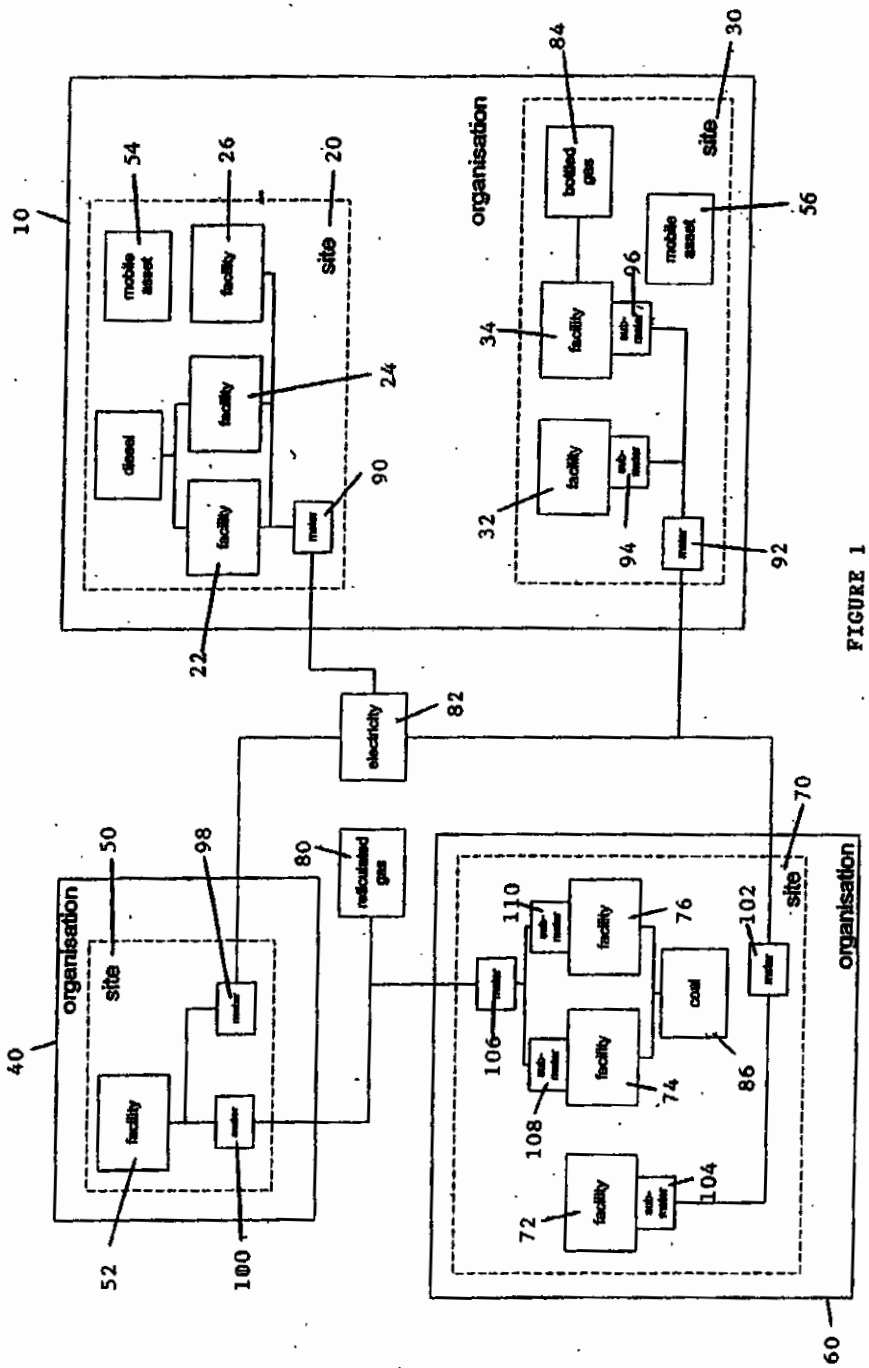

10
20
site
26
facility
54
mobile asset
24
facility
diesel
facility
90
meter
22
organisation
30
site
84
bottled gas
56
mobile asset
96
sub-meter
34
facility
32
facility
94
sub-meter
meter
92
82
electricity
70
site
organisation
60
110
sub-meter
facility
76
coal
102
meter
106
sub-meter
facility
74
86
108
sub-meter
facility
104
72
40
site
organisation
50
98
meter
reticulated gas
80
facility
meter
52
100

