



HOTEL BENCHMARKING CASE STUDIES

TESTING HOTEL ENERGY EFFICIENCY

Every day of every year, hundreds of hotels, from boutique operations to large resorts, rely on significant amounts of electricity and natural gas to service tens of thousands of customers across Australia.

A series of energy benchmarking case studies just released shows the hotel industry how to maximise profits, minimise energy costs and demonstrate leadership by reducing energy use and greenhouse gas emissions—without negatively impacting on the comfort or satisfaction of guests and customers.

Since energy is a significant component of any hotel’s property operating costs, these opportunities cannot be ignored—energy savings go straight to the bottom line and are often an easier route than through increased turnover. Electricity accounts for close to 70 per cent of hotel energy use and contributes more than 90 per cent of greenhouse gas emissions. Alternatively, natural gas typically represents up to 50 per cent of energy consumption.

REAL AND PROVEN RESULTS

The hotel energy benchmarking case studies demonstrate *real and proven* results. They report on ways to improve energy efficiency—ranging from simple changes, which involve little or no capital investment, to longer-term improvements that may require some funding. Many initiatives have quick payback periods.

A sampling of case study results explains how hotels can save thousands of dollars annually by implementing changes in key service areas, including kitchen catering, pool and spa heating, water heating, air-conditioning and ventilation, and lighting power.

1. Installing efficient ice makers: capital cost of \$6 000, generating annual energy savings of 230 400 KWH, delivering annual cost savings of \$23 040.
2. Installing water efficient shower roses and a temperature setback system: capital cost of \$3 600, generating annual energy savings of 75 035 KWH, delivering annual costs savings of \$14 493.
3. Filling north facing rooms first: capital operating cost of \$3 200, generating annual energy savings of 182 400 KWH, delivering annual costs savings of \$16 416.
4. Installing timers on external lighting: capital cost of \$360, generating annual energy savings of 26 280 kWh, delivering annual cost savings of \$5 782.
5. Installing timers in hallways: capital cost of \$883, generating annual energy savings of 14 717 KWH, delivering annual costs savings of \$5 400.

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DOUG STEMP



INDUSTRY
SCIENCE
RESOURCES



energy efficiency
best practice





Simple initiatives are the difference between saving and wasting money.

DON WANDS

HOTEL ENERGY BENCHMARKING CASE STUDIES

The case studies were produced by the Commonwealth Energy Efficiency Best Practice (EEBP) program and the Australian Hotels Association, after studying six major hotels. Each case study includes benchmark and performance comparisons, a cost-benefit analysis, annual energy savings, capital costs, annual energy cost savings and return on investment.

FEATURES OF ENERGY BEST PRACTICE HOTELS

The energy benchmarking project concluded that best practice hotels: a) have systems in place to monitor, record, analyse and report on hot water, gas and electricity use; b) achieve significant and cost-effective savings by focussing on best practice energy efficiency; c) incorporate ways to increase energy efficiency into improvements and/or renovations; and d) continually look for innovative ways to optimise energy performance.

THE BOTTOM LINE FROM PARTICIPANTS

‘Over the past five years, we have reduced energy use by 10 per cent. We’ve achieved big savings from educating hotel division managers about good practice.’

Doug Stemp, Hotel Director of Engineering, Hyatt Regency Perth

‘Refurbishments are a good time to install efficient equipment. In 1999, we installed a Building Management System on air-handling units which saves over \$5 000 a year.’

David Craven, Hotel Director of Engineering, Parkroyal Surfers Paradise

‘Over the past 10 years, we have significantly reduced energy costs by routinely incorporating energy efficiency and energy management into maintenance budgets and reporting systems.’

Peter Knuth, Chief Engineer, Courtyard by Marriott Surfers Paradise Resort

‘I can count on my fingers the number of after-hours’ breakdown callouts we’ve had since we started our maintenance program.’

Tony Fioraso, Assistant Chief Engineer, Sheraton Perth Hotel

‘Simple initiatives are the difference between saving and wasting money. Every little bit helps.’

Don Wands, Maintenance Manager, Holiday Inn Darwin

‘Our dedication to maintenance keeps our energy bills down. Our talented crew are always looking for ways to save energy.’

Daphne Matangie, Hotel Housekeeper, Rydges Capital Hill, Canberra

ENERGY EFFICIENCY BEST PRACTICE

The hotels energy use benchmarking project is a partnership between EEBP and the Australian Hotels Association. EEBP supports industry sectors to identify and implement cost-effective solutions for a more sustainable and competitive future. The program has a combined focus on innovation, training and benchmarking and offers practical tools, information and assistance. EEBP is working with a growing list of industry sectors, which includes aluminium production, beverage and containers manufacturing, bread baking and milling, dairy processing, wine making, and vehicle and fleet management.

The hotel benchmarking case studies are available at no cost from:

ENERGY EFFICIENCY BEST PRACTICE

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