Aktioune vum Ministère fir Ëmwelt, Klima an nohalteg Entwécklung mat de Gemengen, der Chambre des Métiers an der Chambre de Commerce





Guided tour through the SDK logistics centre in COVID times

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#### Preliminary remark about the terminology used

Society doesn't consume waste, it consumes products. Therefore the **SuperDrecksKëscht**<sup>®</sup> (the abbreviation '**SDK**' is used hereinafter), regardless of the legal terminology, doesn't use the term waste, but instead distinguishes between products, end-of-life products or waste products, valuable and problematic products.

In this sense, recycling companies and waste recipients are referred to as reverse producers and product receivers, which treat the products delivered by **SDK** using reverse production processes. Because the management of end-of-life products is a reflection on the consumer society, **SDK** does not talk about waste management but about the reverse consumption economy or also resource management as part of the circular economy.

We are convinced that the terminology we use promotes and develops the appreciation of a sustainable circular economy and the social awareness of society to participate.

#### Gender and diversity statement

To make the text easier to read, the usual male linguistic form is used as a rule in this report for personal nouns and pronouns. If personal terms are only given in the male form, they refer equally to men, women and others.







## 1. About us

The **SuperDrecksKëscht**<sup>®</sup> in Luxembourg are activities of the Ministry of Environment, Climate and Sustainable Development with the municipalities, the Chambre des Métiers (Chamber of Skilled Trades and Crafts) and the Chamber of Commerce in the national waste management.

Resources - Innovation - Sustainability - Circular Economy: these 4 values determine the activities of the **SuperDrecksKëscht**<sup>®</sup>.

The **SuperDrecksKëscht**<sup>®</sup> is a brand which was developed in the context of the sustainability of the waste management tasks of the state of Luxembourg. Its orientation is based on the EU waste hierarchy and on the 2012 national legislation: Avoiding waste before treatment for reuse, before recycling, before other recovery (e.g. energy recovery) and before disposal. Accordingly the focus is on prevention and therefore on resource management - entirely in the spirit of a modern circular economy.

The task of the **SuperDrecksKëscht**<sup>®</sup> is to use and implement the latest information to bring about sustainable material management in an ecological and economic sense combined with high quality. The perception of this task then permits the brand to act as a role model in the ecological restructuring of our society. This role model is intended to provide impetus for all those involved in the national economy with the aim of reducing the burden on the environment and improving resource efficiency.

The activities of **SDK** are also acknowledged by the EU Commission, which has awarded it with the 'Best Practice' label in the field of preserving our resources and protecting our climate.



SDK - SuperDrecksKëscht® - climate protection in practice

2. Where does the SuperDrecksKëscht® campaign stand



#### Legal basis:

- Act of March 25, 2005 on the financing of the SuperDrecksKëscht<sup>®</sup> campaign.
- Act of 21 March 2012 on Waste Management

#### Chargé de Mission (representative): Oeko-Service Luxemburg SA

The authorised company (chargé de mission) Oeko-Service Luxembourg S.A. enters all the legal and otherwise binding obligations such as approvals and contracts for the SuperDrecksKëscht<sup>®</sup> campaign. The highest-level advisory body of the SuperDrecksKëscht<sup>®</sup> campaign is the six-strong steering committee consisting of the representative of the Ministry of Environment, Climate and Sustainable Development, the Environmental Administration, the representatives of the Chamber of Crafts and the Chamber of Commerce and also the management of the authorised company.

# 3. A brief historical overview

1985 started the **SuperDrecksKëscht**<sup>®</sup> as a national campaign for the separate collection of problematic products from private households. Five years later, in 1990, five stationary collection points were available and collection services and special collections were introduced in collaboration with municipalities, organizations and associations. In the same year, the **SuperDrecksKëscht**<sup>®</sup> moved to the Colmar-Berg site. The so-called SuperFreonsKëscht, started with the separate collection and processing of refrigerators, which at the time still contained almost 100% CFCs that damages the ozone layer.

The positive response to the services of **SDK**<sup>®</sup> fir **Bierger** led to the Chamber of Crafts to become a partner of the **SuperDrecksKëscht**<sup>®</sup> in 1992 and **SuperDrecksKëscht**<sup>®</sup> fir **Betriber** was introduced to advise businesses on avoiding, recycling, environmentally sound disposal and handling of waste products. Instruments are the waste management concept and individual monitoring by a consultant. The first labels for ecological waste management were issued at the end of 1993. Ministry of Environment, Climate and Sustainable Development

Environmental Administration





Partners of SuperDrecksKëscht®

Aktioune vum Ministär fir Ëmwelt, Klima an nohalteg Entwécklung mat de Gemengen, der Chambre des Métiers an der Chambre de Commerce



The logistics centre



Advice



Information and activities in the retail sector



SuperSpillMobil



Door-to-door collection



Labeling of environmentally-friendly products in the retail sector



Awarding of the SuperDrecksKëscht<sup>®</sup> label

From 1995 to 2000, **SDK**<sup>®</sup> fir Bierger's services were supplemented by house-to-house collections and Saturday collections, and more and more stationary collection points were added at recycling centers. In 1995 **SDK**<sup>®</sup> received a new logo and a new corporate identity. The information services were expanded, and the the SuperSpillMobil provided the first activities for children and young people.

At the end of the nineties and beginning of the millennium the product range was steadily expanded. In 2001, the yellow collection bucket for cooking oils and fats was introduced. In 2002, joint campaigns were launched in cooperation with retailers to collect dry batteries and other products such as lamps or lighters.

In 2004, the 'Service Center' was introduced, a mobile recycling centre with which the efficiency of mobile collection could be noticeably increased. Furthermore, the logistics centre in Colmar-Berg was enlarged and modernised.

From the outset, the avoidance advice of **SuperDrecksKëscht**<sup>®</sup> campaign focused both on reducing the quantity of problematic products and on recommending ecological low-pollutant products. In 2007 the avoidance advice was given a new framework with the launch of the campaign 'Clever akafen' (Clever shopping). Through the promotion, consumers and businesses receive practical help in environmentally friendly and sustainable consumption.

The **SDK**<sup>®</sup> **fir Betriber** label was certified in 2009 according to the international standard ISO 14024. The Chamber of Commerce joined as a core partner.

The certification of ecological waste management in companies/facilities was thereby further upgraded and is now an important component of comprehensive certifications, such as ISO 14001.

In 2014, **SDK**<sup>®</sup> launched the waste management and avoiding concept for residences as a further instrument to establish the idea of re-consumption, i.e. the separate collection of waste products, in other areas.

The implementation of the Circular Economy is now gaining further prominence. With the resource potential certified according to ISO 14024, a new instrument has been created to further develop recycling quotas and make them more transparent.

In 2018 further innovation projects were introduced under the auspices of the **SuperDrecksKëscht**<sup>®</sup>, e.g. the ECOBOX or 'Flécken a Léinen'.

The corporate design was renewed and the core elements of the **SDK**<sup>®</sup> activity **'Resources, Innovation, Sustainability and Circular Economy'** were integrated into the new logo to make the further development of the **SDK**<sup>®</sup> clearly recognisable to the outside world.

During the COVID pandemic in 2020/2021, the **SDK Akademie** in particular continued to develop positively. The range of activities and training was expanded and well received.

# 4. Environmental Policy – Environmental and Quality Management

# Criteria and tasks for the implementation of environmental policy

As part of its environmental policy, the **SuperDrecksKëscht**<sup>®</sup> is committed to environmental protection, to the fulfilment of legal and other binding obligations, and to the continuous improvement of the environmental management system with the aim of improving environmental performance.

In detail, SDK has set itself the following targets:

#### In the context of circular economy and resource management

- Saving raw materials through resource efficiency management
- Avoiding waste products
- Preparing waste products for reuse
- Recycling and recovery instead of disposal of waste products
- Intelligent and sustainable product design
- New production and reverse production processes
- Changing consumption patterns ('sharing economy')
- Transparency of all product flows

#### As part of general environmental precautions and health protection

- Energy management and climate protection
- Environmental protection and sustainability at suppliers and processing partners
- Prevention of environmental accidents
- Environmental accident procedures reduction of environmental impact

#### As part of social responsibility

- Consideration of the interests of all stakeholders
- Compliance with social standards at local and global level
- Fair conditions for employees and partners
- Training, information and sensitisation in environmental protection

#### Indirect measures

- Promoting awareness of employees' responsibility
- Information and dialogue with all stakeholders
- Advising all partners
- Compliance with environmental standards at suppliers and contractors

SDK's current environmental code was revised in 2021 and put into effect by the SDK steering committee (highest-level advisory body) in April 2021.





ISO 14001 certificate



EMAS certificate

# A. Introducing SuperDrecksKëscht®



Awarding of the EMAS certificate







SDK has been awarded the CSR label



The logistics centre

#### **Environmental policy tools - ISO 14001**

The **SuperDrecksKëscht**<sup>®</sup> is certified according to ISO 14001, the international quality standard for the environmental management of commercial, service and industrial companies.

On 15 th March of 2021, a surveillance audit confirmed the ISO 14001:2015 certification granted in March 2020. In addition to the internal processes, the success of the consulting activities at companies and municipalities, including the innovation projects and the **SDK Akademie**, was also examined. The audit revealed compliance with the requirements of the standard and no deviations. The certificate is valid until 27/02/2023.

#### EMAS

In addition to ISO 14001, **SDK** undergoes auditing according to EMAS, the European environmental management system. The monitoring audit was carried out alongside the verification of ISO 14001 on 15/03/2021. The certificate is valid until 27/02/2023.

#### RAL seal of quality

The reverse production of refrigerators, which **SDK** organises as part of the producer's liability as the representative of **Ecotrel asbl** (see Page 43), has held the RAL 'Reverse Production of Refrigerators' seal of quality since 1999. The quality and inspection regulations are a comprehensive collection of requirements and relate to all phases of the reverse production of refrigerators. The prescribed complete documentation of all steps makes the reverse production a transparent process. The minimum recovery values for the CFCs or climate gases (VOCs) contained in a refrigeration appliance specified in the quality and testing regulations are of central importance. The current certification held by **SDK** is valid until 31/07/2021.

#### CSR

On 19th of March 2020, the **SuperDrecksKëscht**<sup>®</sup> was again certified with the CSR label by INDR (National Institute for Sustainable Development and Corporate Social Responsibility), which confirms the sustainable and socially responsible conduct of the operation.

The current certification held by SDK is valid until March 2023.

# Commodo-Incommodo approval and approval under waste legislation

The existing approvals issued by the Ministry of the Environment, Climate and Sustainable Development (issued by the Environmental Administration) and the Ministry of Labour, Employment and the Social and Solidarity Economy (issued by the Inspectorate of Labour and Mines) are regularly audited in the context of environmental and quality management (Target-Actual state checklists).

# A. Introducing SuperDrecksKëscht®

# **5. Focal Points**

The duties and commitment of the **SuperDrecksKëscht**<sup>®</sup> can be illustrated by the following focal points.

#### 1. SuperDrecksKëscht® fir Bierger

# Problematic waste products in the household - avoiding and recycling them!



Objective: Healthy and sustainable living and sustainably in the household - today and in the future

The activities include:

- The management of problematic waste products in collaboration with the municipalities
- Information and sensitisation for avoiding waste and sustainable consumption
- Supporting the people living in residential buildings regarding the separation and avoidance of waste products

#### 2. SuperDrecksKëscht® fir Betriber



Ecological waste management in organisations/ businesses

Objective: Practical circular economy by avoiding waste and recycling waste products

#### The advice includes:

- Linking ecology and economy
- Priority for avoiding waste
- Separate and clean collection and storage
- Transparent and sustainable handling and transport
- ➡ Resource-efficient recycling
- Displaying the quality label (in compliance with ISO 14024)

#### 3. The SDK Akademie

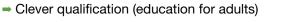


Activities - Information - Education for every age

# Objectives: Promoting environmental awareness and supporting sustainable behaviour / consumption

#### The activities include:

- Clever education (provided to schools and higher education)
- Clever entdecken (clever discovering) with SDK at home,
- SDK on tour, visits, as well as SDK summer school



Online academy





Service for citizens



Practical advice



Awarding of the quality label



Guided tours in the SDK-Center



Activities - Agricultural Fair



# A. Introducing SuperDrecksKëscht®



Body care (rinse-off) products



Cooperation with the consumer protection association (ULC)



Cooperation with the municipalities



Further education



Solutions for waste separation in a small space - the LECO box

#### 4. Driving the economy forward

#### Together with businesses, associations and institutions



circular economy

The activities include:

- Sustainable shopping: 'Clever akafen' with the retail trade
- Repair and rental service: 'Flécken a Léinen' (Repair and Share) with the trade sector

Objective: Education towards a 'Green Economy' -

- Circular Economy in construction
- Supporting farming businesses with the machinery ring (MBR)
- → Against wasting food with HORESCA
- Information about recycling electrical appliances with ECOTREL



#### 5. Developing society

#### Together with municipalities, NGOs and the social economy



Objective: Health and well-being for all people, today and in future

#### The activities include:

- Projects with the Luxembourg Eco counselling (Luxembourg Umweltberatung) for sustainable municipalities
- Making events more sustainable with Oekocenter Pafendall (Green Events)
- Supporting the social economy
- Information for sustainable consumption with the ULC





# New solutions in logistics, waste management and recycling

#### Objective: Protecting resources and the climate -Preserving livelihoods - Closing cycles

The activities include:

- Making waste logistics safer, more efficient and more sustainable
- Practicable solutions such as developing the smart collector
- Contributing towards more safety, such as when collecting rechargeable batteries (with Ecobatterien)
- Driving forward sustainable recycling and recovery processes using the resources potential
- → Establishing and developing reusable systems such as the ECOBOX



# B. Sustainability factor: economy – actively promoting the economy

# 1. Circular economy and resource efficiency

#### Circular economy and resource efficiency

Based on the existing know-how, the strategy of the **SuperDrecksKëscht**<sup>®</sup> 's strategy aims to further develop classic waste management into a reverse consumption economy. With the reverse consumption and reverse production concepts, waste products are collected cleanly and directly and can thus retain their value better than with classic mixed collections of waste. The resources potential tool plays an important part here (see Section G.4).

