

Sustainability Report 2022

Roche Diagnostics International AG



Foreword

Sustainability is an integral part of Roche's business strategy. With the goal of ensuring healthy lives and promoting the well-being of all people, the strategy, in addition to improving healthcare, also focuses on continuous progress in areas related to the needs of the individual, society and the environment. Roche Diagnostics International Ltd in Rotkreuz also aligns its actions with these values.

With 2022, another intensive year came to an end, which was once again marked by change. And there was also no standstill in terms of projects to support sustainability.

For example, the annual Volunteering Week took place, during which employees can make a contribution to the common good through voluntary work. In the area of the environment, the EcoLogicals continue to offer a platform for employees to organise themselves and implement their own ideas for a sustainable and more environmentally friendly site, and the threat of an energy shortage and the new mobility concept have also set a number of things in motion that benefit environmental protection on site. The cobas 5800 has also made a significant contribution to the economic sustainability of the site.

The atmosphere in Rotkreuz is unique and can only be truly grasped in personal interaction on site. It is our employees who make our site special and who make sustainable development possible in the first place.

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 hospitals, laboratories and medical practices. The site Rotkreuz with Roche Diagnostics International AG (RDI) is one of the main sites of Roche Diagnostics. RDI combines central functions and areas of the diagnostics business, such as research, development, production and system integration.

The site Rotkreuz has experienced continuous growth in the past with the structural development from an instrument supplier to a manufacturer of integrated system solutions for medical diagnostics. Founded in 1969, the company is the largest private employer in the canton of Zug with around 3500 internal and external employees from 71 nations.

Today, RDI develops with its commitment to research, development and manufacturing innovative diagnostic solutions that help to improve healthcare. In addition to its core business RDI also focuses on making continuous improvements in addressing the needs of individuals, society and the environment. These three pillars are addressed as responsibly as quality, productivity and cost-efficiency.

This report shows a selection of different projects in the area of sustainability which were implemented at the site in Rotkreuz. Additionally key figures are presented which are included in the site-specific CO₂ emissions calculation and the ecobalance for the reported period. Finally, the report also contains a chapter on the incident figures collected. These are an indicator in the health sector and show how RDI implements the responsibility to ensure a safe working environment.



Sustainability at Roche

Sustainability is the foundation of Roche's business strategy: we have to act sustainable if we want to have success in the long term.

Roche follows a holistic approach and integrates the three dimensions of sustainability.

SOCIETY

- Enabling the right treatment by developing new medicines and new ways of diagnosing diseases.

ENVIRONMENT

- Minimising the environmental impact of operations and products.

ECONOMY

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

The three dimensions of sustainability are embedded in the Ten-Year Ambitions that are used to implement Roche's strategy to transform the healthcare system.

To continuously improve the performance in every dimension and to 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 goals known as SHE-Goals which are continuously monitored. The SHE-Goals are based on the United Nations [Sustainable Development Goals](#) (SDGs).

The local SHE organisations are responsible for the implementation of the SHE-Goals at the individual Roche sites. They pursue the targets set by the Group, develop action plans, help the site and its employees to contribute to the achievement of the targets and follow up on the achievement of the targets via monitoring.

TEN-YEAR AMBITIONS



PHC: Improve patients' lives via 'OneRoche Approach' to ecosystem in every country.



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



Diagnostics: Double patient access to novel, high-medical-value diagnostics solutions.



Insights: Build the leading, profitable insights business.



Diversity & Inclusion: Achieve diversity in leadership, which mirrors our workforce.



Environment: Reduce total environmental impact by half.



Financial: Become the most valuable healthcare company.

Focus topics

The following chapters provide an insight into implemented projects or initiatives that contribute to one or more dimensions of sustainability. Such actions and campaigns are implemented and driven forward by various departments at the Rotkreuz site.

RDI volunteering week

In June the RDI Volunteering Week took place for the second time. 64 colleagues from the Rotkreuz site volunteered at charitable institutions in the region for a good cause. The voluntary commitment, which lasted up to one day per employee, was billed by RDI/RDCH as normal working time.

