

# Renewable Energy and Environmentally Sustainable Design Case Studies

## Karl Chehade Dry Cleaners & Laundry

**Site:** Unley Park, South Australia

**Dates:**

- Design Phase Commencement: November 2004
- System Commissioned: March 2005

**Client:**

Karl Chehade

**Project Goals:**

Provide an efficient, sustainable laundry and dry cleaning operation in a central location that replaces twelve x 15 hp gas fired steam boilers in separate locations across Adelaide. (Each store required plant maintenance, servicing and operations staff).

**Project Features:**

One central, energy efficient dry cleaning plant now handles the entire load of thirteen stores (twelve of which were decommissioned to provide drop-off and pick-up facilities only).

The new plant is run with two 15hp gas fired steam boilers and a Beasley Solar gas boosted hot water system (with a total of 92kw of gas input energy, when solar energy is not used).

Thirty Beasley Solar panels and nine 315L stainless steel storage tanks provide approximately 75% solar contribution to the 92kW gas fired plant. The new factory has a (75°C) hot water requirement of 960 litres per peak hour and a total of approximately 5000 litres per day.

**Project Team:**

- David Slama, PuraHeat Systems, Adelaide

**Further Information:**

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Dry Cleaners



Solar Thermal Panels



Thermal Storage Tanks



Dryers