In addition to reverse consumption and reverse production, the 'clever' concepts of the **SuperDrecksKëscht**<sup>®</sup> ('Clever akafen', 'Clever botzen') aim at the reuse of products and the use of ecological products, and at a later stage of development, at the implementation in the intelligent design of new products ('Ecodesign').

For the further development of the strategy, **SDK** also focuses on the Luxembourg municipalities and regions that are to act as beacon regions and to progress innovative concepts and for instance to convert existing recycling centres into reverse consumption centres.

The activities carried out by **SDK** are fully in line with **Null Offall Lëtzebuerg** (zero waste) strategy presented by Environment Minister, Carole Dieschbourg, in September 2020, which is aimed at reducing non-recyclable residual waste to zero.

#### Sustainability and economy

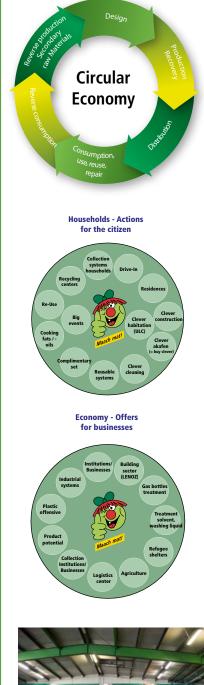
The activities of the **SuperDrecksKëscht® campaign** play an important role in the 2018 national plan for waste management and resources, as well as in the 3rd national sustainability plan, which takes into account the sustainability targets of the UN (SDGs - Agenda 2030).

This concerns, for example, helping to develop and promote Luxembourg as a location for environmental technology companies and service providers, avoiding the production of toxic waste, reducing the vulnerability of the economy to fluctuations in resource prices, or developing scenarios to help decision-makers ('post-growth economy').

# 2. Product flow management and resources potential

#### Product handling and product flows

In 2021, the product handling lists, which represent the product flows at **SDK** from the collection point to the logistics center to shipping to the recipient, were also subjected to an audit and optimized.





The SDK logistics center



Sampling in the SDK logistics center



Quality assurance in the SDK laboratory



Advice for avoiding waste

#### Logistics center

In 2021, the logistics center received 4.899,7 tonnes of valuable and problematic products. In 2020 it was 4,914.2 tonnes. This is 0.3 % less than in the previous year. In 2021, 4,758 tons were transported from the logistics center to the product recipients. In 2020, the figure was 4,966 to. This is 4.2 % less than in the previous year.

Generally, the figures are at the level of the previous years.

The stock level is currently at around 700 tonnes, accordingly the turnover rate is about 7 a year.

The plan is to continue to keep the inventory at the level mentioned; a further reduction of the inventory is hardly possible due to the variety of products as well as the provision of economically and ecologically reasonable transport quantities (complete truckloads; charges).

#### Quality assurance by the SDK laboratory

The number of samples of 'products' and 'unknown products' in 2021 was 2,350, well above the figure in 2020 of 1,983 samples. This resulted in particular from deviations in paints and solvents. The reason were changes at the product receivers, which led to fewer analyses being conducted in 2020 and more in 2021.

The sampling of used oils continues to be the largest item with 1,361 samples (1,350 samples in previous year). 722 solvent samples were taken (264 samples in 2020). The main task in the above sampling was to determine recyclability. In the case of non-recyclable products, the focus was on examining parameters that are to be observed in transportation (ADR = "European Agreement concerning the International Carriage of Dangerous Goods by Road") and by the product receiver in the course of safe and environmentally-friendly disposal.

The analyses of indoor air/radioactivity and special batches were in line with the previous year's figures at 11,685.

The support of recycling centers in the professional conditioning and declaration of laboratory chemicals was continued and has proven successful. The development of laboratory concepts for problem products with specific collection structures for schools and research centres was continued like in the previous year.

Within the framework of **SDK fir Betriber**, laboratory staff processed special batches of hazardous substances at 81 customers (59 customers in 2020), prepared and updated concepts, and sampled 200 products in the process (compared to 114 samples in the previous year).

#### Avoidance strategy for companies – the SDK fir Betriber

As part of the **SDK**<sup>®</sup> **fir Betriber** concept, there is an avoidance catalogue that contains all the preventive measures successfully implemented in the member companies/institutions. A number of companies/institutions recorded the economic benefits of avoidance-orientated waste management. The 'Clever akafen' campaign should also be seen as an important instrument for promoting resource efficiency (see section G.2).

# 3. Product receiver policy

Product recipients will be evaluated according to the requirements of the EU hierarchy of treatment methods as well as the **SDK**-Environmental Code and taking into account the concept of resource potential (see section G.4).

Only product recipients that meet the specifications and thus handle the products in the sense of a sustainable and resource-efficient economy (circular economy) are eligible.

The audit is performed after visiting the premises and reviewing permits, certificates and other relevant documents.

After few site visits were possible in 2020 due to the Corona pandemic and reviews were conducted via video conferencing where possible, most product receivers were revisited at their operating premises in 2021. The calculation of resources potential according to the **SDK** concept has been continued as far as possible in this respect.

# 4. Innovations in logistics and technology

#### **Technical know-how**

In the field of transport and warehouse logistics the **SuperDrecksKëscht**<sup>®</sup> has developed special vehicles and special logistics in recent years, particularly concerning the area of collection and transportation of problematic products.

Logistics/vehicles: The fleet of trucks has been updated. The status of the vehicles is precisely documented so that replacements can be initiated in good time. Regarding emissions and propulsion systems, all vehicles were replaced in 2017 and 2018 by more eco-friendly and low-emission vehicles (Euronorm 6d temp; see Section C.6).

Reverse production: Further optimisations were carried out in 2020. For instance, a fitting was integrated on the existing sorting conveyor for directly tipping plastic pallet boxes. On this line, the employees of Ligue HMC check the incoming old candles for foreign substances before they are transported to the recipient Kaërzefabrik Peters for the reuse of old candle remnants in the production of candle shells and torches.

As part of a pilot project with Peintures Robin, old water-based paints are sorted out for the manufacture of a new product. These have been marketed under the name RobinLoop since the 2nd quarter of 2021.

As part of the dialogue with the product receivers, in 2020 the collection of plastic canisters (10 I – 30 I canisters) with solvents was changed from collecting in plastic lidded drums to collecting in SAP containers with dual authorisation (authorisation IBC 11A and crate 4A). This results in a resource savings potential in the form of avoiding the use of plastic lidded drums and another potential saving on transport and hence CO<sub>2</sub> emissions.

#### Information technology know-how / digitization



Refrigerator recycling according to the latest technology and high resources potential

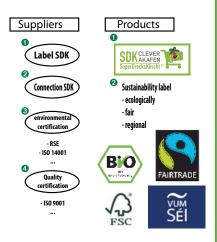


Sorting medicines by means of a sorting plant



Compressor for Styropor® and foamed materials





SDK® procurement policy and hierarchy

The further developed, partly newly programmed warehouse program went into operation from 01/01/2021. The entire movement of incoming products can be completely tracked via barcode until they are shipped to the recipient.

As part of the further optimisation process, in 2020 the recording of working time - by work areas and activities - was structured and digitised. This will make it possible to analyse the individual reverse production processes in detail for potential optimisations and to improve procedures.

Further steps towards digitisation were implemented with the aim of optimising processes and saving paper. Particularly in the **SDK fir Betriber** advice area, the digitisation process has been consistently developed and the advisors can now work predominantly paperless.

# 5. The SuperDrecksKëscht<sup>®</sup> label

#### Consumer brand and business promotion tool

The **SuperDrecksKëscht**<sup>®</sup> label is a quality label for environmentally sound management of waste. It is certified according to the international standard for eco-labels, ISO 14024 and distinguishes facilities from the private and public sector that, implementing the concept of **SDK fir Betriber** make an active contribution to protecting the environment through modern waste management.

Facilities in the sense of the certification regulations are, for example, companies and administrations, construction sites, community housing complexes (residences), community offices or waste collectors. For the consumer it is a reliable trademark for institutions/companies who act sustainably. The number of institutions/companies holding the label as at 31/11/2021 was 12,2021. Compared to the previous year (3,280) this is an increase of 3.3 %.

The label was adapted in 2021 to reflect further developments in society in the area of sustainability and the circular economy. It now stands for handling resources in a sustainable manner. This rates the performance of the certified companies more than the slogan 'for ecological waste management'.

# 6. Supplier policy and purchasing guidelines

The supplier policy and purchasing guidelines are in line with the goals specified in the **SuperDrecksKëscht**<sup>®</sup>'s environmental codex. In the spirit of promoting reduced environmental impacts and resource efficiency, **SDK** has specified environmental and climate protection required from suppliers and processing partners. A specific management task is to advise the partners and to check their compliance with environmental standards.

The same applies to the purchasing guidelines: suppliers with the **SuperDrecksKëscht**<sup>®</sup> quality label are preferred, followed by member companies; when it comes to foreign suppliers, there is a preference for those that are certified to ISO 14001 or EMAS. Whenever possible, products are used that bear the 'Clever akafen' label, e.g. office supplies, cleaning agents and detergents, rinse-off products.

A catalogue of criteria must generally be applied to procurement. This contains existing criteria for the 'Clever akafen' products and furthermore criteria for exhibition stands, information and activities material, for furniture, EDP equipment and electrical devices, for food products, textiles and clothing as well as for promotional items.

# 7. Cooperation arrangements and joint projects

The **SuperDrecksKëscht**<sup>®</sup> has initiated or is involved in a large number of projects together with its core partners: Ministry of the Environment, Climate and Sustainable Development, Environment Agency, municipalities, Chamber of Crafts and Chamber of Commerce.

These cover all stakeholder groups, from the Consumer Protection Association as the representative of consumers, to non-profit organizations from the fields of environmental protection and nature conservation, to the representatives of the various economic sectors (crafts, services, trade, industry, agriculture), to public administrations. The stakeholder groups are listed in a document and their requirements as well as opportunities and risks of collaboration are documented.

#### Waste collectors

In the context of **SDK fir Betriber**, **SDK** offers advice and training to all authorised waste collectors with authorisation for transportation or to act as agents. The collectors have the possibility to sign a cooperation contract and thus to sign up for the label **SuperDrecksKëscht**<sup>®</sup> for collectors. In 2021, of the 25 cooperation partners active in Luxembourg, 11 were awarded the quality label **SuperDrecksKëscht**<sup>®</sup> of which 8 were awarded with the diploma (5 years and longer awarded with the label).

Cooperation partners, who have not met the criteria of the label so far, should be supported with the aim of achieving the quality specifications and obtaining the label. Further training measures are also offered for this purpose. Facilities that use label-awarded cooperation partners for the disposal of their end-oflife products thus have the guarantee that they will be treated according to the latest state of the art in terms of recycling and resource conservation.

#### **Pharmacies**

Together with Luxembourg's pharmacies, the **SuperDrecksKëscht**<sup>®</sup> offers secure collection of old medicines. Pharmacies can also receive advice tailored to their needs as part of the **SDK fir Betriber**. In terms of the collection of medicines, in 2021 19.3 % of the total volume was collected via pharmacies.



Collection in pharmacies



Separation of waste on construction sites



A graphic about the consulting service offered by SuperDrecksKëscht® in the HORESCA magazine



Drive-in collection point at the Howald Cactus

#### **Construction industry**

Modern waste management concepts that meet the criteria of sustainability and circular economy are particularly important in the construction industry. The **SDK** shares its know-how with important institutions such as the IFSB (Construction Industry Training Centre), OAI (Association of Architects and Engineers) and LIST (National Research Centre) (see section G.5).

#### Gastronomy and tourism

There are good contacts with the Luxembourg gastronomy association HORESCA. This association supports the return of used cooking oils and lighters and regularly publishes tips for its member companies in the 'HORESCA Magazine'.

During the further development of the ECOBOX concept (see section G.3) in the context of combating food waste, there was an intensive exchange of know-how with HORESCA with the aim of developing practical solutions.

There is good cooperation with those responsible for the Ecolabel for tourism companies. Companies with the label **SuperDrecksKëscht**<sup>®</sup> fulfil the criteria (waste sector) without further inspection.

As of Dec. 31, 2021, the number of affiliated establishments from the food service sector was 496 establishments, corresponding to 9.1% of all affiliated establishments.

#### Retail

The Luxembourg retail trade has for many years been a partner of the **SuperDrecksKëscht**<sup>®</sup> in the area of the collection of problematic products. Cooperation has existed since the 1990s in the collection of dry batteries and fluorescent tubes. Some supermarkets have expanded their range and offer customers a mini collection station in cooperation with Ecotrel asbl, Ecobatterien asbl and the **SDK**. As of December 31, 2021, this was the case in 27 supermarkets.

Since 2011, the **SDK** has been involved in the pilot project Drive-In Recycling at Cactus Howald (municipality of Hesperange). The aim of this project is to examine how the return of recyclable old products is accepted in supermarkets, in the sense of a general increase in collection rates and the shared use of existing journeys.

The retail trade has been a key partner of the **Clever akafen** campaign from the start, the idea of this campaign being to place and promote environmentally-friendly products in the retail market (see Section G.2).

#### Agriculture

**SDK** conducts ongoing talks with the Ministry of Agriculture and the ASTA (Agricultural Administration) with the aim of getting more farms to join **SDK fir Betriber**. Great support for projects in the field of agriculture is provided by Maschinenring, MBR. As of 31/12/2021, 95 businesses from the agricultural sector had joined.

#### Industry / producer systems

Since the producer responsibility for electrical/electronic waste and batteries came into effect, the **SDK** has been an authorised partner of the national companies Ecotrel asbl and Ecobatterien asbl.

In the area of electrical/electronic waste, the **SDK** takes care of the collection of refrigerators, electric oil radiators and lamps. The **SDK** supports Ecotrel asbl and Ecobatterien asbl in public relations and projects aimed at improving safety and resource efficiency.

