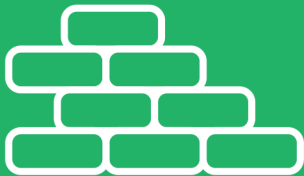


# MATERIALS



*The circular economy uses as few materials  
as possible*



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# RECYCLE

Sort the different types of waste that you generate at home the most, for example, organic waste and paper/cardboard. You can do it gradually along with the rest of home waste.





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## KEEP YOUR HOUSE 2 IN GOOD SHAPE

*Households should have a maintenance manual. If yours doesn't have one, you can search for a generic manual on the internet. Proper maintenance not only prevents inconvenience for residents but also promotes money-saving practices.*





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## REUSE

*Just consider whether you can reuse everyday objects that you no longer need. For instance, think about whether any of your belongings could be useful to someone else. If not, simply recycle them. Remember that each object required natural resources, energy, and labor to be produced.*





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## AVOID PACKAGING

Use returnable packaging where possible. Avoid overpackaged products. Use large-capacity packages and avoid those for an individual use. Don't buy plastic bags and always take your shopping bag with you. Check whether packaging is reusable/recyclable and avoid unnecessary packaging.





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## REPAIR

Try to fix broken items. If not possible, you can use certain parts of them for other purposes before recycling. If you can't, just recycle them. Think about the amount of energy and materials needed to produce everyday objects.





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# BUY

## 2nd HAND

*You can check second-hand websites to avoid buying new products. Additionally, if you have the time, visit flea markets in your area. On swapping platforms, you will find a wide range of interesting resources and offers. Take a look and explore the possibilities!*





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## PRODUCE BIOGAS



## AND COMPOST

Solids from sewage systems and organic waste from kitchens and gardens can be used as compost for gardening or producing biogas. This generated biogas can be used for cooking or heating systems. We encourage you to composte your own waste! Your plants will be thankful to you.





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# MATERIAL PASSPORT

A material passport is a voluntary document that accompanies the design or renovation of buildings. It provides information on the quantity, quality, origin and location of the materials used for construction. If you are planning to improve your house or building, apply for including a material passport in the required documentation.





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# MATERIALS REUSE

The reuse of construction materials at site work or for building renovation reduces emissions, avoids the production of new materials, and helps support the local economy. If you are thinking of improving your house or building, just consider reusing materials. Any new product you purchase should include certificates concerning circularity, and should be available as close as possible.





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## BIO-BASED MATERIALS

Bio-based materials are made from substances derived from living (or formerly living) organisms. Using renewable materials is a better practice than using those based on finite extractive operations and/or involving high carbon emissions. If you are planning to have renovation works at your home/building, be sure to demand bio-based materials for it.



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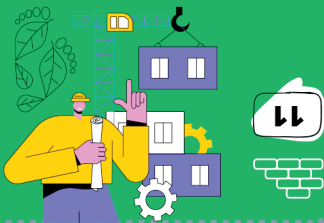




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## USE PREFAB SOLUTIONS

*It has been noted that prefab solutions to construction or renovation in buildings are cost-effective, reduce execution time and inconvenience for residents during the construction works. They also improve quality through a better control during manufacturing and further implementation.*





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# WASTE

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# MANAGEMENT

*Building construction is the sector in which most of the EU waste production occurs. It is important that a circular waste management is implemented with an adequate waste separation and recovery (put it to a new use). If you are planning to have renovation works, make sure that a waste management is properly performed.*





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# WATER



*The circular economy manages water efficiently by keeping and recirculating it into the system as many times as possible*



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# DRINK WATER FROM THE TAP

If the tap water is drinkable in your area, you should drink it. It is healthier and does not produce plastic waste. If not possible, you can buy water bottled in recycled glass containers.





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## SAVE WATER IN THE SHOWER



Try to minimise your daily shower time. Every single minute is vital to save water. And if you want to go a step further, consider having your shower with slightly cooler water.





