

# Three Day Solar Training Course

*Easy Warm Pty Ltd*

*Auckland 30 Sept – 2 Oct 2014*

## Lesson Plan

### Day One

#### Morning:

introduction of PV basics

- how PV works
- solar geometry (with practical exercises in site assessment)  
[resources: Solar Pathfinder/Suneye]

#### Afternoon:

temperature effects on PV performance and voltage

### Day Two

#### PV Electrical Basics

- OH&S for PV
- terms and definitions from 5033/4777
- series and parallel circuits
- isolation and overcurrent protection (5033/4509)
- cable protection (3000/5033)

### Day Three

#### Practical

- site assessment
- OH&S plan
- pre-system check on design
- install
- commission & testing (using checklist)
- review

### Extensions

#### Review

- case studies
- open forum for Q&A
- customer training
- monitoring and maintenance checks
- application of PV theory in practice
- Voc at coldest conditions
- wiring of d.c. isolators
- voltage rating of d.c. isolators

- electrical inspector training
- RCDs and mechanical protection
- self-assessments

### **Inverter System**

- voltage window
- isolation
- string and micro inverters
- modules level d.c. power optimisers

### **Practical**

- site assessment
- OH&S plan
- pre-system check on design (is it going to work?)
- connect inverter (string or micro)
- commission & testing (using checklist)