#### **ULC (Consumer Protection Association)**

With the aim of informing and raising awareness, the **SDK** closely with the Union Luxembourgeoise des Consommateurs. ULC's magazine, 'de Konsument', publishes a monthly article with consumer information on products, waste prevention and recycling.

#### **Oekozenter Pafendall**

The cooperation with Oekozenter Pafendall was intensified in 2017. Together, a concept regarding the area of green events was developed, which officially started in September 2019 The aim is to structure the already existing experiences and best practice examples of different communities and associations and to pass on the know-how by means of consulting and online (see section G.9).

**SDK** is a consulting partner to oekotopten, the internet platform about the best ecological products in various product categories under the umbrella of the Oekozenter. Oekozenter Pafendall is also a partner to the project 'Flécken a Léinen' (see section G.10).

As part of other projects and networks, the **SuperDrecksKëscht**<sup>®</sup> collaborates as a partner. For example:

• river partnerships in collaboration with the municipalities/syndicates involved, natur & ëmwelt, tourism associations, agricultural associations etc.

• campaign 'without pesticides' in cooperation with Emweltberodung Lëtzebuerg, natur & ëmwelt, Ministry of the Environment, Ministry of Agriculture, municipalities/syndicates etc.



Consultancy flyer in agriculture

ecobatterien









The SDK<sup>®</sup> team

## 8. Future prospects

The **SuperDrecksKëscht**<sup>®</sup> will carry on with the tasks assigned to it within the framework of the national sustainability and circular economy policy with dedication and will be available as a partner to all those who are also working on the ecological transformation of society.

In 2022 the product receivers will continue to be examined - using the standardised test reports. As far as possible, the calculation model of resource potential according to the concept of **SuperDrecksKëscht®** will be implemented. Upon request external partners may also have their resources potential checked and verified by **SDK**.

The working processes in the logistics centre and transport logistics will continue to be subject to intensive analysis with the aim of organising the work processes in such a way that they can operate with maximum efficiency.

The recycling centres/resource centres and businesses (schools/colleges and research centres) will continue to be monitored at a high level in terms of correct packaging and declarations of hazardous substances.

The methodology in analytics is continuously developed to ensure efficient and systematic processing.

# C. Sustainability factor: Ecology – active for the ecological transformation of society

# 1. Products

#### **OEKO-PUR**

The OEKO-PUR recovered in the course of the reverse production of refrigerators consists of polyurethane from which the CFCs and VHCs have been extracted. This is to prevent their release which could damage the climate. Every kg of OEKO-PUR thus prevents 250 kg of climate-damaging  $CO_{2}$  emissions.

OEKO-PUR is an excellent binding agent for oil and other organic liquids such as solvents, brake fluid and coolants, paints and varnishes etc. It is offered to the market in 3 different grades (powder, granulate, fine granulate).

In 2021, 1.873 bags were sold. In general, OEKO-PUR continues to be in demand as a product of the circular economy. The sensitivity of companies to clean working and the prevention of incidents thanks to advice contributes to responsible consumption. All 3 products (Plus, Compact and Fine Granulate) are used in a specific manner depending on the different areas of application.

In the context of customer care, OEKO-PUR has been promoted in a targeted manner to fire brigades, civil defence, road construction and maintenance authority, municipalities and other institutions.

To ensure the proper use of OEKO-Pur, users are advised not only to use it correctly but also to store and dispose of it safely.

#### Consumables

As outlined in point B.6 - Supplier Policy and Purchasing Guidelines - purchases are made in accordance with the objectives stated in the **SuperDrecksKëscht**<sup>®</sup>s environmental codex with the aid of a catalogue of criteria.

#### Logistics

In line with the **SDK** environmental codex, besides analysis, representation and evaluation of the packaging material, the focus is on its avoidance. All packaging is used in the recycling system as far as possible. This also applies to cartons and plastic containers.

Regarding cartons, the necessary proportion of virgin fibre now exclusively comes from certified forestry (FSC/PEFC). Hence the cartons used consist exclusively of this and recycled material.

Plastic barrels arising from not completely filled barrels are cleaned by an external service provider and are reused by the **SuperDrecksKëscht**<sup>®</sup>.

#### **Office supplies**

The office materials used internally are purchased in accordance with the criteria of the '**Clever akafen**' campaign. There are internal instructions on reducing paper consumption. Further, digitisation is being driven forward in customer management.

The SuperDrecksKëscht® has long used 100% recycled paper in its offices



Application of OEKO-Pur



3 different products of OEKO-Pur



FSC-certified cardboard





The 'Clever akafen' criteria (see G.1) are also being applied internally.



Fruit basket from ecological production



and orders all print products in recycled quality.

#### **Cleaning agents**

The cleaning agents used internally are selected in accordance with the criteria of the '**Clever akafen**'. There are instructions on correct use for our own cleaning staff.

#### Promotional items and give-aways

The promotional items and give-aways used in the course of events (Clever entdecken) and in prize draws and support for non-profit-making campaigns and associations must fulfil the '**Clever akafen**' criteria according to the SDK criteria catalogue or must bear generally recognised environmental labels and, if relevant, come from fair trade sources.

#### Work clothes

Work clothes are ordered, provided they comply with the safety criteria and the further requirements, according to the criteria defined in the catalogue, in organic quality and/or from fair trade.

#### Food

The food and beverages offered to employees and guests (fruit, coffee, confectionery, etc.) are all organically grown and/or fair trade, according to the criteria defined in the catalogue.

The consumed drinking water is taken from the water pipe with an Inowatio system. This avoids packaging and transport costs for bottled beverages. In 2018, the disposable  $CO_2$  gas cylinders initially used here were exchanged for reusable  $CO_2$  cylinders to counteract the waste of resources.

The coffee /coffee beans for the coffee machines have been delivered in 20 kg reusable PE drums since 2018/2019. This has allowed savings on packaging.

### 2. Energy

#### Electricity

Total power consumption has increased by 13.8 % to 290,012 kWh since 2021. The increasing share of power consumed by electric vehicles must be taken into account here (see Section C.6 Mobility). The estimated share in 2021 was 35,017.75 kWh, equating to 12.07 %. If the consumption from charging e-vehicles is taken out of the calculation, then energy consumption still rose by 9.4 %. The relatively low consumption in 2020 (due to Covid among other things, higher share of home offices) is possibly noticeable here.

In relation to the number of employees, the total consumption at 3,755 kWh is at the level of 2019 when it was 3,730 kWh.

SDK has been using green electricity (nova Naturstrom) for several years.

#### **Heating energy**

Since 2015, the entire Colmar-Berg site has been supplied with heat by one central heating system. The total fuel consumption in 2021 was 52,975 I. In the previous year it was 39,332 I. The reason is presumably the rather cold 2020/2021 winter compared to previous years. Of the fuel consumption, 24,739 litres were old kitchen oil and 28,235 litres were biodiesel. Thus 46.7 % of the energy demand was able to be covered by old kitchen oil.

The energy consumption for heating per employee (full-time equivalents) was 685.84 litres.

Emissions and odours coming from the usage of old kitchen oils have not been a problem for the neighbourhood in any way.

## 3. Water

Total water consumption in 2021 was 1,787 m<sup>3</sup>, which is 1.8 % less than the previous year. Of the total water consumption, 1,234 m<sup>3</sup> (69 %) was tap water and 553 m<sup>3</sup> (31 %) rainwater (tank cleaning/vehicle cleaning/watering of green areas).

There have been major fluctuations in this area in recent years. The high consumption in 2020 is due among other things to high rainwater replenishment and the installation of a second rainwater pump on the large cistern. The development will be closely watched.

#### Tap water

As stated in Point C.2, the consumed drinking water is taken from the water pipe with Inowatio system.

#### Sewage water

All the waste water is routed through oil and grease separators and controlled before its discharge into the public sewer system.

# 4. Biodiversity

#### **Green areas**

Native plant species are used in the planting of the green spaces. Native high-trunk fruit trees were planted in the green area between Hall 1 and the Colmar-Berg residential development. In 2019 a flower meadow was planted with native species. The location was further enhanced in 2020 by a large insect hotel.

The other green areas are also kept as close to nature as possible to give a habitat to as many plants and creatures as possible. There is also a winter bird feeding.

#### Pesticides

The **SuperDrecksKëscht**<sup>®</sup> is a member of the 'Without Pesticides' platform (see Section B.2). Pesticide use on outdoor areas and against animal pests is avoided with a few justified exceptions.



Part of the old kitchen fat heating system



Rainwater supply



Tap water from the water pipeline



Insect hotel and flower meadow



Filtration system and sorting stations



Internal waste collection station



New electric and hybrid vehicles

### 5. Emissions, waste water and waste

#### Emissions

The recurrent emission measurements (dust, cadmium, mercury, lead and VOC) as required in the operating permit must be carried out every 3 years by an approved body and were last done on 12/12/2019; the next measurements will therefore not be carried out until December 2022.

The continuous monitoring of the VOCs (volatile organic compounds) conducted by the operator resulted in an extrapolated total annual volume of 16.95 kg of VOCs emitted, which corresponds to 4.2 % of the permitted maximum emission level of 400 kg of VOCs. This result is in line with the trend of previous years and gives no reason for intervention.

The quarterly measurement in the waste airflow of the filter tower for mercury vapour, chlorine gas, hydrocyanic acid, hydrogen sulphide, ammonia and hydrogen phosphide by the operator produced values below the detection limit. The regular measurements of explosive mixtures were carried out on 25/03 and on 20/10/21. In March there were no findings and in October there was a result of 5 - 9 % of the lower explosion limit (LEL).

#### Waste

The internal wastes are managed with the help of the concept **SDK fir Betriber** in line with the hierarchy of avoidance before reuse and recovery before disposal.

In 2021 there were 15.268 tonnes of internal waste compared with 11.231 tonnes in the previous year. The largest items were sludges from oil and grease separators and emulsions from cleaning a tank.

If these and excavated earth/green cuttings are excluded, this results in an adjusted quantity of 5.353,3 kg of valuable and problem products from office and logistics centres (previous year 4.267 kg). The proportion of nonrecyclable residual waste was only 869 kg.

## 6. Mobility

#### Vehicles

Since 2017, the vehicle fleet has been developed intensively with special regard to low-emission drive systems. At the end of 2021 there were 23 electric vehicles plus one plug-in hybrid vehicle in the fleet.

In 2017/2018, a large proportion of trucks were also replaced by more efficient and low-emission vehicles, which is reflected in both fuel consumption and emissions.

#### Fuels

The total consumption was: 1,326,077 kWh, of which 762,328 kWh (57.5 %)

from trucks, 288,759 kWh (21.8 %) from infomobiles and door-to-door collection vehicles and 274,989 kWh (20.7 %) from cars. The share of electricity used by electric vehicles (green electricity) amounted to 66,226 kWh (5 %) in 2021, double that of the previous year. The average fuel consumption of the trucks was 398.39 kWh/100 km. The average fuel consumption of infomobiles and door-to-door collection vehicles was 224.73 kWh/100 km. The fuel consumption of passenger cars was 36.12 kWh/100 km. The figures are around the level of the previous year. The replacement of some of the vehicles with new, more efficient vehicles has had a noticeable effect. The total fuel consumption in relation to the kilometres driven was 122.65 kWh/100 km. (Previous year 122.4 kWh). The fuel consumption per employee was 17,168.27 kWh.

The more efficient and lower-emission vehicles further reduced  $NO_x$  and particulate emissions. The  $CO_2$  emissions have also dropped considerably compared to 2020.

Further details about fuel consumption and traffic-related emissions can be found in the 2022 environmental statement and the current climate protection report.

#### Volume of traffic

The volume of traffic, i.e. the traffic generated by our own vehicles, suppliers and visitors, is at the same low level as in previous years.

# 7. Use of space

Finally, in 2014 the administration building was extended by 510 m<sup>2</sup> of usable space. For this purpose, an already sealed container storage space was built over and no additional ground was sealed. The construction was executed according to specifications using environmentally friendly building materials and the building was optimally equipped in terms of energy and energy technology (e.g. use of LED lighting).

# 8. Future prospects

In 2022, all ecologically relevant activities will be reviewed for sustainability in to avoid or minimize negative environmental impacts.



Mobile collection service vehicle



Use of biodiesel



Fuelling area with waste collection point

# **SDK** - climate protection in practice

## Climate assessment according to GHG Protocol

In 2020 **SDK** compiled a climate assessment for the first time based on the international GHG (Greenhouse Gas Protocol) standard, in which the directly and indirectly generated greenhouse gas emissions were named and quantified as far as possible.

The assessment primarily relates to the emissions generated at the site by the operator of the **SuperDrecksKëscht**<sup>®</sup>, as well as the emissions from upstream and downstream processes. Details can be found in the comprehensive climate protection report, which is constantly updated and also contains the objectives and planned avoidance activities.

#### Scope 2 - direct emissions

The direct emissions were:

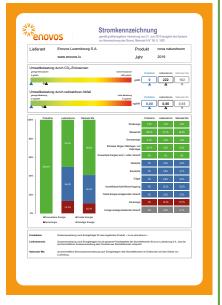
- → Transport: 136,360 kg of CO<sub>2</sub> equivalent from vehicles (trucks, vans, cars). This figure was 194,388 kg of CO<sub>2</sub> equivalent in 2019 (drop of around 30 %). Besides the drop caused by the COVID pandemic (fewer external appointments in favour of online conferences and meetings), the share of electric vehicles increased and more public transport and other alternative forms of mobility were used.
- → Heating: By directly using collected old kitchen fat as well as biodiesel in the central heating system, a total of 129,776 kg of CO<sub>2</sub> equivalent was able to be prevented, which would have arisen from the use of fossilbased heating oil.
- → Machines: High-pressure cleaners and packers (compressors) can currently only be operated using fossil-based diesel. The emissions here amounted to 20,169 kg of CO<sub>2</sub> equivalent. The sweeper also uses fossilbased gas. The emissions here amounted to 520 kg of CO<sub>2</sub> equivalent. In 2021 the existing gas-driven forklift truck was replaced by an electric forklift, which meant that the gas consumption was significantly reduced.

Once the emissions prevented by using old kitchen fat and biodiesel are taken into account, then the total amount in 2021 came to 27,273 kg of  $\rm CO_2$  equivalent.

