with information and tips on how to avoid and reduce waste. along with guidelines for proper disposal and recycling



Batteries, hydraulic fluids and electrical/electronic devices



These contain valuable metals.

Ecobatterien asbl.

items contain.

They can also contain pollutants.

• The collection of scrap items of equipment and used batteries is organised by the

producer-managed systems Ecotrel asbl and

Properly-managed disposal is of great import-

ance, given the valuable materials that these





High quality means a long service life.

- Help to minimise pollutants and electromagnetic radiation.
- ➡ Check for the eco-labelling!
- → Use "green" energy!

Environment-friendly recycling

- Adopt pre-sorting and classification as the first step in recycling
- Recovery of metals and plastics
- Problematic elements are properly disposed
- Certain toner-cartridges can be refilled.

Useful addresses:

www.ecobatterien.lu www.ecotrel.lu www.ulc.lu www.oeko.lu www.oekotopten.lu www.akut.lu





www.clever-akafen.lı





Information on the resource potential on www.resources-potential.com

Building-site waste

→ Pay attention to repairability! ➡ Use rechargeable batteries!

Saving resources while avoiding waste → Help minimise energy consumption!







Useful addresses:

- www.sdk.lu/de/Bau.html
- www.sdk.lu/fr/construction.html
- www.crtib.lu/leitfaden
- www.oeko.lu
- www.akut.lu

Get informed about SDK -LECOBOX.



Information on the resource potential on www.resources-potential.com

- Construction materials should have a long service
- Proper insulation reduces consumption of heat
- Use energy-efficient building technology.
- Consider eventual rebuilding, and even demolition, at the planning and construction stage.

Saving resources while avoiding waste

- Avoid composite materials and tape up, as this makes dismantling and recycling easier.
- Avoid harmful-substance impurities (such as oil and paint).
- Insulation made of natural or recycled materi-

als is more environment-friendly.

- Always opt for low-waste alternatives.
- ➡ Reusable packaging materials are often available.

Environment-friendly recycling

- Mixed waste is difficult to recycle and expensive to dispose of.
- Keep collection clean and separate.
- Mineral-based construction materials are easy
- Problematic waste substances such as bitumen need to be handled separately.

Glass





Saving resources while avoiding

- Buy drinks in reusable bottles, rather than in cans or disposable containers.
- → Minor damage to vehicle bumpers can be repaired.

- DO NOT mix different types of glass!
- DO NOT contaminate with earthenware, ceramic or similar materials!
- Bottles and drinking vessels can be recycled as glass containers.
- Flat glass can be collected separately, and is likewise easy to recycle.
- Glass light bulbs must be handled separately, especially if they are of a "problematic" type (e.g. energy-saving bulbs).

Environment-friendly recycling

- Properly-sorted glass containers can be converted into a granulate material for use in the production of new bottles and glasses.
- Secondary raw materials obtained from old flat glass can be used to manufacture such items as glass insulating fibre or cellular "foam glass".
- Glass from light bulbs can also be reused in industrial processes.

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Plastics







resources.



Useful addresses:

www.valorlux.lu

Info

- These are normally based on petrochemicals.
- Plastics made from renewable raw materials are not necessarily more environment-friendly than those based on fossil sources.
- They are slow to biodegrade (as manifested in littering, both on land and at sea).
- Components such as plasticizers in PVC are

Saving resources while avoiding waste

- ➡ Employee reusable packaging materials!
- Damage to buildings and vehicles can often be repaired.

Environment-friendly recycling

Many plastics are easy to recycle, provided they are carefully sorted and properly labelled.

The use of recycled plastics conserves

 Soiled, unidentified and mixed plastics – along with composite materials - can normally be recycled only thermally.

> Information on the resource potential on www.resources-potential.com

Metals









Useful addresses:

www.valorlux.lu

Info

- The mining of metal ores is normally associated with considerable impact on nature and
- The extraction of metals from their mineral ores is associated with the consumption of large amounts of energy.
- The extraction of certain metals also involves the use of toxic chemicals.

Saving resources while avoiding waste

- Natural reserves of metal ores are not inexhaustible.
- Decomposed (oxidised) metal is released into the environment, from where it is no longer recoverable.



- Re-utilisation wherever possible (e.g. via a recycled-materials exchange)
- Avoid the use of cans and tins by buying fresh or employing reusable containers
- → Metal containers with harmful residues lead to accumulations of "problem" substances.

Environment-friendly recycling

- Employ magnets to separate out ferrous metals, or classify by specific weight.
- Smelting of metals for their reuse in industry
- Special handing of containers/packaging made of problematic substances

Colors/paints etc. in metal packaging



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Organic waste (food residues, garden refuse, wood)







Useful addresses :

www.biogasvereenegung.lu

- Residual refuse contains a high proportion of organic waste.
- The amount of kitchen waste exceeds that of garden refuse, grass cuttings and wood.
- Landfill and indiscriminate incineration are not recommendable methods of waste disposal.

