Energy Policy Document

For

Crerar Hotel Group

Signed

John Wilson
Managing Director

Contents

Part A: Energy Policy

Policy Statement

Crerar Hotel Group is aware of the energy requirements of each of its hotels and the associated environmental and financial impact of its operations. We recognise we have a responsibility to minimise the environmental impact of our operations and are committed at all levels of the business, (shareholders and employees), to continual improvement.

Commitment

Crerar Hotel Group is committed to:

- Purchasing energy at the most cost effective price
- Achieving best practice energy performance standards in its hotels measured against published and internal benchmarks
- Raising employee awareness through the provision of appropriate training
- Eliminating all forms of energy wastage which will result in reduced CO_2 emissions and energy costs
- Investing in new technology where this meets investment criteria (including renewable energy resources, where applicable)
- Considering life cycle energy costs when procuring new projects
- Reducing environmental emissions associated with travel (including employee travel to work, business travel and supply of goods)
- Purchasing energy efficient plant and equipment
- Compliance in the letter of the law and legal regulations and to take a proactive approach to the implications of future legal requirements.

Accountability

The responsibility for determining and ensuring implementation of the energy policy rests at board level. At each hotel, every employee is responsible for energy management with specific responsibilities held by the General Manager or 'Energy Champion'. It is the responsibility of the Energy Champion to ensure that:

- Information and advice is available on all aspects of energy management
- Energy awareness is encouraged in employee activities
- All aspects of energy wastage are investigated and rectified if avoidable

Employees are to be made aware of the cost of energy directly under their control to encourage good housekeeping practice.

Targets

For the two year period 2009/2010 we aim to:

- Provide energy awareness training for all staff at each Crerar Hotel
- Implement a formal energy monitoring and targeting system
- Implement a formal energy management structure
- Implement low cost recommendations from Carbon Trust Energy assessments
- Reduce energy costs by .....%
- Reduce CO_2 emissions by .....%

Energy performance of the hotels will be regularly audited and evaluated. Objectives and targets will be reviewed on an annual basis with the aim to continually improve on minimising the environmental impact of our operations whilst maintaining the comfort and safety of our guests and employees.

Signed

John Wilson

Managing Director Date 2009

Part B: Detailed Document

B1 Short-Term Objectives

The short-term objectives for Crerar Hotel Group are to:

- Distribute the detailed energy policy document to all Crerar Group General Managers and ensure the detail of the document is integrated within current management practices;
- Ensure that all existing and new staff read Part A: Energy Policy;
- Provide the General Manager for each hotel with training on the energy monitoring and targeting system;
- Implement a formal energy management structure within the Crerar Hotel Group;
- Provide staff with energy awareness training at each hotel and ensure that the procedures from the training and this document respectively are integrated into daily routines;
- Monitor energy management progress, through internal energy performance benchmarks (eg kWh/room sold), at head office using the energy monitoring and targeting system;
- Set energy consumption targets for each hotel;
- Review and report energy performance to General Managers on a monthly basis and provide incentives for good performance;
- Carry out an energy audit of each hotel to report on progress and identify areas of improvement;
- Implement Tier 1 capital cost investments (ie paybacks of less than 1 year). The energy efficiency measures requiring capital investment were identified through a Carbon Trust energy survey carried out at all Crerar Hotels in 2008.

B2 Medium-Term Objectives

The medium-term objectives are for Crerar Hotel Group to:

- Continue to monitor energy performance metrics for each hotel and review energy reduction targets;
- Purchase a proportion of green energy (generated from renewable sources);
- Increase staff awareness and encourage staff to provide suggestions for saving energy;
- Set and publish performance improvement targets;
- Provide regular management reports on costs and consumption;

- Establish a budget for investing in energy efficiency;
- Procure energy efficient plant and equipment;
- Implement Tier 2 capital cost investments (ie paybacks of less than 3 year). The energy efficiency measures requiring capital investment were identified through a Carbon Trust energy survey carried out at all Crerar Hotels in 2008;
- Implement a regular programme of energy audits;
- To publish energy performance figures for the hotels.