#### Scope 2 - indirect emissions

The indirect emissions were:

- → Power location: As indicated, this is purchased as nova naturstrom from enovos and is composed of 64.3% hydropower, 21% biogas plants and the like, 13.7% wind energy and 1% photovoltaics (values from 2020). The fuel mix disclosure for this product according to the Grand-Ducal Regulation of 21/06/2010 shows 0 kg of CO<sub>2</sub> equivalent.
- → Electric vehicles: This is sourced from Enovos (enodrive). Generally, when using e-vehicles, a value of 0 kg of CO<sub>2</sub> equivalent is also shown here (when using the national Chargy system).



nova naturstrom electricity mix in 2019

# **SDK** - climate protection in practice

# Scope 3a -

#### indirect emissions from upstream activities

- → Purchased goods/operating equipment (logistics containers, office materials/consumables etc.). These are purchased according to the guidelines for suppliers and products described on Page 14 (Section B.6).
- → Logistics cartons: Data for the costs of manufacture and provision is available: Information provided by Cartonnerie Lintgen. From the data – delivered amount per year results in 28,703 kg of CO<sub>2</sub> equivalent (based on 2020).
- → Printed products (brochures etc.): Measures were started in mid-2021 to directly or indirectly compensate for the CO<sub>2</sub> emissions. Example of SDK calendar. The printing house integrally compensates its products. The 2022 SDK calendar was printed climate neutrally.
- → Server capacities: Websites, SDK cloud, email server: A preliminary analysis of the SDK website has been done. In terms of energy efficiency and climate relevance, SDK achieves 80.7 % out of 100 %.

#### Scope 3b site-related indirect emissions

- → Waste: The self-produced waste is managed according to the SDK fir Betriber concept and is avoidance-oriented. In the worst case (incineration), an estimated 2,700 kg of CO<sub>2</sub> emissions would be produced. However, it is more likely that recycling processes will result in a positive CO<sub>2</sub> balance.
- → In 2021, a commuter survey was conducted for the first time. Of 53 employees who do not use a company vehicle, 20 responded. After evaluating the means of transport used, the result is an emission figure of 115,798 kg of CO<sub>2</sub> equivalent.
- → Business trips: Business trips abroad not made in the company's own vehicles are uncommon. In total, business travel (air, rail, rental car) by 5 employees in 2021 resulted in emissions of 2,596 kg of CO<sub>2</sub> equivalents.

### Scope 3c -

#### indirect emissions from downstream activities

- → Transportation of waste products to the product receiver: National/ regional partners are appointed for this, according to the criteria (Section B.6). Fuel consumption at the logistics partners has been solicited, the calculation is planned
- → Reverse production processes at the product receiver: A start was made on querying climate protection activities among product recipients. Calculation/ data research is planned in conjunction with the resource potential, the first steps have been taken.

In general, all concepts include climate-protecting and sustainable behaviour in line with the slogan 'climate protection in practice'. The aim is to quantify all Scope 3 indirect emissions as far as possible.



# PART 2: SUPERDRECKSKËSCHT® – SUSTAINABILITY ON THE MOVE

# D. Social sustainability factor the SuperDrecksKëscht® team



Honouring employees for long-standing service to the company in 2021



Saying farewell to a long-standing employee



having a barbecue together

# 1. Employees

The organisation chart of the authorised company (chargé de mission) is divided into 8 divisions plus Franchise. The Directors and Managing Director are in charge. Supreme body of the **SuperDrecksKëscht**<sup>®</sup> campaign is the steering committee. Since October 2021, this has consisted of 6 people and is composed as follows: A representative of the Ministry of the Environment, Climate and Sustainable Development, a representative of the Environmental Administration, one representative each of the Chamber of Crafts and the Chamber of Commerce, plus 2 persons from the management of the authorised company.

The current works council was re-elected in 2019. It consists of 3 persons and represents the interests of all employees. As part of the ISO 14001 and RSE certifications, the occupational safety officer and the sustainability officer continue to look after the interests of the employees. In 2021, 10 employees were honoured for their long-standing service to the company.

# 2. Guidelines

All employees are committed to respecting the following guidelines in their behaviour and dealings with each other:

1. Punctuality and outer appearance (punctuality, cleanliness at the workplace, clean and appropriate workwear)

2. Careful and responsible handling of the provided operating equipment (Responsible care and maintenance of all operating equipment and infrastructure e.g. computers, vehicles etc.)

3. Motivated support for restructuring measures (Willingness to implement all restructuring measures, submission of suggestions for improvement, constant flexibility)

4. Observance of the **SDK** culture (Honest and open dealings with each other, respecting other employees, supporting other employees, especially new ones)

5. Observance of the quality and safety guidelines (Observance of the agreements in the individual work areas and observance and implementation of environmental code in accordance with EMAS/ISO 14001)

There is a procedure for suggestions for improvement. Bonuses are awarded for successful suggestions. Observance of the guidelines is reviewed annually. Deviations are discussed in an employee appraisal if necessary. In 2021, there was no need for this on the part of either the management or the employees. All the guidelines were observed.

# D. Social - the SuperDrecksKëscht<sup>®</sup> team

# 3. Safety at work

The occupational safety officer looks after occupational safety and regularly checks compliance with protective regulations, such as the wearing of protective glasses and protective clothing in the logistics center.

Upon recruiting new staff, as well as within the framework of the continuous training of staff, the occupational safety officer regularly conducts refresher training on the operating instructions.

#### Workplace measurements

(WEL - Emissions of harmful substances into the workplace air)

These measurements by an approved authority must be performed every 64 weeks. The last ones were done on 13/04/2021 (see report by the environmental management officer in 2021). The next measurement is scheduled for July 2022.

The emission measurements on 13/04/2021 for monitoring compliance with the WEL values (emissions in the workplace air) were carried out by Luxcontrol ("approved authority"). The measurements were taken at the paint station, GWE refilling station, lamp station and forklift workplaces.

The values of breathable dust at 0.64 mg/m<sup>3</sup> on the forklift were below 10 %, at 1.05 mg/m<sup>3</sup> at the lamp station just over below 10 % of the allowed limit (WEL: 10.0 mg/m<sup>3</sup>). The percentages of alveolar dust at 0.01 mg/m<sup>3</sup> on the forklift and at 0.05 mg/m<sup>3</sup> at the lamp station were each below 10 % of the allowed limit (WEL: 1.25 mg/m<sup>3</sup>).

The measured mercury value at the lamp station was 3.3 micrograms/m<sup>3</sup> with a WEL of 20. Hence clearly below 25 % of the required value. Solvents: The values of various volatile organic compounds were all below 10 % of the respective specific limit.

# 4. Training and development/communication

#### Internal training and development

In 2021 there was a total of 190 internal training modules. This equates to a training volume of 863 person-days (1 person training for 7 hours) in the **SDK** team. This figure includes the initial training of new employees.

All the training is documented in the 2021 training schedule. The success of the training was rated by the employees. The topics included: The latest in national waste management as well as product handling and recycling, first aid and safety.

In addition, all operating employees were specifically trained in the areas of incoming and outgoing goods and reverse production in the 1st quarter. This included operating procedures, work and sorting instructions as well as the new processes as part of the warehouse programme.

There was also an extensive train-the-trainer course for all employees that hold training sessions as part of the **SDK Akademie**.



Safe sorting of unknown products



Inspecting the filter tower



Visit to Kiowatt

# D. Social - the SuperDrecksKëscht® team



Internal communication



The employees of the Ligue HMC team with minister, Carole Dieschbourg



All new permanent employees, depending on the area of operation, and all temporary employees, depending on the duration of employment, also received comprehensive induction training consisting of basic training on the activities and philosophy of the **SuperDrecksKescht**<sup>®</sup> campaign, occupational safety / safety briefing, as well as on certifications, logistics and the laboratory.

#### Internal communication

Regular meetings provide exchange of information within the divisions, between the directors and the individual divisions and at the director/ coordinator level. The company meeting carried out once a year with all employees as a rule took place on 11/09/2021.

The further exchange of information takes place via intranet primarily through the PR marketing and administration boards, and also with notices.

## 5. Work-life balance

As part of the agreements, **SDK** employees have individual options for structuring their jobs and working hours. The daily, weekly and monthly working hours can be organised in a family-friendly way within the framework of the total number of hours.

All employees can thus take advantage of the opportunities for caring for their children, including parental leave.

Another advantage of the individually configurable working time is the possibility of avoiding rush hour traffic. Working from home is also possible in accordance with statutory regulations.

### 6. Diversity and equal opportunities

#### Diversity

Gender: The proportion of female employees in 2021 was 34.8% (32 to 60). There are no differences in salaries.

Nationalities: At the **SDK** employees of the following nationalities are employed: Luxembourg, Germany, Italy, Belgium, Portugal.

Integration / Inclusion: With the aim of professional integration, 11 disabled people worked in the logistics centre in the reverse production department (sorting and disassembly of valuable products) in 2021. They were accompanied by two supervisors. These employees are integrated into the normal work process. The partnership between Ligue HMC and the **SuperDrecksKëscht**<sup>®</sup> has existed since 2000. In 2011, the first two employees were honoured for 10 years of service to the company. One employee retired in 2018.

# D. Social - the SuperDrecksKëscht<sup>®</sup> team

To reinforce its diversity policy, **SDK** signed the Luxembourg Diversity Charter in September 2019 and thereby committed itself to actively promoting equal opportunities and non-discrimination towards the shareholder groups.

#### Traineeships

For several years the **SuperDrecksKëscht**<sup>®</sup> has been offering work placements to school and university students, to collect work experience in a future-oriented business in the environmental sector. This is possible in different sectors – administration, logistics, operative sector / logistics centre, communication and laboratory. In 2021 too, young people completed voluntary or professionally required internships at the **SuperDrecksKëscht**<sup>®</sup>. (see also E.6).

Depending on the requirements and specifications of the school/college/ university, the induction and supervision of the interns is adapted individually. This is done, for example, via deployment plans for the various departments in theory and/or practice.

## 6. Future prospects

The organisation chart and guidelines are updated as the need arises.

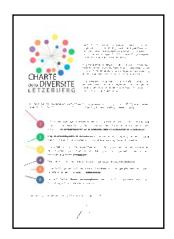
The Safety Officer Safety continues to assure occupational safety with the tried and tested monitoring and management tools.

Based on the experience of the past years, the management plan 'Further training measures' will be continued and further developed.

The internal training requirements for the following year will be determined towards the end of the current year in cooperation with the coordinators per plateau. Here the content is, among other things, in safety management: company guidelines (occupational safety and fire protection), ADR/hazardous goods transportation, road safety; in brand management: EMAS, ISO 14001, ISO 14024, CSR label/sustainability; in product management: product safety, processing at product receivers. Other subjects include IT and information about the ongoing projects.

An evaluation system for internal training has been introduced as of 2018 for continuous quality control. The topic of method training for interactive workshops was also developed.

With new recruitment, equal opportunities are considered and the gender quota is adjusted in the various divisons. The rules for job interviews are orientated towards equality of opportunity and anti-discrimination.



Luxembourg Diversity Charter

# PART 2: SUPERDRECKSKËSCHT® – SUSTAINABILITY ON THE MOVE

# E. Social sustainability factor – Social commitment



The monitoring committee visiting the 'Clever Botzen' training room









# 1. Stakeholder

#### **Monitoring Committee Logistics Center**

Neighbours, residents, civil defence and representatives of the municipality are constantly informed of the **SuperDrecksKëscht**®'s activities in the context of the monitoring committee, in particular at the Colmar-Berg logistics centre. The monitoring committee exists since 1996. Members have access at all times.

In 2021, 3 Monitoring Committee meetings were held to present and discuss current issues affecting the logistics center, such as volume balances, Commodo-Incommodo approval, incidents, EMAS/ISO 14001, logistics optimization and campaigns.

#### **Organizations and associations**

The **SDK** advertising media were given to clubs and other non-profit associations as vouchers so that they could use them in tombolas or other promotions.

#### Other non-governmental organisations (NGOs)

The **SuperDrecksKëscht**<sup>®</sup> supports and cooperates various organisations and also provides advice and assistance:

→ Joint projects with the Emweltberodung Lëtzebuerg, the Luxembourg environmental consultants' organisation ('Ech kafe clever', 'ouni Pestiziden', information and training services for municipalities).

→ Migrant organisations (ASTI, CLAE): information for migrants, Festival des Migrations, des Cultures et de la Citoyenneté (Festival of Cultural, Migration and Citizenship).

Natur & ëmwelt, participation in various platforms (River Partnerships, 'Without Pesticides', environmental education platform).

 Oekozenter Pafendall: Support of the Oekobib (environmental library for ecological topics), cooperation in the green/sustainable events project (see Section G.7)

# 2. Cooperations

#### **Commercial and consumer associations**

As already detailed in Section B.7, the **SuperDrecksKëscht**<sup>®</sup> cooperates with a whole range of commercial associations and with the 'Union Luxembourgeoise des Consommateurs' (Luxembourg consumer union).

#### Social economy

The **SuperDrecksKëscht**<sup>®</sup> places a proportion of its orders with participants in the social economy where disadvantaged people are employed. Examples are the compilation of bulk shipments by the Service de l'Entraide (CNDS) or the delivery of meals via ATP (Ateliers thérapeutiques) Schieren.

In collaboration with the Cactus supermarket chain and the Oeko-Center Hesperange, 2 disabled people supervised by the Ligue HMC have been deployed in the Drive In Recycling Center at Cactus Howald since 2015 to receive and sort recyclable products. The training of the employees is held in the **SDK**-Center in Colmar-Berg.

# 3. Data security

The **SuperDrecksKëscht**<sup>®</sup> has established an internal structure and procedures in accordance with the General Data Protection Regulation (GDPR) to guarantee the protection of data, in particular that of customers and partners.

The **SDK** privacy statement is publicly accessible via the Internet.

# 4. Information, training and other measures to promote awareness

Information and sensitisation, activities and training are the main areas of activity of the **SuperDrecksKëscht**<sup>®</sup> and they are targeted at all groups of society.