For once, Rotkreuz colleagues traded their pipettes and keyboards for hedge clippers and lent a hand with forestry work in Affoltern. They enthusiastically supported the Affoltern am Albis forestry operation in reforesting the young forest. Others went into the thicket to help the Agrofutura association with the removal of invasive neophytes in Risch - both jobs with which the institutions would reach their limits without the support of volunteers. In Zug Roche employees carried out maintenance work at the Fröschenmatt adventure playground - accompanied by frolicking children. In Baar, they helped GGZ@Work with recycling work and in the evening distributed food to people in need. Also in Zurich food and hygiene articles were distributed to the needy together with the Incontro association. A volunteer also enabled three Ukrainian refugee families to spend a special day.

On the one hand, the employees were able to broaden their personal horizons and experience a truly varied working day, and on the other hand, they got to know other colleagues from RDI/RDCH - an encounter of a different kind! But the most important thing is the support for the charitable organisations in the region - a win-win situation!

RDI Volunteering Team



Mobility network

The Mobility Network consists of a motivated group of people that want to leverage agile ways of working to create - in line with our Mobility Strategy 2035+ - sustainable, fair, flexible and simple mobility solutions for every Roche employee in Rotkreuz. In order to achieve this vision, they have set themselves the goal to raise more awareness for all the mobility solutions on site and make them more customer-friendly and attractive.

The Network has been initiated in 2022 to increase the availability of alternatives for motorised-individual-traffic and to ensure a more customer centric approach. Furthermore, it enables the company to strengthen the already existing relationship with the [canton of Zug and the municipality of Risch](#) to counteract traffic issues. Thereby, In addition, the network aims to bring the motivation and passion about different mobility solutions closer to all employees in Rotkreuz and make them more familiar with the big picture behind the adapted mobility concept, which has been active since December 2022. Some of the successes of the mobility network last year included:

- Short facts & figures on the screens explaining the 'why' behind the adapted mobility concept
- An adapted Mobility GSite showcasing the mobility ambitions of Roche Diagnostics
- A fun and informative mobility E-day in June demonstrating different electric cars with the opportunity to test-drive different models
- A unique one-pager on the New Joiner day to promote alternative mobility solutions

RDI Mobility Network



EcoLogicals

The EcoLogicals are a bottom-up community which allows all employees to actively participate in the protection of the environment. Originally the initiative arose from the demand for more sustainability in Basel/Kaiseraugst. Today, the EcoLogicals are represented at a number of sites and are also active at RDI in Rotkreuz since 2019.

The goal is to offer RDI employees a platform that enables them to network with like-minded people and know-how carriers in order to jointly implement their own projects in the area of sustainability both at work and in their private lives. Because #together we are stronger and can achieve a lot!

In 2019 and 2020 various EcoLogical groups were formed and great projects were implemented. But then the pandemic hit. Many jobs were moved from the site to home. As a result most site-related projects came to a halt.

To reinvigorate the EcoLogicals' initiative an Apéro was held as part of the Environmental Week in November 2022. Ideas for future projects were collected together. In the coming weeks and months new activities will be jointly defined and implemented based on the input.

BIRDWATCHERS

One of the most active EcoLogical groups are the 'Birdwatchers'. Volunteers with the common goal to achieve ecological improvements and an ecological balance on site in Rotkreuz and thus contribute to a long-term improvement of biodiversity and bird-friendliness.

In recent years, various smaller projects have been implemented together. For example, site inspections with experts have identified opportunities for improvement, such as the pruning of diseased trees, the creation of rough pastures or watering holes for birds. The concrete implementation of the

suggestions for improvement often took place in cooperation with facility management.

Last year, nesting boxes were placed at various locations on site. How well these are accepted will be seen in spring.

RDI EcoLogicals



Energy saving measures

Due to a potential energy shortage the Swiss government launched a nationwide campaign to save energy at the end of August 2022.