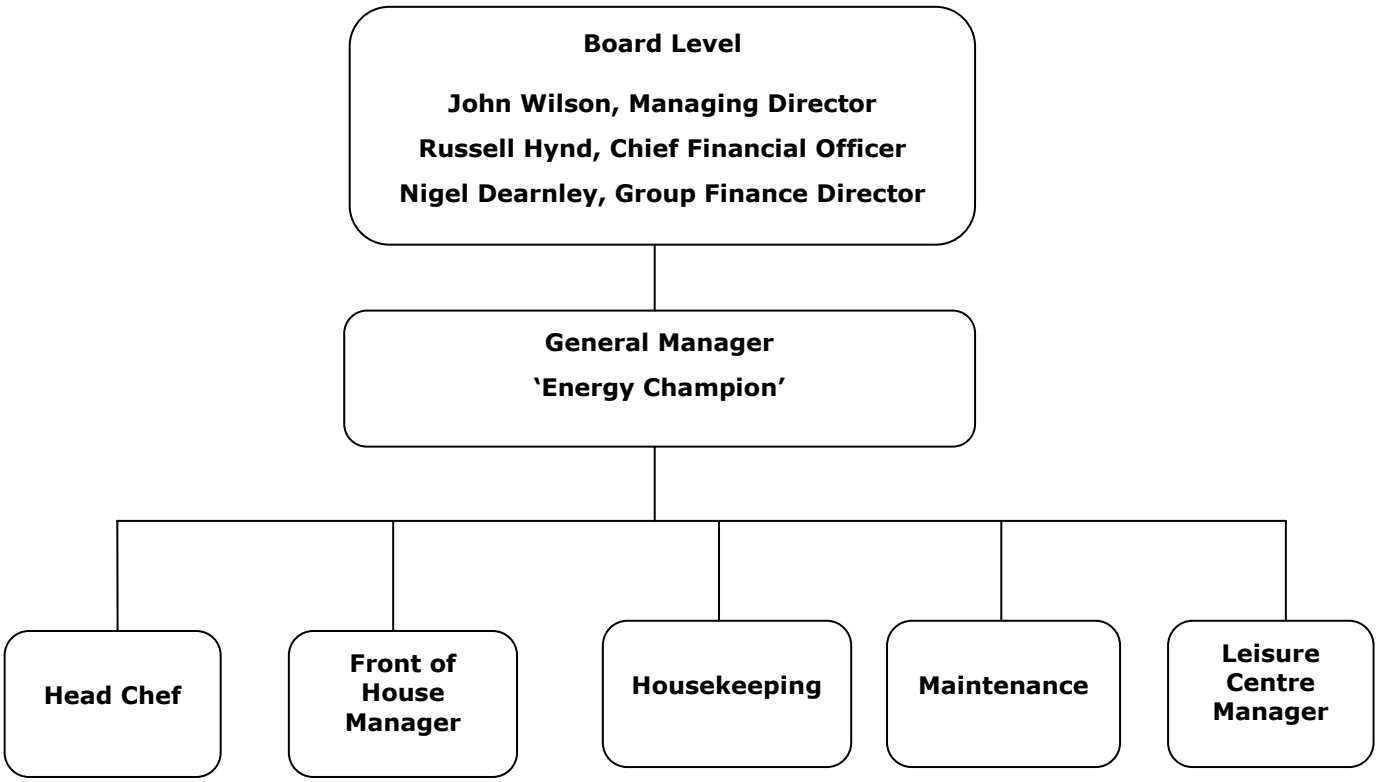
B3 Long-Term Objectives

The long-term objectives are for Crerar Hotel Group to:

- Commit organisational resources to energy management;
- Reduce energy costs and CO_2 emissions;
- Implement Tier 3 capital cost investments (ie paybacks less than 3 years);
- Consider life-cycle energy costs for all new projects;
- Minimise environmental impact of the businesses daily operations;
- Consider investing in renewable energy technologies, where feasible.

B4 Energy Management Structure

The responsibility for energy management within Crerar Hotels lies at board level with the key staff members shown in the first box. The General Manager is the 'Energy Champion' at each hotel with overall responsibilty for consumption at the site. The employees shown in the five boxes below the General Manager have a direct impact on energy management.