#### Individual advice for consumers and businesses

In 2021, 26.618 customers and partners were advised by telephone and e-mail and 28.584 topics were addressed; of these, 4.346 were general questions on waste management and 6.208 concerned information about the innovation projects. Based on 250 working days, 106 questions were answered per day.

For the employees and partners who also provide advice there is a digital portal (information portal at www.sdk.lu) which, besides the current brochures and flyers, also contains additional information on product handling, the collection systems and the companies that have been certified with the **SuperDrecksKëscht®** quality label.

The documents in the information portal have been constantly updated as envisaged.

# 5. Media

To inform the consumer about ecology, about handling of the products from purchase to disposal, about ways to eliminate waste and about the **SuperDrecksKëscht**<sup>®</sup> quality label, the entire range of media is employed. Together with the Consumer Protection Association (ULC), a topic plan has also been developed for 2021, which defines monthly focus topics.

#### Brochures, flyers, posters

As part of the new corporate design, which was approved by the Steering Committee at the end of 2018, the checklist of information carriers, which contains the brochures, flyers and other information carriers as well as the external media used (magazines and journals, radio as well as the Internet), was revised and restructured.



Phone advice



Infographic batteries



Flyer with the collecting dates



Periodicals and magazines



Guest SDK employees in the studio



SDK SoMe channels

The collection dates flyer, which is distributed to all households and informs about the dates of the mobile problem product collection, appeared twice in 2021. It contained information about the SDK fir Betriber label, the Residences and 'Clever akafen' innovation projects, as well as the platform www.e-collect.lu. It also contained information about the services provided by the Luxembourg Consumer Protection Association ULC.

In external communication it is recommended that one relies on the pdf versions of information material accessible via the internet so as to save paper.

#### Newspapers and magazines

In 2021, in addition to the publications in 'de Konsument', regular articles continued to be published in 2021 in the daily newspapers 'Wort' and 'Tageblatt', the Portuguese-language newspaper 'Contacto', and the Frenchlanguage papers 'Le Quotidien' and 'l'Essentiel'. Moreover, articles appeared in other magazines and periodicals.

#### Radio

To promote the label-awarded businesses, regular commercials were broadcast on RTL radio. Here, the label companies were mentioned explicitly.

Once a month, live broadcasts were made with the **SuperDrecksKëscht**<sup>®</sup> on RTL Radio, partly also with the **SDK** or partners (RTL 'Ënnerwee' mat der **SDK**) (on the road with SDK). Topics were the innovation projects, especially also the monthly topics published in 'de Konsument', including information about the quality label **SuperDrecksKëscht**<sup>®</sup>.

There were other regular broadcasts made on Radio Latina. This station targets mainly Portuguese-speaking groups of listeners.

#### Internet and social media

The website www.sdk.lu (incl. www.clever-akafen.lu and www. ressourcenpotential.com) was completely updated and restructured in 2021. The product lexicon, which contains detailed information on the circular economy and avoidance options, has been expanded.

The presence on social media (Facebook, Instagram and YouTube) started at the end of 2019 was developed and has established itself in the meantime. By the end of 2021, 1,070 people had subscribed to the Facebook page, 605 people to the Instagram page and 120 to the YouTube channel.

The Environmental Administration introduced the national waste app in 2021, which citizens can used to find out about all the collection systems and dates in their municipality. Of course, **SDK** is also represented here.

#### Exhibitions and presentations

Due to the Corona pandemic, exhibitions and presentations in 2021 were limited, as in the previous year. All in all, **SDK** was present at 12 exhibitions and information booths with or without staff in attendance, over a period of 41 days.

Information stands and information boards with product information on avoiding and recycling are located in the recycling centers/resource centers and currently 176 businesses.

#### Guided tours/exhibitions in the SDK Centre

During 2021 a total of 670 people visited the logistics centre, some in groups, some as individuals. The visitors received background information about the **SDK** from the PowerPoint presentations and the permanent exhibition in the Infocenter.

The presentation of the **SuperDrecksKëscht**<sup>®</sup> campaign and the 'Clever akafen' exhibition in the reception area of the Infocenter, as well as in the logistics center, were continuously updated and used both during visits and training sessions. In the course of the extension of the administration building, the information area in the Administration visitor reception was expanded. Since 2015 there has been an exhibition here on the subject of resources potential/the circular economy based on sample presentations.

# 6. SDK Akademie -Training courses, qualification activities

**SDK Akademie** is an umbrella instrument that serves to raise awareness, provide information and qualifications within the framework of the activities in the three pillars of the **SuperDrecksKëscht**<sup>®</sup> (**SDK fir Bierger, SDK fir Betriber** and **SDK** Innovationsprojekte).

The Academy's activities for the public are currently divided into three areas: 'Clever Bildung' (education for schools and colleges), 'Clever Entdecken' (discovery, sensitisation measures) and 'Clever Qualifikation' (training and development).

Even though the first four months of 2021 were heavily influenced by Covid-19 and very few activities and further training could be held during this period, this time was used to continue the further development of the SDK Akademie.

#### **Clever Bildung**

In the "Clever Bildung" area, 455 activities (40 % in primary schools, 46 % in secondary schools, 12 % in transition centres and 2 % in the college sector) could take place in 2021. In the college sector there were collaborations with the Lycée du Nord Wiltz in the "Technologie Bois" (wood technology) BTS (advanced vocational diploma) and the Lycée technique Ettelbruck in the "Gestion d'entreprise et dévelopement durable" (business management and sustainable development) BTS. (In 2022 another collaboration is planned with the Ecole de commerce et de gestion (School of business and management)).

There are specific offerings for each area of education. The respective contents have been compiled in the catalogues. Hence there is a catalogue for primary schools (with 4 cycle-specific activities), a catalogue for transition centres (with 4 age-specific activities) and a catalogue for secondary schools (6 year-specific activities, 2 projects and 1 coaching course). Furthermore, in the elementary school area, a teacher's guide was published for each activity. This contains background information about the activity and ideas for preparing and following up the respective activities.



Agricultural Fair Ettelbruck



Oekofestival 2017



Visit to the logistics centre



Clever Entdecken (clever discovery)



Training courses



Training courses



Training courses in the SDK Infocenter



Information and collection point in the training and visitor centre

In 2021, 9 young people completed an internship with the SDK (duration 1 day to 4 months).

As part of the partnership agreement with the SCRIPT, the project "Wuertfloss 2021" could be successfully implemented in 2021. Further, a joint project for schools related to the topic of the circular economy was also planned, which is expected to be implemented in 2022.

Another partnership agreement has been signed with the Science Centre. This is the basis for a regular collaboration.

Furthermore, the SDK Akademie is a member of the BNE platform (Education for sustainable development).

#### **Clever Entdecken**

50 activities took place in the "Clever Entdecken" area in 2021. Due to the pandemic, the 'Clever Entdecken' activities could take place to a limited extent.

In the "Clever Entdecken" area there was a good working relationship with the ONA. As a result, it was possible to implement both sensitisation activities for applicants for international protection as well as corresponding training measures for the personnel.

Furthermore, during the course of the year it was possible to welcome groups of visitors to see the Colmar-Berg site on a regular basis.

SDK also took part in 12 events with an information and sensitisation stand.

#### **Clever Qualification**

197 training modules for external participants took place in 2021. This equates to a training volume of 968 person-days.

The training offered by the **SDK Akademie** are currently divided into 4 competence areas:

- Safe and sustainable cleaning
- Handling resources in a sustainable manner
- Qualified and safe handling of hazardous substances
- SDK philosophy and SDK activities

The training courses are aimed at defined target audiences. The training offered by the **SDK Akademie** has been compiled in a catalogue.

Some of the developments from 2021 are highlighted here:

- 2 complete specialist training courses took place in 2021. 12 specialists could be trained.
- In 2021, a training programme for skilled personnel was developed as part of SDK Residenzen. This was well received. Thus, the basic training could already be offered 6 times between September and December 2021.

• The concept of training for cooperation partners was revised in 2021 and is expected to be implemented in 2022.

Furthermore, the collaboration with various Luxembourg training institutions was expanded. This involves the National Institute of Public Administration (INAP), the National Education Training Institute (IFEN), the National Centre for Continuing Vocational Training (CNFPC) in Esch/Alzette and Ettelbrück and the House of Training (HoT). A partnership agreement was signed with the latter in 2021.

# 7. Future prospects

#### Stakeholders and cooperation arrangements

In 2022, the **SuperDrecksKëscht**<sup>®</sup> will continue its intensive collaboration with the monitoring committee and with the Colmar-Berg municipality. The support of associations and non-governmental organisations and the cooperation arrangements with trade and consumer associations will also be continued intensively in line with the tasks and goals of the **SuperDrecksKëscht**<sup>®</sup>.

#### Information and activities

With regard to the tools of public relations and consultancy, we will keep up with technical developments in the areas of electronic and digital media. Personal consulting will continue to play a major role.

The thematic plan for print and electronic media for 2022 was again drawn up together with the Consumer Protection Association (ULC). This involves the avoidance and recycling of waste products, but also the innovation projects, such as ECOBOX in the context of food waste avoidance. Additional Agreements were made with EBL (Emweltberodung Luxembourg) or with HORESCA when it came to advising companies.

Daily and weekly newspapers, as well as the main radio stations, will continue to be used as public relations tools. An important medium is the member magazine of the consumer protection association, ULC. With RTL Radio, on site reports are the main focus for 2022 (RTL 'ennerwee').

In 2022, **SDK** will again be represented with information stands at exhibitions and events, if the pandemic situation allows it. Plans include a presence at the Agricultural Fair Ettelbrück. As in past years, the **SuperDrecksKëscht**<sup>®</sup> will be providing information on the joint stand with the ULC.

As part of the animation concept, potential visitor groups will also be addressed in 2022 so that they can gain an insight into the logistics center's capabilities. Further to affiliated companies and partners/public institutions, groups and associations will continue to be addressed.



Meeting of the Ecoinnovation Cluster Luxembourg at SDK in 2017



Schulungskatalog 2021



Version Juni 2021

# **1. SDK fir Bierger**

### Volumes and deliverers

The total amount collected by **SDK fir Bierger** in 2021 was 3260.8 tonnes. This corresponds to a decrease of 2.0 % compared to 2020. The population increased by approx. 1.4 % to 634,730 persons over the same period. The volume of problematic products collected per inhabitant per annum has decreased slightly to 5.14 kg.

The results of the national residual waste analysis carried out in 2018/2019 were presented at the start of 2020 and were taken as the basis for new product-specific campaigns on avoidance and separate collection.

In 2021, the number of people delivering items to the mobile collection points was 66,223, a slight drop of 0.83 %. This figure is still the second highest ever registered.

The development is generally influenced by the COVID pandemic. In 2020 the volumes and number of people delivering items was extraordinarily high as a result of house/basement clearances.

### **Collection systems**

Mobile collection: With its Service-Centre, temporary acceptance points and door-to-door collections, the **SuperDrecksKëscht® campaign** has a very flexible system in terms of time and location that meets citizens' requirements and is well received.

#### Service-Center

The Service-Center is a modern reverse consumption vehicle. The collection costs and the number of vehicle movements, emissions from transports and fuel consumption per ton kilometer continue to be at a good level.

#### Door-to-door collection

In 2021, modern vans were in operation for the house-to-house collection. These meet the latest safety requirements and are equipped with SAPs, drums and plastic pallet boxes so that the products can be sorted directly and the containers exchanged in the Service-Center. Door-to-door collections were made in about 2/3 of Luxembourg's municipalities, as in previous years.

#### Recycling centres (permanent collection points/technical services)

In the municipalities of Wormeldange, Manternach and Mertert, mobile collections of problematic products were made once a month, alongside the collection of valuable products by the technical service of the municipalities. Collections were made twice a month in the Mondorf-les-Bains, Echternach and Rosport/Mompach municipalities. Citizens of the municipalities of Grevenmacher, Flaxweiler/Lenningen and Betzdorf now have the opportunity to hand in valuable and problematic products at the Buchholtz-Muertendall landfill acceptance point on 2 Saturdays a month.



The product range



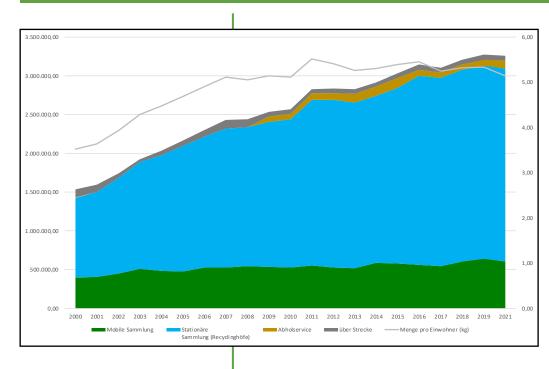
The Service-Center



The small van for the door-to-door collection

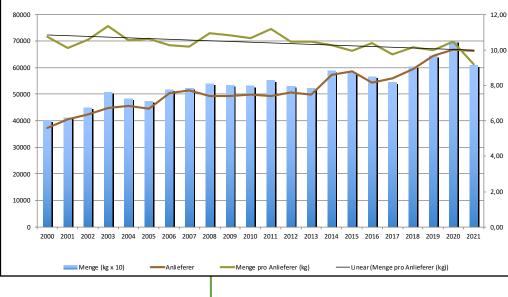


Permanent collection point

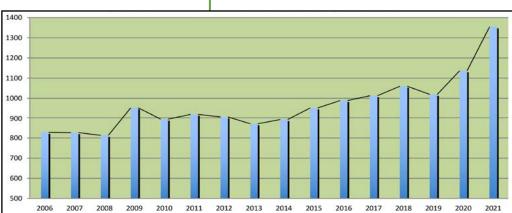


SuperDrecksKëscht® fir Bierger - Total volume and volume by collection system / volume per year and inhabitant (in kg)

2000 - 2021







SuperDrecksKëscht® fir Bierger - Volume of refrigerators collected (in tonnes)

2006 - 2021

#### - Recycling/resource centres (permanent collection points)

There are currently 17 stationary collection points available to citizens in recycling centres. The volume of 2.483,3 tonnes of problem products collected was at the level of the previous year. Thanks to expert support and management, the quality of the waste collected is once more very high.

