

Sustainability Report 2023

Roche Diagnostics International AG



Foreword

Every year, our sustainability report provides an insight into ongoing projects at the site that make a significant contribution to sustainability. We measure the impact of our actions annually using the relevant health and environmental key figures. Because only if we know where we stand can we work on improving.

I am pleased to present our latest sustainability report, reflecting our ongoing commitment to a holistic approach that encompasses society, environment, and economy.

Despite our site's growth we have successfully reduced energy consumption and waste. These accomplishments underscore our commitment to minimising our environmental impact and exemplify our responsibility as stewards of the planet.

Together, we are making significant strides in sustainable innovation. Let us continue to harness our collective strengths to drive forward on this path.

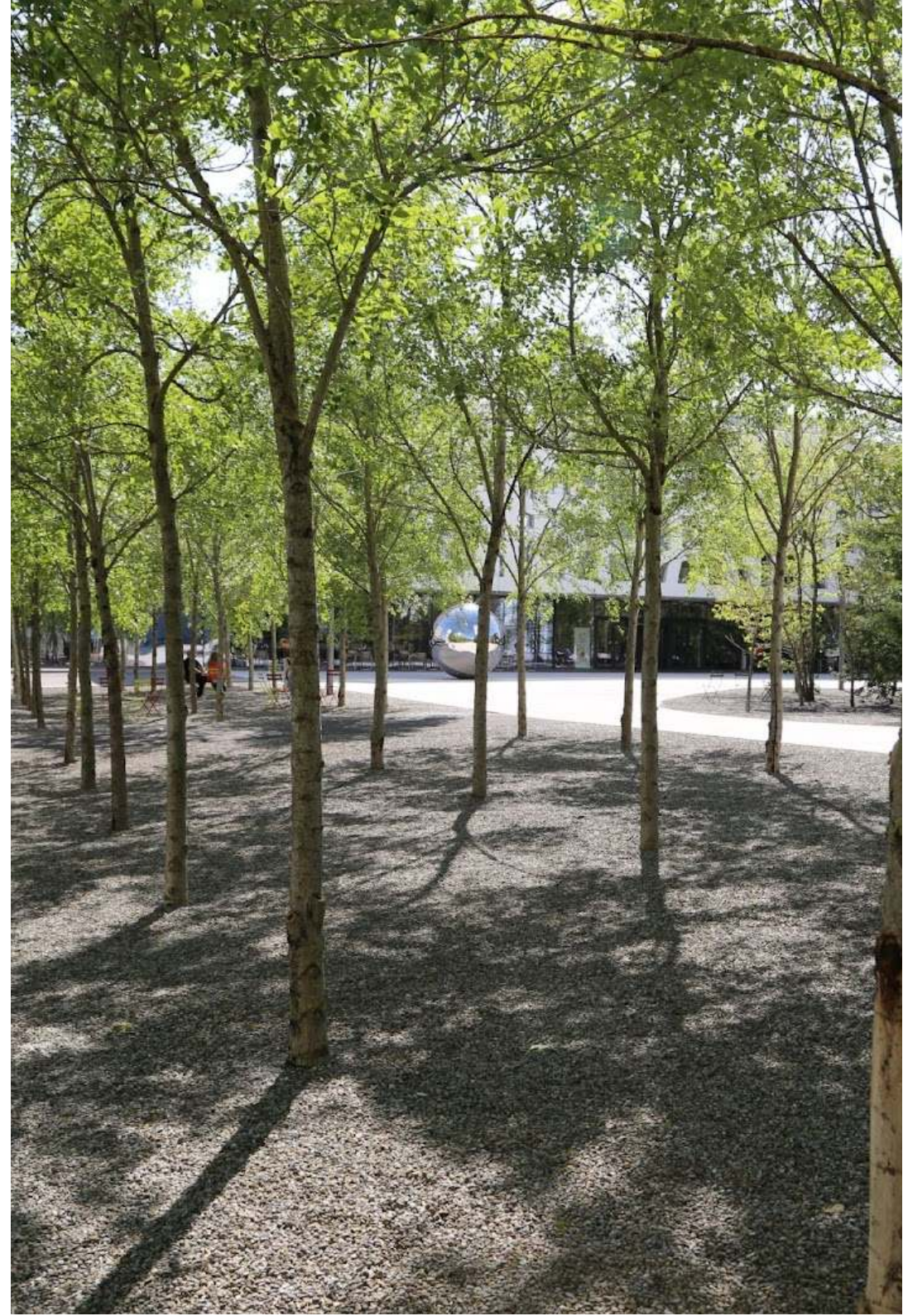
Just like the development of new healthcare solutions, our sustainability work is a never-ending process of innovation, dedication and collaboration. I am certain that we are on the right track because our teams and individuals across the organisation are committed to this every day.

Thank you for your contributions and continued efforts.

Andreas Klopp, General Manager RDI

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Roche Diagnostics International

The site Rotkreuz

The Roche Division Diagnostics is one of the world's leading providers of diagnostic system solutions for clinics, laboratories and medical practices. The Rotkreuz site, with Roche Diagnostics International AG (RDI), is one of the main locations for Roche Diagnostics. RDI brings together key functions and areas of the diagnostics business, such as research, development, production, and system integration.