FIGURE 1

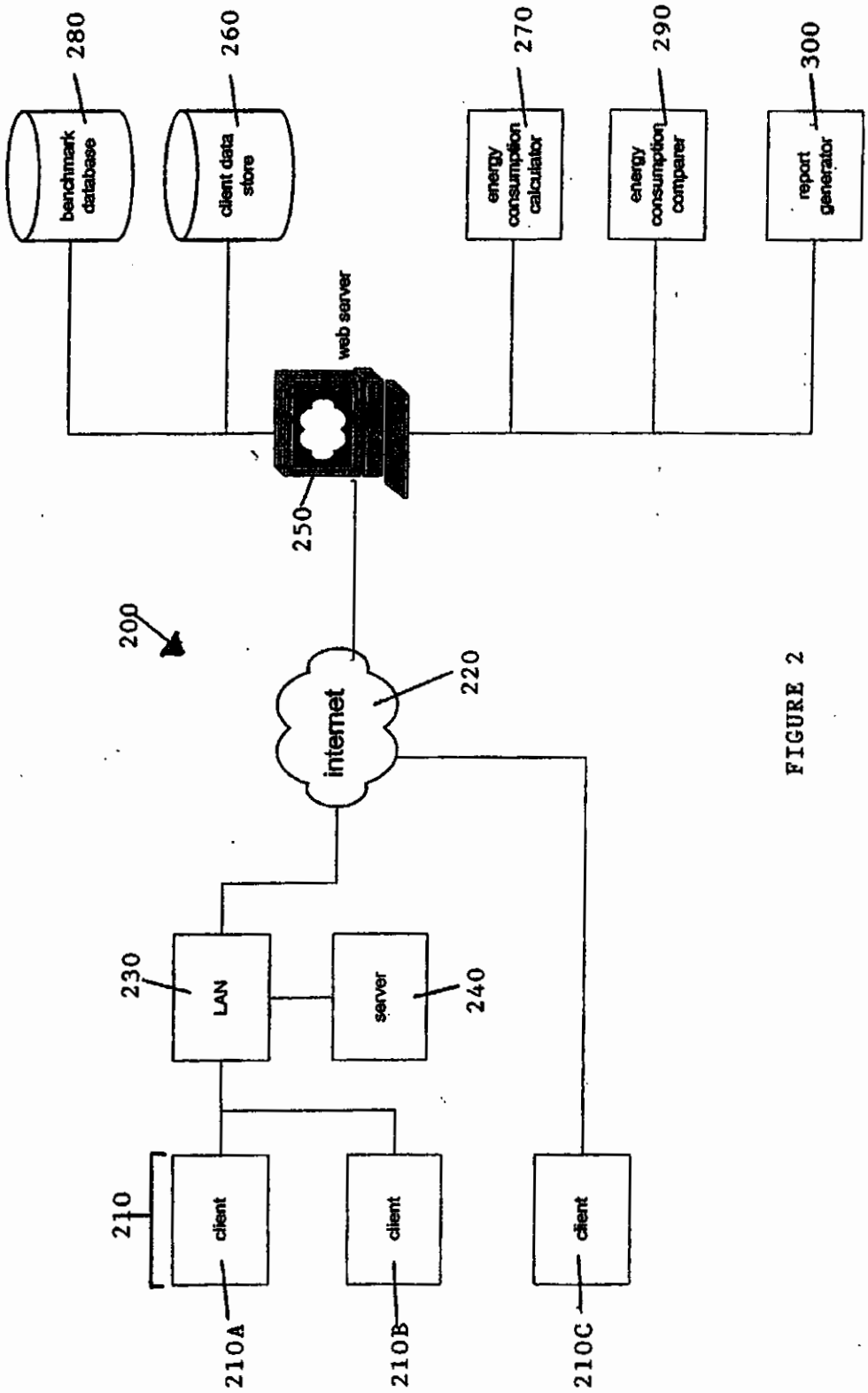

280
260
270
290
300
benchmark database
client data store
energy consumption calculator
energy consumption compairer
report generator
web server
250
200
internet
220
230
LAN
server
240
210
client
client
client
210A
210B
210C

