Sustainable Energy Industry Association of the Pacific Islands -Achievements and Objectives

(Revised: October 2025)

The Sustainable Energy Industry Association of the Pacific Islands (SEIAPI) was formed in 2010 with the mission to create an enabling environment for the growth of sustainable energy business entities and sustainable energy equipment and/or energy services in the Pacific Island Countries and Territories (PICTs). Secretariat services have been provided by Global Sustainable Energy Solutions Pty Ltd (GSES) since 2012, SEIAPI has had a part-time Executive Officer since July 2022 and a Technical Projects Officer since September 2025.

SEIAPI works closely with the Pacific Power Association (PPA) with whom we have a Memorandum of Understanding (MOU) to collaborate on developing technical resources, and an MoU with the Pacific Centre for Renewable Energy and Energy Efficiency (PCREEE). We are currently developing an MoU with the International Solar Alliance (ISA). We are a partner within the International Renewable Energy Agency (IRENA) SIDS Lighthouses Initiative to support small island developing states (SIDS) transform from a predominantly fossil-based to a renewables-based and resilient energy system.

SEIAPI Achievements

The focus of SEIAPI is to support its members, particularly in building the capacity of the emerging private-sector sustainable energy industry throughout the Pacific in expanding and improving sustainable energy services to the PICTs.

Since 2011 SEIAPI has collaborated with numerous organisations including the University of the South Pacific (USP; 2011-the present), the Pacific Power Association (PPA; 2014-present), and numerous national training organisations to provide competent technicians to improve the quality of PICT solar installations. Through SEIAPI/USP, a Renewable Energy & Energy Efficiency Training Competency Standards Advisory Committee was established, which developed five training competency standards resulting in a regional certification/accreditation scheme for PV system designers/installers. SEIAPI's program was developed in 2012 and relaunched in 2014 as a joint PPA / SEIAPI certification/accreditation program.

As far back as 2012, SEIAPI developed four technical guidelines for solar photovoltaic (PV) systems: i) Design of Off Grid PV Systems; ii) Installation of Off Grid PV Systems; iii) Design of Grid Connected PV systems and iv) Installation of Grid Connected PV systems. Accreditation required completing training based on the competency standards and the design and installation of PV systems in compliance with the standards.

Training has been both on-line and practical but it is voluntary and *ad hoc*, with a limited number of accredited technicians, due to of the lack of suitable ongoing in-country training in the region. Since 2018 GSES, a Registered Training Organisation in Australia. has been working with SEIAPI to try to establish on-going training through in-country training centres. From 2018-2020, through World Bank funding to PPA, GSES completed for SEIAPI the following:

- 4 earlier technical guidelines were updated and are freely available on-line;
- 12 new technical guidelines were developed and are freely available on-line;

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- 19 training unit standards were developed and approved by the Educational Quality and Assessment Programme (EQAP) for inclusion in the Pacific Register of Qualifications and Standards (PRQS); and
- 633 different people attended at least one of the thirty-two 4-day guideline workshops that were conducted in twelve PICTs.

In 2019, the German aid organisation Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), purchased a license for GSES resource material for in-person training courses. This allows *all* Pacific-based training centres free access to the resources (as long as the material is used only by the training centre). Agreements have been signed with the Solomon Islands National University; the College of Micronesia, Pohnpei; the Vanuatu Institute of Technology and the University of South Pacific-Pacific Technical and Further Education (USP Pacific TAFE) programme. SEIAPI is liaising with the Tonga National university to have the solar training units accredited through the Tonga National Qualifications and Assessment Board. We expect the materials may also be used by Fiji National University's TAFE.

USP Pacific TAFE Sustainable Energy Training Centre

In July 2022, GSES signed a partnership agreement with USP Pacific TAFE to offer the following three online courses: i) Grid Connected PV Systems - Design and Install; ii) Stand Alone Power Systems (Off-Grid) - Design and Install; and iii) Battery Storage Systems for Grid Connected PV System - Design and Install. About 90 trainees from 5 PICTs countries have undertaken, or are in the process of completing, at least one of the online training courses. Those who successfully complete the courses are eligible to apply for PPA/SEIAPI design accreditation.

In 2022 SEIAPI began discussions with an American philanthropic foundation resulting in an agreement to construct the Pacific Regional Sustainable Energy Training Centre at USP's Pacific TAFE campus in Suva. The centre will open in 2026. The funding includes two trainers to be trained by SEIAPI and equipment for hands-on training.

SEIAPI is working with other PICTs to identify potential trainers and training centres that can provide the practical training components of the courses in-country or to conduct the courses face to face. SEIAPI is working with them to identify funding sources for systems and testing equipment needed to support the practical training. SEIAPI is working with industry and others to identify other training to support the growth of the industry.

Additional new courses identified to date include: i) Operation and maintenance of both grid connect and off grid PV systems; ii) Utility scale storage systems; iii) Inspection of systems; and iv) Awareness course for various stakeholders (e.g. financing institutions, utilities, government departments, regulators). In 2022 SEIAPI prepared a solar training plan for 14 PICTs including practical equipment needs. This was submitted to a number of development agencies for possible support.

Training Utility Inspectors to Inspect Solar Systems in Accordance with Relevant Standards

SEIAPI has also developed PV system inspection checklists. These can be used by electrical inspectors to inspect grid-connected solar systems to ensure they have been installed in accordance with relevant standards. The current 2024 checklist covers Australian and New Zealand Standards.

In 2024 SEIAPI initiated a trial programme of training power utility inspectors on the AS/NZ standards, with one-day sessions with engineers/inspectors from the Electric Power Corporation (Samoa) Energy Fiji Limited and the Fijian Competition and Consumer Commission. SEIAPI also conducted a two- day



inspector training course at the PPA conference in Palau in 2025. SEIAPI is attempting to secure funding for a Pacific-wide programme.



SEIAPI's Current Objectives

SEIAPI's current activities include:

- Developing a strategic plan for SEIAPI to become financially sustainable within 3 to 5 years, and to consider other areas of sustainable energy in which we might be involved. .
- Promoting the Sustainable Energy Training Centre at USP Pacific TAFE.
- Developing new courses for which a need has been identified.
- Raising the profile of SEIAPI within the PICTs and work with in country and regional stakeholders to develop a workplan on the capacity building needs of individual PICT to increase the use of sustainable energy products and services and how SEIAPI can support this.
- Working with government departments, power utilities and donors to have SEIAPI guidelines endorsed, or the relevant solar installation standards from Australia/New Zealand or United States, enforced.
- Securing funding for PV inspector training.
- Raising awareness within government departments/agencies of the PPA/SEIAPI accreditation program.
- Raising awareness of the international standards acceptable for PV system components and have them mandatory so that only components/equipment tested and approved are installed within PICT PV systems (and other RE technologies).
- Determining the support required from SEIAPI for capacity building and for maintaining and expanding a sustainable RE industry.
- Supporting financial institutions in providing loans for the supply and installation of solar systems.

SEIAPI has a joint programme over the next year with the Market Development Facility (MDF) to improve our services in promoting sustainable growth in the solar PV market, particularly through the development and uptake of quality standards related to solar products