

SEIAPI July 2025 Newsletter

RE NEWS

Sustainable Energy Industry Association of the Pacific Islands



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SEIAPI joins IRENA as a partner



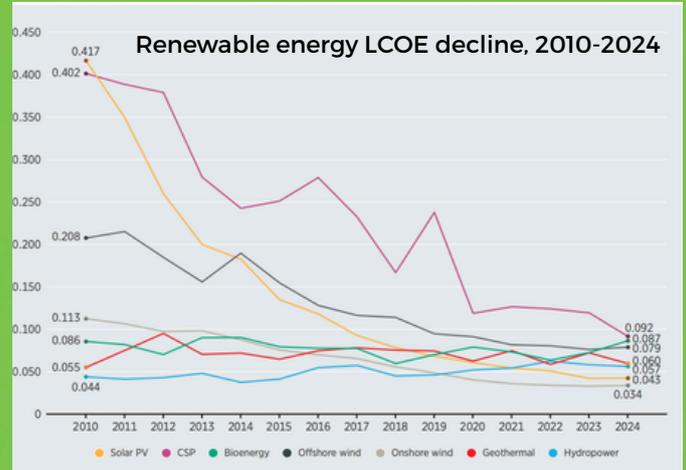
The Sustainable Energy Industry Association of the Pacific Islands (SEIAPI) is grateful to become the newest partner of the IRENA Small Island Developing States (SIDS) Lighthouses Initiative (LHI).

Supporting the energy transition and climate action efforts of SIDS remains a central pillar of IRENA's mandate. Coordinated and facilitated by IRENA, the SIDS LHI encompasses 42 SIDS and 55 partners comprising developed countries, SIDS focused initiatives, regional, international and non-profit organisations, private companies, academia, and development financing institutions which are all committed to supporting SIDS' energy transition efforts towards resilient renewables-based energy systems.

SEIAPI's efforts to promote sustainable energy through technical guidance, capacity development, and institutional support are well aligned with the objectives of the SIDS Lighthouses Initiative. SEIAPI's regional presence and active engagement with key stakeholders exemplify a collaborative approach that reinforces the aim of SIDS LHI to advance inclusive and coordinated energy transition efforts across the Pacific.

SEIAPI wishes to express its gratitude to IRENA for accepting SEIAPI as a partner.

RE Generation Costs in 2024



Solar PV once again demonstrated why it leads the global energy transition delivering electricity at an average cost of just 4.3 US cents per kilowatt hour (¢/kWh), making it 41% cheaper than the lowest-cost fossil fuel alternative.

The global energy system is undergoing a profound transformation, with renewables accounting for an increasing share of power generation. Global renewable power capacity additions in 2024 reached 582 GW – a 19.8% increase over additions in 2023. In 2024, 91% of all newly commissioned utility-scale renewable projects delivered electricity at a lower cost than the cheapest new fossil fuel-fired alternative. Onshore wind retained its position as the most affordable source of new power generation globally, with a global weighted average levelised cost of electricity (LCOE) of USD 0.034/kWh, closely followed by solar PV at USD 0.043/kWh and hydropower at USD 0.057/kWh. Meanwhile, emerging enabling technologies, such as battery energy storage systems (BESS), continue to see rapid cost reductions. In 2024, the cost of utility-scale battery storage fell to USD 192/kWh – a 93% decline since 2010 – driven by manufacturing scale-up, improved materials and production efficiencies. Nevertheless, short-term risks remain. Geopolitical tensions, supply chain bottlenecks, and trade-related barriers threaten to disrupt further cost reductions. Access to financing is challenging in capital-constrained markets. For more information, visit: <https://www.irena.org/Publications/2025/Jun/Renewable-Power-Generation-Costs-in-2024>



**SAVE ENERGY!
HARNESS RE
TECHNOLOGIES!
GO SOLAR!**

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US SEIA's new Roadmap – A lesson for emerging Solar Associations

The American Solar Energy Industries Association (SEIA) unveiled a bold new roadmap to implement a circular economy approach throughout the U.S. solar and storage industry.

As solar and storage account for a majority of the new power on America's electric grid, this plan lays out a strategic vision to prepare the industry for the challenge of responsibly managing the growing volume of equipment reaching the end of its service life.

Titled "A Vision for Implementing the Circular Economy in the Solar and Storage Industry," the roadmap details how the industry will reduce waste, strengthen supply chains, and extend the life of clean energy products — all while driving job creation and economic growth.