FIGURE 2

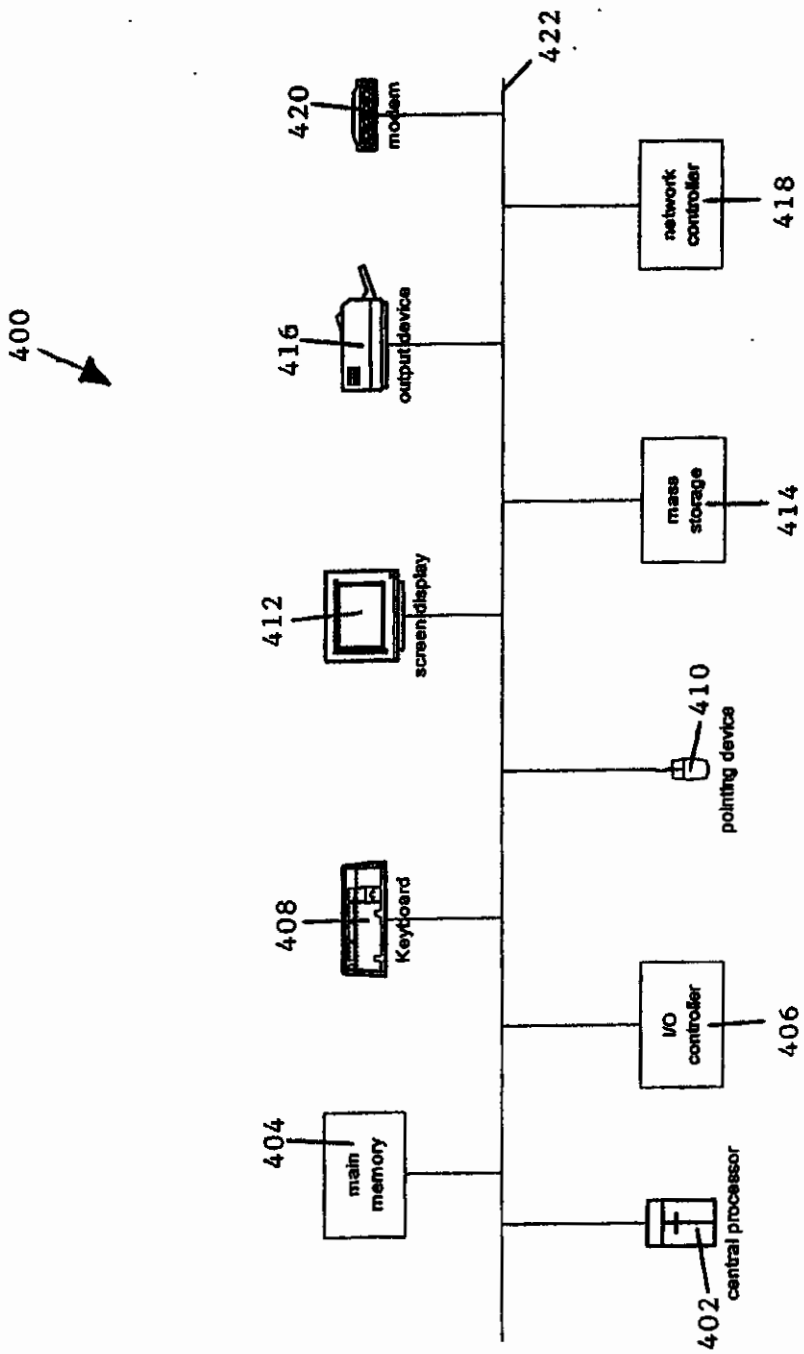

400
422
420
modem
network controller
418
416
output device
mass storage
414
412
screen/display
410
pointing device
408
Keyboard
I/O controller
406
404
main memory
central processor
402

FIGURE 3

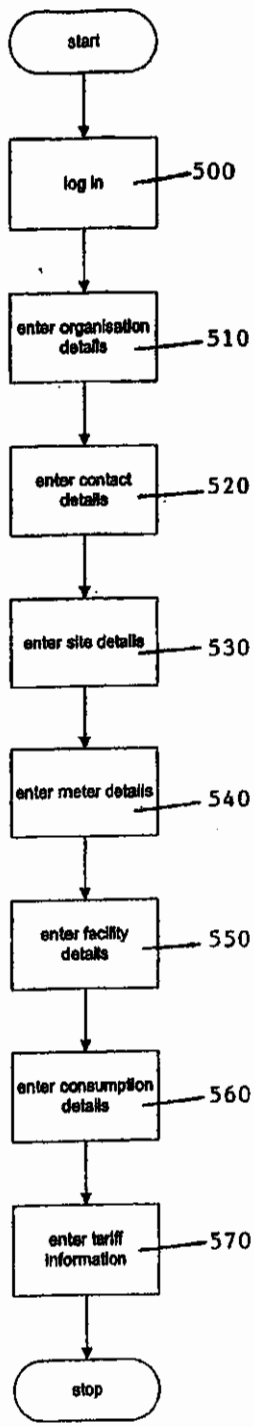

start
log in
500
enter organisation details
510
enter contact details
520
enter site details
530
enter meter details
540
enter facility details
550
enter consumption details
560
enter tariff information
570
stop

FIGURE 4

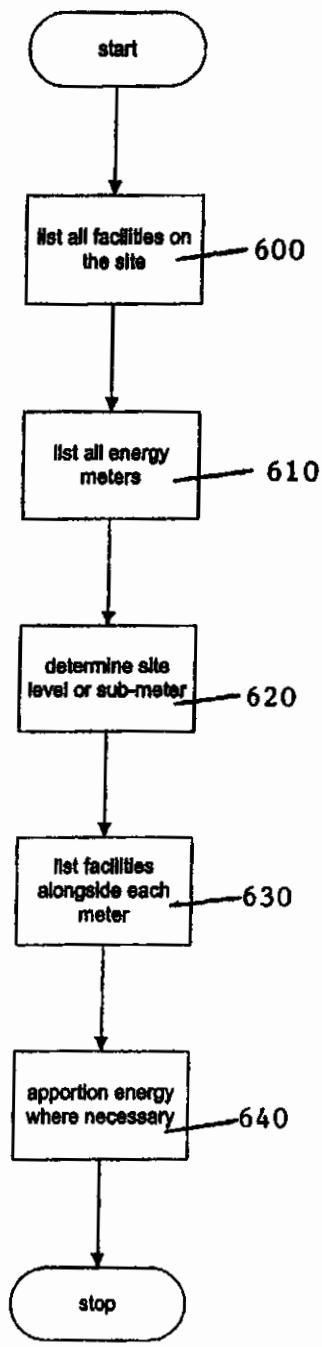

start
list all facilities on the site
600
list all energy meters
610
determine site level or sub-meter
620
list facilities alongside each meter
630
apportion energy where necessary
640
stop