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## CLOSE THE TAP

Keep the tap closed while you are soaping your hands or brushing your teeth.

Sparely fill the sink when shaving instead of leaving the water run.





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## FILL IT

# COMPLETELY

Get in the habit of using your washing machine fully loaded (not overloaded). You will reduce the consumption of energy, water, detergent and besides, you will extend the appliance lifespan.





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## DEFROST SLOWLY

*Defrost food in the refrigerator; do not use water for it. You will save money, and the food will be tastier and safer.*





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## WATER WITH LEFT WATER

*Store the water wasted while waiting for hot water and use it for irrigation. The water discharged from the air conditioning system can also be used for watering the plants or ironing.*





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## AVOID DRIPPING IN TAPS



Repair faucets to prevent leaks. A tap leaking for 24 hours involves wasting over 30 litres of water per day and may increase your water bill by 5.3% per year.





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## SAVE WATER IN THE CISTERN

Over 6 litres of water can be spent per flush. This can be reduced by putting a bottle full of water into the toilet cistern. The volume occupied by it will not be occupied by the water each time the cistern is filled, with a subsequent saving. You can consider having a dual flush system installed.





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## COLLECT RAINWATER

There are many types of rainwater recycling systems that will help you collect the rain water and reuse it for irrigation, for the toilet cistern, bathing your pet, washing the dishes or others. These systems should be installed on your roof, terrace or garden, which is why they are usually placed at the building/single-family house level.





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## EFFICIENT TAPS

Only by installing aerator fittings on taps you can save water consumption, since they will reduce the amount of water needed without reducing the water pressure. If you are thinking of replacing a tap, contemplate the possibility of those with a central cold tap opening, and a double-position handle and/or thermostatic taps. The latter are especially designed for showers and bathtubs



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# WATER METER

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A water meter is a good way for you to reduce water consumption: it helps you instantly see how much water you are using each time, so that you can adjust water usage accordingly. The shower is the best place for installing water meters, since it is where the largest quantity of water is consumed in a household.





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## REUSE GREYWATER

Greywater is the wastewater from plumbing systems other than the toilet, such as sinks, washing machines or showers. It can be collected and treated for reusing in irrigation or tank filling.





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# ENERGY



*The circular economy selects energy sources wisely and responsibly, while minimizing the use of non-renewable ones*



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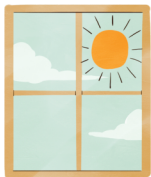




## USE NATURAL LIGHT

1

Plan the distribution of your home to make use of natural light in the most efficient way, according to your daily activities. Pick soft colours for your interior walls or have solar tube systems or skylights installed to allow natural light to enter into poorly illuminated areas, such as bathrooms, corridors, etc.





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## MOST EFFICIENT

2

## FRIDGE

Locate your fridge in a cool and ventilated place and keep it away from potential sources of heat. Keep the back area clean and properly ventilated, and adjust temperature from  $5^{\circ}\text{C}$  for the fridge to  $-18^{\circ}\text{C}$  for the freezer. In the case that you buy a new one, make sure it is as efficient and durable as possible, since it will become inexpensive and cost-effective in the long run.





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## REGULATE



3

## TEMPERATURE

It is important to regulate temperature during warm and cold months. It is advisable to keep the house properly air-conditioned, which is between 22°C and 25°C in the summer, between 19°C and 21°C in winter during the day, and between 15°C and 17°C at night. A difference over 7°C with respect to the outside temperature might be unhealthy, and any extra degree will increase energy consumption over 8%. A smart thermostat is highly recommendable.





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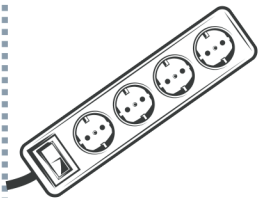




## SWITCH OFF STANDBY

4

The 'standby' refers to the power consumption of devices when they are not actively in use but remain connected to the current. Standby mode is often referred to as an 'energy vampire'. Consider using a power strip or plug with a timer to prevent unnecessary consumption.