The Rotkreuz site has experienced continuous growth in the past, evolving from a supplier of instruments to a manufacturer of integrated system solutions for medical diagnostics. Founded in 1969, the company is now the largest private employer in the canton of Zug, with approximately 4'200 employees¹ from around 70 nations. Today, RDI is dedicated to research, development, and production of innovative diagnostic solutions that contribute to improving healthcare.

In addition to the core business, RDI also focuses on making continuous progress in meeting the needs of individuals, society, and the environment. These three areas, along with quality, productivity, and cost-efficiency, are treated with equal responsibility in the pursuit of sustainable development.

This report showcases a selection of sustainability projects carried out at RDI. It also presents key indicators that contribute to site-specific CO₂ emission calculations and the ecological balance for the reporting period. Lastly, the report includes a chapter on recorded accident statistics, which serve as an indicator in the health domain and demonstrate RDI's commitment to a safe working environment.

¹ Internal & external employees in headcounts (source: SHE Key Figure 2023 RDI)



Sustainability at Roche

Sustainability is the cornerstone of Roche's business strategy because: We must act sustainably if we want to be successful in the long term. Roche adopts the holistic approach to sustainability in its three dimensions.

SOCIETY

- Provision of the right treatment through the development of innovative diagnostic solutions, medicines and therapies.

ENVIRONMENT

- Minimising the impact of our activities and products on the environment.

ECONOMY

- Maintaining competitiveness in order to meet patient needs and continue creating quality jobs.

The three dimensions of sustainability are embedded in the Ten-Year Ambitions, which serve to implement Roche's strategy for transforming healthcare.

To continuously advance performance in each dimension and minimise the negative impacts of our business activities, Roche operates a Safety, Security, Health, and Environmental Management (SHE Management). Within this framework, Roche sets itself ambitious targets, known as SHE-Goals. The basis of the SHE-Goals are the United Nations [Sustainable Development Goals](#) (SDGs).

For the implementation of the SHE-Goals at the individual Roche sites, the local SHE organisations are responsible. They pursue the goals set by the Group, develop action plans together with various departments, assist the site and its employees in contributing to the achievement of these goals, and track the progress through monitoring.

TEN-YEARS AMBITIONS



PHC (Personalized Healthcare): Enable a higher quality of life for patients through the "One Roche Approach" in the respective countries.



Pharma: Deliver twice as many medical advances at half the cost to society.



Diagnostics: Double patient access to diagnostic solutions of high medical value.



Insights: Become a profitable market leader in the field of medical insights.



Diversity & inclusion: Have a diversity at the leadership level that reflects the diversity of the workforce.



Environment: Reduce total environmental impact by half.



Financial: Become the most valuable healthcare company.

Focus topics

The following chapters provide an insight into projects that have been carried out, contributing to one or more dimensions of sustainability. These actions and campaigns are initiated and driven by various departments at the Rotkreuz site.

Lived sustainability for over 15 years

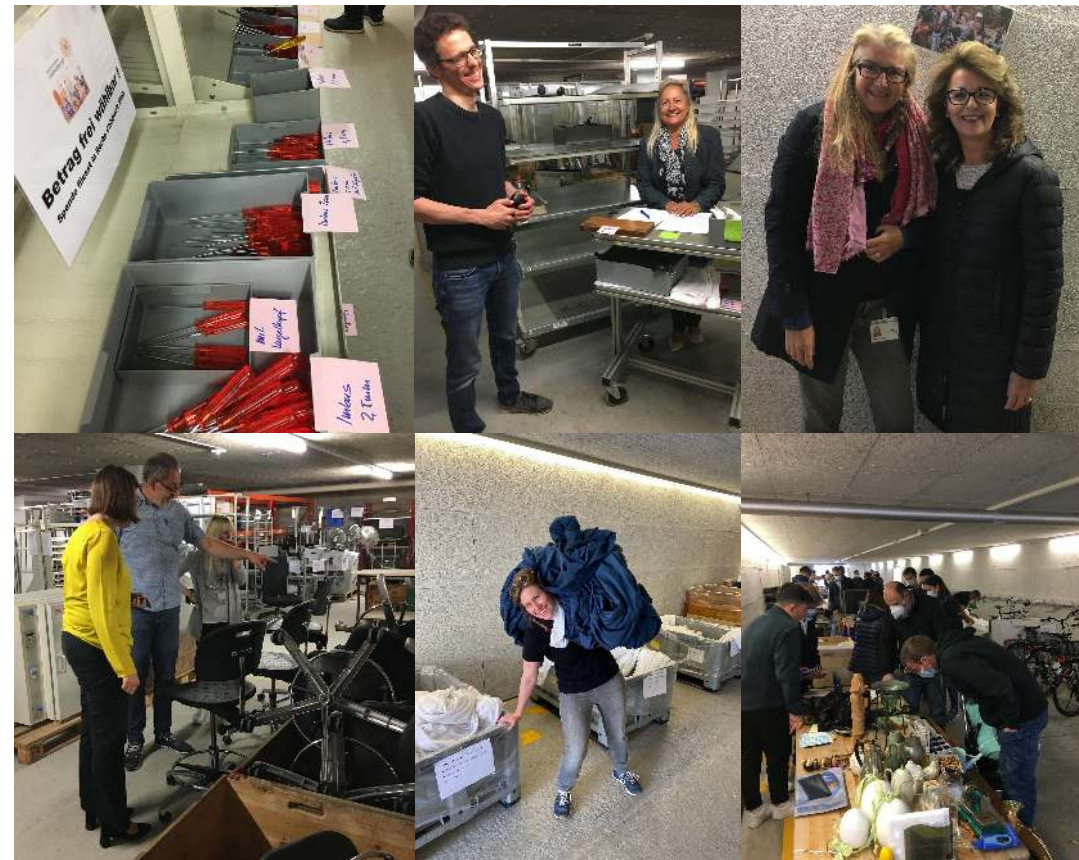
A modern production demands new means of production. Therefore, older items (e.g., tools) are no longer needed. In many cases, these are things that are still perfectly suited for a second life in a hobby room or a crafting corner.