FIGURE 5

Energy Map Process at end Step 4

Facility	Energy Sources	Floor Area (000 Metres)
Admin	Elec, Diesel	15
Ward 1	Elec, Gas	25
Ward 2	Elec, Gas, Diesel	28
Laundry	Elec, Gas	4
Operating Theatres	Elec, Gas, Diesel	6
Heat Plant	Coal, Elec	0.5
	Total	78.5

Meters	Energy	Ann. Consum. (000 kWh)	Sub or Site	Facilities Supplied (Directly)
Site Elec	Elec	2300	Site	Admin
ElecSub1	Elec	1000	Sub	Ward2,Heat Plant, Operating Theatre
ElecSub2	Elec	750	Sub	Operating Theatre, Ward1
ElecSub3	Elec	250	Sub	Laundry
Site Gas	Gas	1600	Site	Ward1, Ward2, Operating Theatres
GasSub	Gas	800	Sub	Laundry
Diesel	Diesel	150	Site	Admin, Operating Theatres, Ward2
Coal	Coal	850	Site	Heat Plant
	Total kWh*	4900		

*This total is for site level meters only. Submeters measure a portion of this energy.

FIGURE 6

Energy Mapping Process at end Step 5

Facility	Area	Meter	Consum	%	Notes
	15		15		
	15		300		
	0.5		650		
	0.5		14		
	4		250		
	4		800		
	6		60		
	6		174		
	6		145		
	6		84		
	25		605		
	25		351		
	28		76		
	28		612		
	28		393		
		Total kWh	4928		

Apportioning Heat Plant Energy

Facilities Heated	Volume	Consumption (000 kWh)	Notes
Ward1	63	470	Pro-rata based on volume (Actual figures will be calculated by the application)
Admin	33	246	Pro-rata based on volume (Actual figures will be calculated by the application)
Op.Theatres	18	134	Pro-rata based on volume (Actual figures will be calculated by the application)
Tot Volume	114		

Check Consumption for Each Facility (total consumption / floor area)

Facility	Tot. Consum (incl heat plant)	kWh/sq. Metre
Admin	561	37
Ward 1	1425	57
Ward 2	1280	46
Laundry	1050	263
Operating Theatres	597	100
Heat Plant	14	29

FIGURE 7

Appendix A - Organisation Details

Organisation Name

Mandatory. Name of your Organisation

Organisation Website

Please enter the address of the website of the organisation (if a website exists). Please only enter the part of the address that follows the 'http://' component (i.e. www.energyts.com).

Organisation Type

Predefined. Choose the appropriate Organisation Type from the dropdown list. If none seem appropriate choose 'Other' and contact ETS so we can update the list.

Address

Mandatory. Please enter the postal address for your Organisation.

FIGURE 8

Appendix B – Contact Details

Position

The Position held / Job title of this person.

Title

Please insert the title of this contact (i.e. Mr, Mrs, Miss, Dr, etc).

First Name / Surname

Mandatory. The First Name and Surname of this contact person.

Email

Mandatory. Please enter the full email address for this person.

Address

Mandatory. Please enter a physical (courier) address for this person.

DDI / Extension

Mandatory. Please enter the landline number to reach this person (plus extension number if necessary). Include the area code.

Mobile

User Assigned. Please enter a mobile phone number to reach the person.

Fax

User Assigned. Please enter a fax number for this person. Include the area code.

FIGURE 9

Appendix C – Site Details

Region

Predefined. Mandatory. Choose the appropriate region from the drop down list. The selection should be based on the closest location with the most similar year round temperatures.

Site Name

Mandatory. Enter the name of the site sufficient for you to be able to readily identify it from a list of all your sites.

Site Description

This is an optional field where any information and notes you consider useful may be entered.

Site Start

Approximate date on which the site was first opened, if known. Will default to 1-Jan-1900 if left blank.

Site Finish

Date on which the site closed or left the ownership of your Organisation.

Address

The physical location/address of the site.

Indicator Period

The year for which the site level indicators apply. This will be determined by the norms for different industry groups.

Site Indicator 1

This is an indicator used when preparing a site level efficiency indicator. These indicators will be particular to different industry groups.

Site Indicator 2

This is an indicator used when preparing a site level efficiency indicator. These indicators will be particular to different industry groups.

Site Indicator 2

This is an indicator used when preparing a site level efficiency indicator. These indicators will be particular to different industry groups.

FIGURE 10

Appendix D - Meter Details

Energy

Predefined. Mandatory. Please choose from the drop down list which energy source this meter is measuring.

Meter Type

Applies to reticulated Gas and Electricity only. Predefined. Mandatory. Please select from the drop down list the type of metering installed to measure consumption of these energy sources.

GXP / Network Company

Applies to reticulated Gas and Electricity only. Predefined. Please select from the drop down list the distribution network company maintaining the connection to your site. Alternatively for Electricity please select the Grid Exit Point from the National Transmission Grid if known.

ICP

Applies to reticulated Gas and Electricity only. Please enter the ICP (Installation Control Point) number assigned to your site. This can usually be found on the bill.

Rating

Applies to reticulated Gas and Electricity only. For Electricity please enter the KVA rating for the connection. For Gas please enter the assigned MDQ (Maximum Daily Quantities – GJ's) for the connection.