RDI has taken its corporate responsibility and established a task force with the goal to save as much energy as possible as well as developing action plans that enable RDI to guarantee the supply of diagnostics to the health care system even in the event of power shortages.

As a result various measures were developed, implemented and verified in a very short amount of time.

LIGHTING

- Adjustment of lighting times
- Shortening the follow-up time of motion detectors
- Dimming indirect lighting or switching off light sources where there is sufficient ambient light
- Reducing the light output via brightness control
- No Christmas lighting and no lighting of the Roche logos

CLIMATE CONTROL

- Reduction of room temperatures
- Optimization of air quality control with corresponding reduction of:
 - Ventilation volumes
 - Air humidification
 - Operating hours
- Various measures in gastro areas like increase cooling temperatures, decommissioning of redundant refrigerators
- Rising cooling setpoints in technical rooms
- Targeted optimisations of control technology

RAISING AWARENESS

- Climbing stairs instead of using elevator
- Washing hands with cold water
- Switching off devices completely (and thus avoiding standby)

Since the beginning of September 2022 it has been possible to save an average of around 10 percent electrical energy compared with the previous years. Savings in natural gas are even a few percentage points higher.

Saving energy will continue to be an important topic even beyond a potential shortage situation. Not least because Roche has the goal to continuously reduce energy consumption.

Facility Operations & Engineering and Technology



Cobas 5800

With the development of the cobas 5800 System, the laboratories have a compact extension of the family of automated PCR systems. It enables fast and reliable diagnostics for different infectious diseases such as SARS-CoV-2, influenza, HPV or HIV. The cobas 5800 System has been designed to give laboratories that have lower molecular testing volumes (20 to 150 samples per day) access to the same level of testing automation that large/larger laboratories get with the cobas 6800/8800 Systems (up to 300/1000 tests per day and System). The cobas 5800 System is the youngest (most recently launched) and also the smallest member of the x800 Systems Family.

A huge advantage of the family concept is that Roche offers a harmonised solution for laboratories of all sizes, and when larger laboratories and/or laboratory networks work with the different systems that are part of this system family, they have the advantage of simplified logistics (because all systems use the same reagent cassettes), simplified training of the staff (the way to operate the three systems is very similar), and consistent patient results (once again, due to the identical reagents and testing technology used by the three systems).

The cobas 5800 System was designed intelligently to be very compact and therefore occupy the least amount of space, which is a scarce resource for laboratories in all geographies.

The broad menu that the cobas 5800 System shares with the cobas 6800/8800 Systems, and the cobas omni Utility Channel - a functionality that enables the automation of Laboratory Developed Tests (LDTs) - allows laboratories to consolidate more than 90 percent of their routine molecular tests onto a single platform. This high consolidation capability can help laboratories reduce the need for additional, dedicated instruments.

The cobas 5800 System has been designed to utilise consumables intelligently and optimally, helping reduce operating costs and the amount of waste. Liquid waste can be separated into hazardous and non-hazardous in a way that can help reduce costs related to liquid waste handling.

The cobas 5800 System offers an innovative and unique customizable control concept that gives laboratories high flexibility in the frequency of running controls, allowing for more efficient testing.

The high level of automation, consolidation, and flexibility offered by the cobas 5800 System on a compact footprint can help laboratories optimise their investments and operating costs related to testing automation.

IPM Cobas 5800



Key Figures

In order to be able to record the performance of RDI in figures over the course of the year an annual survey of relevant key figures from the health and environmental sectors is carried out. The site's key figures are compiled for the period from the beginning of October of the previous year to the end of September of the current year.

Waste

Types of waste

Municipal waste includes fractions such as food waste, construction waste, cardboard, glass and other known household-type waste.

Hazardous wastes are wastes that, due to their properties, may pose a risk to the environment and humans and therefore require special treatment. Hazardous wastes can be generated in industry as well as in private households. They can be identified by the globally harmonised hazard pictogram (GHS).

