



GO SOLAR!

*Free Power to run your
Swimming Pool Pump*



Regen Power presents the ultra efficient, zero energy cost solar pool pumps to keep your pools sparkling clean all day long.

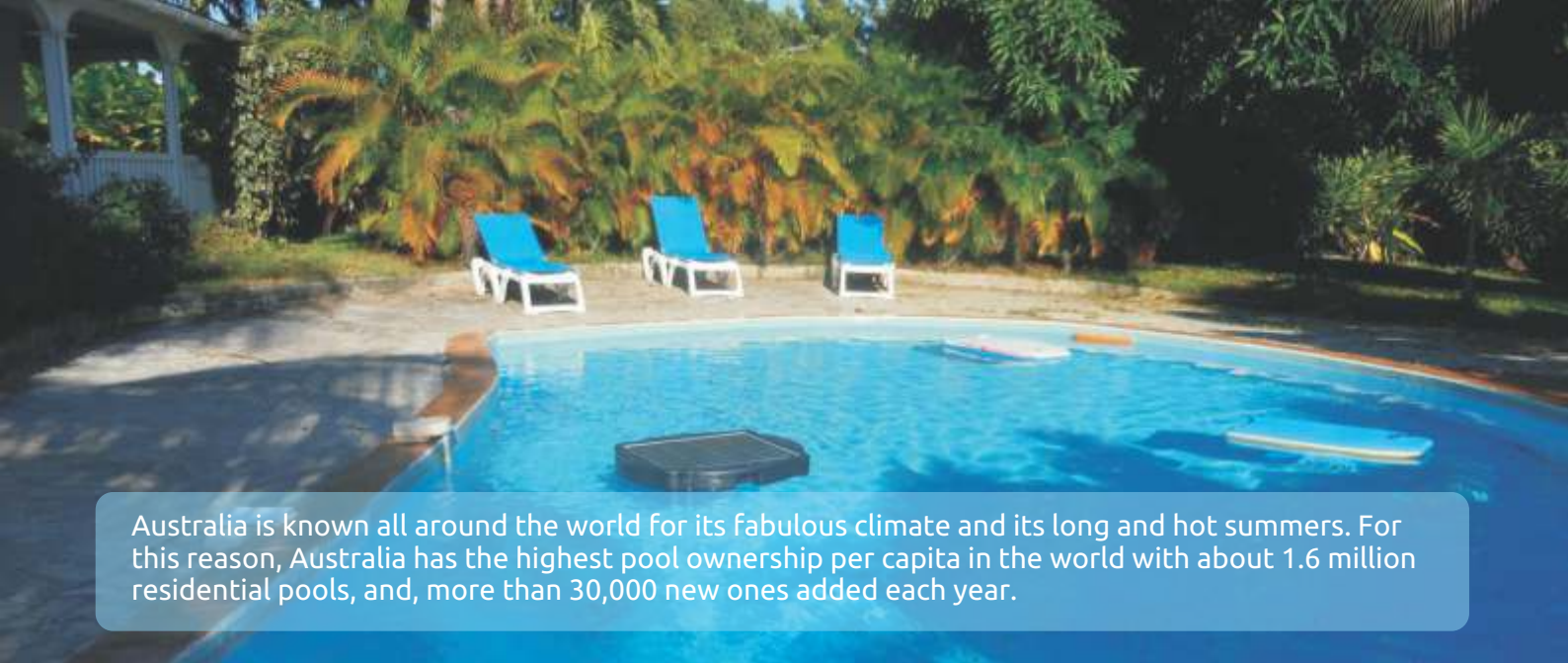
Switch now and save thousands of dollars on annual energy costs while reducing your carbon footprint.

- ✓ Zero energy cost to run all day
- ✓ Super efficient brushless DC motor
- ✓ Ultra quiet performance
- ✓ Zero emissions
- ✓ Energy Independence
- ✓ Long term product warranty

**SOLAR
POOL PUMPS**

INNOVATIVE • EFFICIENT • LOW COST





Australia is known all around the world for its fabulous climate and its long and hot summers. For this reason, Australia has the highest pool ownership per capita in the world with about 1.6 million residential pools, and, more than 30,000 new ones added each year.