MHQ

Applies to reticulated Gas only. Please enter the Maximum Hourly Quantity assigned to the connection (GJ's)

Meter Start

Mandatory. The date from which these meter details are applicable.

Meter Finish

The date until which the above meter details are applicable. This can also indicate instances where an energy source is no longer used (i.e. coal being phased out/replaced by other energy sources such as gas).

Local Meter ID

An optional field to fill in any identifier used within the Organisation to identify this meter / energy source.

Local Meter Name

An optional field for entering a name for this meter. Especially useful for quick differentiation when there are a number of sub-meters on a site.

Meter Level

Predefined. Mandatory. Choose from the dropdown list which level of metering applies for this meter. The Site Meter option is for a meter that measures the energy entering the site (facilities may be directly supplied from this meter). The Sub-Meter option applies when the meter measures energy usage subsequent to that energy passing through a Site Meter. Sub-meters are used to measure energy use at a specific facility or group of facilities.

% Consumption

User assigned. Mandatory. Used to determine the amount of energy passing through the meter that is consumed by a facility connected to that meter. It should be 100% in all cases where all the consumption of the meter is used by a single facility. In other cases it should be determined after an energy map has been created (see Appendix E).

FIGURE 11

Appendix F – Facility Details

Facility Type

Predefined. Mandatory. Please choose from the drop down list the Facility Type that best describes the main use of this facility. If none of the options seem appropriate please select 'Other' and contact ETS so we can update the list. See Appendix I for a list of Facility Types and their definitions.

We recognise that many buildings are used for a number of different purposes. This is taken into account using sub-facilities that are detailed in the utilisation section later in this guide. However it is necessary to assign a primary purpose to the facility for comparisons to be made. This primary purpose should be the one that uses the majority of energy in the facility.

Facility Name

Mandatory. Please enter information that will allow you to easily differentiate the facility from others (e.g. building name).

Facility Description

Please enter any additional information or notes that further describe the facility.

Facility Open

Mandatory. Enter the date the facility opened for its current use.

Facility Close

Enter the date the facility was closed for its current use or was demolished.

Facility Built

Enter the date the facility was built. This may be different from the Facility Open date above.

FIGURE 12-1

Utilisation

% Windows

Mandatory. Percentage of total exterior wall area comprised of windows.

Air Changes

Air-conditioned facilities only. The typical number of air-changes per hour.

Air Conditioning

Yes / No. Does the facility have an air-conditioning system.

Air-Con Area (%)

Air-conditioned facilities only. The percentage of the floor area of the facility that is air-conditioned.

Air-Con Control

Air-conditioned facilities only. Select from the dropdown list the control system that most closely reflects that used for the air-conditioning in this facility.

Air-Con Filter

Air-conditioned facilities only. Select from the dropdown list the filtration system that most closely reflects that used in this facility.

Attendance Hours

Entertainment & Lecture Theatre Facilities only. Mandatory. Attendance (number of people) times hours of 'showtime', per week.

Batch Laundry

Laundry Facilities only. Mandatory. The amount of laundry washed per week (kilograms) in a batch process.

Bench Area

Laboratory Facilities only. Mandatory. The total laboratory bench area in the facility (square metres).

Books

Library Facilities only. Mandatory. The number of books stored in the facility.

Building Management System

Yes / No. Does the facility have installed a computerised Building Management System.

Building Shape

Predefined. Mandatory. Select from the dropdown list the building shape that most resembles the actual shape of the building / facility.

Computers

Computer Services/Computer Labs only. Mandatory. The total number of computers (PCs, Servers, etc) in the facility.

Continuous Laundry

Laundry Facilities only. Mandatory. The amount of laundry washed per week (kilograms) in a continuous cycle process.

Customers

Café/Canteen Facilities only. Mandatory. Average number of customers per week.

FIGURE 12-2

Days Used

Changing Sheds only. Average number of days used per week.

Details Finish Date

Enter the date until which the above details were applicable to.

Details Start Date

User Assigned. Enter the date on which the above details were first applicable from.

Exposure

Predefined. Please select from the dropdown list the level of exposure to wind and direct sunshine that most corresponds to that experienced by this facility.

Floor Area

Mandatory. Total area of covered floor space within the facility (square metres).

Floor Material

Mandatory. Select from the dropdown list the floor material option that most closely reflects the construction of the floor/foundations.

Full Time Equivalents

Administration / Office Facilities only. The number of full time equivalent (FTE) staff working in the facility. Every 40 hours per week of staff time should be regarded as an FTE.

Glazing

Predefined. Mandatory. Select from the dropdown list the glazing option that most closely reflects the type of glazing used in exterior windows.

Heating Control

Predefined. Mandatory. Select from the dropdown list the control system that most closely reflects that used in this facility.

Heat Losses

Heat Plant Facilities only. The level of heat losses during transportation from the heat plant to facilities, as a percentage of heat generated.

Heat Plant

Predefined. Select from the dropdown list the heat plant that supplies energy to this facility. The heat plant must have already been entered into the application as a facility.

Humidity

Indoor Swimming Pool Facilities only. The maintained level of humidity for the majority of the facility volume (percentage).

