ProCredit Bank

ProCredit ACADEMY

Quipu Part of the ProCredit Group

ProCredit HOLDING

UPDATED ENVIRONMENTAL STATEMENT 2023

for the ProCredit institutions located in Germany

EMAS
GEPRÜFTES UMWELTMANAGEMENT
DE-125-00059

Information about this statement

This updated Environmental Statement covers the calendar year 2023 and is based on the third full statement for the ProCredit institutions based in Germany, which was issued in January 2022. In accordance with the defined scope, every three years a full statement covering all aspects of the environmental management system is published for all ProCredit institutions located in Germany. In the years following the full reports, the Environmental Statement is updated with the most important developments that took place during the respective calendar year. Since the first reporting year, which was 2015, the Environmental Statement has been published by ProCredit Holding on an annual basis. A detailed overview of the ProCredit group's environmental management system can be found in the most recently published Impact report and full Environmental Statement 2021, where you can also read the sections which have remained unchanged

The scope of the statement and EMAS validation covers the following four institutions:

- ProCredit Holding AG, Rohmerplatz 33-37, 60486 Frankfurt am Main
- ProCredit Bank AG, Rohmerplatz 33-37, 60486 Frankfurt am Main, Germany
- ProCredit Academy GmbH, Hammelbacher Straße 2, 64658 Fürth-Weschnitz
- Quipu GmbH, Koenigsberger Straße 1, 60487 Frankfurt am Main

Further information on our group-wide comprehensive commitment to environmental, social and governance issues, including the previously published Environmental Statements and the ProCredit Group Impact Report, can be downloaded from Downloads - PCH (EN) (procredit-holding.com).

The next full Environmental Statement is expected to be validated and published in 2025.

List of abbreviations and names

CO_2eq	Carbon dioxide equivalent
E&S	Environmental and social
EMS	Environmental Management System
ESG	Environmental Social Governance
EU	European Union
EUR	Euro
FFM	Frankfurt am Main
FTE	Full-time equivalent
GEM	Group Environmental Management
GHG	Greenhouse gas
GRI	Global Reporting Initiative
kWh	Kilowatt hours
OS	Overnight stay
PCA	ProCredit Academy
PCAF	Partnership for Carbon Accounting Financials
PCBG	ProCredit Bank Germany
PCH	ProCredit Holding
PLA	Polylactic acid
PP	Per Person
PV	Photovoltaic
SME	Small and medium-sized enterprises

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1 Foreword

The year 2023 was a significant one for the ProCredit group. Despite the challenges of the previous year, we saw notable improvements in profitability and cost efficiency across our banks. This validates our commitment to sustainable profitability and positive impact orientation.

In 2023 we kept the focus on reducing our environmental footprint by continuously analysing and monitoring the impact of our activities. At the group level, we have developed a Climate Action Strategy to align with the 1.5°C scenario of the Paris Agreement. Our goal is to cut at least 90% of our scope 1, 2, and 3 emissions by 2050, with scope 3 comprising the emissions from financed activities. To reach this goal, we have established near- and medium-term objectives grounded in scientific methodology and validated by the Science Based Targets initiative (SBTi). As the ProCredit institutions in Germany, we are also committed to reducing our emissions wherever it is possible.

We are also proud to report that the share of green loans in our total portfolio has been consistently rising since 2015, and now accounts for 20.4%. We have set a new medium-term target of 25%.

In addition, ProCredit was asked to represent the Finance Leadership Group on Plastics in the third Intergovernmental Negotiating Committee, at which the UN member states worked to develop an internationally binding instrument to end plastic pollution.

In Germany, we are dedicated to reducing our relative consumption figures, and we are able to report improvements in both energy and water consumption. Due to the planned increase in staff numbers, we expect slight increases in absolute consumption values, which we are aiming to address in our annual environmental plan for the year ahead.

1.1 Relevant changes at the institutions

In the first half of 2023, both floors at ProCredit Bank Germany underwent renovation work. In September, we finalised the change in legal form of ProCredit Holding and successfully became a joint stock corporation.

This year the electricity consumption values include the consumption from the data centre in Frankfurt. The data centre is rented by Quipu to provide the necessary infrastructure for the servers of Quipu and partially of PCH and PCBG. All the servers, network equipment and storage units are owned by Quipu and only the infrastructure is rented. Because we have decided to report the electricity consumption of the rented facility dedicated to our servers, there are differences in total energy consumption and electricity consumption compared to previous reports.

1.2 Significant environmental law requirements and their implementation

The ProCredit locations in Germany are subject to various legal requirements. The following are the most relevant environmental regulations:

- German Regulation on Hazardous Substances - Regulation on Protection against Hazardous Substances (GefStoffV)

This regulation describes the requirements for risk assessment, basic obligations and protective measures depending on the hazard. The aim of the regulation is to protect people and the environment from the effects of harmful substances.

- German Regulation on Facilities for Handling Substances that are Hazardous to Water (AwSV)

This regulation serves to protect bodies of water against hazardous substances. Each substance is classified according to its hazard potential and, on that basis, requirements are laid down for facilities and handling.