MUNICIPAL WASTE

Cardboard, food waste and wood

Cardboard is mainly generated in the goods receiving department by the packaging of the materials to be disposed of.

The proportion of wood disposed of is mainly pallets, of which the still usable Euro pallets (approximately 30 percent) are passed on by the disposal company and are reused.

As with cardboard volumes, the fluctuation in wood volumes between 2019 and 2021 is potentially due to the COVID-19 pandemic, which led to an initial decrease and then an increase in production.

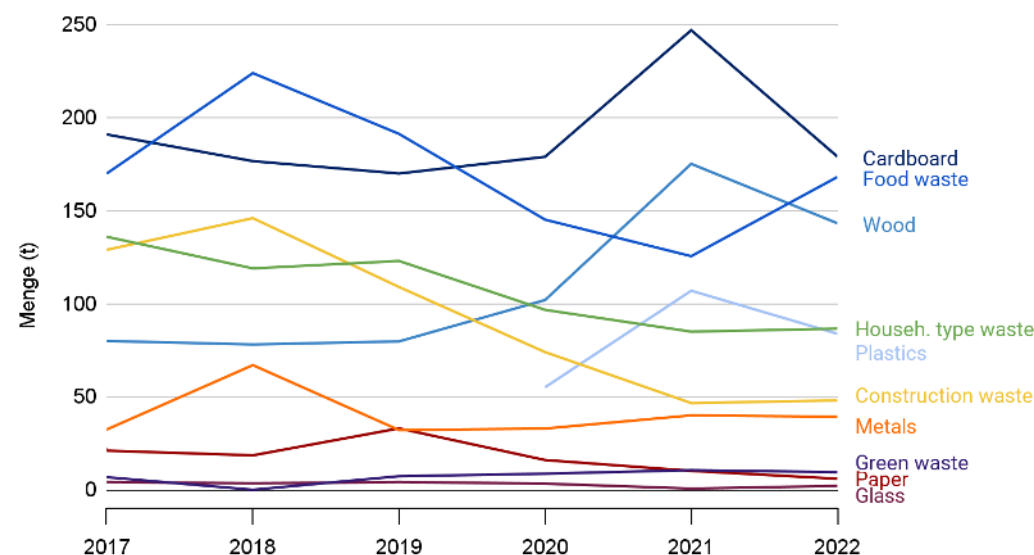
The share of food waste is composed of kitchen waste and food leftovers. In 2022, this increased by around 40 tonnes due to the return of employees to the site. In the biogas plant most of the energy from the food waste is recovered in the form of biogas.

Other fractions

The remaining fractions are not particularly noteworthy for the year 2022. Only in the case of construction waste it should be mentioned that since

2020, mixed plastic waste is no longer allocated to the construction waste category, but is reported separately, as can be seen in the graph. Construction waste from conversion projects on the site is excluded from reporting.

The increase in production of plastic waste can also be observed analogous to the cardboard and wood waste in 2021.



DISPOSAL METHOD

In 2022, 71 percent of the waste disposed of could be recycled and thus returned to the material cycle. The recycling rate has increased by 4 percent since 2017.

The category 'organic waste' is made up of food, wood and green waste. These are all recycled.

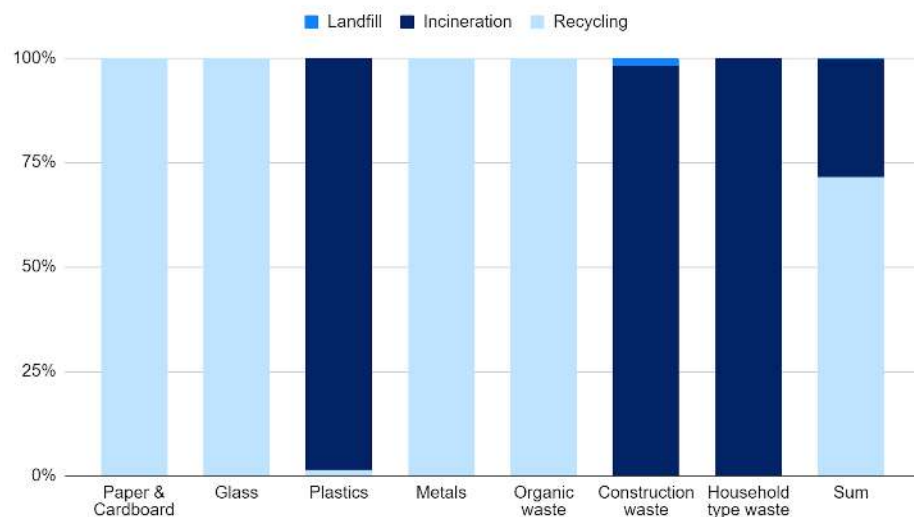
A small proportion is landfilled, these are inert materials such as porcelain. The types of waste that are incinerated include normal household type waste, construction waste and mixed plastics.