Income

Café / Canteen Facilities only. Mandatory. Average weekly income ($) of the facility.

Kilometres Covered

Street lighting only. Mandatory. The length of roading covered by streetlights (Kilometres).

Lighting Control

Predefined. Mandatory. Select from the dropdown list the control system that most closely reflects that used in this facility.

Lit Area

Outdoor Lighting only. Mandatory. The total area under lighting (square metres).

Luminaires

FIGURE 12-3

Outdoor & Street Lighting only. Mandatory. The number of lights installed for lighting the area.

Lux

Outdoor & Street Lighting only. Mandatory. The average level of lighting (in lux) maintained in the area.

Maintained Temperature

User Assigned. The target temperature that the facility is maintained at.

Number of Beds

Dorm & Ward Facilities only. The number of beds contained within the facility.

Number of Occupants

Residential Facilities only. Mandatory. The number of occupants in the residential facility per day.

Occupancy

User Assigned. Mandatory. The percentage of the week that the facility is occupied. Note – total of 168 hours in a week.

Occupied Bed Days

Dormitory & Ward Facilities only. The average number of occupied bed days in a week. An occupied bed day is essentially a bed that is occupied over night.

Operating Hours

Operating Theatre Facilities only. Mandatory. The total number of hours per week each operating theatre is in use. E.g. A facility has two operating theatres and they are each used an average of 20 hours per week. The total would therefore be 40 hours.

Orientation

Predefined. Please select from the dropdown list the orientation that most corresponds to that of the facility. The decision should be based upon which side of the building has the greater requirements for heating/cooling.

Parks

Parking Facilities only. Mandatory. The number of carparks within the facility.

Pipe Diameter

Flood & Water & Sewerage Pumping Facilities only. The diameter (metres) of the pump piping.

Re-circulation Time (hours)

Indoor & Outdoor Swimming Pools only. Mandatory. The time taken (in hours and fractions of hours) for the total volume of pool-water to be re-circulated through the filtration system.

Roof Area

Mandatory. The surface area of the roof (square metres).

Roof Material

Mandatory. Select from the dropdown list the roof material option that most closely reflects the construction of the roof.

Seats

Entertainment & Lecture Theatres only. Number of seats in the facility.

Storeys

Number of storeys (including underground/basement levels).

FIGURE 12-4

Sub-Facilities

Yes / No. Does this facility have any other energy using facilities that are significantly different to the main usage. An example might be an office building which also has some retail space, and/or apartments.

Sub-Facility Type

Predefined. Choose from the dropdown list the Sub-Facility Types that are located within this facility.

Sub-Facility Indicator 1

While not yet defined, this field will be used in future updates to allow for sub-facilities within a facility to have corrections for a share of consumption, and therefore increase the accuracy and relevance of the overall indicator.

Sub-Facility Indicator 2

While not yet defined, this field will be used in future updates to allow for sub-facilities within a facility to have corrections for a share of consumption, and therefore increase the accuracy and relevance of the overall indicator.

Surface Area

Outdoor & Indoor Swimming Pools only. The total surface area of all swimming pools in the facility (square metres).

Theatres

Operating Theatre Facilities only. Mandatory. The number of operating theatres in the facility.

Visitors per Week

Mandatory. The average number of visitors per week.

Volume

Mandatory. The volume of the building (cubic metres).

Volume Heated

Heat Plant Facilities only. Mandatory. The total volume of all facilities that are heated by this heat plant.

Volume Pumped

Flood & Water & Sewerage Pump Facilities only. The volume of water pumped per week (litres).

Volume Treated

Water & Sewerage Treatment Facilities only. Mandatory. The Volume of sewerage treated per week (litres).

Wall Area

User Assigned. Mandatory. Total area of exterior wall surface (square metres).

Wall Material

Predefined. Mandatory. Select from the dropdown list the wall material option that most closely reflects the construction of the exterior walls.

Water Temperature

Outdoor & Indoor Swimming Pools only. The maintained temperature of the majority of water in the swimming pools.

Water Volume

Outdoor & Indoor Swimming Pools only. The total volume of water (including in the recirculation / filtration system) for all swimming pools in the facility.

FIGURE 12-5

Facility Attributes

The information fields with ** in the heading are fields that are needed to calculate the benchmark figures. If any of these fields are left blank, then no benchmarks will be calculated.

Construction

In most cases, allowance is made for multiple types of construction. This is to reflect that buildings change, and may include more than one type of construction. For example a building has concrete block type construction for the ground floor walls, and wooden stud type construction for the upper floor walls. In all cases, the area of the particular type of construction must be specified. Also – for all materials that are specified, the thickness must also be specified.

Floor Construction

Allowance is made for up to two different types of floor construction at the base of the facility/sub-facility. This floor construction is made up of the internal lining (e.g. carpet), the load bearing material (e.g. Joists, Concrete pad), and the external lining (e.g. dirt if set into ground). The user must specify whether the floor is an internal or external floor (i.e. is it the separation between two storeys of a building, or is it the base floor of the building). If it is the base floor, the user must also indicate the type of construction of the floor (e.g. solid pad, whether it has a crawlspace etc).

