



**EUROPEAN COMMISSION**

**DIRECTORATE-GENERAL FOR ENERGY**

**SAVE II Programme**



**Energy Savings by CHCP plants in the Hotel Sector**

## **Energy Audits form and Checklist for Energy Saving Measures in Hotels**

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## CONTENTS

|  |          |
|--|----------|
| <b>1. Short audit form .....</b>                               | <b>3</b> |
| Main characteristics .....                                     | 3        |
| <b>2. Checklist for Energy Saving Measures in Hotels .....</b> | <b>9</b> |

# 1. Short audit form

## Hotel

Name: \_\_\_\_\_

Address: \_\_\_\_\_

## Owner of the building

Contractor:

Other:

Contact person for energy systems: \_\_\_\_\_

Telephone number: \_\_\_\_\_

## Main characteristics

This short audit form is used to identify the hotel characteristics and electrical, heating, cooling and domestic hot water systems installed.

Known future changes in installations and/or energy use etc can be noted separately.

Such factors as the size of heating, cooling and electrical loads, the temperatures at which heat and cooling are required, site for locating the CHCP etc can be examined and determined on the basis of this form. The identification of which load to use, and an accurate determination of this load and its variation, are the most important steps in the design of CHCP installation.

## Type (related to guests)

Business:

Tourism:

## Occupation

Occupation rate, % \_\_\_\_\_

**Class(related to quality)**

Highest(5\*)

High(4\*)

Average(3\*)

**Size**

Number of rooms: \_\_\_\_\_ Average room size, m2: \_\_\_\_\_

Total covered area, m2: \_\_\_\_\_

Public general service and service area, m2: \_\_\_\_\_

**Special service**

Climate cooling: Total size of climatized areas: \_\_\_\_\_

Swimming pool: Area, m2: \_\_\_\_\_ Period of use: \_\_\_\_\_

Restaurant: Places: \_\_\_\_\_ Use for non guests: \_\_\_\_\_

Average meals/month: \_\_\_\_\_

Laundry: Yes  No

**Energy sources, primary energy bought (used) per year, MWh**

| Energy           | Energy per year, MWh |
|------------------|----------------------|
| Electricity      |                      |
| District heating |                      |
| Light oil        |                      |
| Natural gas      |                      |
| Other:           |                      |

**Use of water, per year**

Use of water, total m3: \_\_\_\_\_

There of, for domestic hot water, m3 \_\_\_\_\_

**Climate according to geographical location, just for internal use**

Heating degree-days: \_\_\_\_\_

Outside average temperature in summer: \_\_\_\_\_

## Energy Data

### Electricity

The following information can usually be found on your electricity bills.

Installed Electrical Power, kW: \_\_\_\_\_

Electrical Demand (Max demand), kW: \_\_\_\_\_

### Electricity consumption

| Month        | Demand<br>kW | Consumption<br>kWh |
|--------------|--------------|--------------------|
| Jan.         |              |                    |
| Feb          |              |                    |
| Mar          |              |                    |
| Apr.         |              |                    |
| May          |              |                    |
| Jun.         |              |                    |
| Jul.         |              |                    |
| Aug.         |              |                    |
| Sep.         |              |                    |
| Oct          |              |                    |
| Nov.         |              |                    |
| Dec.         |              |                    |
| <b>Total</b> |              |                    |

**Installed systems within the hotel, electrical power by end-use/equipment**

(HVAC; Swimming pool heater; Domestic Hot Water, Climate cooling, refrigerator etc)

| <b>Unit no</b> | <b>Heating-, cooling-, water- and electrical system</b> | <b>Power, kWe</b> | <b>Installed year</b> | <b>Used for:</b> | <b>Meters installed Yes/No</b> |
|----------------|---|-------------------|-----------------------|------------------|--------------------------------|
| 1              |   |                   |                       |                  |                                |
| 2              |   |                   |                       |                  |                                |
| 3              |   |                   |                       |                  |                                |
| 4              |   |                   |                       |                  |                                |
| 5              |   |                   |                       |                  |                                |
| 6              |   |                   |                       |                  |                                |
| 7              |   |                   |                       |                  |                                |
| 8              |   |                   |                       |                  |                                |
| 9              |   |                   |                       |                  |                                |
| 10             |   |                   |                       |                  |                                |
| 11             |   |                   |                       |                  |                                |

**Thermal energy consumption for the year**

Installed thermal power (total), kW

Installed power by end-use/equipment, kW:  
(HVAC; Swimming pool heater; Domestic Hot Water, etc)

**1st Thermal energy source**

Energy source: \_\_\_\_\_ Unit: \_\_\_\_\_

Produced energy used for: \_\_\_\_\_

**Month consumption, MWh:**

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| Jan. | Feb. | Mar. | Apr. | May. | Jun. |
|      |      |      |      |      |      |
| Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|      |      |      |      |      |      |

Total consumption, MWh: \_\_\_\_\_

**2nd Thermal energy source**

Energy source: \_\_\_\_\_ Unit: \_\_\_\_\_

Produced energy used for: \_\_\_\_\_

**Month consumption, MWh:**

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| Jan. | Feb. | Mar. | Apr. | May. | Jun. |
|      |      |      |      |      |      |
| Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|      |      |      |      |      |      |

Total consumption, MWh: \_\_\_\_\_

**3rd Thermal energy source**

Energy source: \_\_\_\_\_ Unit: \_\_\_\_\_

Energy used for: \_\_\_\_\_

**Month consumption, MWh:**

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| Jan. | Feb. | Mar. | Apr. | May. | Jun. |
|      |      |      |      |      |      |
| Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|      |      |      |      |      |      |

Total consumption, MWh: \_\_\_\_\_

**Principal schemes and manuals to be enclosed for the individual systems:**

Schemes of installation, regulation equipment and a flow scheme. A copy of the manual if possible.