The latter have the greatest potential for increasing recycling. Separating different types of recyclable plastics by type, such as PMMA (polymethyl methacrylate), also known as Plexiglas, or LDPE (low density polyethylene), can make a substantial contribution to the target of an 80 percent recycling rate. RDI has great leverage with LDPE in particular, as this type of plastic accounts for an estimated 50 percent of all plastics collected. Therefore, a separate collection was introduced for this in Q3 2022. However, the data will only be collected from 2023 onwards, which is the reason that on the graph the recycling share of plastic waste is still very low.

HAZARDOUS WASTE

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

- The majority of liquid waste is generated during reagent production by rinsing the preparation tanks. RDI's hazardous waste consists mostly of liquid waste which are mainly generated during reagent production.
- Contaminated waste (biohazard) accounts for the largest share of solid waste. This waste is incinerated.
- Batteries and electrical waste are also reported under hazardous waste due to their dangerous properties. Most of them can be recycled.



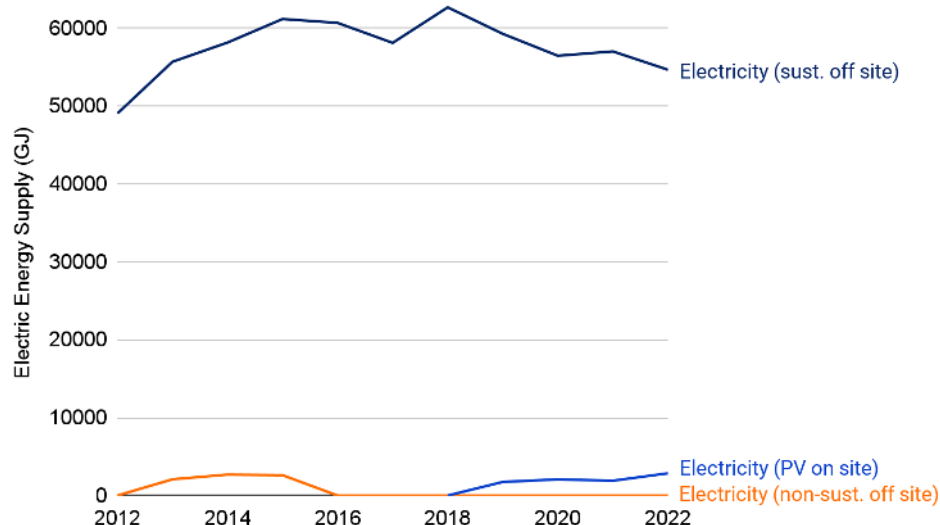
Energy

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

ELECTRICAL ENERGY DEMAND

Since 2016 RDI has purchased 100 percent of its electrical energy from hydropower. This is used for example for heating and cooling generators, ventilation systems, lighting, laboratory equipment, IT equipment and other devices.