The Energy Champion is required to:

- Ensure the energy consumption records are kept up to date and sent to Head office on a weekly basis;
- Inform the key employees (listed above) of the weekly energy performance and their contribution to energy consumption for the business as a whole;
- Ensure staff are fully aware of energy efficiency best practice procedures for their relevant departments (refer to Appendix 1 of this document);
- Ensure staff rectify energy wastage issues identified from analysis of monitoring spreadsheet;
- Provide advice on all aspects of energy management. The Energy Champion should contact head office should he require advice on any energy issues.

A key member of staff at operations level (shown in the bottom five boxes above) should be issued with the best practice energy efficiency guidelines (refer to Appendix 1) relevant to their departments. The implementation of these procedures at operations level is key to the success of the energy management system and achieving CO_2 and energy cost reduction targets.

B5 Energy Information Systems

Energy Monitoring and Targeting Energy Consumption

Each hotel has an electronic copy of a Microsoft Excel document titled 'Energy Consumption and Performance Metric Records *hotel name*'. The document comprises the following (depending on whether they are relevant to the hotel):

- **A metrics spreadsheet.** The sheet forms a record of rooms sold, number of meals served, number of leisure centre users (if applicable) and average number of employees over a given week;
- **A water meter reading spreadsheet.**
- **An electricity meter reading spreadsheet.**
- **A gas meter reading spreadsheet.**
- **An LPG meter reading spreadsheet.**
- **An oil tank dipstick level reading spreadsheet.**

The General Manager of each hotel will receive training on the aims and objectives of the document and how to use it. The detail below provides Hotel management with an outline of how the energy monitoring system is designed to operate:

- The General Manager should appoint a responsible person who is proficient with Microsoft Excel to complete the spreadsheets in the document as required. The Financial Controller may be the person in the best position to complete the spreadsheets;
- The energy (gas and electricity) and water meter readings are to be recorded in hard copy by the on-site Maintenance Engineer on the dates provided in the document (reference to Appendix 2 shows types of energy meters). The meter readings must correspond to the meter reference numbers in the relevant spreadsheets;
- Where there is oil on-site, the Maintenance Engineer is to take a dipstick level reading of the oil tank (reference to Appendix 3 provides instruction). The dipstick reading is to be provided in metres and recorded immediately before and after every oil delivery and at least once in between deliveries;
- Where there is LPG (liquid propane gas) on-site, the Maintenance Engineer is to take a percentage reading from the tank meters. The tank reading is to be provided as a percentage and recorded immediately before and after every oil delivery and at least once in between deliveries;
- The on-site maintenance engineer is to provide (where applicable) a hard copy of the record of:
    - Electricity meter readings (in kWh) corresponding with meter reference numbers from the spreadsheets;
    - Natural Gas meter readings (in cubic ft) corresponding with meter reference numbers from the spreadsheets;

- LPG tank levels (in percentage) corresponding with tank reference numbers from the spreadsheets;

- Dipstick readings (in metres) corresponding with tank reference numbers from the spreadsheets;

- Water meter readings (in cubic metres) corresponding with tank reference numbers from the spreadsheets;

The person (eg Financial Controller) updating the Microsoft Excel document titled 'Energy Consumption and Performance Metric Records *hotel name*' is to input the figures in the relevant spreadsheets for the dates provided.

- The Financial Controller is to input the rooms sold, number of meals served, number of leisure centre users (if applicable) and average number of employees over the week specified in the Microsoft Excel document titled 'Energy Consumption and Performance Metric Records *hotel name'*:

The document is to be completed on a weekly basis and sent to Russell Hynd, Chief Financial Officer for Crerar Hotels on completion. The file name of the Microsoft Excel document ***must not be changed*** because it cross references a Microsoft Excel document titled 'Energy Monitoring Sheet *hotel name*' which will be kept at Head Office and used to monitor each hotel's energy performance.

The data collected will be compared against the performance metrics recorded by the hotel eg rooms sold, number of leisure centre users etc and reported to each General Manager. The performance indicators will enable General Managers (or Energy Champions) to identify areas of energy wastage and prevent recurrence.