#### Collection service

The collection service has once again grown in importance in the commercial sector (retail, Comptoir pharmaceutique for pharmacies) thanks to the joint product-specific campaigns. 169.1 tonnes were collected via the collection service and via partners.

#### ➡ Mini-collection points in retail

Collection boxes and collection points have been set up in various supermarkets and DIY stores together with Ecotrel asbl and Ecobatterien asbl.

#### Products

Of the more than 100 different products, a few are singled out here.

#### Lighters

In 2021, 1.487,8 kg or the equivalent of about 121.450 gas lighters were collected. This is almost exactly the same volume as in the previous year.

#### Medicines

After large quantities of medicines were also found in the residual waste analysis 2018/2019, the advertising of the separate collection of medicines and the delivery options via pharmacy, recycling centre or the mobile collection of the **SuperDrecksKëscht**<sup>®</sup> continued to be maintained at an intensive level. Information material was also distributed in 2021 via pharmacies, doctors' and veterinary surgeries. Among other things, information was provided in an issue of the Luxembourg pharmacy customer magazine 'Letz be healthy'.

The volume of medicines collected increased slightly by 1.4% to 186.9 tonnes compared to the previous year. This is 294.5 gr per year and inhabitant. This is the same figure as the previous year, due to the increase in the population. 36.0 tonnes (19.3 %) were collected via the pharmacies. Collection in pharmacies continues in collaboration with the Pharmacists' Union.

#### ➡ Night storage heaters

The **SDK** continues to receive regular inquiries about night storage heaters. In 2021, there were 9 enquiries from citizens who wanted to know if their night storage heaters had any parts containing asbestos. This concerned 45 devices. Of these, 29 were found to contain asbestos and 16 were found to be asbestos-free.



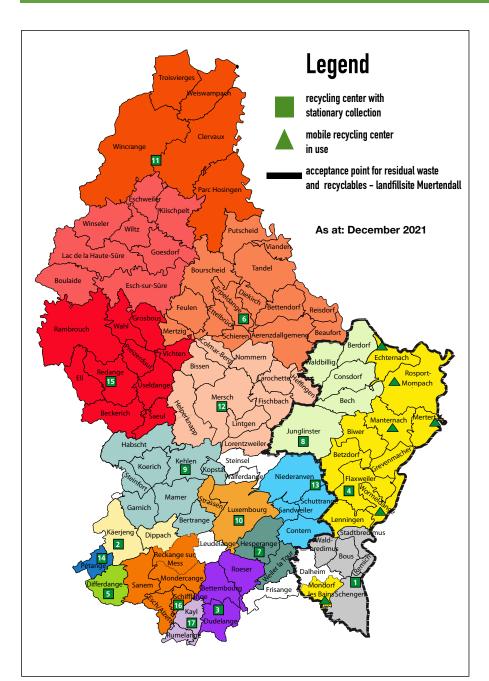
Collection in Cactus supermarkets



Collection of medicines in pharmacies



Display



### Mobile recycling center in use

- Echternach (2x a month)
- Manternach
- Mertert
- Mondorf-les-Bains (2x a month)
- Rosport /Mompach (2x a month)
- Wormeldange

- 1 Bech-Kleinmacher, Recycling centre 'Am Haff',
- 2 Bascharage (Eco Centre), Zone d'activité R. Steichen
- 3 Bettembourg (STEP), Route de Dudelange, Tél. 52 28 34
- 4 Buchholz-Muertendall (SIGRE),
- 5 Differdange, Z.I. Gadderscheier, Tél. 59 23 99

- 6 Fridhaff (SIDEC), Décharge Fridhaff, Erpeldange,
- 7 Itzig (Oeko-Centre Hesperange),1, Rue Nachtbann,
- 8 Junglinster, Beim Rossbour,
- 9 Kehlen (SICA), Zone Industrielle Kehlen,
- 10 Luxembourg, Rue du Stade,

- 11 Lentzweiler (SIDEC), Zone Industrielle,
- 12 Mersch (SIDEC), Mierscherberg,
- 13 Munsbach, Um Landtrausch,
- 14 Pétange, Rue de l'Industrie,
- 15 Redange/Attert, Rue de Niederpallen,

- Stationary collection points
  - 16 Schifflange (SIVEC), Station d'Epuration,
  - 17 Tetange (STEP), Rue de la Fontaine,

#### - Gas cylinders and containers

2021, 56.64 tons were withdrawn. That is 14.4% more than in 2020, another clear increase. This included 37.4 tonnes of Probutan gas bottles (including camping gas; previous year 35.7 tonnes). Helium gas cylinders have increased further (13.14 tonnes, previous year 9.06 tonnes; balloon filling).  $CO_2$  gas bottles (2.95 tonnes, previous year 2.81 tonnes; drinks) continue to be handed in. Despite existing deposit return schemes, return options in the recycling centres and the **SDK** mobile collection systems are frequently used.

The returnable bottles go to the Luxembourg recycler PrestaCylinders, where they are - if possible - put back into use. The recent resources potential certification for the reverse production of "Probutan" gas cylinders at PrestaCylinders resulted in a raw material usage of around 97 %.

#### Mercury in private households

In 2021, 144 kg of mercury-containing products were collected from households, of which 11.2 kg were mercury thermometers. In 2020, it were 103.1 kg. Thus, although household products containing mercury may no longer be sold, there are still non-negligible quantities of mercury-containing products left. Hence, in cooperation with doctors and pharmacists, the product should be kept in the public consciousness.

#### Kitchen fats and oils

In 2021, a total of 518.6 tonnes of kitchen fats and oils was collected via **SDK fir Bierger** and **SDK fir Betriber** compared with 530.4 tonnes in 2020, a decrease of 2.2 %, probably due to lower volumes from the food service/ catering sector (COVID-19).

Of the quantities processed in 2021 - 465 tonnes – 88.53 % were used for biodiesel production and 5.32 % directly in the **SDK** central heating system, whilst 6.15 % went into replacement fuel production.

All the trucks and commercial vehicles and some of the cars continue to use biodiesel. The central heating system at the site continues to run directly on used cooking oil as far as possible. In 2021 this was a proportion of 46.7 % (see points C.2 - Energy and C.6 - Transport).

To optimise the use of old kitchen fats ecologically and economically in line with the circular economy, since 2014 the German REDcert certification system has been used. This system certifies the sustainable use of biomass in line with the German biomass sustainability regulations and has now also been recognised Europe-wide by the EU Commission. Within this framework, all product flows are precisely documented and processed separately according to origin (distinction between cooking fats of vegetable/animal origin; see also www.redcert.org).



Use of gas bottles



Mercury thermometer



Collecting bucket for kitchen fats and oils

prolerra	
Certificate	
60-960cm-520-261a5+66	
anoTarra Umanificănte, ună Henegementberstung Grobie Ummitiguierine Ber Urk II du Barbach	
Geto-Service Luser-bourg Fana Industrials Burd, 1 (FP) (planar Jung	
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**REDCert - certification** 



Syringes and cannulas - the special container is sealed after use.



Toner cartridges



Dry batteries and accumulators

# ecobatterien

ssociation sans but lucratif



Information sheet about the safety concept

#### Syringes and cannulas

The recorded volume of syringes and cannulas continues to increase. In 2021, 23,910.5 kg of syringes/hypodermic needles were recorded compared to 20,069.2 kg in the previous year (up 19.1%). 46,825 safety containers were delivered in 2021, more than ever before.

The majority of syringes and cannulas were delivered in special containers, with only a small percentage packed in other containers.

#### Toner and ink cartridges

Since 2010, toner cartridges and ink cartridges have been handled by our partner 'Return', which guarantees transparent product flows during refilling. In 2021, 36.7 tonnes of toner and ink cartridges were collected by **SDK fir Bierger**. This is 4.1 % less than in 2020. A total of 55.2 tonnes were collected including **SDK fir Betriber**, a slight drop. In 2021, a large proportion of these were also refilled or recycled.

These figures reflect the wide distribution of printers, including laser printers, in the private sector, but also increasing digitisation.

#### Dry batteries and high-capacity rechargeable batteries

Since 2010, **Ecobatterien asbl** has coordinated the national collection of batteries as part of the product responsibility of manufacturers and importers.

The volume of dry cell batteries collected from private households was 103.2 tonnes in 2021 (0.1 %), practically the same level as the previous year. There was a slight increase of 1.4% in high-capacity rechargeable batteries to 10.9 tonnes.

In the case of **SDK fir Betriber**, for dry batteries there was a decrease of 13.7 % to 34.4 tonnes, for high-capacity rechargeable batteries a very significant increase of 65.2 % to 16.7 tonnes.

Overall, the technical development, which increasingly relies on rechargeable batteries, is likely to lead to a further decrease in the quantity of dry batteries collected. As expected, the volume per head of dry batteries processed via the **SuperDrecksKëscht**<sup>®</sup> fell to just 217 grams per inhabitant per annum (previous year 229 gr). The volumes of high-capacity rechargeable batteries (predominantly lithium batteries) are increasing.

The collection logistics with the 30 I collection container introduced in 2003 together with the retail trade (Chamber of Crafts, Chamber of Commerce, the Fédération des Artisans and the Confédération de commerce) has proved its worth.

To ensure sufficient safety with the increasing share of lithium batteries and accumulators (danger due to strong heating/risk of fire in case of short circuits), a new safety concept was introduced at the end of 2019 together with **Ecobatterien asbl**, which ensures the separate treatment of lithium accumulators. At the end of 2021, containers were placed at 293 locations in retail and public buildings.

The smaller 2 I model continues to be popular, filling a gap between the big containers and the mini-collection boxes.

As part of the 'Clever akafen' campaign, rechargeable batteries and charging devices have been heavily promoted since January 2007.

#### Railroad ties

Because of their weather resistance, discarded railroad sleepers were often used by private individuals in gardens, for supporting slopes, for enclosing flower beds, etc. However, these are usually treated with creosote, a tar oil. This biocide is classified as carcinogenic.

**SDK fir Bierger** therefore began in mid-2017 to collect railroas ties from private households and thus remove these environmentally hazardous waste products from the environment. 165.4 tonnes were disposed of in 2021, an increase of 18.3 % compared to 2020 at 139.8 tonnes, whereby the volumes in 2020 were also influenced by the COVID pandemic.

#### - Refrigerators and air conditioning units

The **SuperDrecksKëscht**<sup>®</sup> is an agent of the national return system for the Ecotrel asbl collection and recycling of electrical/electronic waste (see Section B.2).

It also accompanies the implementation of EU Regulation 1005/2009 on substances that deplete the ozone layer as a partner of the Environmental Administration, Chamber of Crafts and Chamber of Commerce.

In 2021, 1354.0 tons of refrigerators, air conditioners and dehumidifiers with an average weight of 45kg per appliance were collected, corresponding to a quantity of 30,089 units. This represents an increase of 19.24 % over the previous year.

Commercial refrigerators and cooling counters as well as air conditioning units and drinks dispensers were also collected and subjected to environmentally-friendly treatment at an RAL-certified product receiver. 3247.7 kg of coolants were collected via **SDK fir Betriber**.

The collection points at the recycling/resource centres are equipped with special containers in accordance with the quality criteria of RAL-GZ 728.

At the product receiver, reverse production Steps 1 and 2 are operated on an industrial scale in a reverse production facility and therefore carried out very efficiently and cost-effectively.

The refrigerator reverse production is done according to the strict criteria of the RAL Quality Association. This covers both older refrigerators that still contain CFCs and also VOC refrigerators, as well as refrigerators with other coolants such as ammonia. The environmentally-friendly and climate-friendly treatment is in line with standard DIN EN ISO 50574.

The reverse production of refrigerators reduces  $CO_2$  through the recovery and subsequent environmentally sound destruction of ozone layer and climate-damaging substances, as well as the recycling of recovered metals and plastics into secondary raw materials. After approval of the calculation method (RAL-CO<sub>2</sub>OLprint), the CO<sub>2</sub> savings certificates regenerated in Luxembourg were passed on to Ecotrel asbl.





Reverse production of refrigerators and air conditioning units



Even CFC-free refrigerators have to be specially treated.



Certified climate protection through RAL-compliant reverse production of refrigerators



Collection of spectacles with the partner 'Brillen weltweit'



Pétange recycling centre that has been awarded the label



Meeting with those responsible for the recycling centres

Contact with the municipalities and the other clients, in collaboration with Ecotrel asbl, was also intensively maintained in 2021.

The **SuperDrecksKëscht**<sup>®</sup> informs the public about the avoiding and recycling of various product groups in the range of products that damage the climate and the ozone layer.

As a partner of the oekotopten campaign, the **SuperDrecksKëscht**<sup>®</sup> contributes to the promotion of energy-saving and climate-friendly refrigerators. As part of the partnership with Ecotrel asbl, the topic of refrigerators and climate protection is constantly communicated in public relations.

# Advice and support for stationary collection points within the framework of the SDK fir Bierger

The recycling/resource centres were visited at least once a quarter. Contact with the communities was through visits and phone calls.

As explained in Point E.3, depending on their level of knowledge, the employees of the recycling centres were offered basic, refresher or advanced training courses.

In 2021, training to become an **SDK** specialist was conducted for the first time. Compared to the basic training for the employees at the recycling centres, the training passes on further expertise about how to safely handle problematic products.

Meetings with those responsible for the recycling centres were held twice, in May and November 2021, at the **SDK** logistics centre in Colmar-Berg. These were used for quality and safety management.

In 2012, a system folder for recycling centre managers, which primarily contains safety-relevant information was created (operating and work instructions, behaviour in case of incidents, etc.). This has also been available in digital form via the internet (RC portal) since the start of 2014 and is continuously revised / updated.

There is also a specific set of criteria for recycling centres to evaluate particularly ecological waste management. Currently, 11 recycling centres are certified with the quality label (see map on page 50).

#### **Future prospects**

The path taken so far will be consistently pursued and improved. There will be more campaigns in 2022 to increase the collection rates.