Saving resources while avoiding waste

- Given the global hunger crisis, the throwing-away of food is not only unethical but also a waste of valuable resources.
- The recycling of organic waste provides resources for producing energy.





The instrument against food waste and the avoidance of unnecessary packaging. Info on: www.ecobox.lu

with information and tips on how to avoid and reduce waste, along with guidelines for proper disposal and recycling



... organic waste

→ The production and use of compost also contributes to reducing CO₂.

Environment-friendly recycling

- Most of Luxembourg's biogas power plants also use kitchen and food waste.
- This biogas is used to produce heat and electricity, or is fed into the country's natural-gas

network.

- Garden waste and grass cuttings are composted, while wood-based waste is turned into wood chips.
- Wood waste: Used to make wood-based materials, or in the production of energy.

Information on the resource potential on www.resources-potential.com

Paper / Cardboard



Info

- Although wood is renewable and available virtually everywhere, the conscientious handling of this raw material is still important.
- The low weight of paper and cardboard makes them ideal packaging materials.

Saving resources while avoiding waste

- ➡The recycling of paper reduces the environmental impact of its manufacture, with its high consumption of energy and fresh water. Trees and forests are conserved.
- → Use recycled paper!
- → Reusable containers can help reduce the consumption of packaging materials.
- ⇒ Paper and cardboard cartons can often be



reused several times.

Print out electronic documents and e-mails only when strictly necessary!

Environment-friendly recycling

- Clean material is easier to recycle.
- Short-fibre paper such as that used in disposable tissues reduces the quality of the recycled material.
- Waste paper is dissolved into a paste and cleaned in various stages.
- After the mixing-in of fresh fibres, along with fillers and other additives, pressure and heat are applied to produce new paper.



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Problematic items - chemicals/environmentally hazardous substan-













Useful addresses :

www.ecotrel.lu

Info

- Always proceed with great care when handling chemical substances.
- Observe the safety-warning symbols and protective measures printed on the label.
- Substances that suppose a hazard to health may be concealed, as is the case with products containing mercury or asbestos.
- Waste containing substances that are hazardous to health should be correctly marked, preferably with the original label.

Saving resources while avoiding waste

- Use alternative methods or products (such as detergents with the Clever akafen / "Smart Purchasing" label).
- In the case of pesticides, mechanical means of extermination can be used to replace toxic



Preventive and protective measures can make the subsequent use of chemical unnecessary.

Environment-friendly recycling

- Further treatment or recycling is usually not possible.
- Environment-friendly disposal normally consists of the safe destruction of these products in high-temperature incinerator plants.
- Products such as those containing asbestos-based substances are consigned to special landfill sites.





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Problematic items - oil, grease/substances hazardous to water and flammable products











Useful addresses:

www.ecotrel.lu

Info

- Industrial oil, grease and fuel products, and emulsions containing them, contaminate water and soil – and are also flammable.
- In the case of waste oil, just a few drops are enough to render groundwater unsuitable for consumption.
- Edible oils and fats are likewise problematic when disposed of via the sewer system. This also applies to paints, coatings and solvents.
- Proper storage is important, given their flammability and danger to water.

Saving resources while avoiding waste

- Avoid waste by adopting clean working practices and proper methods of use
- UUse environment-friendly products, such as paints and coatings with the ,Clever akafen' (= smart purchasing) label.
- ➡ Use of recycled products

Environment-friendly recycling

- Products such as oils or solvents are easy to reprocess and if they have been collected under clean conditions.
- Mixtures of mineral oils and solvents, for example, can only be recycled thermally (for energy production).
- A large recovery is possible in the case of waste paint and coatings.

ecutrel



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Information on the resource potential on www.resources-potential.com

Problematic items - gases and pressurised containers









Info

- Lighters, aerosol sprays and modern refrigeration devices contain flammable gases.
- Gas bottles should be handled with great care!
- Lighters and aerosol sprays must not be exposed to high temperatures.
- Many older refrigeration devices still contain CFC coolants, which are harmful to both the climate and the ozone layer.
- Many gases exacerbate the greenhouse effect when released in an uncontrolled manner.

Saving resources while avoiding waste

- Alternatives to aerosols include the use of compressed-air or pump sprays.
- Preventing the release of gases likely to da-

mage the climate is of particular importance when handling refrigeration or air conditioning equipment.

Environment-friendly recycling

- Gas bottles can be reused after suitable handling.
- If this is not possible, the residual gas is recycled as fuel and the metal is scrapped for reuse.
- Aerosol containers are predominantly materially recycled
- Lighters and other items that cannot be dismantled are recycled thermally.
- CFCs from refrigeration devices are destroved.



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Information on the resource potential on www.resources-potential.com



Detailed information can be found in the SDK product dictionary -produktlexikon.sdk.lu