

Heating and Cooling

1. Thermostat Management:

- Lower the thermostat temperature by 1 degree. This can already save up to 6% on your heating costs.
- Use a programmable thermostat to lower the heating when you're not home or at night.

2. Insulation:

- Ensure proper insulation of walls, floors, and the roof. Insulation prevents heat loss in the winter and keeps your house cooler in the summer.
- Insulate your attic to prevent heat from escaping through the roof.
- Use draft strips and brushes to seal gaps around windows and doors.

3. Windows and Doors:

- Install double or HR++ glass for better insulation.
- Use thick curtains in the winter to keep heat inside. Ensure they're closed at night and open during the day for maximum solar warmth.

4. Sunshading:

- Use blinds or sunshades to keep the sun's heat out in the summer.

Lighting

5. LED Lighting:

- Replace incandescent and halogen bulbs with LED lighting, which is much more energy-efficient and lasts longer.

6. Daylight:

- Make the most of natural daylight and keep lights off in areas where it's not needed.

7. Dimmer Switches:

- Install dimmers to adjust lamp brightness according to needs. This can help save energy.

8. Timers and Motion Sensors:

- Use timers and motion sensors for lighting in hallways and outdoor spaces.

Electrical Appliances

9. Energy-Efficient Appliances:

- Replace old appliances with energy-efficient models with an A+++ rating.

10. Stand-by Mode:

- Avoid stand-by mode and switch appliances off completely when not in use to prevent phantom energy use.

11. Refrigerator and Freezer:

- Don't set your refrigerator and freezer colder than necessary (refrigerator: 4°C, freezer: -18°C).
- Ensure door seals are tight.

12. Laundry:

- Wash clothes with cold water and wait until you have a full load before washing.
- Use a drying rack instead of a dryer when possible.

Water Heating

13. Boiler Temperature Setting:

- Set your boiler temperature to 60°C.
- Consider installing a solar boiler or heat pump to heat your water.

14. Water-Saving Showerhead:

- Install a water-saving showerhead to reduce water consumption during showers.

Energy Generation

15. Solar Panels:

- Consider installing solar panels to generate your own energy and reduce your reliance on the power grid.

16. Wind Energy:

- If the location allows, a small wind turbine can be an option for energy generation.

Awareness and Behavior

17. Education:

- Educate household members about energy savings to encourage more aware consumption behavior.

18. Energy Monitoring:

- Track your energy consumption with an energy meter to understand which applications consume the most.

Advanced Heating and Cooling Solutions

19. Heat Pump Upgrades:

- Consider an advanced heat pump that can both heat and cool, especially as a replacement for traditional systems.

20. Solar Thermal Systems:

- Integrate a solar thermal system that actively uses solar energy for both heating and cooling.

21. Underfloor Heating:

- Install underfloor heating; this offers efficient heat distribution and can be integrated with low-temperature heating systems such as heat pumps.

Efficiency in Ventilation

22. Heat Recovery Ventilation (HRV):

- Implement a heat recovery system to retain and reuse heat from exhausted air in incoming fresh air.

23. Natural Ventilation:

- Optimize natural ventilation by strategically placing ventilation grills to maximize airflow without using energy.

Smart Technologies

24. Smart Thermostats and Devices:

- Use smart devices and thermostats that learn from your habits and automatically adjust to save energy.

25. **Home Automation:**

- Integrate home automation systems to optimize energy use of lighting, appliances, and heating based on presence and behavior.

Energy Infrastructure Upgrades

26. **Smart Energy Storage:**

- Invest in home battery systems that can store excess energy from solar panels for use during peak hours or outages.

27. **DC Projects:**

- Consider direct current projects that use DC internally, such as DC lighting and appliances, minimizing conversion losses.

Sustainable Energy Solutions

28. **Hydrogen Technology:**

- Explore the possibilities of hydrogen storage and usage at home, especially in combination with solar panels for local hydrogen production.

29. **Geothermal Energy:**

- Use geothermal systems to take advantage of constant ground temperatures for more efficient heating and cooling.

Ecological and Health Benefits

30. **Green Roofs and Facades:**

- Install green roofs or facade planting to improve insulation and regulate local microclimates.

31. **Indoor Climate Control:**

- Use air purification systems and humidity regulators to maintain a healthy indoor climate without unnecessary energy use.