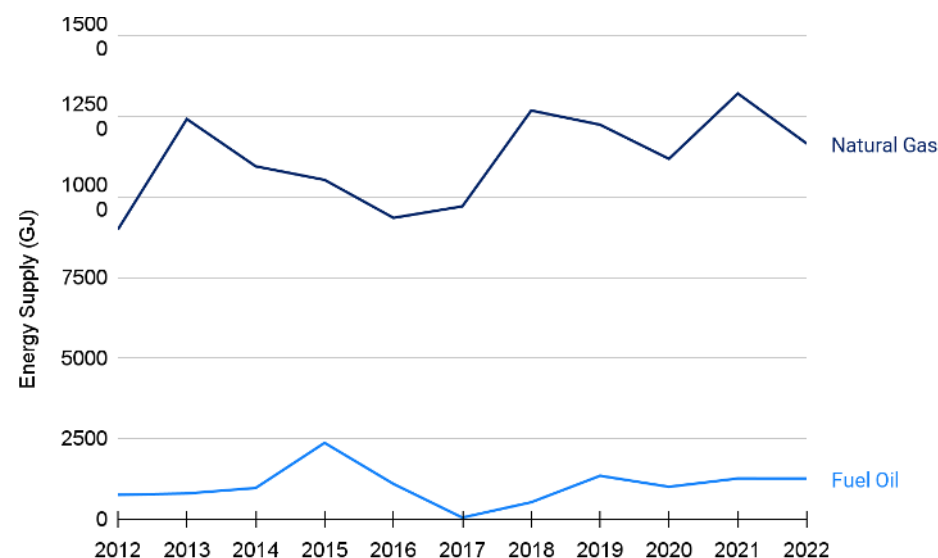
Additionally in April 2022 the already existing photovoltaic systems on the parking garages were extended with a system on the roof of building 10. Last year they together produced about five percent of the electrical energy demand locally which was fed into the site's own grid.



FOSSIL FUELS

The demand for natural gas is almost exclusively for heating building 1, 4, 8, 9 and 10. To substitute fossil fuels the department *Engineering & Technology* has developed an action plan so that the buildings can be operated in a renewable way in the coming years.

Only building 13 uses fuel oil for heating. The planned demolition in 2023 is expected to reduce heating oil consumption. However, RDI continues to rely on fuel oil for the emergency generators. These are used in the event of power interruptions. To ensure operational readiness, their function is tested monthly.



ENERGY CONSUMPTION FOR MOBILITY

In the area of mobility, the largest share of energy is required for business flights. With the kilometres flown in 2022 of around 27 million, one could circle the earth 675 times. This is a very strong increase compared to 2021 (2 million kilometres) but still lower than before the COVID-19 pandemic.



Greenhouse gas emissions

The different scopes of greenhouse gas emissions

Greenhouse gas emissions are managed according to the Roche Greenhouse Gas Inventory. This follows the Greenhouse Gas (GHG) Protocol, an international accounting instrument. Greenhouse gases are divided into three groups, so-called scopes.

Scope 1 emissions are emissions that occur directly in RDI's production processes and through the car fleet.

Emissions that are indirectly caused by purchased energy belong to **Scope 2 emissions**.

Scope 3 emissions are indirectly generated by RDI's business flights, incinerated waste and fuel related activities

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

RDI's business activities resulted in greenhouse gas emissions of approximately 5'533 metric tons of CO₂ equivalents (CO₂-eq) in 2022. This is an increase of over 160 percent compared to the previous year.

Scope 1 emissions originate from the fossil energy sources required, namely natural gas, heating oil and fuels. These emissions have remained quite constant over recent years.