This roadmap includes an action plan for the solar and storage industry — in partnership with stakeholders, as well as federal, state, and local governments — to:

- Develop national standards for recycling, decommissioning, and reuse of solar and storage equipment
- Provide support and technical assistance to manufacturers in order to create demand for recovered raw materials
- Support existing and new research & development workstreams to provide solutions to barriers to implementing a circular economy
- Develop contract language to satisfy financial assurance requirements for project decommissioning
- Develop zero waste-to-landfill best practices
- Develop model siting and handling guidelines for PV recycling facilities
- Craft a framework for a national network of solar and storage equipment collection sites that increase logistical efficiencies
- Convene a first-of-its-kind sustainability conference for our industry in the U.S.
- Advocate for legislation and regulatory requirements at the local/state/federal levels to make resource recovery easier and less expensive than land disposal.
- Assess and develop recommendations for further standards that support successful permitting of projects

The roadmap also includes a timeline for execution of the action plan, with key standards expected to be in place by 2026.

Although the solar industry in the Pacific differs greatly from those of the US or Australia, the SEIA roadmap may offer some suggestions as SEIAPI develops its own plan for the future.

To view the full Circular Economy Roadmap, visit: www.seia.org/circulareconomy.

Australian funding for Palau

Australia has pledged A\$16.4m (US\$ 10.8m) to support the next phase of Palau's transition to renewable energy, with funds designated to secure a battery energy storage system for the nation's 15-megawatt solar farm, one of the largest in the Pacific region. The announcement was made by Australian Minister for Climate Change and Energy Chris Bowen during a reception hosted by the Australian Embassy in Palau. Bowen is currently visiting several Pacific nations to advance Australia's bid to co-host COP31 and to strengthen climate partnerships in the region.

For full story, visit: <https://islandtimes.org/australia-commits-15-million-to-boost-palaus-renewable-energy-project/>

Weaving light into lives of Fiji through Rural Electrification

On Koro Island, a rural coastal community in Lomaiviti, Eastern Fiji - the weaving and sale of traditional mats is more than a livelihood. With support from the Australian Government's Pacific Climate Infrastructure Financing Partnership, the United Nations Development Programme (UNDP) Fiji Rural Electrification Fund (FREF) recently launched a field mission to eight selected villages in Lomaiviti Province. The goal is to gather local knowledge and collect socio-economic and environmental data that will inform evidence-based decisions on finalizing sites for Phase 2 of the FREF project that aims to install solar mini-grids to unlock the development potential of rural Fijian communities. In Nasau village, the reality of energy scarcity affects the daily lives of people. Most households rely on a shared village generator, powered by monthly contributions from each family. "We make good money weaving mats, as there is a high demand both locally and internationally for mats from Koro," said Nanise Yaya Viribale, President of the Nasau Women's Group. "But the village generator only runs for three hours each night, which gives us very limited time to prepare voivoi (pandanus leaves) and weave together." For full story, visit: <https://www.undp.org/pacific/stories/weaving-light-lives-fiji-through-rural-electrification>



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EV charging station launched in Samoa



An Electric Vehicle (EV) Charging Station and 20 plug-in hybrid vans were launched in Samoa earlier this month, marking a step forward in the nation's push for sustainable and low-emission transport.

The charging station, located in Tuanaimato, is part of the Climate Action Pathways for Island Transport (CAP-IT) project, a regional initiative funded by the Government of Japan and implemented in partnership with the UNDP. The project supports Samoa's national climate commitments and long-term transition to low-carbon transport.

The new facility includes five DC fast chargers, each with a 60-kilowatt capacity and dual charging points, enabling up to 10 EVs to be charged simultaneously. It also houses two 22-kilowatt AC chargers, designed to meet the needs of the newly deployed plug-in hybrid vans.

Since late 2024, Samoa has received 76 EVs for government use under the CAP-IT initiative. These include sedans, SUVs, pickup trucks, utility vehicles, and the newly introduced plug-in hybrid vans.

For more information, please visit: <https://www.samoobserver.ws/category/samoa/11534>

Drop in Power bills for Tongans



A Utility Scale Solar Farm in Tonga

Households in Tonga will see a 13.1% drop in power prices (tariffs) from 1 July 2025.

The Tonga Electricity Commission (TEC) approved the new electricity tariff of T\$0.8494 per kilowatt-hour (US\$0.36/kWh), down from T\$0.9778 (US\$0.42/kWh), following a significant fall in diesel prices by 10.72% during the April–June quarter.

The tariff adjustment was based on recommendations by the Tonga Competent Authority (TCA), the government body that sets diesel prices for power generation. Tonga Power Limited (TPL), the country's sole electricity supplier, will implement the reduced rate from next month.

Currently, 22% of Tonga's electricity is generated from renewable sources, a factor considered in the revised pricing.