- EU Regulation 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing EC Regulation 842/2006 (EU F Gas Regulation)

This regulation sets out bans, restrictions and maintenance requirements relating to fluorinated greenhouse gases (F-gases) in the EU. The aim is to reduce emissions in order to meet the obligations of the Montreal Protocol.

- German Regulation on the Management of Commercial Municipal Waste and of Certain Construction and Demolition Waste (GewAbfV)

In order to ensure that waste is recycled in the best possible way, GewAbfV regulates the separation of waste from commercial enterprises. Waste is separated according to paper, glass, plastics, metal, organic waste, wood and textiles.

- First regulation for the implementation of the German Federal Emissions Control Act - Regulation on Small and Medium Combustion Plants (1. BImSchV)

In order to reduce air pollution, this document regulates the operation of combustion plants, which are not subject to approval according to section 4 BImSchV. The regulation also promotes efficient use of energy.

- German Chimney and Flue Cleaning and Inspection Regulation (KÜO)

The KÜO governs fire protection and safety for operators of gas, oil and solid fuel combustion plants. It regulates maintenance needs and requirements for installations and heating safety inspectors (*Bezirksschornsteinfeger*).

- Wastewater Ordinance (AbwV)

The Wastewater Ordinance (AbwV) regulates the minimum requirements that must be set for permits to discharge wastewater. Annex 31 of the Waste Water Ordinance (AbwV) deals with

the requirements for the discharge of waste water in connection with water treatment, cooling systems and steam generation. It applies to wastewater discharges of more than 10 m³ per week from swimming pool water treatment.

The provisions of 1 BImSchV, KÜO, AwSV and AbwV are only relevant for ProCredit Academy. For the other locations, this responsibility lies with the building owner, and we simply monitor implementation.

The regulations are implemented as follows:

GefStoffV: The existing substances are recorded in a hazardous substance register with a risk assessment showing the degree of hazard they pose. Protective equipment (e.g. safety goggles) is provided for handling the substances. The substances are stored in a safe environment and disposed of by suitable service providers.

AwSV: The underground oil-fired boiler at PCA is regularly inspected by an expert. The relevant records, certificates and reports are retained. If defects are found during the inspection, they will be rectified by competent service providers in a verifiable and timely manner.

EU F Gases Regulation: Refrigeration systems are subject to regular leakage tests by suitable service providers. PCA retains reports of these tests and complies with testing intervals. At the other locations, this responsibility lies with the respective building owner, but implementation is also monitored by the institutions.

GewAbfV: Waste is collected at all locations and separated into paper, glass, organic waste, plastics and, if necessary, wood, metal and textiles. For PCA, the disposal company certificates are also documented. For the other locations, the responsibility lies with the respective building owner.

1. BImSchV and **KÜO**: At PCA, the existing (oil) combustion installations are tested and maintained in accordance with the statutory provisions. The relevant documentation on heating system inspections and maintenance is retained in order to ensure compliance with threshold values, maintenance intervals, etc.

AbwV: The discharge of wastewater from the water treatment of the PCA swimming pool is subject to Annex 31 of the Wastewater Ordinance (AbwV). In accordance with Annex 31 of AbwV, the PCA has the necessary authorization for the discharge of wastewater in connection with water treatment.

Compliance with the legal requirements at all institutions is managed within the framework of the legal register, which is an essential component of our environmental management system.

2 Current status of environmental aspects and impacts

Environmental aspects are elements or characteristics of the business activities of an organisation that can have an impact on the environment. The definition of and evaluation criteria for direct and indirect aspects remained the same.

2.1 Direct and indirect aspects

The relevance of the direct and indirect environmental aspects is determined by each institution as part of its environmental audit. Due to their different business models and building types, the degree of environmental relevance and control of each aspect varies from institution to institution.

The weighting of the aspects for Quipu, PCBG and ProCredit Academy in 2023 remains the same as in the complete environmental statement from 2021.

A new environmental aspect, “Packaging waste”, has been added for PCH. We have observed that most of the packaging waste collected stems from single-use takeaway packaging. Through our Plastic Strategy, we also aim to tackle internal plastic usage. Therefore, although such waste has medium relevance for the institution, there is a high degree of control by implementing measures such as reusable packaging.

We also updated our degree of influence on the environmental and social performance of our suppliers from High to Medium. During our sustainable supplier assessment process we noted that, although we work with many companies for the specialized products or services they provide, we have only a limited degree of control and limited chances to find a more sustainable alternative. Nevertheless, we are in communication with them and focus on areas where we see a chance to have a positive influence.