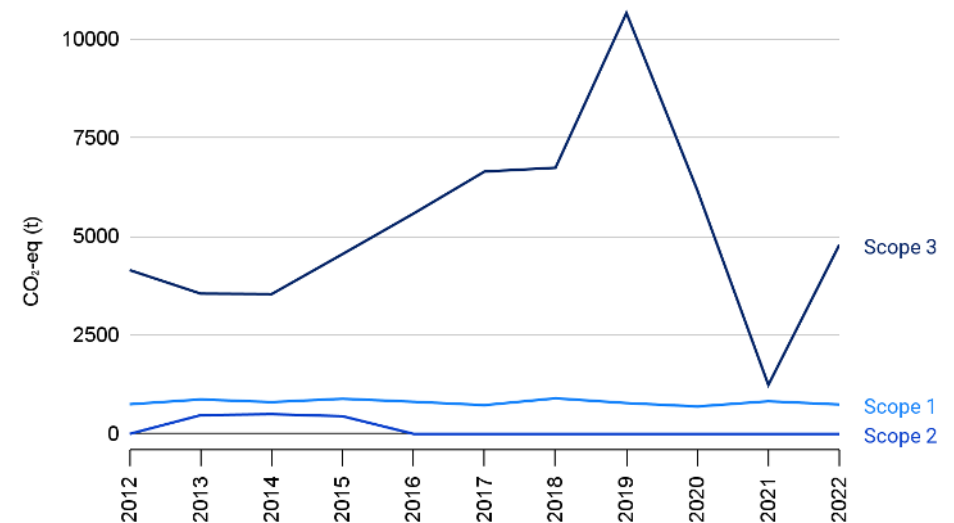
As all electrical energy stems from renewable sources since 2016, scope 2 emissions are zero since then.

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 2020. 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 in December almost reached the monthly level of 2019 again.

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.

Various projects are intended to help achieve Roche's target of reducing emissions Roche-wide as well as locally for RDI.



Ecobalance

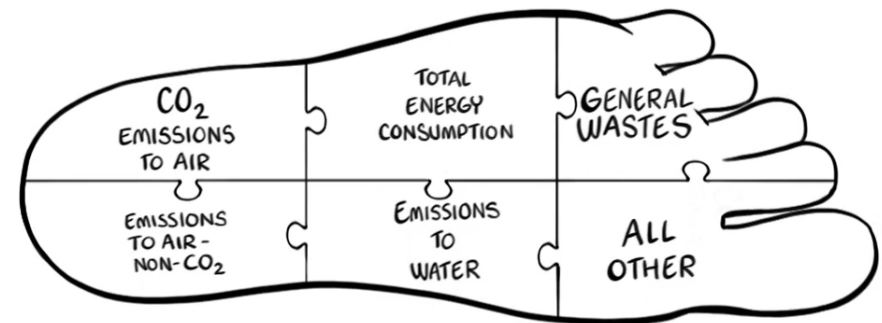
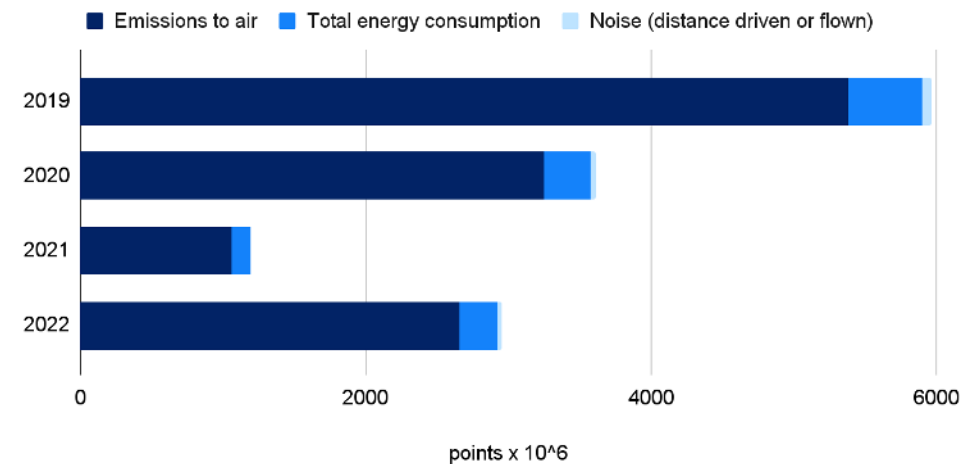
All environmental indicators collected by RDI are summarised in the ecobalance. The ecobalance calculates the footprint of the reported RDI activities within a year, based on various influences such as air, noise and water emissions, waste and resource consumption. The impact is expressed in so-called 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, kerosin)
 - 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 the environmental impact also increased again and RDI's ecobalance totaled in 2'956 million UBP.



