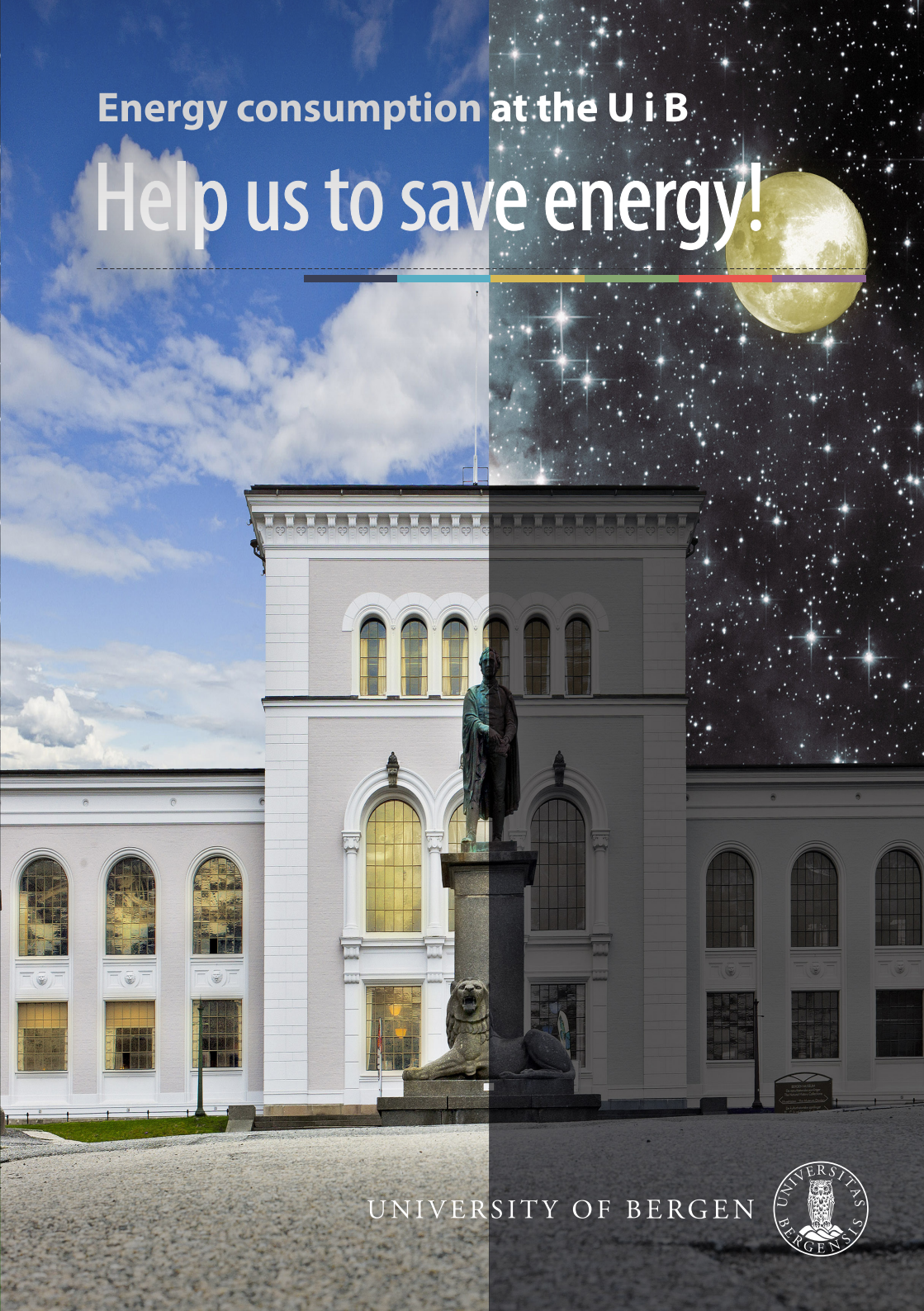


Energy consumption at the U i B

Help us to save energy!



UNIVERSITY OF BERGEN



WHY SHOULD WE SAVE ENERGY?

Saving energy is good for both the environment and economy. Most of the energy consumed by the University of Bergen is electric power. The power that we save can replace more polluting energy sources in other countries. This makes energy saving one of the most important climate measures we can take.

In the University of Bergen's action plan for the environment, the target is to save 20 per cent of our energy consumption by 2020. We have made a good start, but to achieve the full effect we depend on every student and employee making a daily contribution.

In many of our buildings, we have considerably higher energy consumption than can be seen in similar buildings. This means that we have a potential for savings.

If we reduce energy consumption in the buildings, this means we also have more funds available for other important activities.

We can all help to influence the consumption and saving of energy, and it is in all our interests to make this a natural part of our daily activities. You can read more about how you can help in this leaflet. They are simple measures, but together their effect is considerable.



WHAT HAS THE UNIVERSITY OF BERGEN DONE SO FAR?

There have been large investments in energy-saving measures, including automatic control of the indoor climate and of turning off lights in a number of buildings.

We are in the process of installing an overall building management system so that we can monitor energy consumption in all our buildings from one place that we can optimise energy consumption in many of our 90 buildings.