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## USE THE STAIRS

*Using stairs and skipping the elevator will help you keep yourself fit and will save energy.*





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## MOVE WITHOUT POLLUTING

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For travelling short distances, a wise choice is going on foot or using your bicycle. Another less healthy but more sustainable alternative is using public transport. If not available, you can ride a scooter or an electric motorbike. In the event that you need to travel longer distances, then use the train rather than the car, coach or plane, which are much more polluting and consume more energy.





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# MEASURE WHAT



# YOU CONSUME

If you use an energy meter you will learn about how much power you are using at home, so you can adapt your consumption accordingly. Finding out how much energy you are using is the first step to reduce your consumption. Some devices are especially designed for scheduling the start up and shut down, or do it remotely.





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## PROTECT FROM THE SUN

8

Overheating might occur during the summer months, as it is when direct sunlight enters through the windows.

You can avoid this by using sunscreens, such as cantilevers, horizontal slats, awnings, opaque curtains or deciduous vegetation. It is also advisable to ventilate your house taking advantage of the cooler hours of the day (early morning and night).





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## EFFICIENT WINDOWS

Make sure to have weather stripping installed on all the windows to prevent any external air intake. If they already have it, get it replaced when it is in poor condition. When you decide to replace windows, the double-glazed folding and tilt-and-turn windows are the best option. Highly insulating windows will help you save energy and increase comfort in the house.





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**10**

## INSULATE YOUR HOUSE

Insulation is the first step to improve comfort at home, reduce energy consumption and save money. There are several ways of insulating buildings or single-family houses. In the latter, insulation from the outside should be the best choice. In the case of a flat in a building, the entire building should be insulated from the outside (best option), or only your flat can be insulated from the inside.



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## GET ELECTRIFIED

*It is important to replace domestic hot water, heating and cooling systems using fossil fuels, such as natural gas or diesel, by others that use electricity, in order to make them compatible with renewable energy production.*





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# RENEWABLE ENERGY

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Try to have renewable energy systems installed at your home, such as photovoltaic power or thermal solar panels. In the case of newly constructed buildings, geothermal energy is also highly recommended. Biomass heating is also a wise option. A first step which does not involve high investment can be to replace your energy supplier for one only using renewable energy.



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# COMFORT



*The circular economy aims to care for and enhance the health and well-being of people and the rest of living beings.*



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# KEEP YOUR HOUSE WARM

*Draw the curtains and lower the blinds at night during the winter months. It can help keep your house warm for longer and it reduces heating consumption.*





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2

## VENTILATE

Open the windows for at least 10 minutes a day.

Without a proper ventilation, polluting particles and humidity might damage both houses and residents. In addition, if a gas stove is used, it will take over 10 minutes to remove the increased humidity caused by the stove itself.



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3

## PLACE PLANTS

Vegetation has many benefits: it regulates temperature, protects from noise and improves the air quality. There are several ways to place it at home, for example, by using pot plants, standing plants or hanging them from the ceiling. They can make you feel better thanks to its psychological effect.





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# ECO CLEANING AND HYGIENE

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Try to use eco-friendly products both for cleaning your house and for personal hygiene. Non-eco-friendly stuff may generate more pollutants and waste. For example, some substances existing in cleaning materials may affect the air quality inside the house.



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5

## MEASURE AIR QUALITY

In order to improve the air quality in your house, the first thing should be to measure its level. There are meters that will allow you to identify polluting substances and avoid jeopardizing your health. For example, the CO<sub>2</sub> level is an indicator to detect when ventilation is necessary.





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## AVOID AIR INLETS

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Seal any hole or crack through which the air may enter into your house. You can check the windows, sockets or cracks in the facade. Preventing unwanted air inlet and outlet is essential for creating a healthy environment around. In addition, you will save energy as well as money on heating.