In 2009, before the dismantling of the old production building, many questions arose from employees about what should happen to the old items. Two volunteers took heart, defined the process with the site management, and organised a first ramp sale for employees. The proceeds amounted to several thousand Swiss Francs and went to the Roche Children's Walk. Thus, a successful model was born, which covers several aspects to this day:

- Usable items are repurposed for further use
- Employees have the opportunity to purchase tools and items at a low cost
- Less material is disposed of, which positively affects the ecological balance
- The proceeds support the Children's Walk, with which sustainable projects in Africa are realised

Almost at the same time, three other employees began to regularly organise a flea market with private items. This was already mentioned in the 2010 yearbook of the Rotkreuz site. Since Eveline and Beatrice no longer work at the site, the flea market and ramp sale were combined in 2022. Thanks to the huge network that the three have as long-time employees, they repeatedly receive goods for their actions. They coordinate the delivery of goods in their free time, prepare the items, and carry out the events, supported by another colleague. The proceeds from the voluntary activities of the quartet continue to benefit the Roche Children's Walk. "I'm

not particularly 'green', but usable and useful items should not simply be thrown away. That is the motivation for our commitment. Additionally, supporting operational goals and a good cause creates a win-win-win situation," says one of the initiators concludingly.



Community of practice for sustainability in instrument operations

In order to collectively achieve Roche's Ten-Year Ambitions by 2029 and to reduce the ecological footprint by half, a working group of Roche employees from various sites joined forces in 2023 to exchange ideas on sustainability and to implement corresponding projects. They call themselves the "Community of Practice for Sustainability in Instrument Operations" (CoP).

Over 90 percent of the emissions in operations occur in the supply chain. For example, through purchased goods, packaging waste, transportation, or energy-related activities. Therefore, initial practical projects have been implemented or started to target precisely these areas. For example a guideline for sustainable industrial packaging for the supply chain was written. This was published in December 2023 for the Rotkreuz site. In 2024, this guideline is also to be implemented at other sites. The goal for suppliers is to optimise materials with regard to more sustainable packaging. This can often also lead to a reduction in transport and production costs, for example, through less volume and the elimination of work steps in goods receipt and production.

In addition, the internal tool for continuous improvement processes has been expanded: since last year, colleagues additionally have the option to select sustainability aspects so that these optimizations can also be tracked. Several ideas, such as the reduction of plastic, water, and materials, have since then been received and implemented.

To integrate sustainability aspects more strongly into everyday work, a new concept of checklists for control walks in production is currently being defined. The aim of this project is to integrate sustainability as a fixed agenda item.

All projects have confirmed that the CoP is an important central network within the company. It acts as a cross-site multiplier, creates synergies, and achieves a reduction in resource consumption.



Treatment of industrial wastewater

Roche Diagnostics produces reagents for blood gas and electrolyte analytics. This analytics is used in hospitals in intensive care units, as well as during surgeries or dialysis.

PREVIOUS DISPOSAL

During the production of these reagents, industrial wastewater is generated. Until now, less contaminated industrial wastewater has been treated via pH neutralisation so that it can be safely discharged into the sewage system. More heavily contaminated industrial wastewater was collected and disposed of externally as hazardous waste. This external disposal, in particular, has negatively impacted the ecological footprint of the site.

ON-SITE TREATMENT

To become even more sustainable as a site, RDI aims to continuously reduce the amount of hazardous waste in the long term.

For this purpose, a facility for the pretreatment of industrial wastewater was built in 2023. This will enable that almost all industrial wastewater can be treated on-site and then safely discharged into the public sewer system. After extensive testing, the facility will start operating in the first half of 2024.

Thanks to this pretreatment, future reliance on external hazardous waste disposal can, except for a few exceptions, be eliminated, reducing the ecological footprint.

TREATMENT METHOD

To effectively pretreat the industrial wastewater, the wastewater is filtered. The filters contain granulated activated carbon. This is coal that has been crushed into coarse grains and “activated” through a thermal process. Due

to this activation, the activated carbon has a sponge-like structure and thus an extremely large surface area.

When the industrial wastewater is pumped through these filters with activated carbon, the problematic substances adhere to this surface. The water that comes out of the filters is sufficiently pretreated to be safely discharged into the sewer system.

The activated carbon becomes increasingly loaded through this process. At a certain point, the activated carbon is saturated and can no longer absorb additional substances. When this point is reached, the activated carbon must be replaced. The saturated activated carbon is disposed of in a waste-to-energy plant.