The University of Bergen has also built its own district heating network: We pump up water from Puddefjorden and send it out to a number of buildings via our heat pump installation at Dragefjellet. The Student Centre is one of the buildings that is heated by this system. This is a very effective and environmentally friendly way of producing heat and the temperature of the sea water is a 100 per cent renewable and sustainable resource.

The capacity of the sea water network is begin expanded, and soon we will also be able to provide cheap and energy-efficient cooling to some of our buildings.



HOW CAN YOU HELP?

Turn down the temperature

The recommended temperature indoors is 21 degrees. Many people keeps it much warmer than this. If you increase the temperature during the winter months, you also dry out the air, so that water is drawn from your body. This means that the energy loss will cool your body, so that you still feel cold and uncomfortable. Mucous membranes also become dry, which reduces the body's immune defences. If you lower the temperature by 1 degree, centigrade you reduce energy consumption for heating by up to 5 per cent.

Do not cool the room by opening windows in the winter

It is better to turn the room thermostat down to the temperature you want (21 degrees). The temperature will then be stabilised at this level.

Close cupboards and cabinets

If you work with ventilated cupboards or cabinets or extractor hoods, close the cupboard or turn off the extractor when you are finished. The air that is extracted cannot be recycled and heating the air supply is very expensive and uses a lot.



TURN OFF THE LIGHT

In many of our buildings, lights are turned on and off automatically, but many buildings do not yet have this function.

If you are the last person to leave a room or office, turn off the light if it is not controlled automatically.

The buildings are present 24 hours a day, 365 days a year, but are in use for much less than half this time. Lighting represents about 20 per cent of our total energy consumption in buildings.

Most of the year, there is more than enough daylight to light offices with windows. So think about whether you really need to have a light on during the day; it is often not necessary.



HOW DOES THE UNIVERSITY OF BERGEN USE ENERGY?

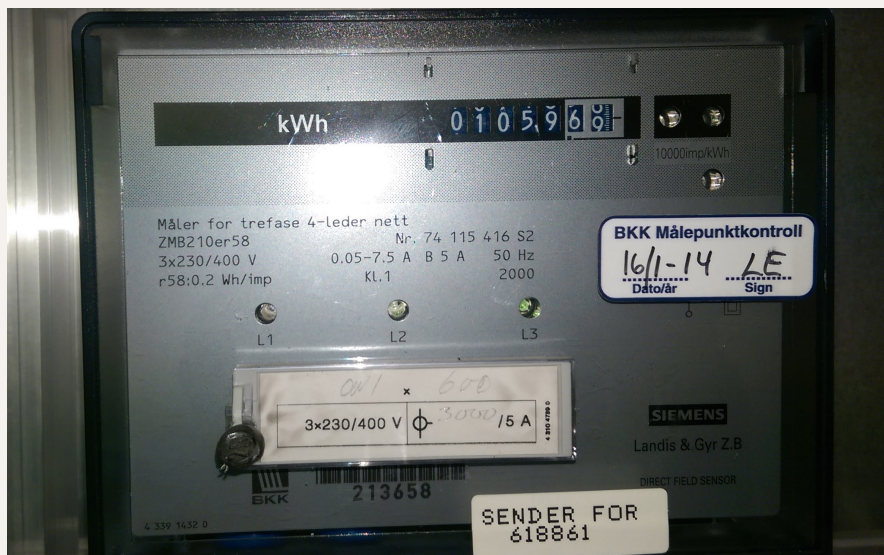
The University of Bergen consumes between 80 and 100 GWh, or gigawatt hours (million kilowatt hours) of energy a year. This corresponds to the energy used by about 4,000 homes.

We spend about NOK 70 million a year on energy. The buildings use a number of different energy carriers: electricity, oil, district heating and energy from sea water.

We use about 60 GWh of electricity. About 40 per cent is used for heating, about 20 per cent for lighting and about 15 per cent for cooling. Most of the rest is used for operating technical equipment and machines.

We use about 23 GWh of district heating; 95 per cent of this is used for heating and the rest for hot water.

We use about 2 GWh of oil for heating buildings. This is being phased out and converted.



WHERE DOES THE ENERGY COME FROM?

Local heating

This is the University of Bergen's own district heating network, in which we use heat from the sea to heat a number of buildings.

Electric power is bought from Fjordkraft with green certificates. This means that the energy is guaranteed to be renewable and that a charge is used for the further development of renewable energy.

District heating is bought from BKK Varme; it is produced from combustion of residual waste in the plant at Rådalen. Oil-fired boilers are being phased out and we will not use oil for primary heating of any of our buildings after 2016. In the interim phase, the University of Bergen is considering the use of bio oil, which is a renewable resource.



UNIVERSITY OF BERGEN TO BE AN ECO-LIGHTHOUSE

During the course of 2015, the University of Bergen will be certified as an Eco-Lighthouse. The University of Bergen will be the first of Norway's major universities to receive this status in its entirety.

Eco-Lighthouse is Norway's best-known certification scheme for organisations that wish to document their environmental and social responsibility. Being an Eco-Lighthouse involves systematic work every day on environmental measures.

It has long a goal of the University of Bergen to be an eco-friendly and green university. The measures that have been implemented include energy labelling of buildings, energy-economy measures and reducing paper consumption. Oil-fired heating is being phased out, bicycle parking has been extended and the number of car parking spaces reduced by 30 per cent.

Becoming an Eco-Lighthouse is a natural consequence of our desire to become even better at this.

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