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## USE ECO-

# 7

# FRIENDLY PAINT

If you're considering painting your house, opt for eco-friendly paint. Not only is it highly durable and environmentally friendly, but it also allows the materials it covers to breathe. What's more, it doesn't contain any substances that could potentially harm your health, like heavy metals.





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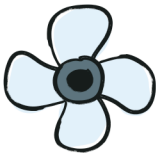
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## MECHANIC VENTILATION

A mechanical ventilation system guarantees the air quality and comfort at home. Also, if a heat recovery system is installed, instead of just extracting air and replacing it with outside air, the system extracts heat from the air and passes on to the air filtered from the outside, saving energy and money.





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## AIR PURIFICATION

It is known that the indoor air quality affects people's health, comfort and well-being. A poor indoor air quality is directly linked to the so-called "Sick Building Syndrome", reduces productivity and might impair learning in schools. There are market-based devices that filter and treat indoor air by removing pollutants. Get one of them!



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# INSULATE

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## ACOUSTICALLY

Noise may affect people's well-being and has a significant impact on health. Acoustic insulation in buildings and homes eliminates the potential discomfort caused by the usual impact noises, as well as by the airborne noise.



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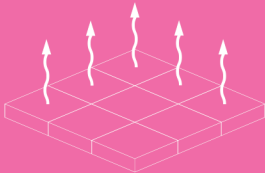




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# RADIATING FLOOR

Radiant heating systems warm the floor. The heat radiates upwards and it is absorbed by other objects in the room, helping to heat the total space efficiently and comfortably. You will keep your feet warm all the way!





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## GREEN OUTSIDE AND INSIDE

The installation of a green roof or facade can cushion and absorb rainwater, insulates the house, increases biodiversity and minimises the urban-heat-island effect. Interior green walls can be also used to improve air quality and absorb noise, having a positive effect on your mental health.



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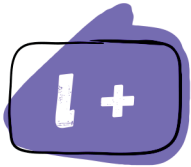
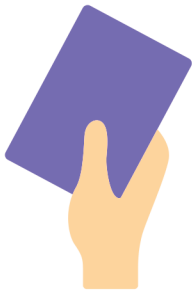
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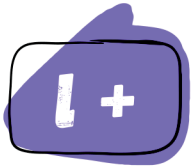
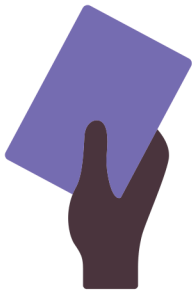
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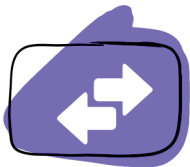
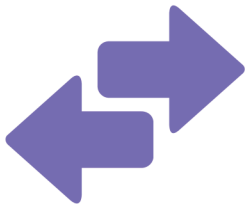
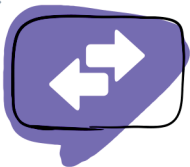
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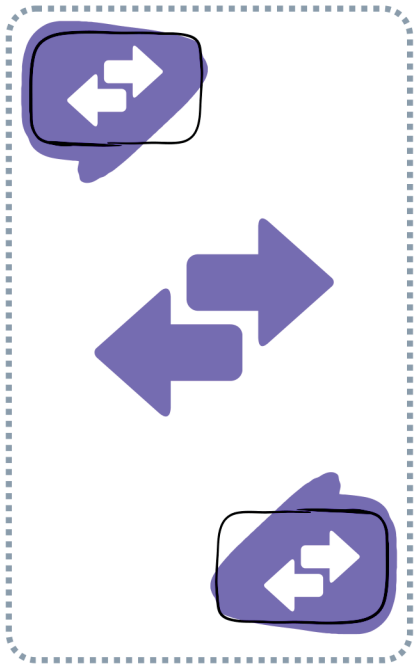
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