

## 12. Good practices for energy efficiency in households

Current energy consumption patterns are unsustainable: the world is using excessive amounts of energy, and non-renewable energy sources are rapidly dwindling. Energy can be conserved in many ways, and choosing energy-efficient goods is one of them.

Consumers need to be able to make educated decisions when buying electrical appliances. Information about the energy certificate and labelling systems of the European Union can be helpful when making these choices. It is also important for households to know how much energy is actually used by their appliances. There are many readily available tools to help you calculate your energy consumption and implement energy-saving solutions.

There are some good practices for reducing energy consumption in households:

- **Analyses of the current energy consumption and calculation of the costs by making a list of the electrical appliances (especially energy-efficient goods) in the home:**

Non-renewable energy resources such as crude oil, natural gas and coal will be seriously depleted within our lifetime. Their rising cost is just one of the many reasons why a change in attitude is essential. In general, we waste energy and consume more than we really need, and by doing so we are jeopardising the energy supply of current and future generations. There are a lot of useful tools for measuring the current and future impacts of energy consumption. While an awareness of the issues can help the consumer to save energy, thus reducing the impacts of climate change, it can also save money.



- **Smart meters and plugs**

Lack of information is a present barrier to consumer energy saving. Lack of information constitutes a barrier on two levels: consumers lack information on the energy consumption of their household appliances, as well as on how this consumption can be reduced. By using smart plug equipment and feedback on the individual consumption patterns of their appliances, consumers will be given a very easy way to learn about how much energy their appliances are using. Smart plugs allow

consumers to monitor the extent of energy savings through changed behaviour when using individual appliances. Seeing this immediate effect is one of the most promising ways to changing habits.



- **Install Programmable Thermostat**

The thermostat is a device that automatically responds to changes in ambient temperature by switching on or off a heating or cooling system to permanently maintain a set desired temperature in a confined space.

The greatest benefit of using thermostat is the ability to set different temperatures for daytime, nighttime and non-room temperature maintenance. When optimizing the operation of the heating or cooling system or appliances, in the long run, considerably less energy is used, which in turn leads to a significant lack of energy bills up to 30%.

**Temperature control** - It is possible to set a lower temperature (heating) during the time (work, school, engagements) of the day when we are not at home and at the same time program (at digital thermostats) to reach and maintain a comfortable temperature when go home. This leads to energy savings during the time we are gone and at the same time when we return home we are waiting for a cozy and warm home.

**Increased comfort** - The programmable thermocouples give the possibility of increased comfort during the winter mornings. Setting lower temperatures at night - results in significant savings, and at the same time, nothing is better than warm hobs when we hatch from a warm bed. The temperature and the time of reaching and maintaining it are programmed in the thermostat and it follows the program.



### References:

[1]<http://www.mcit.gov.cy/mcit/EnergySe.nsf/All/1E01BF794C5B51EBC22580650035FD2D?OpenDocument>