

SECTION E: ENERGY CONSUMPTION

The following questions refer to the energy end uses in this building. Questions consider different energy sources and equipment, and their use in heating and cooling systems.

E1: Here is a list of various fuels or energy sources. During the 2000 calendar year, which of these fuels or energy sources were used to supply energy to this building?
(Mark all that apply)

- 01 - Electricity
- 02 - Natural Gas
- 03 - Fuel/heating Oil
- 04 - Diesel or Kerosene
- 05 - Bottled gas, Liquified Petroleum Gas or Propane
- 06 - District Steam piped into the building from a central plant or utility
- 07 - District Hot Water piped into the building from a central plant or utility
- 08 - District Chilled Water piped into the building from a central plant or utility
- 09 - Wood
- 10 - Coal
- 11 - Solar thermal panels that use sunlight to heat fluids
- 12 - Others – Please specify _____

E1a: In 2000, was there any direct generation of electricity at this site (e.g. solar panels, wind or diesel generators) or electricity generated as a by-product of another process (e.g. co-generation, steam plants)?

This does not include the emergency generator.

- 1 - Yes
- 2 - No  Go to Question E2

E1b: What percentage of the electricity used in this building was generated on site in 2000?
|_____|% (Record percentage of electricity generated on site)

E1c: In 2000, which of the following was the MAIN energy source used to generate electricity for this building?

- 1 - Natural Gas
- 2 - Fuel/heating Oil
- 3 - Diesel or Kerosene
- 4 - Bottled gas, Liquified Petroleum Gas or Propane
- 5 - District Steam piped into the building from a central plant or utility
- 6 - Coal
- 7 - Wind
- 8 - Solar panels
- 9 - Others – Please specify _____

E1d: In 2000, approximately what percentage of the energy from this source was used in on-site generation of electricity?

|_____|% (Record percentage of energy source used to generate electricity)

E2: In 2000, which of the following energy sources were used for heating?
(Mark all that apply)

- 01 - Electricity
- 02 - Natural Gas
- 03 - Fuel/heating Oil
- 04 - Diesel or Kerosene
- 05 - Bottled gas, Liquified Petroleum Gas or Propane
- 06 - District Steam piped into the building from a central plant or utility
- 07 - District Hot Water piped into the building from a central plant or utility
- 08 - Wood
- 09 - Coal
- 10 - Solar thermal panels that use sunlight to heat fluids
- 11 - Others – Please specify _____
- 12 - None, the building was not heated in 2000 ➡ Go to question E3

E2a: In 2000, which energy sources you mentioned in question E2 were used as the MAIN energy source for heating, that is the energy source used to heat most of the square footage in this building, most of the time?

- 01 - Electricity
- 02 - Natural Gas
- 03 - Fuel/heating Oil
- 04 - Diesel or Kerosene
- 05 - Bottled gas, Liquified Petroleum Gas or Propane
- 06 - District Steam piped into the building from a central plant or utility
- 07 - District Hot Water piped into the building from a central plant or utility
- 08 - Wood
- 09 - Coal
- 10 - Solar thermal panels that use sunlight to heat fluids
- 11 - Others

E2b: In 2000, what percentage of the gross area of this building was heated to at least 10°C (50°F)?

(If you do not know the exact value, please indicate the best estimate)

|_____|% (Record percentage of area)

E2c: Here is a list of different types of equipment that may be part of a building's heating system. Please indicate the equipment that was used for heating in this building in 2000. (Mark all that apply)

- 1 - Furnaces that heat air directly, without using steam or hot water? (similar to a residential furnace)
- 2 - Heat pumps (other than packaged units)? *(These are devices that heat the interior of a building by absorbing heat from the outside air. Include ground or water source heat pumps. They may stand alone or be combined with another type of equipment. In warmer weather, they can also be used to cool a building.)*
- 3 - Individual space heaters, free standing or mounted in walls, ceiling, or windows? *(This includes portable heaters, hanging unit heaters, heating panels, electric baseboards, perimeter heaters that contain heating elements, wood stoves, and fireplaces.)*
- 4 - District steam or hot water piped in from outside the building?
- 5 - Boilers inside the building that produce steam or hot water? *(Also include boilers just outside the building that are primarily associated with it.)*
- 6 - Packaged heating units, often mounted on the roof or on a slab beside the building? *(These are also known as self-contained units. They contain heating equipment as well as fans, and may or may not include air conditioning equipment.)*
- 7 - Other heating equipment?
Please specify _____

E2d: Which equipment you mentioned (in question E2c) was the MAIN heating equipment for heating the most floor space in 2000?