B6 Policy and Guideline Notes on Energy Management of Specific Areas

Reference to Appendix 1 provides Energy Management Best Practice Guidelines for each department within the Hotel and should be read in conjunction with Section B5. The Energy Management Best Practice Guidelines should be printed and provided to a responsible staff members within each department. The responsible person should ensure that all staff within their respective departments is made aware of energy management best practice guidelines and that they are incorporated within daily routines.

B6.1 Lighting

It is the Crerar Hotel Group's policy that:

- All lights in guest bedrooms are to be switched off once housekeeping have cleaned the rooms;
- Employees use their judgment to switch off artificial lighting in areas where there is a high level of natural light during the day. This decision must not affect occupancy comfort;
- Lights are switched off in unoccupied areas, where there are no health and safety issues, at night;
- Lamp shades are cleaned regularly by staff;
- External lighting should be switched off during the day.

B6.2 Heating

It is the Crerar Hotel Group's policy that:

- All bedroom windows are to be closed when a room is unoccupied and the heating is on;
- All bedroom towel rails are to be switched off when the room is unoccupied;
- Room temperatures, where there is a room thermostat or thermostatic radiator valve, are to be maintained within the guideline parameters discussed in Appendix 1 so long as occupancy comfort is not adversely affected;
- Electric heaters are set to frost protection or low heat if the room is to be unoccupied. The Housekeeping staff must communicate with the Front of House Manager to identify when a room is to be occupied before switching the electric heating on;
- Heating timeclocks are optimised to ensure unnecessary heating of areas;

B6.3 Hot Water

It is the Crerar Hotel Group's policy that:

- Electric immersion heater timeclocks are optimised to ensure unnecessary heating of water.

B6.4 Air Conditioning

It is the Crerar Hotel Group's policy that:

- A room is not being heated when air conditioning is switched on;

B6.5 Appliances

It is the Crerar Hotel Group's policy that:

- TVs are switched off at the mains or on units themselves when a room is unoccupied. The units must not be left on standby;
- Fridges storing non perishable goods such as beers and soft drinks are switched off at night.

B6.6 Catering

The kitchens in hotels are large energy consumers requiring electricity and gas or LPG to power the equipment. Energy efficiency publications estimate that up to 40% of the energy used in kitchens is lost as heat in the kitchen. There are detailed best practice energy management guidelines for catering staff to follow in Appendix 1. However, it is Crerar Hotel Group's general policy that catering equipment is switched off unless it is in use.

B6.7 Leisure Centres and Spas

It is the Crerar Hotel Group's policy that:

- Pool water temperatures are maintained at around 28°C/29°C with pool hall air temperatures maintained at 1°C above the pool water temperature;
- Spas water temperatures are maintained at 37°C;
- Spa pool covers are used when the spa is not in use;
- Steam rooms and saunas are switched off when not in use during known quiet periods;
- Backwashes are carried out according to the pressure drop across the filters and the corresponding manufacturer guidelines;
- Electronic gym equipment is switched off at cease work.

B6.8 Front of House

It is the Crerar Hotel Group's policy that:

- When occupancy is low all of the occupied rooms are in the same location of the hotel where energy in unoccupied rooms can be managed more efficiently;
- Front of house staff inform housekeeping as soon as guests check out so that all energy consuming equipment can be switched off as soon as practicable;
- Lobby main entrance doors are kept closed in winter;

Part C: Guest Displayed Policy

Crerar Hotel Group is aware of the energy requirements of each of its hotels and the associated environmental and financial impact of its operations. We recognise we have a responsibility to minimise the environmental impact of our operations and are committed at all levels of the business, (shareholders and employees), to continual improvement.

We would be grateful if you could contribute to reducing the CO_2 emissions associated with our operations by:

- Switching off TVs and lights when you leave your rooms;
- Switching off taps and showers where possible;
- Re-using towels where possible;
- Showering before using the swimming pool and spa.

Signed

John Wilson
Managing Director

Date 2009

Appendix 1 Energy Management Best Practice Guidelines

Kitchen

1. Determine the preheating time for ovens, grills, fryers & other cooking equipments. Generally speaking 10 to 20 minutes should be sufficient.