For full information, visit: <https://talanoaotonga.to/power-bills-to-drop-13-from-july/>

Solar repair training empowering remote Vanuatu communities

Fixim Sola, a new solar repair training course launched last month in Vanuatu's Tafea Province, is giving local communities the tools, skills and confidence to manage solar waste, improve energy access and create new job opportunities.

Launched in June 2025, 48 participants from five islands, including 18 women and four people with disabilities, took part in two weeks of hands-on learning led by the University of New South Wales in partnership with the Vanuatu Disability Promotion Advocacy Association, Vanuatu Institute of Technology, University of the South Pacific and the Vanuatu Department of Energy. For more information, visit: <https://www.aifp.gov.au/news/solar-repair-training-empowering-remote-vanuatu-communities-tackle-waste-and-create-jobs>



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6th S-Access Conference - Call for Abstracts

The 6th S-Access - International Conference on Solar Technologies & Hybrid Mini-Grids for Energy Access will take place from 8 to 10 April 2026 in Mallorca, Spain.

The Call for Abstracts will open on 1 September 2025, and professionals across the energy access sector are encouraged to begin thinking about the insights, case studies and innovations they may wish to contribute. This early announcement is intended to help potential contributors plan ahead and keep the submission window (1 to 30 September 2025) in mind. The full submission guidelines will be available in August, and further updates, templates, and outreach materials will be shared.

SEIAPI is a supporting organisation for this conference. S-Access is one of the rare international conferences that focusses on off grid systems and in particular small solar home systems and thus may be of interest to SEIAPI members..

For more information, visit: <https://energy-access-conferences.com/132050/detail/6th-international-conference-on-solar-technologies-and-hybrid-mini-grids-to-improve-energy-access.html>



International Conference

6th International Conference on Solar Technologies and Hybrid Mini-Grids to improve energy access

SAVE THE DATE

8-10 April, Mallorca, Spain

www.energy-access-conferences.com

Regional Conference



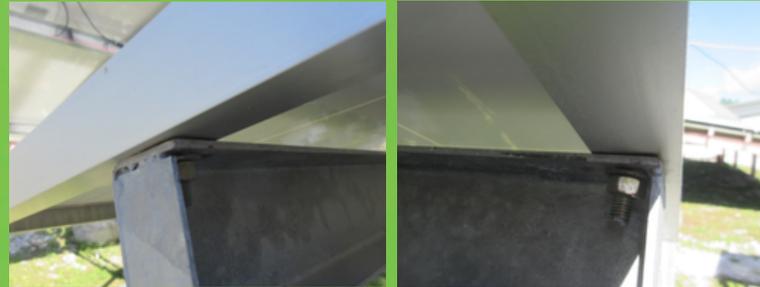
32nd PPA Annual Conference and Trade Exhibition

This year's conference will be held at the Ngarachamayong Cultural Centre, Koror, Palau from 22 September – 25 September 2025

Please visit: www.ppa.org

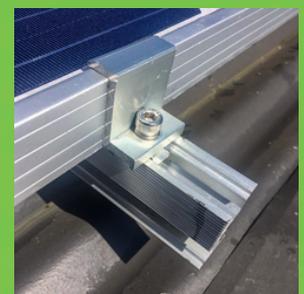
Standards Corner

In recent months, SEIAPI has been conducting webinars related to the current Australia and New Zealand Standards and we will arrange similar webinars for the USA National Electrical Code. To supplement these webinars, the newsletter includes this 'standards' corner highlighting an installation identified during a site visit in the Pacific that does not comply with relevant standards, SEIAPI guidelines or international best practices.



The above photos illustrate an aluminium PV module bolted to a galvanised array frame. Aluminium and galvanised iron are dissimilar metals which should have a galvanic isolation when in contact as dissimilar metals in contact could lead to corrosion (rubber grommets could be used for separation). There appears to be no separation material and also PV modules need to be bonded with purpose made fittings (e.g. WEEB). This system does not comply with the following standard requirements:

- AS/NZS 5033:2021 4.3.2.2.8 All array supports, brackets, screws and other metal parts are either: (a) of similar material or stainless steel to minimise corrosion; or (b) where dissimilar metals that can have a galvanic reaction are used, they are galvanically isolated
- AS/NZS 5033:2021 4.6.3 The PV array frame and/ module earthing connections and methods comply with standards requirements



The photos above show an aluminium PV module with aluminium mounting frames (i.e. uses no dissimilar metals) and there is a purpose-made fitting (e.g. WEEB) to provide module bonding to the rails. Purpose-made fittings (such as the "Washer, Electrical Equipment Bonding" or WEEB product line) should be used for PV module bonding.

For more updates, please visit <http://www.seiapi.com> or email on

info@seiapi.com or secretariat@seiapi.com for any queries and comments.

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