

"ENERGY SAVING AND ENERGY EFFICIENCY" LEARNING MODULE

NOTES FOR TRAINEES/STUDENTS



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"ENERGY SAVING AND ENERGY EFFICIENCY" LEARNING MODULE

Worldwide demand for energy is constantly growing. Climate change is accelerating because a large proportion of energy is produced by burning fossil fuels. In order to counter this development, endeavours are being made to acquire more energy from renewable sources and to achieve higher levels of energy efficiency and energy saving. Your own approach to energy is also relevant in this regard. But how familiar are you with the economical and efficient use of energy? Do you try to conserve energy both in your personal life and at work?





Before you undertake a detailed consideration of a specific energy-saving measure, start by collecting all the energy-saving measures that you know in your private and work environment. It does not matter whether you implement these yourself or not.

TASKS:

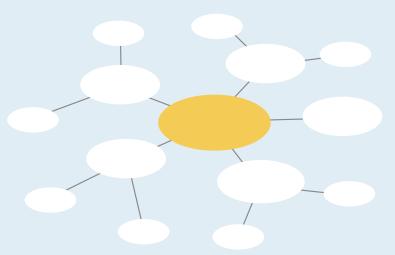
- 1. State all the energy-saving measures that you are familiar with from your private life and from the work environment.
- 2. Present your results in the form of a mind map (see Note 1).

TIPS FOR CREATING A MIND MAP:





The idea behind creating a mind map is to structure and visualise networked and complex information, ideas, problems, etc. Start by writing the topic of the mind map in the middle of the sheet. Branches indicating sub-aspects of the topic lead off from the topic. Further branches lead off from these first branches to sub-divide the sub-aspects of the topic once more. In order to present a mind map clearly, it is a good idea to use a piece of paper that is sufficiently large.





Once you have collated all the energy-saving measures that you are familiar with within your home and work environment, establish contexts within and outside the company and write a story about this.

TASKS:

- 1. Select one of the energy measures stated for closer consideration.
- 2. Create a story on the energy measure selected. Your story should be illustrated by the inclusion of the possible causal chain that lies behind this measure (see Note 2).







TIPS ON CREATING A STORY

The important aspect of the story is the context you create, not its length.

A possible causal chain, for example, would be as follows:

Radiators free of dust

- → energy saving of 15%
- → less natural gas used for energy production
- → less methane in the atmosphere
- → lower greenhouse gas effect
- → less climate change
- → less damage to the ecosystem
- → greater biodiversity
- → less threat to the habitats of all living beings

The following questions may help you to compose your story:

- What is the aim of my story?
- Who is the target group for my story?
- What type of story would I like to write (e.g. field report, fictitious account)?
- What figures should play a part in my story?
- How will I structure my story (introduction, main section, conclusion)?
- Who is the narrator (e.g. trainee, trainer, or customer)?
- Which means of communication would I like to use (e.g. images, films)?

In general terms, there is no right or wrong way of going about things. Your story merely needs to be interesting. The direction you go in is entirely up to you!

Use the Internet to conduct your research and save your story electronically so that you can continue to work on it if necessary.

By the way: storytelling is a highly modern method within the company context. This is a technique which is deployed both for internal management purposes and for external marketing.



Once you have written your story on the topic of "Energy-saving measures and their contexts within and outside the company", you present it to your colleagues.

TASKS:

- 1a. If you are the presenter, tell your story to your colleagues in your own chosen form.
- 1b. If you are a member of the audience, identify a conclusion or a personal consequence for your everyday life from the story.
- 2. Exchange views on the stories and on their underlying energy-saving measures or on the conclusions or personal consequences that have been drawn.





Once opinions have been expressed on the stories and on their underlying energy-saving measures or on the conclusions or personal consequences that have been drawn, it is now time to turn fiction into reality.

TASKS:

- 1. Supplement your individually prepared mind maps by adding energy-saving measures, such as those that have already been stated, and then use this as a basis to draw up a joint energy-saving guide (see Note 3).
- 2. Identify which of the measures mentioned in the energy-saving guide have already been implemented at your own company.
- 3. Discuss which of the measures mentioned in the energy-saving guide you would like to implement at your own company.
- 4. Implement the selected energy-saving measures at your company by forming "energy teams" (see Note 4).



Tasks to be completed in pairs or groups





TIPS ON DRAWING UP AN ENERGY-SAVING GUIDE

The following questions may assist you in developing an energy-saving guide:

- Does the mains adapter of your notebook stay plugged in when the notebook itself is turned off?
- Do you use animated screen savers?
- Do you keep your bulbs clean?
- How many light sources do you use?
- Do you use energy-saving light sources?
- Do you turn out the lights in areas that are rarely used?
- How hot is it in your office?
- How do you ventilate?
- Are the radiators in your office unobstructed, and are they free of dust?



TIPS FOR THE DEVELOPMENT AND INTRODUCTION OF ENERGY-SAVING MEASURES WITH THE HELP OF "ENERGY TEAMS"





Each "energy team" assumes responsibility for one area of energy consumption. The "light" energy team could, for example, work on a new lighting concept whilst a computer team looks at how to deal with stand-by modes in an energy-saving way. This approach aims to avoid a "someone needs to deal with this" trap. These are cases where everyone wants to take responsibility, but no one actually does. Once you have assigned areas of responsibility for lighting, computers, paper, etc., you should draw up a plan of action. The following structure may assist you:

Preparation

- What is the objective?
- How can this objective be achieved/which measures are useful?
- How can these measures be specifically implemented?

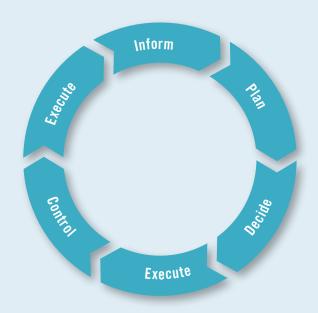
Introduction

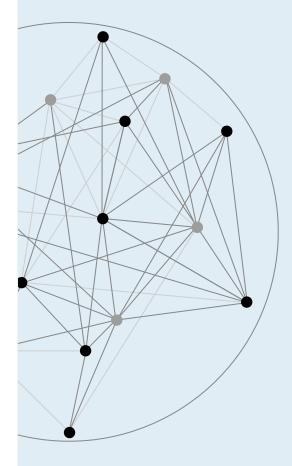
- How can the measures be introduced?
- How can the measures be communicated?
- How can your colleagues be encouraged to become involved?

Retention and improvement

- How can you receive feedback from colleagues?
- How regularly will the measure be reviewed and discussed?

The following action model may help with the implementation.





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