2. When preheating ovens, set the thermostat at the desired temperature. Ensure thermostat controls are operating properly.

3. Determine cooking capacity of ovens. Use a smaller more efficient oven where possible.

4. Use additional fryers, ovens, grills etc only during peak hours.

5. Load and unload ovens quickly and safely. If an oven door is kept open for a second it loses approximately 1% of its heat.

6. Use pot lids while cooking.

7. Pots must be larger than the cooking range burner.

8. Turn off cooking and heating units that are not needed.

9. Oven should not be opened during operation. Food will cook faster and lose less moisture if oven is kept closed.

10. Frozen food should be thawed in refrigerators. It will reduce power demand on the refrigerator.

11. When using gas range for full heat condition the tip of the flame should touch the bottom of the pan. Yellow flame is the indication of inefficient incomplete combustion and wastage of LPG/Gas. Burners and pilots lights should be cleaned on a regular basis. Adjust gas gas-air mixtures if the flames are still yellow.

12. A blue cone with a distinct inner cone is optimum.

13. Clean the base of pots and pans to ensure there is no carbon build up at the bottom.

14. Placing foil under range burners & griddles will improve the operational efficiency.

15. Fryers need to be cleaned & oil filtered at least once a day.

16. Arrange to have broken door hinges and cracks of oven doors repaired immediately.

17. Turn off rotary toaster when not in use.

18. Use hot water only when necessary.

19. Where there is manual dish washing fill the sink for washing kitchen utensils instead of running hot water.

20. Do not use dishwasher until a full load of soiled dishes is available.

21. Turn-off lights in the walk-in refrigerators and freezers.

22. Ensure refrigerator doors are tightly closed after use.

23. Allow hot foods to air cool before placing them in refrigerators.

24. Do no store items in front of refrigerator evaporators or condensers.

25. Ensure refrigerators and walk-in chills are fully stored. Fully stored refrigerators operate more efficiently than partially stored refrigerators.

26. Ensure foods requiring refrigeration are promptly placed in refrigerated storage after delivery.

27. Turn off supply and exhaust fans when they are not in use.

28. Report leakage of gas immediately.

29. Record all equipment breakdowns to establish were inefficient equipment exists.

30. Turn on equipment only when required and make sure all equipment with the exception of refrigeration is turned off at night.

31. Ensure equipment and door seals are clean and free of debris to prevent energy wastage.

32. Equipment should be turned on at specific time to a specific temperature and turned off at times when not needed.

33. Clean heating elements at least weekly, or daily if the hotel does a high volume of frying.

34. Cook foods in least volume possible to avoid unnecessary energy wastage.

35. Do not turn on gas burners until you are ready to cook.

36. If possible, fill pots and pans according to capacity. Using a large pot for cooking a small quantify of food will consume more energy.

37. Use flat bottom pots and pans for maximum heat transfer.

38. Turn down heat as soon as food begins to boil and maintain liquids at a simmer.

39. Clear spillages immediately to avoid build up of carbon deposits which will adversely affect equipment efficiency.

40. Always try to use roasting and baking oven to full capacity for optimum use of heat. If possible wait until the oven is loaded up to its optimum capacity prior to switching on.

41. Avoid frequent opening of refrigerator doors. Planned door opening will save energy.

42. Do not allow frosting on refrigerator coils to save energy.

43. Using hot water for cooking consumes less energy as compared to cold water.

Front of House

1. When occupancy is low, front of office should provide rooms by location. In winter rooms on the north side of buildings will be colder. Rooms close to heat source should also be avoided.

2. Rooms which are unoccupied should set heaters to frost protection in winter and turned off in summer. ½ to 1 hour before guests occupy a room (this duration will be dependent on the hotel and location) the heating should be activated (by room thermostat or thermostatic radiator valve) The Front of House Manager is required to communicate these requirements with House Keeping staff members.

3. Lower all light levels (or switch off where possible) during late night and day light hours.

4. Lobby main entrance doors should be kept closed in winter conditions.

5. During daylight hours reduce the lighting load in the lobby, public areas etc to make full use of natural daylight.

6. During low occupancy period try to block complete floors. If this is not practicable, attempt should be made to block as far as possible total wings of individual floors.