Incident management

Roche is committed to creating a safe and healthy working environment for its employees. For this reason, all incidents are investigated by safety specialists.

Since 2021, all incidents, near misses and unsafe conditions have been recorded and systematically processed in STARI (System for Tracking and Reporting Incidents).

Since the implementation of STARI, almost 150 incidents have been reported, of which two-thirds were occupational accidents and one-third property damage and environmental incidents.

Significantly more than 50 percent of the personal accidents occurred in connection with falls or cuts. Fortunately, most of the accidents resulted in only minor injuries, only 6 accidents led to work absences due to injuries in the period 2021/2022.

The data recorded in STARI helps to identify existing risks and accident blackspots and to implement fact-based preventive measures that specifically address the identified causes.

An **incident** can be an occupational accident, the release of a substance, an environmental incident, property damage or an accident involving a motorised vehicle.

A **near miss** is an unplanned event that occurs suddenly at work and does not result in injury or damage. However, because it had potential to do so, it is a warning signal that must be responded to.

An **unsafe condition** is a deviation from the intended condition and may result in an occupational accident or environmental damage.

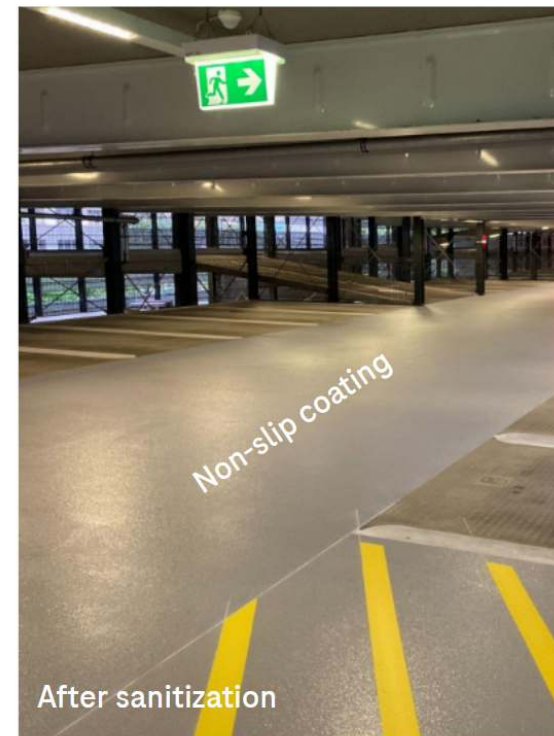
PREVENTIVE MEASURES

Car park renovation

In 2022, following several STARI reports of fall accidents or near misses in wet weather, both P2 and P3 car parks were fitted with anti-slip flooring.



Before sanitization



After sanitization

Collision prevention

In building 8 and 10 goods are transported by various industrial vehicles. Vehicles and pedestrians frequently cross each other in the corridor. Doors from the cloakrooms that open into the corridor cause a considerable risk of collision even before the employee can see the approaching vehicle. Drivers entering the corridor may not realise the danger of a collision with a vehicle travelling in the opposite direction in the corners until it is too late.

This is how 'near accidents' occur during daily operations. Measures that are taken, such as awareness campaigns or targeted training, are not sufficient on their own.

Therefore, further measures were taken in 2022 through warnings such as BluePoints lights on the vehicles, ground projections, circular mirrors and the automatic limitation of driving speed. This significantly reduced the likelihood of a collision and its impact.



Safe roof exit

In November 2019, a comprehensive risk analysis was carried out which showed the deficits according to current standards in safety when accessing and working on the roofs. Based on the identified deficiencies a project proposal was submitted in 2020.

In April 2020, the proposals for the measures to mitigate the risks in the risk analysis were signed and work began. The project was completed with the last measure in building 9 with the installation of the roof exit stairs inside and outside the building.





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