Wall Construction

Allowance is made for up to three different types of wall construction for any facility/sub-facility. The wall construction is made of the internal lining material (e.g. gib-board), any insulation that is installed, the main load-bearing material (e.g. concrete blocks, wooden studs etc), and the external material (e.g. weatherboards). In each case the user must specify whether the wall is an internal wall or the external wall of the building.

Roof Construction

Allowance is made for up to two different types of roof/ceiling construction for any facility/sub-facility. The roof/ceiling construction is made of the internal lining material (e.g. gib-board), any insulation that is installed, the main load-bearing material (e.g. concrete pad, wooden studs etc), and the external material (e.g. galvanised iron). In each case the user must specify whether the roof/ceiling is an internal ceiling (i.e. another storey above) or the external roof of the building. If external, then the type of construction must also be specified (i.e. loft/attic, pitched, flat etc).

FIGURE 13-1

Window Construction

Allowance is made for up to two different types of window construction for any facility/sub-facility. The window construction is made of the type of glazing used (i.e. tinted, double glazed etc), the frame material (e.g. wooden, aluminium etc).

Other Attributes

Air-Con Area (sq. Metres)

Air-conditioned facilities/sub-facilities only. The total floor area of the facility/sub-facility that is air-conditioned.

Air-Con Controls (for information only)

Air-conditioned facilities/sub-facilities only. Select from the dropdown list the control system that most closely reflects that used for the air-conditioning in this facility.

B. M. S. (for information only)

Yes / No. Does the facility/sub-facility have installed a computerised Building Management System.

Core Hours

The number of hours per week, on average, that are the core hours of operation of the facility/sub-facility.

Core Occupancy

The average number of occupants in the facility/sub-facility during the core hours.

Energy Intensity

The energy intensity, in watts per square metre, of equipment that is used in the facility/sub-facility. For example, fume cupboards in a laboratory or computers in an office environment.

Exposure

Please select from the dropdown list the level of exposure that most corresponds to that experienced by this facility/sub-facility.

Finish Date (for information only)

Enter the date which this facility/sub-facility ceased to be operational.

Heat Controls (for information only)

Select from the dropdown list the control system that most closely reflects that used in this facility/sub-facility.

Humidity

The maintained level of humidity for the majority of the facility volume (percentage).

FIGURE 13-2

Infiltration

The number of air-changes per hour due to infiltration of air into the facility/sub-facility due to inflows not attributable to mechanical ventilation.

Light Controls (for information only)

Select from the dropdown list the control system that most closely reflects that used in this facility/sub-facility.

Orientation

Please select from the dropdown list the orientation that most corresponds to that of the facility/sub-facility.

Non-Core Hours

The number of hours per week that the facility/sub-facility is occupied for outside the core hours. This may be time when cleaners are in the facility, or a skeleton overnight staff for example.

Non-Core Occupants

The average number of people present in the facility/sub-facility during the non-core hours.

Number of Air Changes

The number of air-changes per hour for the air-conditioned area of the facility/sub-facility.

Shape

Select from the dropdown list the shape that most closely resembles that of this facility. The Long Rectangular option should be used where the long sides are twice the length (or more) of the short sides. The Short Rectangular option should be used when the long sides are less than twice the length of the short sites.

Start Date (for information only)

Enter the date on which this facility/sub-facility commenced operation.

Storeys (for information only)

Number of storeys (including underground/basement space).

Temperature (low and high)

The target temperatures that the facility is maintained between during the core hours. NB. The mean temperature is used for calculating benchmarks.

Volume

The volume of the facility/sub-facility, not including any void spaces (cubic metres).

FIGURE 13-3

Appendix G – Consumption Details

Reading Type

Reticulated Gas and Electricity only. Predefined. Mandatory. Please select the appropriate reading type from the drop-down list for reticulated gas/electricity.

Day Type

Time of Use metered electricity and gas only. Predefined. Select the appropriate day-type from the drop down list.

Consumption Start Date

Mandatory. Date on which consumption of this block of energy started.

Consumption Finish Date

Mandatory. Date on which consumption of this block of energy ended.

Consumption Start Time

Time of Use metered electricity and gas only. Time of day at which consumption of this block of energy started.

Consumption Finish Time

Time of Use metered electricity and gas only. Time of day at which consumption of this block of energy ended.

Consumption

Amount of energy consumed during the current period (kWh). Or:

Volume Consumed

Volume consumed of the energy source (e.g. kilograms of coal, litres of diesel, GJ of gas etc.). The consumption figure above (kWh) will be calculated from this.

KVA

Time of Use metered electricity only (optional). The KVA reading during this block of consumption.

FIGURE 14

Appendix H – Pricing Details

Fixed / Demand Charges

Tariff Start Date

The Date from which this tariff was available.

Tariff End Date

The Date from which this tariff is no longer available.

Period

The period that this charge applies for – i.e. is it on a weekly basis, monthly, daily etc.

Energy

This charge is for the energy (retailer) component of the fixed / demand charges. Only applies to reticulated electricity and gas.

Network

This charge is for the distribution component of the fixed / demand charges. Only applies to reticulated electricity and gas.

Bundled

This charge is the total charge applied to fixed / demand charges. It should be the sum of the energy and network charges if these have been entered.

