



## CASE STUDY

# Nirwana Karang Tinggi Villas

### PROJECT SUMMARY

**Location:** Kuduuh, Bali

**Description:**

Thermal Solar Hot Water System  
and PV Solar Home System

**System Size:** 3x thermal solar  
panels, 3x300 Liter Hot Water  
Heaters, 2x solar trackers, 15 PV  
panels of 180 Wp

**Completed:** December 2008



Nirwana Villas is leading the green building initiative in Indonesia and beyond. In early 2008 Nirwana Villas contracted Contained Energy (CE) to install a solar grid-feed power system and solar hot water heating system. The solar grid-feed power system uses the highest quality German SMA equipment including 15 solar PV panels of 180 Wp each, two solar trackers, Sunny Boy inverter and battery storage to power the villa day and night. The hot water system utilizes 3 systems of Apricus 20 vacuum glass tubes to heat the 300 liter systems in combination with back-up electric hook-up. The systems have been running since late 2008 with regular maintenance and inspections by CE professionals.

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