Mobile collection: In 2022, the various collection systems - Service-Center, short-term collection points and door-to-door collections - shall continue according to the needs of the municipalities.

The utilisation rate for system containers used for quality and safety purposes for products such as cooking oils and fats or syringes/cannulas should be further increased.

To assure the service is in line with the quality label for recycling centres, there will be intensive monitoring in 2022 too. Recycling centers with stationary collection points will be visited every 4 - 6 weeks, recycling centers without stationary collection points every 3 months. The communities also continue to receive intensive support.

The regular meetings and training measures will also be offered in 2022. Besides the module on occupational safety/handling problem products, the focus will be on the re-production of waste products and the resource potential.

In 2022, information stands, supplemented by information modules, will continue to provide citizens with information and current news, especially in the area of waste prevention and sustainable consumption.

# 2. SDK fir Betriber

#### **Product processing**

The task of the **SDK fir Betriber** in the field of waste product handling is to dispose of very small quantities and special products safely and on fair terms, as a supplement to the collectors operating in the market. In 2021, more than 120 different product groups were collected and sent for correct recycling/disposal.

#### Advice and support

As at 31/12/2021 there were 5,443 member institutions/companies. The only slight increase by 8 companies compared to 5,435 companies in the previous year was due above all to the company liquidations and adjustments. The facilities continued to receive intensive support in 2021. There were

- 2,047 analyses and concepts created
- 2,288 label related inspections
- 241 new business members
- 2,054 other consulting visits conducted.

A total of 6,630 facilities were visited. These included 204 initial consultations and 30 training sessions. A total of 120,580 counselling visits have been conducted since the campaign began.



Mobile recycling center



Information given at the Service-Center



Consulting



Conferment of the label



The number of employees at affiliated facilities was 273,659 as of Dec. 31, 2021. This equates to around 60 % of the active population (incl. cross-border commuters). By number, the trades lead the way with 1,206 establishments, followed by public enterprises, institutions and administrations with 784 establishments and the service sector with 657 establishments. In terms of employees, the trades also lead the way with 59,897 employees.

The number of consultations by telephone and e-mail is at the same level as in the previous year. Of 26,618 calls and mails, 15,109 were within the scope of the **SDK fir Betriber**.

The number of label facilities was 3,387 as of Dec. 31, 2021, an increase of 3.2% from the previous year. The goal of further increasing the number of label facilities was thus achieved. The importance of the label remains high in 2021 - due to the advertising campaign and the associated measures (certificates, diploma). The proportion of the number of member institutions/ companies is 62.2 % (previous year 60.3 %).

#### **Future prospects**

In the future, an incentive for joining **SDK fir Betriber** for the improvement of waste management with the aim of obtaining the quality label will be promoted through accompanying advertising measures.

For 2022, it is planned to further inform consumers about the label through increased public relations work and to encourage them to use the offers of label businesses and facilities.

The aim is to increase the share of label businesses in the number of affiliated businesses.

Cooperation with the MLQE (Mouvement Luxembourgeois pour la Qualite) and the INDR (Institut National pour le Developpement Durable et la Responsabilite Sociale des Entreprises) should further enhance the status of the quality label.

The certification of the quality label according to DIN EN ISO 14024 makes it possible to award facilities outside Luxembourg for ecological waste management.

**SDK fir Betriber** -Developing the members and companies holding the label

1993 - 2021

# 1. Circular Economy

In 2014, a study on the circular economy was commissioned by the Ministry of Economy and the Ministry of the Environment, Climate and Sustainable Development together with Lux-Innovation, entitled 'Luxembourg - as a knowledge centre and test area for the circular economy', the results of which were published in early 2015. The **SDK** plays an important role with its activities.

The **SuperDrecksKëscht**<sup>®</sup> is specified as a key player in the national circular economy strategy, as well as, for example, in the national waste and resources plan. The task of **SDK** is, for instance, to develop new instruments of the circular economy, such as the resources potential, reuse and recycling concepts for products that cannot be avoided (see Section G.12 ReUse).

In 2021 **SDK** created the SDK Circular label, which identifies products that are manufactured using old products (see also G.4 and G.12)

# 2. Clever akafen

The "Clever akafen" campaign (Clever shopping) was continued as planned in 2020. This nationwide campaign recognised by the EU Commission continues to promote environmentally-friendly, low-waste products in the retail trade with the slogan "Clever akafen". The number of participating stores remained constant at around 200, including supermarkets and DIY stores, electrical and paint stores, and retailers of school and office supplies. The participating retailers are visited regularly. The following product groups will be evaluated and promoted as part of the campaign:

- environmentally-friendly paints, varnishes and glazes
- rechargeable batteries and chargers
- ecological detergents and cleaning agents for household and commercial use
- energy-saving and long-life lighting
- ecological school and office supplies
- Rinse-off products
- Hygienic papers

Products are generally evaluated on the basis of questionnaires completed by the manufacturer, safety data and product information sheets, and other information provided by the manufacturer. The criteria are constantly and specifically adapted to the individual product groups. Detergents and cleaning agents, paints and varnishes and rinse-off products are assessed by the partner organisation Energie- und Umweltagentur Niederösterreich/ the environmental consultancy agency, Vienna. In 2021, as in every year, updates/adjustments were made to the criteria and documents. Market analyses have been continually conducted since the end of 2020. Using a rota, 40 participating stores and businesses of different sizes and from different regions are examined. The analysis determines the proportion of products marked with "Clever akafen" to the total number of products offered. There, we focused on the product groups detergents and cleaning agents, school





The campaign's newly developed logo in 2019.





Identification of environmentallyfriendly cleaning agents







'Eat it' Festival 2018 food truck



EXPOGAST 2018

and office supplies and rinse-off products (shelf presence). The analysis also included a survey of the level of information of the employees at the participating stores. The analyses serve as a basis to further develop the project.

Recommendations of use and information flyers about the individual product groups complete the "Clever akafen" sensitisation campaign.

Ongoing exchanges with campaign partners, especially from the retail sector, also continued in 2021. The <u>www.clever-akafen.lu</u> website is constantly updated and it offers interested consumers a great deal of information: lists of the participating shops, catalogues of criteria for the individual product groups, lists of positively assessed products, recommended applications, information flyers etc.

The permanent 'Clever akafen' exhibition in the **SDK** Infocenter was continually updated.

Also in 2021, the 'Clever akafen' campaign was regularly covered in the ULC's newspaper articles and publications such as "de Konsument".

## 3. Clever lessen (ECOBOX)

The ECOBOX is a reusable container in two sizes (500 ml and 1000 ml) to take food from restaurants, canteens, take-aways and other facilities that offer food to eat later at home or in the office. To avoid the use of disposable cutlery, a reusable cutlery set is also available.

The campaign to promote the reusable container started in June 2018 and has continued to develop positively in 2021 despite the COVID pandemic. In particular, ECOBOX was increasingly used as a take-away container during the period of restaurant closures.

On 31/12/2021, 145 restaurants plus 141 canteens / school canteens were members. 23,797 500 ml containers and 67,056 1000 ml containers, as well as 2,179 cutlery sets had been distributed up to this date. The project is part of the Luxembourg government's strategy against food waste and disposable packaging and is managed by the Ministry of the Environment, Climate and Sustainable Development and the Environmental Administration. The partner is the Luxembourg restaurant association, HORESCA. In 2021 there were further talks with Horesca, the Environmental Administration and Ministry of the Environment about an ECOBOX 2.

The **SuperDrecksKëscht**<sup>®</sup> takes care of the operational implementation, i.e. the distribution and management of the containers, as well as the support of participating companies and facilities and questions from individuals.

The ECOBOX is managed according to Circular Economy and resource potential. Containers that are no longer usable will be taken back by **SDK** and go to the manufacturer for the production of new secondary raw materials.

Since June 2021 there has been a collaboration with the company 'Party Rent' in Echternach. Associations, clubs, municipalities or other persons, who want to organise an event, can hire ECOBOXes for any given period. Moreover, the ECOBOXes can be returned unwashed. This allows the use of unbreakable reusable containers at events on the one hand and on the other hand it does not require any storage capacity.

## 4. Resources potential

The concept 'resources potential' - initially called 'product potential' - developed in the first phase with the state research centre (now LIST) allows test and evaluate the recycling or disposal processes (remanufacturing processes) at the waste recipient (product recipient) in terms of resource efficiency. The audit procedure has been certified to standard ISO 14024 since July 2015.

In contrast to the classic recycling rates, this calculation method takes into account the output flows of the treatment plants. This discloses of all product flows and promotes transparency of recycling and disposal routes. For data collection, the treatment plant must provide detailed information on each output fraction. The calculation results of the resources potential are distinguished by colour.

One major advantage of the **SuperDrecksKëscht**<sup>®</sup> calculation method is that different treatment methods for an identical product can be compared without much effort, as only the output flows are taken into account for the representation by pie chart. The treatment plant where the greatest raw material use i.e. in which the emphasis is on materials recycling, can thus be quickly identified.

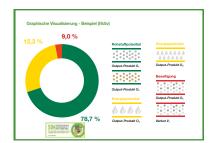
The first resources potential certificates were presented to 12 product recipients from Switzerland and abroad by Environment Minister Carole Dieschbourg in late summer 2016. As of 31/12/2021, a total of 131 reverse production processes at 53 partners of **SuperDrecksKëscht**<sup>®</sup> and other players were assessed.

All award-winning product recipients are pioneers with regard to the implementation of the Circular Economy by achieving an optimal yield of raw materials from the waste (= end-of-life products) according to the state of the art.

In addition, Peintures Robin SA, Contern SA and Käerzefabrik Peters, 3 producers of new products that use end-of-life products in the production of new goods, are certified.

Peintures Robin SA is a Luxembourg-based paint manufacturer. The company's Verdello product has been meeting the requirements of 'Clever akafen' for ecological paints for a long time. In 2021, Peintures Robin then launched a genuine **SDK** circular product on the market in the form of RobinLoop. It uses old paint here that comes from the collection by **SDK fir Bierger**. This is then used for the new production of RobinLoop, a good example of the circular economy in practice.





Sample diagram of resources potential



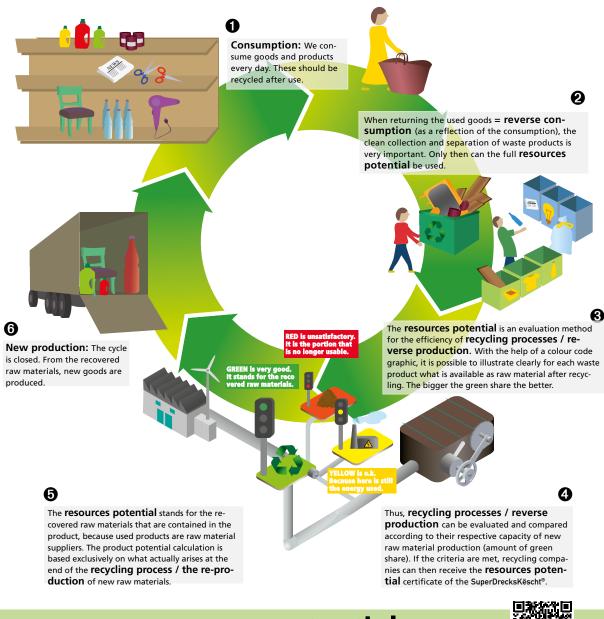
Resources potential flyer



Resources potential for new products at Contern SA

**Resources potential** the innovative assessment tool in the circular economy





# www.resources-potential.com





LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG Ministère de l'Environnement, du Climat et du Développement durable Administration de l'environnement

www.emwelt.lu



CHAMBER OF COMMERCE LUXEMBOURG

www.cdm.lu

www.cc.lu

Since 2021 Käerzefabrik Peters has been selling an outdoor candle, which comes from old candles from the collection made by **SDK fir Bierger** and also bears the SDK Circular label.

A product made by Contern SA has been certified since 2018. Contern SA produces concrete parts and paving stones and also uses old products in the production of new goods.

# 5. Construction industry

In the context of **SDK fir Betriber**, **SDK** is there to support all those active in the construction sector. Public and private builders have an opportunity to organise the waste management of their construction projects according to the **SDK**<sup>®</sup> **fir Betriber** concept. The construction and building trade companies were advised in line with the concept. 31 construction sites were members in 2021.

7 specific training courses for the construction sector were conducted by **SDK** in 2021, with 57 participants. Of these, 6 training courses with 45 participants were held with the IFSB (Institute for Training in the Construction Industry), and 1 training course with the House of Training.

Avoiding waste and deconstruction have also been addressed in ongoing discussions with the aforementioned and other stakeholders. In this sense, it is planned to further develop the topic of using building materials that facilitate later deconstruction.

In the Luxembourg Sustainability Certification for Residential Buildings (LENOZ), which was developed in 2016 and implemented in 2017, the **SuperDrecksKëscht**<sup>®</sup>-concept is also integrated.

To facilitate a widely separate collection even on smaller construction sites, the so-called LECO-Box (Letzebuerger ECO-Box) was created in 2016. In 2021 this was in operation on 11 construction sites.

## 6. Plastics

The sorting of the various cleaned hard plastics has been successfully concluded. Distribution channels to partners who can process the materials from the separated plastics have largely been found. Other searches are still ongoing. Due to the lack of space (storage capacity), the sorting of hard plastics has currently been stopped.

# 7. Ecological waste management in residential buildings

The Luxembourg Waste Law of March 21, 2012 has set ambitious goals. One important goal is to increase the recycling rate of waste. § 14 Paragraph 4a calls for increasing the recovery rate of paper, metal, plastics and glass products from household waste to at least 50% by 2020.



RobinLoop



Use of the LECO box



Collection station



# Saving resources in residential buildings Reduction and separate collection of waste



#### Join in!



Initiative Contact your homeowners' association or property management (syndic) because they are responsible for the organization.



Free consultation Individual analysis Concept development Information material Practice oriented Tel: (+352) 488 216 - 1 residenzen@sdk.lu

#### Example of a waste room (Local poubelle)



The Luxembourg Waste Management Law of March 21, 2012 (Article 13, paragraph 3) specifies that apartment buildings ("residences") must be equipped with the necessary facilities to enable separate collection of the

#### Goal:

1111

#### Reducing residual waste

In general, the objective is to largely reduce the amount of residual waste by separate collection and valorisation of various end-of-life products.



