frequency. By considering seasonal weather forecasts and changes in electricity prices and cleaning costs, the models help reduce O&M costs.

ID 653

Link to submission

Submission Title: Trinano Coating optimizes performance of every solar panel regardless of make, type, age or location

Organisation name: Trinano Technologies Pvt. Ltd.

Geographic location: India

Contact name: Dr Harsh Sethi

Contact title: CEO & Founder

Contact email: harsh_sethi@tri-nano.co

Continents of operation:

- [ ] Oceania
- [x] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[ ]	Other innovation	[ ]
[x]	Current or future solar PV projects	[ ]
[x]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 7-8

- [x] New component design
- [x] Planning / deployment optimisation
- [x] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

Our coating is applied to the top glass surface of panels, thereby increasing surface area and creating a micro-structure similar to the Amazon raintree forest. Our 0.4 micron coating, thinner than human hair, traps light and directs it to underlying silica cells, generating more power and energy.

Due to the unique microstructure, particles like dust, oil, bird droppings, etc., don't stick to coated surfaces and can be easily cleaned with high-pressure air, a soft brush, or rain. It also reduces cell temperature to prolong panel life.

ID 675

Link to submission

Submission Title: Decarbonising Remote Mines & Communities

Organisation name: Energy Developments Pty Limited

Geographic location: Australia, QLD

Contact name: Melissa Te Ahuru

Contact title: Head of Growth - Remote Energy

Contact email melissa.teahuru@edlenergy.com

Ask from a partner		Offer to a partner
☑	Technology solution	☐
☑	Other innovation	☐
☑	Current or future solar PV projects	☑
☐	Land for potential solar PV projects	☑
☑	Potential electricity offtake	☑
☐	Investment	☑
☐	Manufacturing capability	☐

Continents of operation

- ☑ Oceania
- ☐ Asia
- ☑ Europe
- ☑ Americas
- ☐ Africa
- ☐ Middle East

Focus Areas

- ☑ Balance of plant costs
- ☑ Installation costs
- ☑ Ops and maintenance
- ☑ Other LCOE reduction
- ☑ ScaleUp enablers

Overview

EDL is a pioneer in the development and operation of hybrid renewable microgrids. We have 50 power stations across Australia and are committed to decarbonising mines and remote communities. We are keen to work with companies that can help reduce construction costs and/or enhance the output of our solar facilities.

ID 678

Link to submission

Submission Title: Equans Solar & Storage AU - Large-scale solar EPC

Organisation name: Equans Solar & Storage AU (Bouygues Group)

Geographic location: Australia, NSW

Contact name: Quentin Crancee

Contact title: Senior Project Engineer - Innovation Lead

Contact email quentin.crancee@equans.com

Ask from a partner		Offer to a partner
☑	Technology solution	☐
☑	Other innovation	☐
☐	Current or future solar PV projects	☑
☐	Land for potential solar PV projects	☐
☐	Potential electricity offtake	☐
☐	Investment	☐
☐	Manufacturing capability	☐

Continents of operation

- ☑ Oceania
- ☑ Asia
- ☑ Europe
- ☑ Americas
- ☐ Africa
- ☐ Middle East

Focus Areas

- ☐ Balance of plant costs
- ☑ Installation costs
- ☑ Ops and maintenance
- ☐ Other LCOE reduction
- ☐ ScaleUp enablers

Overview

As a leading EPC focused on large-scale solar farm construction, we are always searching for new ways to improve our construction processes in regard to safety, quality and productivity.

ID 644

Link to submission

Submission Title: Greenova8 - GreenPay

Organisation name: Greenova8

Geographic location: Pakistan

Contact name: Ibrahim Afridi

Contact title: Founder/CEO

Contact email: Im.ibrahimafd19@gmail.com

Continents of operation:

- [ ] Oceania
- [x] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[x]
[ ]	Other innovation	[x]
[x]	Current or future solar PV projects	[ ]
[ ]	Land for potential solar PV projects	[ ]
[x]	Potential electricity offtake	[ ]
[x]	Investment	[x]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 4-5

- [ ] New component design
- [x] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [x] Other

Solution description

Greenova8 facilitates investment in solar photovoltaic projects, leveraging a digital platform that connects investors with sustainable energy initiatives. Our solution integrates blockchain for transparency, AI for personalised investment insights, and a user-friendly mobile app for seamless management. By democratising access to renewable energy investments, we drive down costs and scale up clean energy adoption, contributing to environmental sustainability and economic resilience.

