

FUNDAMENTAL OF FLOATING SOLAR PV SYSTEM



DATE : 30 – 31 MAY 2023

NOMENCLATURE : ILS-MX-ENG-GN-RE-IL-0016

ENROLL NOW

TNB Employee: <https://people-matters.tnb.com.my/>
Non-TNB: infoILSAS@tnb.com.my

COURSE OUTLINE

A systematic assessment method is required to design, procure, construct, test, commission, operation and maintenance of Floating Solar PV system. Through this training, participants will have a fundamental knowledge on the Floating Solar PV system, as well as designing, handling, test, commission, operation and maintenance of Floating Solar PV system, which can be elaborated to enhance understanding on the importance of how to designing and managing the system in an appropriate way.

COURSE OBJECTIVES

- Facilities project manager and solar designer to understand the importance of Floating Solar PV system
- Produce additional knowledge for project manager and designer on how to develop Floating Solar PV system
- Provide individual capacity building skills

WHO SHOULD ATTEND?

Solar Project Manager, Solar PV Designer/Engineer, Technical Staff & Solar PV System Owner



Duration
2 Days



Training Location
TNB ILSAS & TNBR, Bangi

DAY 1

- Module 1 – Fundamental of Floating Solar PV System
- Module 2 – Design of Floating Solar PV System

DAY 2

- Module 3 – Project Costing
- Module 4 – Construct, Test, Commission, Operation & Maintenance of Floating Solar PV System

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City and Guilds Approved Training Centre



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Program	: Renewable Energy	Trainer	: TNB Research Sdn. Bhd.
Title	: Fundamental of Floating Solar PV System	Participant	: Open
Training Fees	: RM 2,014 (Inclusive SST)		

TRAINING SYNOPSIS

A systematic assessment method is required to design, procure, construct, test, commission, operation and maintenance of floating solar PV system. Through this training, designing, handling, test, commission, operation and maintenance of floating solar PV system can be elaborated to enhance understanding on the important how to design and manage the system in an appropriate way.

COURSE OBJECTIVE

- Facilitate project manager and solar designer to develop their own floating solar PV system
- Provide participants with knowledge and know-how on how to develop floating solar PV system
- Produce additional competency for project manager and designer on how to develop floating solar PV system
- Provide individual capacity building skills

LEARNING OUTCOME

This training aims to guide participants on the acceptable knowledge of principles and practices on development of engineering design, procurement, construction, test, commission, operation and maintenance of floating solar PV system.

WHO SHOULD ATTEND?

- Solar project managers
- Solar PV designers / Engineers
- Technical staff
- Solar PV system owner

COLLABORATIVE WORK WITH

TNB Integrated Learning Solution Sdn. Bhd. - ILSAS
TNB Research Sdn. Bhd.

MODULE HIGHLIGHTS

Day 1

1. Fundamental of Floating Solar PV System
2. Design of Floating Solar PV System

Day 2

1. Project Costing
2. Construction, Test, Commission, Operation and Maintenance of Floating Solar PV System

COURSE OUTLINE

Day 1

Time	Activities	Description	Learning Outcome
08:00 - 08:30		Registration	
08:30 - 09:00		Welcoming speech & ice breaking	
09:00 - 10:00	Presentation by trainer on renewable energy scenario in Malaysia, the needs and requirement of floating solar PV system activities	Pre-Assessment Introduction <ul style="list-style-type: none"> - Renewable Energy (RE) and Green Technology (GT) scenario in Malaysia - What is Floating Solar PV System? - Why, what, when and who should implement this technology? 	<ul style="list-style-type: none"> - Able to understand the RE and GT scenario in Malaysia - Demonstrate the definition of floating solar - Describe the purpose and principles of floating solar
10:00 - 10:30		Break	
10:30 - 13:00	Presentation by trainer on the fundamental concepts of floating solar PV systems Trainer provides examples of floating solar PV system in Malaysia At the end of this session, trainer gives some quizzes for the participants to answer	Fundamental Concepts <ul style="list-style-type: none"> - Floating solar PV system (FSPV) <ul style="list-style-type: none"> o Detail concept of FSPV o Installation method - Materials and equipment use for floating solar PV system 	<ul style="list-style-type: none"> - Demonstrate basic concept of floating solar PV system - Able to identify each materials and equipment use for floating solar PV system - Evaluate and select the best option that suit floating solar PV application
13:00 - 14:00		Lunch	
14:00 - 16:30	Presentation by trainer on the designing the floating solar PV system At the end of this session, trainer gives some quizzes for the participants to answer	Introduction to Designing of Floating Solar PV System <ul style="list-style-type: none"> - Site assessment - Determine Solar PV system capacity, energy production, specific yield and performance ratio - Determine Bill of Materials for Floating Solar PV Systems 	<ul style="list-style-type: none"> - Describe steps of developing floating solar PV system - List of what should be included in the floating solar PV system
16:30 - 17:00		Break	

Day 2

Time	Activities	Description	Learning Outcome
8:30 – 10:00	Site Visit	Site Visit	Able to familiarize materials and equipment of FSPV
10:00 – 10:30		Break	
10:30 – 13:00	Trainer continues presentation on the project costing	Project costing <ul style="list-style-type: none"> - Determine Bill of Materials for Floating Solar PV Systems - Determine costing of Solar PV system Bill of Materials 	Develop a proper costing for floating solar PV system
	Presentation by the trainer on construction, test, commission of floating solar PV system	Construction, Test and Commission of Floating Solar PV System <ul style="list-style-type: none"> - Construction's installation methods requirements, standards and regulations - Testing and commissioning 	<ul style="list-style-type: none"> - Able to follow method of installations, standard requirements and regulations. - Able to perform proper testing and commissioning
13:00 - 14:00		Lunch	
14:00 - 16:30	Presentation by the trainer on operation and maintenance of floating solar PV system	Operation and Maintenance of Floating Solar PV System <ul style="list-style-type: none"> - Operating Floating Solar PV System - Maintenance Floating Solar PV System 	<ul style="list-style-type: none"> - Able to identify what is the process of operating the floating solar PV system - Able to perform preventive and corrective maintenance of floating solar PV system
16:30 - 17:00		Break and End of Training	