7. As soon as guests check out, Front of House should inform Housekeeping so that all lights and TVs and switched off, and heaters are switched to frost protection in winter (or off in summer) in vacant rooms.

Housekeeping

1. Turn off guest room lights when rooms are unoccupied.
2. Do not leave water taps running.
3. Use minimum artificial lighting when making up and cleaning rooms; use natural light wherever possible.
4. Turn off lights in laundry rooms and storage rooms when not in use.
5. Clean lamp shades as lamps give more light with clean lampshades.
6. Clean walls and ceilings for better light reflection.
7. Switch TVs when rooms are unoccupied.
8. Switch heaters in unoccupied rooms to frost protection in winter.
9. Switch heaters off in unoccupied rooms in summer.
10. Close windows in unoccupied rooms in winter.
11. Close curtains in unoccupied rooms in winter.
12. Communicate with Front of House to identify room occupancy in order to manage energy use in each room.

Laundry

1. Turn off lights when not in use.
2. Operate washing machines at full load; partial loads may require the same amount of water as full loads.
3. Do not leave water taps running.
4. Reduce hot water temperature on washing machines to 30C where possible.
5. Operate tumble dryers at full load.
6. Reduce time between loads to prevent tumble dryers from cooling down.
7. Periodically clean exhaust duct for lint and dust.

Maintenance

1. Turn off heating, ventilation and air conditioning plant in all unoccupied spaces.
2. Lower hot water temperature for space heating when outside air temperature rises.
3. Stop all refrigerant leaks.
4. Check thermostats for correct functioning.
5. Avoid multiple boiler operation. One boiler operating at 80% is more efficient than two at 40%.
6. Insulate all pipework and valves.
7. Draught proof all exterior windows

Leisure Centres and Spas

General

1. Document frequent measurement of space and water temperatures and compare against a schedule of preferred conditions
2. Check heating controls and room thermostats are correctly set
3. Switch of lights if there is sufficient daylight
4. Close windows and doors in heated areas
5. Avoid obstruction in front of air ducts and radiators
6. Switch off lights in empty spaces where it is safe to do so

Pool Areas

7. Check the pool hall air is 1C above the water temperature
8. Check spa pools are covered and sauna and steam rooms are off
9. Check that hoses used to rinse poolside areas are fully turned off

Fitness Rooms

10. Ensure air conditioning is switched off at the end of the day
11. Ensure air conditioning is switched on as late as possible to meet comfort conditions
12. Turn off all equipment overnight

Changing Rooms and Toilet Areas

13. Check hot water temperatures
14. Turn off fans and lights at the end of the day
15. Turn off unused taps or showers at regular intervals
16. Turn off fans and lights at the end of the day
17. Turn off unused taps or showers at regular intervals

Maintenance

18. Check location and operation of thermostatic controls
19. Check for draughts and damage to windows, window frames and doors
20. Repair dripping taps/showers or pipework
21. Check for damage to walls, fixtures and fittings, including damp/mould growth and metal corrosion

Check exhaust and inlet air temperatures where heat recovery is installed

Appendix 2 Types of Energy Meters

Electricity Meters

All hotels have Code 5 electricity meters installed (refer to figure 1 below). These meters, connected by a telephone line to the hotel's electricity supplier, download electricity consumption every half-hour each day. This data will be collected and analysed at Head Office.

Figure 1

Reference to figure 2 below shows a three-phase electromechanical induction meter which is required to be manually read. Typical locations for these types of electrical meters are separate staff accommodation blocks or outbuildings separate from the main hotel. The units of measure are normally in kWh.

Figure 2

Natural Gas Meters

Reference to figure 3 below shows a gas meter which is required to be manually read. The units of measure are in cubic feet (ft^3) for each hotel with a gas meter.