Unit Charges

Day Type

Time of Use metered electricity and gas only. Predefined. Mandatory. Select from the drop-down list the appropriate day type.

Price Start Date

Mandatory. Date from which this specific price started.

Price Finish Date

Mandatory. Date from which this specific price ended.

Price Start Time

Time of Use metered electricity and gas only. Time of day at which this price started.

Price Finish Time

Time of Use metered electricity and gas only. Time of day at which this price ended.

Retailer Price

This charge is for the retailer (sometimes known as energy) component of the unit charges. This figure should include local losses (electricity).

Network Price

Applies to reticulated electricity and gas only. This charge is for the distribution (sometimes referred to as lines) component of the unit charges.

Bundled Price

This is the total charge applied to unit consumption. It should be the sum of the retailer and network charges if these have been entered.

FIGURE 15

Appendix I - Facility Types

Administration / Offices

A Building/Facility that is primarily used for administration work. Essentially made up of open plan office environments and/or offices. Generally used on a working day, 9-5 basis.

Cafeteria / Canteen

A Building/Facility primarily used for the preparation and consumption of food.

Changing Sheds

A Building/Facility primarily used as changing rooms. For example ...

Dormitories

A Building/Facility primarily used as a dormitory or hostel. This does not include apartment blocks or blocks of flats (refer also Residential Facilities).

Enclosed Spaces / Foyers

This refers to large indoor spaces that are used as entrance foyers, gathering places, atriums, or similar.

Entertainment Theatre

A theatre attended for entertainment purposes, such as operas, plays, or movies.

Flood Pumping Station

A pumping station primarily used for pumping flood, storm, and drain water.

Gallery

A facility used for the storage and display of art and similar types of objects.

Gymnasium

A facility used for recreational purposes such as weight training, squash etc.

Heat Plant

A facility that generates heat for use by other facilities.

Hospital Wards

A facility used for the housing and care of hospital patients. Patients usually stay overnight.

Indoor Swimming Pool

A recreational swimming pool kept in an enclosed environment (indoors).

Laboratories

A facility used primarily as laboratories for the purposes of research, measurement, or education.

Laundry

A facility used to launder clothes and linens.

Lecture Theatres

A theatre used for lectures and/or conferences.

Library

A facility used for the storage and display of books. These facilities will tend to have fairly specific requirements for temperature and humidity.

Museum

FIGURE 16-1

A facility for the storage and display of art, historical documents, archaeological artefacts, and objects from the natural world.

Operating Theatre

Hospital facilities used for performing surgery.

Outdoor Lighting (Public) / Unenclosed Spaces

Areas that are exposed to weather which are lit for the purposes of public safety and convenience.

Outdoor Swimming Pool

A swimming pool that is not enclosed within another structure.

Parking Building

Building used for car-parking.

Residential Facilities

Intended to encompass apartment buildings and large blocks of flats. The energy consumption should be for the entire building/block, and not just for communal areas (e.g. stairwells/corridors etc).

Sewerage Pumping Station

A pumping station used for pumping sewerage.

Sewerage Treatment Plant

A plant used for processing and treating sewerage in order to minimise any harm caused by its discharge.

Street Lighting

Lighting used on streets to illuminate the road, intersections, and areas of potential danger (e.g. outside shops, pedestrian crossings etc).

Toilet Block

A block of toilets and bathrooms.

Water Pumping Station

A pumping station used for pumping water around a mains system, or from a water source.

Water Treatment Plant

A plant for treating water to ensure its safety for public consumption.

FIGURE 16-2

Appendix J – List of Indicators

Per sq. meter of pool surface (Annualised)

Indoor swimming pool/Outdoor swimming pool

Per sq. meter of flooring (Annualised)

Library/Laboratories/Administration (Office) blocks/Hospital wards/Dormitories/Residential/Museums/Gymnasiums/Large enclosed public spaces/Galleries/Changing Sheds/Canteens/Operating Theatres

Per Computer (Annualised)

Computer Services / Computer Labs

Per visitor (Annualised)

Museums/Cafeterias/Gymnasiums/Galleries/Toilet Blocks

Per cubic meter of water pumped (Annualised)

Flood pumping/Sewerage pumping/Water pumping

Per cubic meter of treated liquid (Annualised)

Sewerage treatment/Water treatment

Per occupied bed day (Annualised)

Hospital wards/Dormitories

Per seat (Annualised)

Lecture theatres/Public theatres

Per hour of attendance (Annualised)

Lecture theatres/Public theatres

Per full time equivalent staff member (Annualised)

Administration (office) blocks

Per car park (Annualised)

Parking buildings

Per 1000 books (Annualised)

Libraries

Per sq. meter of laboratory benches (Annualised)

Laboratories

Per occupant (Annualised)

Residential Facilities

Per sq. meter of lighted area (Annualised)

Outdoor lighting

Per luminaire (light fitting) (Annualised)

Outdoor Lighting/Street lighting

Per km of lighted road (Annualised)

Street lighting

Per cubic meter heated volume (Annualised)

Heating Plant

FIGURE 17-1

Per kilogram of washing (Annualised)

Laundries

Per Operating Hour (Annualised)

Operating Theatres

FIGURE 17-2