MONITORING

The industrial wastewater is closely monitored. The SHE department will regularly have samples of the industrial wastewater analysed in laboratories. This ensures that the required water quality is achieved.

With this facility, a significant contribution is made to the sustainability of the production site.



Security in focus: Courses on personal security

At Roche, great importance is placed on the safety, security and well-being of employees. To empower employees in their personal security, *RDI Security* regularly organises courses. These courses provide practical tips on how to behave to avoid or de-escalate tense situations in private life or at work.

These are not active self-defence courses but rather practical training where experienced trainers demonstrate and play through real scenarios. The trainers individually address the suggestions, questions, and experiences of the participants so that each course offers new insights. With the experiences from the course, employees are given tools to act correctly in difficult situations.

The response to the courses is extremely positive, and over 500 employees have already participated since their introduction in the summer of 2023. In order to enable as many employees at the site as possible to participate, the course is now held not only in German but also in English.

Participants particularly appreciate the opportunity to ask their own questions in a safe environment and to get a feel for how to react in potentially dangerous situations.

Through the courses, not only is the individual sense of security of the employees strengthened, but also a culture of mindfulness and care throughout the entire company is promoted. This is another step in Roche's commitment to the safety and well-being of their employees.



Key figures

To be able to capture the impact of RDI throughout the year in numbers, an annual survey of relevant key figures from the health and environment sectors is conducted. This survey gathers the key figures of the site for the period from early October of the previous year to the end of September of the current year.

Waste

Types of waste

The categories of **municipal waste** include fractions such as household waste, bulky waste, cardboard, glass, and other commonly known household-like waste.

Hazardous waste refers to waste that, due to its properties, can pose a danger to the environment and humans and therefore requires special treatment. Hazardous chemical products can arise both in the industry and in private households. They can be recognized by the internationally harmonised hazard symbols (GHS).

MUNICIPAL WASTE

Cardboard, wood, and food waste

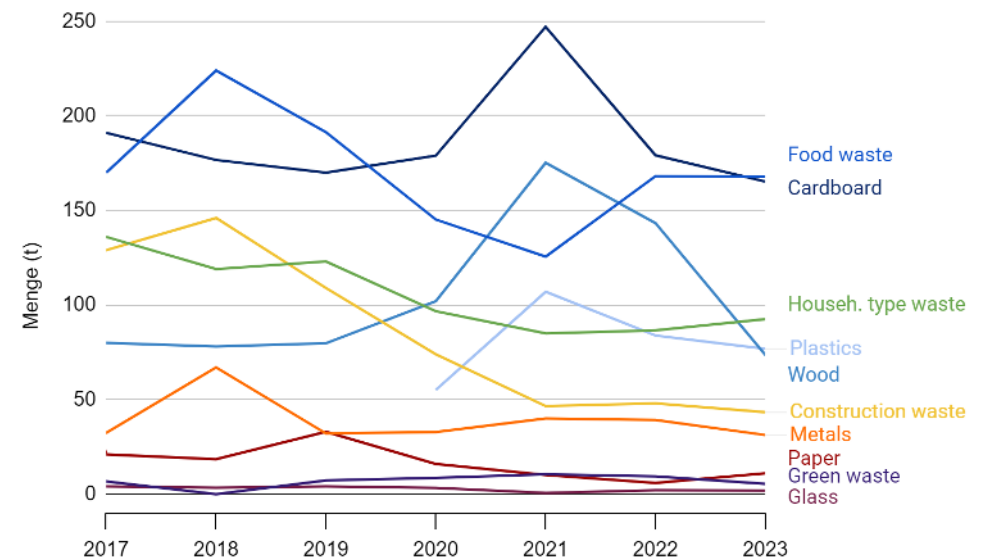
The cardboard is mainly generated in the goods receiving area due to the packaging of materials that need to be disposed of. The proportion of disposed wood is primarily pallets used for transporting materials, of which the still usable Euro pallets (approximately 30 percent of the amount handed over) are passed on and reused by the waste disposal company. This amount has been deducted from the total amount since 2023, as it is not considered waste. Just like with the cardboard quantities, the peak in the year 2021 can be attributed to the COVID-19 pandemic, which led to an increase in production.

The share of food waste consists of kitchen waste and leftover food from guests. In 2022, these increased by around 40 tons due to the return of employees to the site and have since then remained at a constant level. In the biogas plant in Hünenberg, the energy from the food waste is largely recovered in the form of biogas.

Other fractions

The other fractions for the year 2023 are not particularly notable. It is only worth mentioning that up until the year 2020, mixed plastic waste was also allocated to the category of construction waste and has since then been listed separately, as can be seen in the graphic. Construction waste volumes from renovation projects on site are excluded from the reporting. The construction waste here is waste from office clean-up actions such as cups, binders, and additional materials made from composite materials.

An increase in production can also be observed in plastic waste, analogous to the cardboard and wood waste in the year 2021.