#### Safety and cleanliness

Separate collection reduces both the quantity and the potential hazards of residual waste.

#### Recycling



Separate collection is what makes recycling possible in the first place, and therefore the reclamation of secondary raw materials.

In collaboration with:

Chambre immobilière



#### SuperDrecksKëscht<sup>®</sup>

Collections on SDK® fir Bierger, Recycling center, door-to-door (4x/year), \*Please dispose of dry batteries at public collection points or recycling centers

- Pharmaceuticals, spray cans, ink and toner, cooking oils and -fats, hazardous packaging
- Fluorescent lamps, energy-saving lamps
- Small electrical appliances

#### ecutrel ecobatterien



#### **Resource gateway**

- at least 50% less residual waste, resources are conserved
- lower waste fees, simple operation billing according to polluter pays
- principle (pollueur payeur)
- individual billing per user, secure data transmission
- Solution for inside and outside of buildings



various waste fractions/products generated. The separate waste collection system can be used in multi-family residences of any size. For more information, visit residences.sdk.lu

The previous findings from the residual waste analyses, as well as the results of the analyses of **SDK fir Betriber** show that in apartment blocks, particularly those in which several parties live and jointly dispose of their household waste, there is a very low rate of collection of valuable materials.

In 2012 the **SuperDrecksKëscht**<sup>®</sup> therefore launched the 'Ecological waste management in residential buildings' project. It is intended to improve the separation of waste in communal housing with the **SDK**<sup>®</sup> **fir Betriber** tried and tested tools.

The first residential buildings joined in 2013. As of 31/12/2021, a total of 127 housing associations with 7,858 residences, corresponding to 16,162 apartments, had joined. Of these, 544 residential buildings = 6.92 % had joined and 1.567 residential buildings = 9.94% were in the process of implementation.

During the course of 2019, a pilot project was conducted in the Residence du Jazz in Esch-Belval under the auspices of **Ecotrel**. The aim of this project is to integrate buildings with mixed residential and commercial use into the concept.

The municipalities have great influence on waste management in residences by means of municipal regulations / permits and are also interested in the introduction of separate waste collection facilities within the framework of legal obligations. There is a close collaboration in this area with a series of municipalities/syndicates. Here the municipalities of Schifflange, Hesperange, Remich and Mondorf, as well as the syndicate, SICA, should be given a particular mention.

In 2021, a new training program was offered for the promotion and implementation of **SDK Residenzen** as well as training modules for the safe handling of hazardous and problematic products that may be generated in the course of collection in residences. Due to the high reception, other dates have been planned for 2022.

Smart collectors for 1,100 litres residual waste containers have been on the market since 2016, also for 240 litres residual waste containers since 2017. Smart collectors allow the individual recording of each party's residual waste and thus charge only for the amount of residual waste generated, according to the pollueur-payeur principle. Despite the special promotion of smart collectors, they could not establish themselves so far, which was because of their high monthly costs. Therefore, since 2018, **SDK** has developed a cost-effective and flexible smart collectors from the various providers more often. In 2021, 4 versions, ranging from 240 I to 1100 I for residual waste containers and a wall-mounted version, were developed. At the end of 2020, a 5th version with weight recording is in development.

The number of residential buildings awarded the quality label has been low so far because of the special configuration (housing associations, owners, tenants), only 3 residences were label-awarded as of 31/12/2020. In 2021, the concept was further developed and now allows to award particularly sustainable residences. On 31/12/2021, 15 residential buildings had been awarded the label.



Information salon at the Chamber of Commerce



Label certification in a residential building



Exhibition in the Herspange OekoCentre



Advice in refugee housing





Support for the Energy Days in Mondorf-les-Bains

# 8. Refugee housing

After the sharp increase in refugees in 2016, the facilities for receiving refugees were expanded and modern concepts for the rapid integration of the new citizens were developed.

The **SuperDrecksKëscht**<sup>®</sup> participates in information and awareness courses as well as in the separate collection of waste products by setting up and maintaining the infrastructure.

### 9. Sustainable events – Green Events

The Ministry of the Environment in cooperation with Oekozenter Pafendall and **SuperDrecksKescht**<sup>®</sup> launched the Green Events project back in 2017. The official start was in September 2019 at a press conference by the Minister for the Environment, Carole Dieschbourg.

The aim is to promote sustainable initiatives in the event sector and to strengthen their visibility. Furthermore, the saving of natural resources shall be stimulated and promoted (closed-loop concept) and  $CO_2$  emissions will be reduced. Within the framework of the sustainable events, the cooperation of communities and associations should also be supported. The target group are all kinds of events (festivals, musical, cultural and or sporting events) organized by associations, clubs, federations of associations, federations, municipalities, natural parks or ORTs (Office Régional du Tourisme).

The Ministry of Environment, Climate and Sustainable Development awards the logos "Green Events" and "Mir engagéieren eis" (We commit) to ecologically responsible events to support organisers who are committed to a sustainable approach. The "Green Events" checklist lists the criteria for the logo. This acts as a guideline and orientation for the organisation of ecologically responsible events. To acquire the "Green Events" logo, the event must meet all the mandatory criteria on the checklist. The "Mir engagéieren eis" logo can be acquired if at least half of all the criteria (mandatory and optional) are met by the event.

In 2021, 8 events were awarded the "Green Events" logo and 3 events the "Mir engagéieren eis" logo. Due to the coronavirus pandemic, a large number of events were cancelled in 2021.

# 10. Flécken a Léinen / Repair and Share

As early as 1999, a brochure was published together with the then Oeko-Fonds (now Oekozenter Pafendall) listing businesses and institutions that offer repair ("Flecken") and share ("Leinen") services.

This project was revived in 2018 as an online platform. In terms of resource efficiency, the overarching aim of the online platform is to extend the lifetime of goods and to reduce the consumption of resources through shared use. It was made available to the public in early summer 2018.

As at 31/12/2021, 109 establishments were registered under "Flecken" and 32 establishments under "Léinen", i.e. a total of 141.

In 2020 the Luxembourg Repair Café Initiative was incorporated. **SDK** and Repair-Café Luxembourg want to work closer together in future.

A market analysis was conducted at the end of 2020 to determine which product categories were in particular demand and whether participating businesses had seen a change in demand for repairs.

Partners are the Administration de l'Environnement, Chamber of Crafts and Chamber of Commerce, the Oekozenter Pafendall, Ecotrel asbl and INDR.

## **11. Agriculture**

In 2021 with support of the farmers machinery ring, MBR, the consultancy service was further intensified and a further participation at the Agricultural Fair in Ettelbruck also took place with the ULC (Consumer Protection Association Luxembourg).

As of 31/12/2021, 95 agricultural companies had joined, a significant increase compared to 38 in the previous year.

The collection of agricultural foil was also organised in 2021 by **SDK** on behalf of the Ministry of Agriculture and awarded to an authorised disposal company after a call for tenders. It took place on 6 dates from March to May 2021. As in the previous year, nets, twines, underlay films and used BigBags were also collected separately.

The volume of foil was 957.6 tonnes (previous year 1,196.9 tonnes). This was due, however, to the fact that the 2020 collection was delayed because of the COVID pandemic, which leads to different reference periods. The figure for impurities was also low in 2021. There were 115.5 tonnes of hay nets, 30.7 tonnes of BigBags and 44.6 tonnes of twine, a total of 190.8 tonnes compared to 212.4 tonnes in the previous year.

After the problem of the disposal of vineyard stakes treated with wood preservatives was pointed out by the Luxembourg winegrowers, their environmentally-friendly disposal by an authorised disposal company was coordinated by **SDK**. The first collection in 2019 yielded 124.5 tonnes. In 2021, 90 tonnes were collected and sent to a recycling facility.

12. Re-use





Collection campaign 2021 flyer





The Re-use project is aimed at developing the highest-value waste strategy after avoiding, namely the re-use of materials in practice.

Generally, the **SuperDrecksKescht**<sup>®</sup> supports ventures like Social-ReUse by Ecotrel wherever possible. Several projects have also been launched in the past 2 years. In some cases, we started collection systems for previously unaccepted products, and in other cases methods are sought to bring more products into reuse.

#### from 2019 - collection of used spectacles

As part of the collection of medicines, old glasses also turned up repeatedly at **SDK**. Since 2019, spectacles are now also systematically collected in collaboration with the recycling centres and the Luxembourg opticians and processed via the 'Brillen weltweit' (Glasses worldwide) logistics centre. 'Brillen weltweit' is a non-profit activity, which passes on the used spectacles to the whole world for humanitarian purposes after a professional quality check.

In 2021, around 500 kg equating to around 9,800 pairs of glasses were collected.

#### from 2019 - collection of old candles

As part of the collection of problematic products, candle residues also turned up repeatedly at **SDK** and there were enquiries from citizens about how used candles should be treated. Back in 2019 therefore, it was investigated with the Luxembourg candle factory, Käerzefabrik Peters, to which options existed for using old candles. After confirming the reuse in new products like torches or burner pots, 4.59 tonnes were already collected in 2019. Once all questions relating to licensing laws had been clarified over the course of 2020, the collection of candles was advertised among the public and an initial delivery was made to Käerzefabrik Peters. In 2020, 6.16 tonnes of old candles were collected, whilst in 2021 it was 7.29 tonnes.

Since autumn 2021, Käerzefabrik Peters has been selling an outdoor candle, which is made from old candles from **SDK fir Bierger**'s collection and bears the SDK Circular label.

#### from 2021 - joint project with Peintures Robin to use old paint

As part of the partnership with Peintures Robin (joining **SDK fir Betriber**, resources potential for the product Verdello), a pilot project was started to reuse old paint from the **SDK fir Bierger** collection to produce new paints. After tests and quality checks, the new RobinLoop product, which bears the SDK Circular label, was successfully launched on the market. This happened in summer 2021 (see Page 51 above).

# PART 4: SUPERDRECKSKËSCHT® – INTERNATIONAL

# H. International presence and "circular economy"

# 1. International presence

### Switzerland

In 2021, **SuperDrecksKëscht®** Switzerland was further developed using the tools tried and tested in Luxembourg.

Mobile problem product collections were conducted for the regional waste association, GAF. In October 2016 a plastics collection was added.

Other activities already proven in Luxembourg are planned, including:

- Reverse consumption centre at the Rheinfelden/Möhlin site
- Optimization of the collection of recyclable materials
- Activities and training

#### Sweden

**SuperSopTunna** is active within the **SDK**<sup>®</sup> franchise system for the implementation of the **SDK**<sup>®</sup> concept in Sweden.

### Germany

The first consumption centre in Germany based on the **SuperDrecksKëscht**<sup>®</sup> model and located in the Saarland municipality of Mettlach, which started in January 2013, was also well received in 2021. The number of admissions was 14,391. The recorded quantity of valuable and problem products was 1,228.9 tonnes. The residual waste quantity is 133.54 kg per year and inhabitant. That is a decrease of almost 45 % compared with 2011, when a 'traditional' waste model with volume-related residual waste removal without a reverse consumption centre was still in operation. Financially, the introduction of the reconsumption centre was also a success. Both local government and citizens are satisfied.

There is a joint online portal at www.superdreckskescht.com for **SuperDrecksKëscht**<sup>®</sup> Luxembourg, Switzerland, Sweden and Germany.





Visits from international delegations



The return consumption center of the municipality of Mettlach

# H. International presence and "circular economy"



Visit from a delegation of the EU Commission - Directorate-General for the Environment in July 2018

# 2. Vision Circular Economy

In the context of the national circular economy strategy described in Section B.1, **SuperDrecksKëscht**<sup>®</sup>'s strategy is still aimed at contributing its knowhow so as to establish Luxembourg as a resource-efficiency location and best practice country, together with its partners. This includes ecological and sustainable products and services, in regard of climate protection.

The prerequisite is that Luxembourg's waste management, which is already at a very high level, is developed even further in the direction of the circular economy and reverse consumption. Therefore, municipalities and regions that are willing to act as beacon regions to promote innovative concepts and, for example, convert existing recycling centres into reverse consumption centres based on the **SuperDrecksKescht**<sup>®</sup> model, are addressed.

The **SuperDrecksKëscht**<sup>®</sup> sees its role not only in the operational area, but also as a source of know-how. Know-how can be exported in the form of products and services. Then, this should also attract innovative producers and service providers to Luxembourg.

In this way, Luxembourg can be secured as a location and from here impetus for sustainable development can spread throughout Europe and the world.

# **GLOSSARY - ABBREVIATIONS**

# 1. Clubs / associations / institutes

- SDK SuperDrecksKëscht®
- SICA Syndicat intercommunal pour l'Hygiène publique du Canton de Capellen (waste treatment association of municipalities)
- SIDEC Syndicat intercommunal pour la gestion des déchets (waste treatment association of municipalities) (cantons of Diekirch, Mersch, Redange, Wiltz, Clervaux, Vianden as well as the municipality of Beaufort)
- SIGRE Syndicat intercommunal pour la gestion des déchets (waste treatment association of municipalities) (région de Grevenmacher, Remich et Echternach)
- SIVEC Syndicat Intercommunal à Vocation Ecologique (Intercommunal Syndicate for Ecological Activities ) (Esch-sur-Alzette, Mondercange, Reckange/Mess, Sanem, Schifflange)
- SNJ Service National de la Jeunesse (National youth service)
- STEP Syndicat Intercommunal (Bettembourg, Dudelange, Kayl, Roeser, Rumelange)
- ULC Union Luxembourgeoise des Consommateurs (Consumer Protection Association Luxembourg)

## 2. general abbreviations

- WEL Workplace Exposure Limit
- EN European Norm / European Standard
- kWh Kilowatt / hour
- CFC Chlorofluorocarbon
- LED Light-emitting diode
- LKW Truck
- PKW Passenger car
- PU Polyurethane
- SRE Social Responsibility of Enterprises
- TOC Total Organic Carbon (total amount of organic carbon)
- VOC Volatile Organic Compound



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