Figure 3

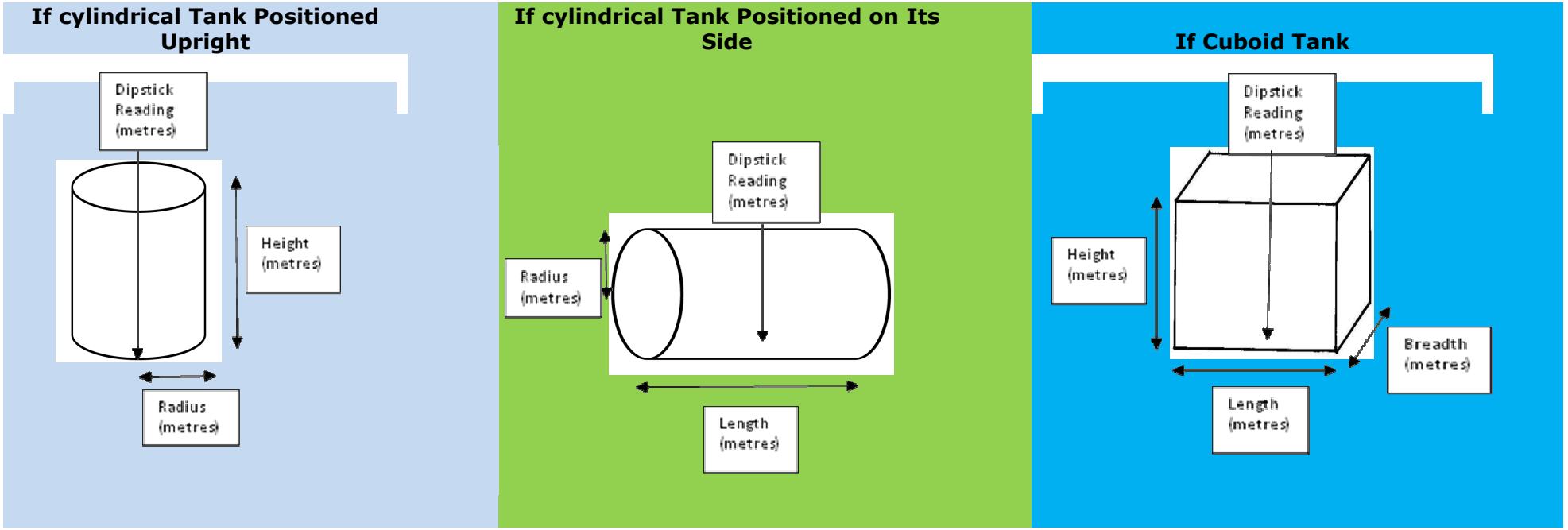
B3.3 Oil Meters

There are currently no oil meters on any of the tanks at any of the hotels. Manual dipstick readings are currently the only form of recording oil consumption.

B3.4 LPG Meters

There are currently no LPG meter installed on the tanks which provide a percentage level of tank capacity. Manual readings of LPG tank meters are the only form of recording consumption.

Appendix 3 Illustration of Dipstick Reading Requirements



Appendix 4 Thermal Comfort

The table below provides guideline air temperatures for rooms in a hotel:

Room Type	**Temperature (C)***
Bars, lounges	20 – 22
Guest bathrooms	26 – 27
Guest bedrooms	19 – 21
Restaurants and dining rooms	22 – 24
Corridors	19 – 21
Kitchens	16 – 18
Laundries	16 – 19

*Source: Adapted from Environmental Design CIBSE Guide A, 2006

The Energy Champion should try to adhere to these guidelines, whilst maintaining occupancy comfort, bearing in mind that for ***every 1°C increase in space heating temperatures there is an 8% increase in energy consumption***. However, it is acknowledged that:

- The energy required to achieve the guideline temperatures above may vary significantly depending on the construction and insulation levels in each hotel;

- Human comfort levels are complex and depend on many variable conditions, some of which the Energy Champion has no direct control over.

The technical definition of thermal comfort conditions can be difficult to understand and, hence, a simplified definition of thermal comfort conditions is provided below.

The air temperature is the only internal climatic condition which can be controlled in the hotels. However, there are many other factors which make up a person's sensation of thermal comfort (or a feeling of warmth) which are as follows:

- Air temperature
- Radiant temperature due to the temperature of surrounding surfaces
- Air movement
- Humidity
- Personal human factors such as clothing and activity