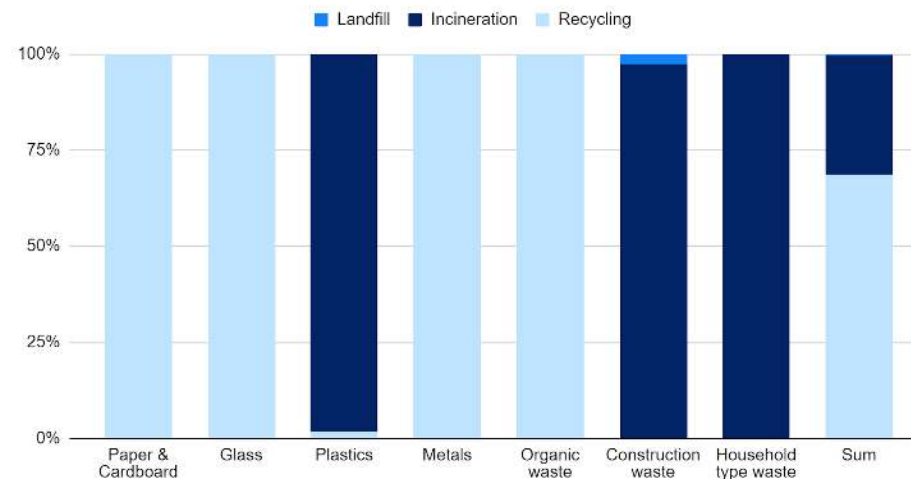
DISPOSAL METHOD

In 2023, 73 percent of disposed waste was recycled and thus returned to the material cycle. The goal by 2025 is to achieve a recycling rate of 80 percent, although, it must be mentioned that this rate has been highly fluctuating since the reference year of 2020. This is related to the fact that in certain years the quantities of waste categories that are recycled decrease, while the amounts of waste sent to incineration remain constant.

The category “organic waste” consists of food, wood, and green waste. All of these are recycled.

For construction waste, a small proportion is landfilled, which includes inert materials such as porcelain. Waste types that are incinerated include regular household waste, the majority of construction waste, and mixed plastics.

The greatest potential for increasing recycling lies with the latter. A clean separation of different recyclable types of plastics, such as PMMA (Polymethylmethacrylate), also known as Plexiglas, or LDPE (Low Density Polyethylene), can substantially contribute to the set goal of a recycling rate of 80 percent. Especially with LDPE, RDI has a significant lever, as this type of plastic makes up an estimated 50 percent of all collected plastics. However, since the introduction of separate collection and disposal of LDPE at the end of 2022, many LDPE films still end up in the mixed collection containers. Or many other types of plastics end up in the LDPE container. Since the plastics are not sorted afterwards because the costs are too high, a significant proportion of the plastics still end up being incinerated. Further sorting options and optimizations for increasing recycling are continuously being examined, with the focus always primarily on waste minimization.



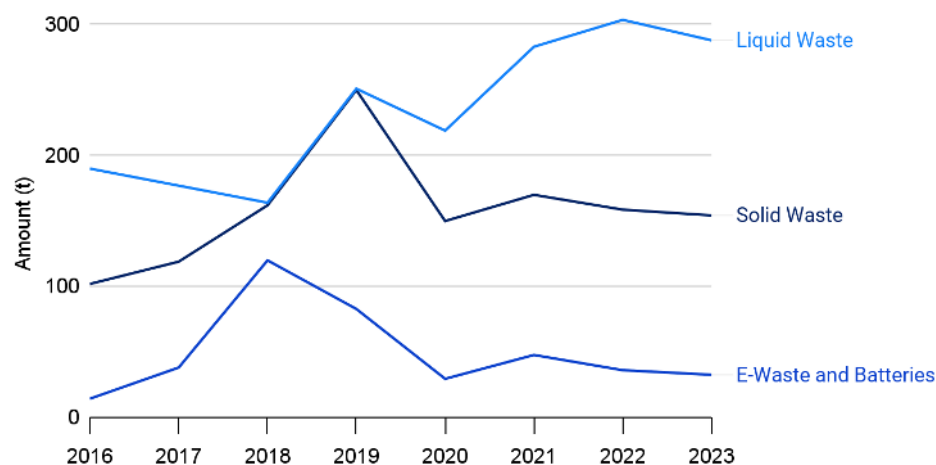
HAZARDOUS WASTE

Special waste is divided into liquid and solid substances as well as electrical and electronic objects such as devices, cables, and batteries.

The main portion consists of liquid waste, which is mostly generated during the production of reagents by the flushing of mixing tanks. With the commissioning of the industrial wastewater pretreatment plant, a decrease in the quantities disposed of via the special waste route is expected in the future. Liquid waste is recycled whenever possible.

Among the solid wastes, biologically contaminated waste has the largest volume. This waste is incinerated.

Batteries and electronic scrap are also classified as special waste due to their hazardous properties, but can mostly be recycled.