A pool pump is the heart of the pools filtration system; without it, the pool would lose its sparkle and soon turn green. In households with swimming pools, the pool pump-unit is usually the largest single electricity user.



Fig 1. Conventional AC Pool Pump

Time requirements for pool filtering vary from home to home due to differences in pool volume and equipment, the amount of use and environmental factors. As a general rule, one complete water turnover every 24 hours will provide adequate filtering for a residential or a small resort swimming pool.

The average recommended running time for the swimming pool filtration system is about 8 hours in summer (heavy use), and about 4 hours in winter (hardly any usage). The annual total pump operating time is about 2200 hours. 75% of all residential pools use a standard 1HP, 240 volt (single phase) AC pump (Fig 1) consuming around 2000 units (kWh) per annum.

Monthly Energy Consumption of Various Size Swimming Pool Pumps (Kilowatt Hours)

PUMPING HRS/DAY	1/2HP	3/4HP	1HP	1-1/2HP	2HP
2	38kWh	52kWh	64kWh	98kWh	126kWh
4	79kWh	104kWh	128kWh	196kWh	252kWh
6	114kWh	156kWh	192kWh	294kWh	378kWh
8	152kWh	208kWh	256kWh	392kWh	504kWh
10	190kWh	260kWh	320kWh	490kWh	630kWh
12	228kWh	312kWh	384kWh	588kWh	756kWh

Regen Power Solar Solution

Regen Power has engineered an efficient and cost effective solar photovoltaic (PV) powered swimming pool filtration system. This can be fitted to either a new installation or retrofitted to an existing pool.

Regen's solar pool pumping system uses a high efficiency DC (Direct Current) brushless motor coupled to a centrifugal pump. The brushless DC motor solar pump is much more efficient than a conventional mains powered pool pump. The motor is connected to solar panels through a controller. The controller controls the speed of the pump and optimises the amount of water pumped based on the available solar radiation.



There are three models suitable for different pool sizes:

Regen SP 600

Regen SP 900

Regen SP 1200

SP 600 model will suit pools for up to 70,000 litres. Low voltage DC electricity is provided by a maximum of six 190 watt panels or four 300 watt solar panels through a controller that will extract maximum power from the solar panels and run the pump at the optimum speed.

Since the controller and the solar panel installation fall into the Extra Low Voltage electrical supply, a licensed electrician is not required. The system is very efficient and proven to run even on cloudy days

Features & Benefits

- ✓ Zero electricity cost
- ✓ No approval required from electricity supplier as the system is low voltage off-grid
- ✓ No need to modify existing grid connected solar system and hence no loss of revenue from feed-in-tariff such as 47c/kWh available to pre-2012 customers in Western Australia.
- ✓ Quiet and efficient operation compared to conventional pool pumps
- ✓ The solar pump can be stand-alone (for new installations) or can be retrofitted with an existing mains powered pool pump.

Case Study

A case study was done on a residential below ground 65000 litres salt water pool with automatic pool cleaner in Willetton, Western



Key Facts

DESCRIPTION	BEFORE	AFTER
Pump	1HP, 240 V Single Phase AC Mains powered	Regen SP 600 500 W Brushless DC Pump 6 x 190W solar panels
Chlorine	Produced by saltwater chlorinator - Mains powered	Produced by saltwater chlorinator - Mains powered (Optional : Solar powered)
Pool Cleaning System	Kreepy Krauly automatic pool cleaning system - Mains powered	Kreepy Krauly automatic pool cleaning system - Solar powered
Electricity Required (for pool pump)	about 250 kWh per month	None
Electricity Cost	\$80 per month	None
CO2 Emission	3000 kg per year	None



Western Australia

4/90, Catalano Circuit, Canning Vale, WA 6155.

www.regenpower.com

Authorised Dealer:

POWERSOFT SYSTEMS

12, Pillayar Koil St., Vijayshanthi Bldgs.
T. Nagar, Chennai - 600 017

Phone: (44) 2814 0386, Mobile: 94440 34160

Email: powersoft_systems@yahoo.com

Website: www.powersoftsystems.com