- 1 - Furnaces that heat air directly, without using steam or hot water?
- 2 - Heat pumps?
- 3 - Individual space heaters?
- 4 - District steam or hot water piped in from outside the building?
- 5 - Boilers inside the building that produce steam or hot water?
- 6 - Packaged heating units?
- 7 - Other heating equipment?

E3: Which, if any, of the following energy sources was used in 2000 for domestic hot water heating?

- 01 - Electricity
- 02 - Natural Gas
- 03 - Fuel/heating Oil
- 04 - Diesel or Kerosene
- 05 - Bottled gas, Liquefied Petroleum Gas or Propane
- 06 - District Steam piped into the building from a central plant or utility
- 07 - District Hot Water piped into the building from a central plant or utility
- 08 - Wood
- 09 - Coal
- 10 - Solar thermal panels that use sunlight to heat fluids
- 11 - Other – Please specify _____
- 12 - Not applicable (No domestic hot water in this building)

E4: In 2000, what percentage of the building gross area was cooled by a cooling system (e.g. air conditioned)?

_____ % (Record percentage of area)

- 1 - 0% - The building did not have air conditioning ➔ Go to Question E5

**E4a: Which of the following energy sources was used in 2000 for air conditioning?
(Mark all that apply)**

- 1 - Electricity
 2 - Natural Gas
 3 - Fuel/heating Oil
 4 - Diesel or Kerosene
 5 - Bottled gas, Liquified Petroleum Gas or Propane
 6 - District Chilled Water piped in the building from a central plant or utility
 7 - Others – Please specify _____

E4b: Here is a list of different types of equipment that may be part of the building's cooling system.

Please indicate the equipment that was used for cooling in this building in 2000.

(Mark all that apply)

- 1 - Residential type central air conditioners, other than heat pumps, that cool air directly and circulate it without using chilled water? *(These may be found either alone or in combination with a boiler or furnace)*
- 2 - Heat pumps used for cooling? *(These are devices that can also be used for heating in cooler weather by absorbing heat from the outside air. They may stand alone or be combined with another type of equipment.)*
- 3 - Individual room air conditioners, mounted in a window or wall?
- 4 - District chilled water piped in from outside of building?
- 5 - Central chillers inside the building that chill water for air conditioning? *(Also include chillers just outside the building that are primarily associated with it.)*
- 6 - Packaged air conditioning units, often mounted on the roof or on a slab beside the building? *(These are known as self-contained units, or Direct Expansion (DX). They contain air conditioning equipment as well as fans, and may or may not include heating equipment.)*
- 7 - "Swamp" coolers or evaporative coolers?
- 8 - Other cooling equipment -- Please specify _____

E4c: Which equipment you mentioned (in question E4b) was the MAIN cooling equipment, that is the one cooling the most floor space in 2000?

- 1 - Residential type central air conditioners, other than heat pumps, that cool air directly and circulate it without using chilled water?
- 2 - Heat pumps for cooling?
- 3 - Individual room air-conditioners?
- 4 - District chilled water piped in from outside of building?
- 5 - Central chillers inside the building that chill water for air conditioning?
- 6 - Packaged air conditioning units?
- 7 - "Swamp" coolers or evaporative coolers?
- 8 - Other cooling equipment?

E5: In 2000, were any energy consuming services provided from this building to other buildings? (For example, shared laundry, heating, cooling, etc.)

- 1 - Yes
- 2 - No ➔ Go to Question E6

E5a: Which of following services were provided from this building to other buildings?

- 1 - Shared laundry
- 2 - Kitchen services
- 3 - Heating
- 4 - Cooling
- 5 - Other – Please specify: _____

E5b: Approximately what percentage of the energy supplied to this building was devoted to services provided to other buildings?

|_____|% (Record percentage)

E5c: How many other buildings were supplied energy from this building?

|_____| (Record number of buildings)

E5d: Is this energy consumption taken into account in your energy bills?

- 1 - Yes
- 2 - No

E6: In 2000, were any energy consuming services provided to this building by other buildings (For example, shared laundry, heating, cooling, etc.)?

- 1 - Yes
- 2 - No ➔ Go to Question E7

E6a: Which of following services was provided to this building by other buildings?

- 1 - Shared laundry
- 2 - Kitchen services
- 3 - Heating
- 4 - Cooling
- 5 - Other – Please specify: _____

E7: If do not know the answer to any question in this section (building's energy consumption), would you know who could provide the information?

- 1 - Another contact
Please specify: _____
- 2 - Building Service Company
Please specify: _____
- 3 - Don't know