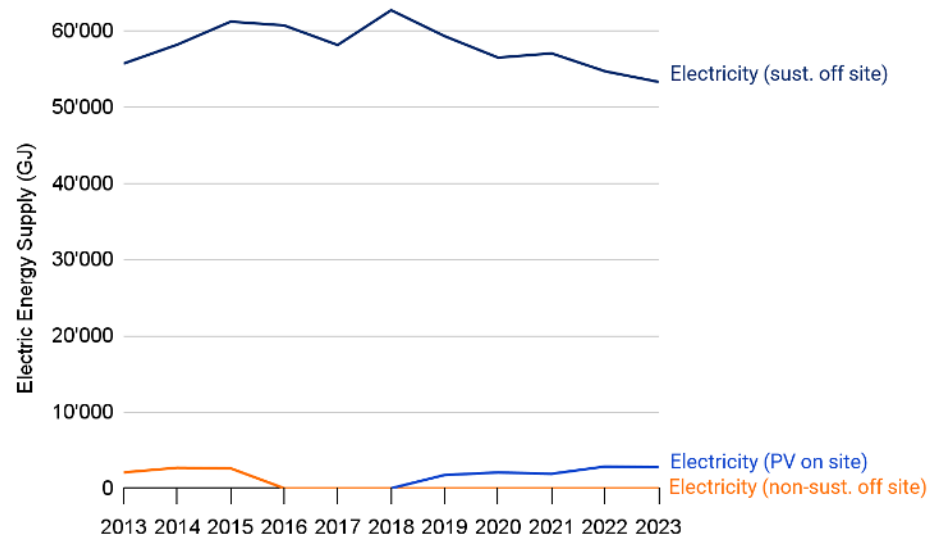
Energy

The energy demand of RDI consists of building operations (electricity from the public grid and from the own photovoltaic systems, gas, and oil) and mobility (business flights, company car fleet: kilometres driven with RDI-owned vehicles and kilometres driven with rented Europcar vehicles).

ELECTRICITY SUPPLY

Since 2016, RDI has been sourcing 100 percent of its purchased electrical energy from hydroelectric power. This is used for consumers such as heating and cooling generators, ventilation systems, lighting, laboratory equipment, IT equipment, and other devices. Through the in-house photovoltaic systems, around 5 percent of the required electrical energy could be produced locally and fed into the site's own network in 2023.

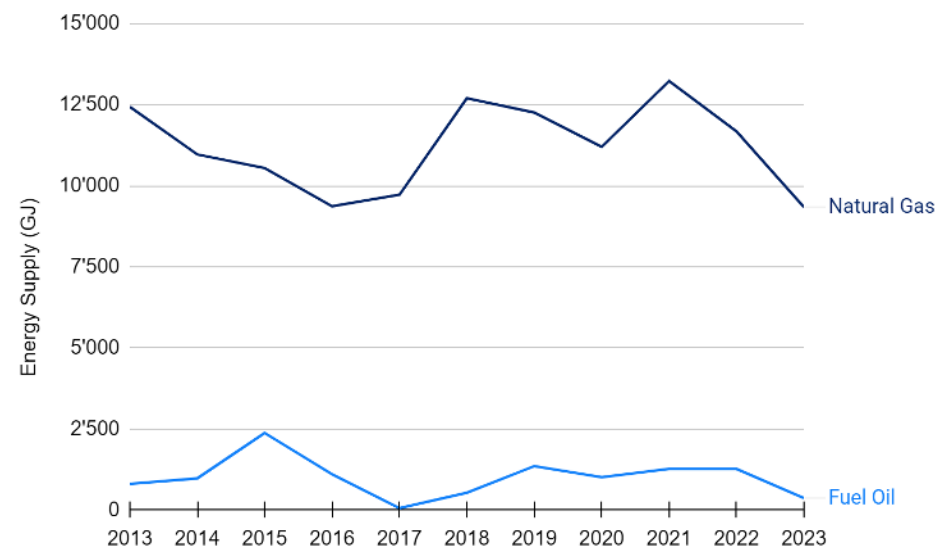
Various energy-saving measures implemented during the shortage and beyond have led to a measurable reduction in energy consumption.



FOSSIL FUELS

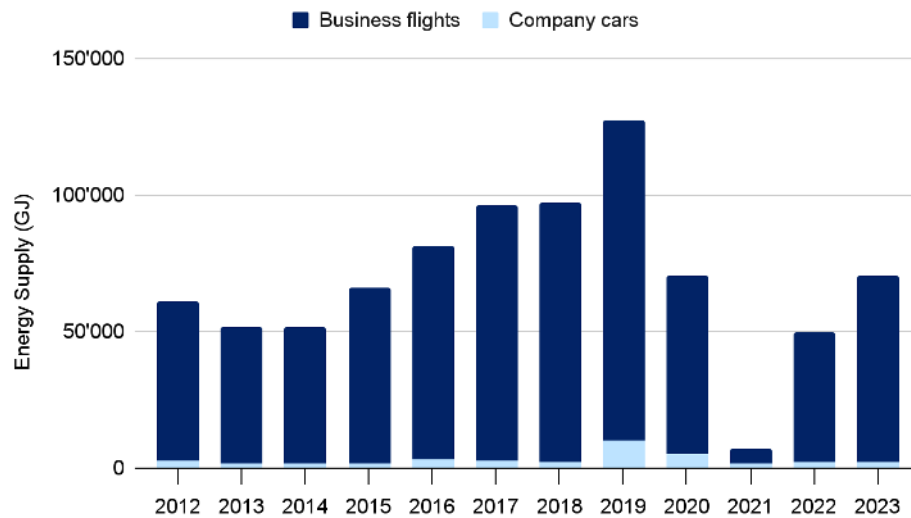
Natural gas is used almost exclusively for heating buildings 1, 4, 8, 9 and 10. The *Engineering & Technology* department has developed an action plan for the substitution of fossil fuels so that RDI's building park can be operated renewably in the coming years.

