

INTRODUCTION TO SOLAR PV SYSTEMS

COURSE OBJECTIVES

With the increasing number of solar PV systems installed all around the world, including Singapore, there is the need to have more trained professionals to help carry out this growth. The training course is a basic but very informative 2-day introduction to help students understand about the workings of Solar PV energy systems and perhaps enlighten them to proceed further into developing solar PV studies and engineering.

This basic course will cover the fundamental subjects such as energy and energy efficiency in the home/business, discuss the best ways to capture sunlight and takes a look at the system design and operational workshops of these individual components that are connected together to create a solar PV system.

LEARNING OBJECTIVES

- To understand energy and apply energy efficiency in the home and business
- To understand how to measure electrical energy with an energy meter and how to apply using them with different Solar PV export topologies
- To understand solar irradiance values and how it effects solar PV generation
- To understand what Peak Sun Hours (PSH) are and how to apply to calculating solar PV energy yields
- To understand the constructional sections of Solar PV modules
- To understand the different types of Solar cell technologies and learn how these can be best selected for different operating environments
- Learn how to install solar PV modules, with understanding the key fundamentals of solar PV module orientation and tilt values

**PDU's AWARDED
BY PROFESSIONAL
ENGINEERS BOARD,
SINGAPORE.**

**APPLICABLE FOR
PRODUCTIVITY AND
INNOVATION CREDIT (PIC)
VISIT IRAS.GOV.SG FOR
MORE INFORMATION.**

16 & 17 NOVEMBER 2015

9:00AM - 5:00PM

SEAS Training Centre
9 Penang Road, #08-02 Park Mall, Singapore 238459



INTRODUCTION TO SOLAR PV SYSTEMS

PROGRAMME OUTLINE

Day 1

- Definitions of binary prefixes
- Energy overview
- Energy efficiency in the home
- Measuring electrical energy
- Solar export topologies
- What is a grid connected solar system
- Solar energy generation
- Solar photovoltaic (PV) systems

Day 2

- Solar cell technologies
- Solar PV modules
- The solar inverter
- Understanding irradiance
- Solar system installation basics
- Technical design details
- Solar energy generation (yield)
- Installing solar PV modules
- Connect solar PV modules

ABOUT THE TRAINERS



Mr. Andrew Nicholls has achieved a successful international career in solar PV systems, specializing in the technical design engineering, project managing and specific key training and solar PV industry accreditation roles.

Andrew is also an experienced trainer in the solar and renewable energy sector, training solar electricians and installers to be Clean Energy Council Australia (CEC) approved and accredited members, in both Grid connected and Off-Grid solar power systems.

Andrew is currently working at SERIS (Singapore Energy Research Institute of Singapore), located at NUS Singapore, where he is the project manager for many new solar projects in Singapore. He is also involved in the testing of many new innovative solar products and solar modules in Singapore, based on "real" outdoor testing conditions for the tropics.

RATES

EARLY BIRD (before 15 October)	NORMAL FEE	GROUP FEE
S\$530.00 (SEAS Member)	S\$590.00 (SEAS Member)	S\$520.00 (4+ delegates from 1 organization)
S\$590.00 (Non Member)	S\$800.00 (Non Member)	

* EENP member is entitled to SEAS member rate

* Fees inclusive of GST

* Payment to SEAS & Address: Please send a crossed cheque to:

the Sustainable Energy Association of Singapore, 9 Penang Road, #08-02 Park Mall, Singapore 238459

Training Partner:



Supported by:



CALL US AT 6337 9886 TO ENQUIRE

REGISTRATION FORM

Yes! I would like to register for this programme I am unable to attend but please put me on your mailing list

PARTICIPANT'S DETAILS		Number of Delegates	Fees Payable
1	Name (Dr/Mr/Mrs/Ms)		Designation
	HP No	Email	PEB <input type="text"/>
2	Name (Dr/Mr/Mrs/Ms)		Designation
	HP No	Email	PEB <input type="text"/>

ORGANIZATION'S DETAILS

Company Name	
Company Address	
Contact Name	Tel
Email	Fax