



# INTEGRATIVE DESIGN PROCESS & ENERGY EFFICIENCY

## COURSE OVERVIEW

A basic level course intended for adopters of Integrative Design Process. The aim is to provide a basic understanding of IDP and its link to Energy Efficiency and measurable sustainability. The lecturer will also share his valuable experience on common design mistakes and appropriate solutions to the efficiency problems.

## COURSE OBJECTIVES

On successful completion, the candidate will be able to:

- Identify the opportunities for IDP both via retrofit of existing systems and for new projects
- Understand performance metrics and international guidelines for sustainable measures
- Organise IDP for his business from conceptual design whether brown field or green field
- Avoid common mistakes in technology & design solutions and create efficient & future proven facility
- Calculate the positive influence of IDP in terms of reducing resource consumption, CAPEX, OPEX, budget & project schedule
- Increase triple bottom line benefits

**PDU AWARDED  
TO SCEMs AND  
PROFESSIONAL  
ENGINEERS**

**APPLICABLE FOR  
PRODUCTIVITY AND  
INNOVATION CREDIT (PIC)  
VISIT [IRAS.GOV.SG](http://IRAS.GOV.SG) FOR  
MORE INFORMATION.**

3 MARCH 2016

9:00AM - 5:00PM

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



# INTEGRATIVE DESIGN PROCESS AND ENERGY EFFICIENCY

## PROGRAMME OUTLINE

### Session 1: Introduction

- Why IDP and what is the difference compared to conventional design process?
- IDP and its link to 12 Pillars of Sustainability

### Session 2: Identifying Opportunities for IDP

- Testing existing business for IDP need:
  - current local standards
  - expected changes in local and international standards
  - best in class practices

### Session 3: Implementing IDP for new project

- Steps and challenges to consider
- Life examples from local and foreign projects

### Session 4: Implementing IDP for existing system (retrofit)

- Steps and challenges to consider
- Life examples from local and foreign projects

### Session 5: Case study on Integrative Design Project

- Understanding the initial metrics and need for the IDP
- Identifying best technological solutions via sample IDP Charrette
- Estimating CAPEX & OPEX savings, payback and other relevant KPIs

### Session 6: Ways to decrease a payback of CAPEX investments

- Available grants
- Banking financing & Revenue-sharing schemes

### Session 7: Carbon credits & certifications

## ABOUT THE TRAINER



### Vinod Kesava (CEO & Managing Director), Climate Resources Exchange (2014) Pte Ltd

has been involved in the carbon and renewable energy markets in Europe and Asia since 2001. Between 2003 and 2007, Vinod co-founded, designed and successfully implemented the world's first carbon exchange trading in CDP-derived emission reductions, through a unique action process. This provided a clear system of transparency and price-discovery for the carbon markets, for real, long-term and measureable carbon reduction units.

Vinod's work in the field of integrative design in his capacity as Chief Operating Officer of The GreenAsia Group has made significant headway in the past 1 year. Projects he has executed have resulted in millions of dollars in savings through CAPEX and OPEX of projects ranging from data centres, pharmaceutical and mixed development facilities for clients. Consultancy fees and retrofit works have resulted in sales close to S\$2.5 million dollars. He has also developed products for measurement of key performance metrics to determine the true measure of sustainability that brings additional measurable value to clients.

Vinod has a very keen sense of how to use a holistic approach to develop sustainable projects, and gets his ideas across to stakeholders with his very practical and down-to-earth perspective. He is well-versed in the GHG Protocol to develop sector-wide approaches in Corporate Social Responsibility and Sustainability Behavior. His interest is in identifying opportunities to reduce emissions that produce cross-border sustainable development while preserving environmental integrity.

## RATES

EARLY BIRD (before 5 February)	NORMAL FEE	GROUP FEE
S\$350 (SEAS Member)	S\$450 (SEAS Member)	S\$400 (4+ delegates from 1 organization)
S\$450 (Non Member)	S\$550 (Non Member)	

\* Fees inclusive of GST

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

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

# 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"/>
<b>ORGANIZATION'S DETAILS</b>			
Company Name			
Company Address			
Contact Name			Tel
Email			Fax