With the demolition of Building 13 in 2023, the last building heated with heating oil was removed. As a result, the consumption of heating oil has significantly reduced. However, RDI still relies on diesel for emergency generators, which are used in the event of power failures. To ensure operational readiness, their function is tested monthly.



ENERGY CONSUMPTION MOBILITY

In the area of mobility, the largest share of energy is required for business flights. With the approximately 24 million kilometers flown in the year 2023, one could circle the Earth 600 times. This is yet another significant increase compared to the previous year, but it is still well below the values before the COVID-19 pandemic.



Greenhouse gas emissions

The scopes of greenhouse gas emissions

Greenhouse gas emissions are calculated according to the Roche Greenhouse Gas Inventory. This follows the Greenhouse Gas (GHG) Protocol, an international accounting tool. Greenhouse gases are divided into three groups, known as Scopes.

Scope 1 emissions are generated directly on-site at RDI operations and by the company-owned vehicle fleet.

Emissions that arise indirectly through purchased energy belong to **Scope 2 emissions**.

Scope 3 emissions are generated indirectly through business flights, incinerated waste, and upstream processes for the provision of energy carriers for RDI.

All emissions are standardised and reported as CO₂-equivalents (CO₂-eq).

RDI's business activities in 2023 resulted in a total greenhouse gas emissions of approximately 7'080 metric tons of CO₂-eq. This represents a 28 percent increase compared to the previous year.

The Scope 1 emissions come from the use of fossil fuels such as natural gas, heating oil, and fuels. These emissions have remained largely constant over the past few years.

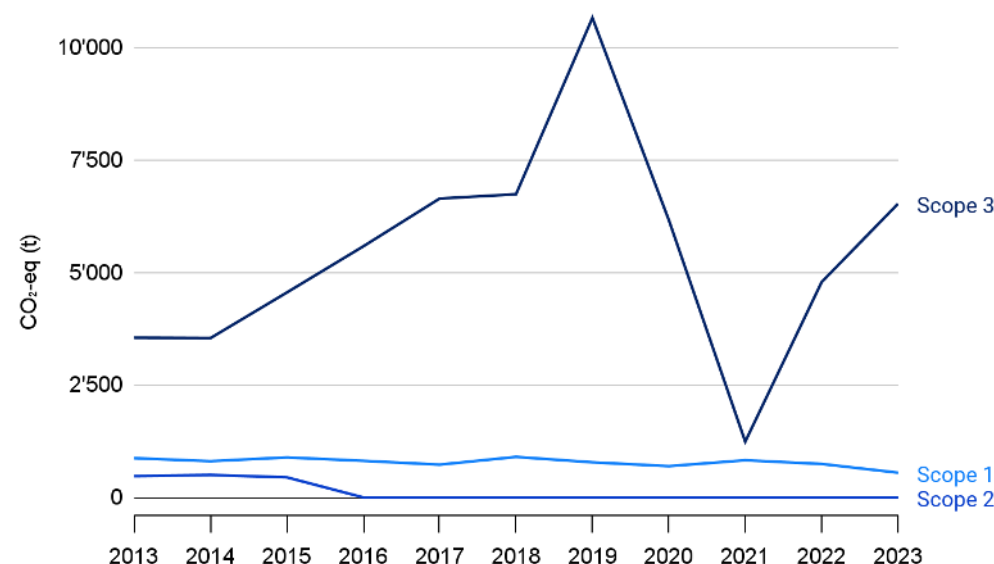
Since 2016, as electrical energy has been sourced from renewable sources, Scope 2 emissions have been zero.

Scope 3 emissions show both the largest relative share and a large variation over time. Since most of the emissions are caused by RDI's business flights, a steep decrease can be observed from 2019 to 2021. This is due to travel restrictions caused by the COVID-19 pandemic. With the

removal of most restrictions, the number of business flights rose again sharply in the course of 2022 and 2023.

Not included are Scope 3 emissions from purchased and sold goods, upstream and downstream transportation and employees commuting. Some of these emissions are reported elsewhere, are not considered relevant, or there is not yet a suitable method for calculating them.

A variety of projects have been and are being implemented to contribute to emission reduction both Roche-wide and locally for RDI.



