Fact sheet

Household Energy Use and Electrical Appliances

How do we use energy?

Household energy consumption around the world makes up 29% of total final energy consumption. Our habits at home have an important impact on how much energy we consume and consequently on how much greenhouse gasses emissions we produce, so we need to think about how we use this energy and whether we use it efficiently.

To answer these questions, we need to determine how much energy we use doing various everyday activities around the house. The graph in appendix shows electrical appliances represent 21% of household final energy consumption, the second largest source of energy consumption in households after space heating, excluding personal transportation.

While the share of heating in total consumption has decreased from 58% to 53% between 1990 and 2005 and the share of other end-uses has remained stable, the share of energy use for electric appliances has increased from 16% to 21% during this period.

Electricity use for household appliances in the countries covered in the International Energy Agency survey grew by 57% from 1990 to 2005. How much energy appliances use is therefore significant, not only because it represents the second highest share of energy use in a household, but more importantly because it is increasing.

A more detailed analysis shows that the share of energy use of large appliances (refrigerators, washing machines, dishwashers) has been decreasing due to increased energy efficiency, while the share of small appliances (personal computers, mobile phones, personal audio equipment, other home electronics) has been increasing. Between 1990 and 2005, the share of large appliances' energy consumption has decreased from over 60% to around 50%. At the same time, the share of small appliances' consumption has increased from below 40% to around 50%

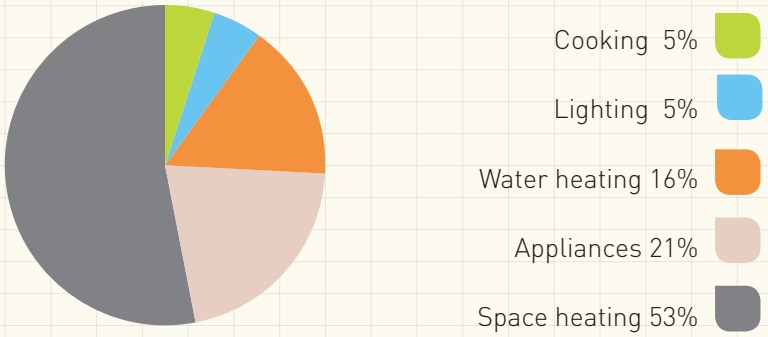
What can you do?

Actions that can be undertaken with regards to electrical appliances include amongst others:

- Not using standby modes
- Choosing appliances based on energy performance labels
- Reducing the temperature when washing clothes and making sure to wash full loads
- Not placing your freezer next to a heat source
- Reducing the use of air conditioning and finding alternatives ways of cooling

Look for more detailed information in the Action Sheets

Household Energy Use by End-Use (IEA19, 2005)[1]



Source: Worldwide Trends in Energy Use and Efficiency,
Key Insights from the International Energy Agency (IEA) Indicator Analysis© OECD/IEA, 2008, Fig 4.3, page 46.

1 | (IEA19: Australia, Austria, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Republic of Korea, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom, United States)

Average annual consumption of some electrical appliances

Average annual consumption in kWh/year	Electrical appliances
< 200	Kitchen oven Microwave Coffee machine
200-400	Dishwasher Washing machine
400-600	Lighting Dryer
> 800	Large refrigerator

Source:
Worldwide Trends in Energy Use and Efficiency:
Key Insights from IEA Indicator Analysis © OECD/IEA, 2008, Fig.2.1, page 17