ID 657

Link to submission

Submission Title: Increva - third-party management service for providers and resource companies for solar projects

Organisation name: Christopher Hood

Geographic location: Australia, WA

Contact name: Roy Pascoe

Contact title: Principal- Power & Electrical

Contact email: chris.hood@increva.com.au

Continents of operation:

- [x] Oceania
- [ ] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [x] Ops and maintenance
- [x] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[x]	Technology solution	[ ]
[x]	Other innovation	[x]
[x]	Current or future solar PV projects	[x]
[ ]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[x]	Investment	[ ]
[x]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: xx

- [ ] New component design
- [x] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [x] Asset Management
- [ ] Other

Solution description

As part of our capability, we investigate and collaborate with solar system providers to demonstrate a system's capabilities, cost-effectiveness, deployment efficiency, and flexibility over the life cycle. Increva provides scope definition and engineering assessments that are used to form tender packages, which clients use for contractor engagement and supplier selection for projects. We also offer project management services on behalf of owners or contractors.

ID 679

Link to submission

Submission Title: Integrated Vertical Solar System

Organisation name: Innovative Technologies Pty Ltd
Geographic location: Australia, NSW
Contact name: Jack Lyons
Contact title: Managing Director
Contact email: info@solar-shutters.com.au

Continents of operation:

- [ ] Oceania
- [x] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [ ] Ops and maintenance
- [x] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
☐	Technology solution	☐
☐	Other innovation	☑
☑	Current or future solar PV projects	☑
☐	Land for potential solar PV projects	☐
☐	Potential electricity offtake	☐
☑	Investment	☐
☐	Manufacturing capability	☐

Types of technology/innovation: TRL: 4-5

- [x] New component design
- [x] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description
Our solution consists of a non-combustible integrated modular system that fits together to securely attach any number of solar panels to the vertical wall surface area of any building. The system's central watertight connector channel securely houses the electrical wiring from all of the attached vertical solar panels and the microinverters for each solar panel, creating a safe AC system that eliminates any potential electrical short or potential electrical fire.

ID 663

Link to submission

Submission Title: Integrated Vertical Solar System

Organisation name: Innovative Technologies Pty Ltd
Geographic location: Australia, NSW
Contact name: Jack Lyons
Contact title: Managing Director
Contact email info@solar-shutters.com.au

Continents of operation:

- [ ] Oceania
- [x] Asia
- [ ] Europe
- [ ] Americas
- [ ] Africa
- [ ] Middle East

Focus Areas:

- [ ] Balance of plant costs
- [ ] Installation costs
- [ ] Ops and maintenance
- [ ] Other LCOE reduction
- [x] ScaleUp enablers

Ask from a partner:		Offer to a partner:
☑	Technology solution	☑
☑	Other innovation	☐
☑	Current or future solar PV projects	☑
☐	Land for potential solar PV projects	☐
☐	Potential electricity offtake	☐
☑	Investment	☑
☐	Manufacturing capability	☐

Types of technology/innovation: TRL: 4-5

- [x] New component design
- [x] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description
Our global “Patent Pending” system has untapped potential to offer significant amounts of renewable solar power from the vertical surface areas of buildings, providing a sustainable supplementary source of renewable electricity and reducing the usage and associated costs of main-grid electricity.

Our system incorporates functionality and aesthetics and is manufactured from non-combustible and recyclable modular material, which securely houses solar panels and electrical components.

ID 649

Link to submission

Submission Title: REplace

Organisation name: REplace

Geographic location: Israel

Contact name: Matias Sigal

Contact title: CEO & Co-Founder

Contact email: tomas.guilman@renewableenergy.place

Continents of operation:

- [ ] Oceania
- [ ] Asia
- [x] Europe
- [x] Americas
- [ ] Africa
- [x] Middle East

Focus Areas:

- [x] Balance of plant costs
- [x] Installation costs
- [ ] Ops and maintenance
- [ ] Other LCOE reduction
- [ ] ScaleUp enablers

Ask from a partner:		Offer to a partner:
[ ]	Technology solution	[x]
[ ]	Other innovation	[ ]
[x]	Current or future solar PV projects	[ ]
[x]	Land for potential solar PV projects	[ ]
[ ]	Potential electricity offtake	[ ]
[ ]	Investment	[ ]
[ ]	Manufacturing capability	[ ]

Types of technology/innovation: TRL: 6

- [ ] New component design
- [x] Planning / deployment optimisation
- [ ] Robotics / automation
- [ ] Vegetation management
- [ ] Fault detection / management
- [ ] Panel cleaning
- [ ] Asset Management
- [ ] Other

Solution description

REplace transforms renewable energy development with a one-click solution for optimal project locations, reducing the current 80% project failure rate and maximising ROI. Our advanced algorithms analyse 40+ parameters from public and proprietary sources, empowering developers to accelerate sustainable energy deployment with informed decisions.

Solar ScaleUp Challenge

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