Ecobalance

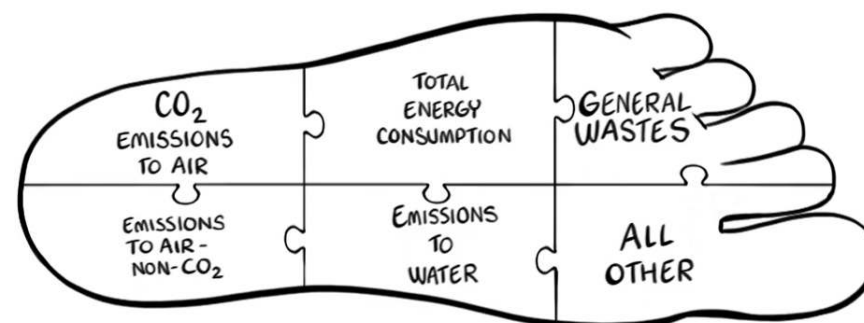
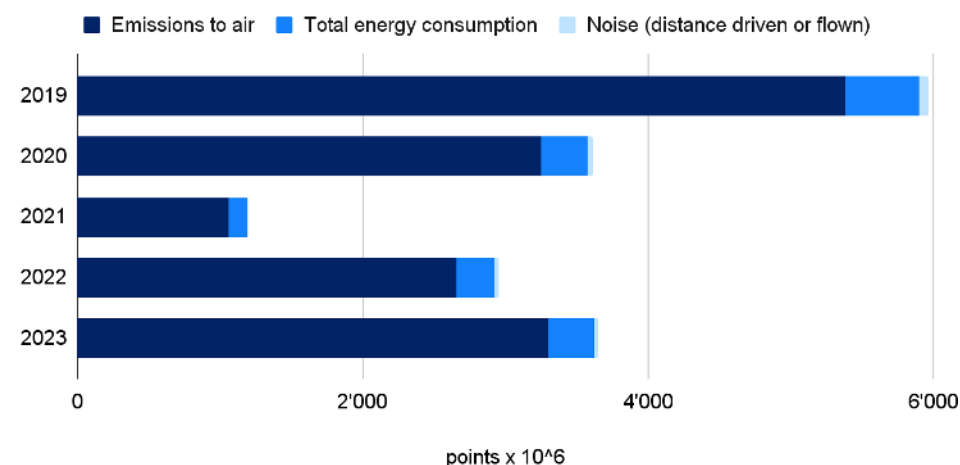
All environmental indicators collected by RDI are summarised in the ecobalance. The ecobalance calculates the footprint of the reported RDI activities within a year, based on various influences such as air, noise and water emissions, waste and resource consumption. The impact is expressed in so-called environmental impact points (EIP). These standardise the individual activities to a comparable size.

RDI's ecobalance includes only impacts resulting from

- Emissions to air
 - Air travel
 - Waste incineration
 - Fuel-related activities (extraction, production, transport, etc.)
- Energy consumption
 - Fuel consumption (natural gas, fuel oil, gasoline, diesel fuel, kerosene)
 - Electricity consumption
- Noise emissions
 - Distance flown
 - Distance driven
- Emissions to water and water consumption
 - Cubic metres of water consumed
 - Type and amount of substances emitted into waste water

whereby the emissions to water are so small that they are not shown in the graph.

From 2019 to 2021 RDI's ecobalance decreased continuously. This reduction was primarily due to the COVID-related reduction in business flights and the resulting lower CO₂ emissions. Due to the increase in business flights in 2022 and 2023 the environmental impact also increased again and RDI's ecobalance totaled in 3'659 million EIP in 2023.



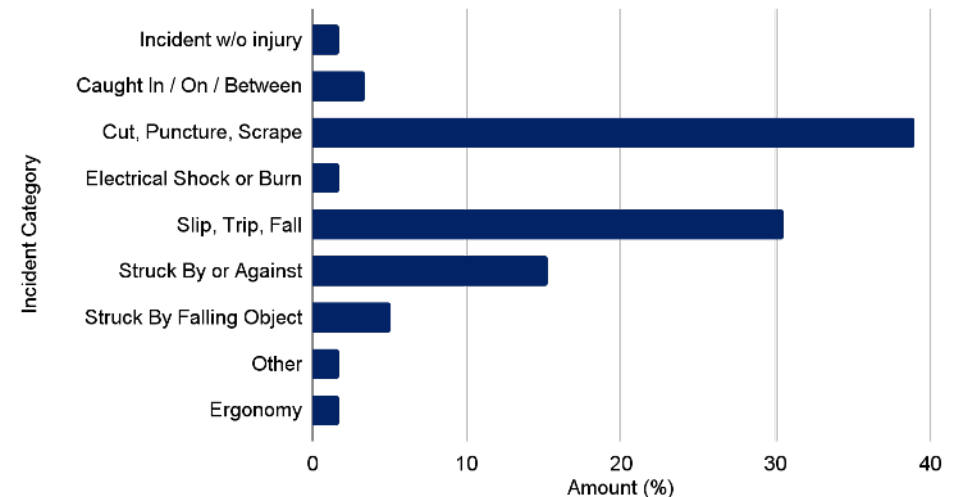
Incident management

All events, near misses, and unsafe conditions have been recorded in STARI (System for Tracking and Reporting Incidents) since April 2021 and are systematically processed. This includes the identification of the cause(s) and the subsequent definition and implementation of preventive and corrective measures. In the year 2023, 84 events were reported, of which 59 were personal accidents.

The most common events include trips and falls as well as puncture injuries, which together account for almost 70 percent of all reported events. Falls were also responsible for more than 50 percent of all accident-related downtime. To raise awareness about the risk of stair falls, the prevention campaign 'Tatort Treppe' by SUVA was conducted in 2023.

Puncture wounds did not lead to work absences but pose an infection risk in laboratories. In the past, there were frequent puncture injuries from broken glass capillaries in some laboratories. To prevent this, various workshops were held, including safe handling of glass capillaries. Since these workshops, no puncture injuries from capillaries have been reported from the areas where they took place.

Few events were related to ergonomically unfavourable work processes. However, these few accidents always led to relatively long downtime. Also, many work absences due to illness are caused by musculoskeletal complaints. In 2023, various measures for prevention were therefore launched, such as the training of "Ergo-Scouts" who support employees in the ergonomic adjustment of furniture, or the implementation of preventive exercises in work areas with excessive or one-sided physical strain.





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