Based on these changes, the significance matrix for PCH has been updated as presented below:

Table 1: Significance matrix for direct environmental aspects at ProCredit Holding in Germany 2023

		Relevance		
		Low	Medium	High
Degree of control	High		• Packaging waste	
	Medium	• Organic waste • Fuel consumption / emissions	• Freshwater consumption • Electricity consumption • Waste paper • Electronic waste • Office supply consumption • Paper consumption in the office • Heating energy consumption	
	Low	• Land use	• Residual waste • Fugitive emissions • Wastewater	

Table 2: Significance matrix for indirect environmental aspects at ProCredit Holding in 2023

Relevance				
Degree of influence		Low	Medium	High
	High			
	Medium	• IT service provider • Building maintenance and minor renovation work • Catering company • Cleaning company	• Environmental performance of ProCredit banks • External printing company • External travel agency • Environmental and social performance of suppliers	• Loan portfolio of ProCredit banks • Aircraft emissions
	Low	• Security company (external)		

A detailed overview of the different levels of control and environmental relevance of the direct and indirect aspects of the four ProCredit institutions in Germany can be found in the full environmental statement from 2021.

3 Environmental data

3.1 Complete overview of ProCredit

In 2023, the total number of staff employed by the ProCredit institutions based in Germany increased by 10% in comparison to the previous year, from 376 to 412. The increase took place at all four institutions, with the highest increase at PCA (18%), followed by PCBG (10%), PCH (9%) and Quipu (8%).

Table 3: Number of employees

Indicator Employees	Unit	PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Employees[1]	Headcount	132	137	149	69	67	74	146	144	156	26	28	33
Employees	FTE	121	122	139	60	58	67	132	136	145	18	27	30

Following the increase in our staff numbers, we have observed a 7% increase in our total energy consumption. This rise is directly proportional to our expanded operations and workforce. However, it is important to note that our relative energy consumption has decreased by 4%. This is a positive trend that underscores our commitment to sustainable growth and energy efficiency.

Table 4: Total energy consumption

Energy					
Indicator	**Unit**	**2021**	**2022**	**2023**	**Difference 2022/2023**
Total energy consumption[2]	kWh	2,275,063	2,294,771	2,450,759	+7%
Relative energy consumption[3]	kWh/FTE	4,796	4,653	4,486	-4%
Electricity (offices)	kWh	462,713	536,941	549,692	+2%
Electricity (Data	kWh	783,016	918,603	1,008,931	+10%

[1] Data for employees represent the average number of employees (headcount) and full-time equivalents (FTE) for the respective year and refer to all persons working in Germany, including participants in the staff exchange programme but excluding staff on maternity or parental leave. The figures for Quipu only include employees working at its Frankfurt headquarters. There was a slight update in the number of employees in 2021 and 2022 for the Academy, leading to changes regarding relative data in the other sections.

[2] The consumption figures for 2021 and 2022 differ from those published in the EMAS 2022 statement as a result of adjustments made during the year and the addition of Data Centre electricity consumption.

[3] The relative energy does not include the Quipu Data Centre, as the consumption of the data centre is not related to the number of employees and includes weather adjusted heating consumption.

Centre)					
Heating energy	kWh	977,515	802,913	861,206	+7%
Heating energy (weather-adjusted)	kWh	1,072,419	1,022,681	1,128,661	+10%
Fuel	kWh	44,656	27,906	17,712	-37%

The total amount of fresh water consumed by our institutions increased by 3% compared to 2022, which can again be attributed to the increase in staff numbers. At 5.8 m^3, the relative water consumption per FTE at our institutions in Germany (excluding the Academy) is below the benchmark of excellence[4] and decreased by 33% in comparison to 2019.

Table 5: Total water consumption

Water consumption					
Indicator	**Unit**	**2021**	**2022**	**2023**	**Difference 2022/2023**
Total water consumption	m^3	6,014	7,814	8, 067	+3 %
Relative water consumption	m^3/FTE	18.2	22.8	21.2	-7 %

In line with our sustainability efforts, we have achieved a significant reduction in both the total and relative amount of household waste. This is largely due to our continuous initiatives to raise awareness about food waste and promote the use of reusable packaging. The most substantial decrease was observed in organic waste and total paper waste. The only two categories that saw a slight increase were packaging waste and non-separated waste; however, they remained almost unchanged. Compared to the EMAS benchmark for offices, 200kg/FTE/year, our waste production is considerably lower at 32kg/FTE/year.

[4] The benchmark of excellence can be found under 6.8 Indicators and benchmarks for comparison.

Table 6: Total waste generation

Waste generation					
Indicator	**Unit**	**2021**	**2022**	**2023**	**Difference 2022/2023**
Total household waste volume	kg	15,191	38,747[5]	34,254	-12%
Relative household waste volume	kg/FTE	41.2	109,1	86,3	-21 %
Total E-waste volume	kg	1,499	1,254	1,330	-6%

We have observed a significant increase in paper consumption. One of the reasons is the Academy's return to normal teaching activities. Despite the increase compared to 2022, we are still at around 50% of the paper consumption of the pre-COVID era (2019: 2,593 kg). For the other institutions, we are actively investigating this trend and are committed to promoting practices such as double-sided printing and digital signatures. Our goal is to understand and address the causes of increased paper consumption, and ultimately, reduce our environmental footprint.

Table 7: Total paper consumption

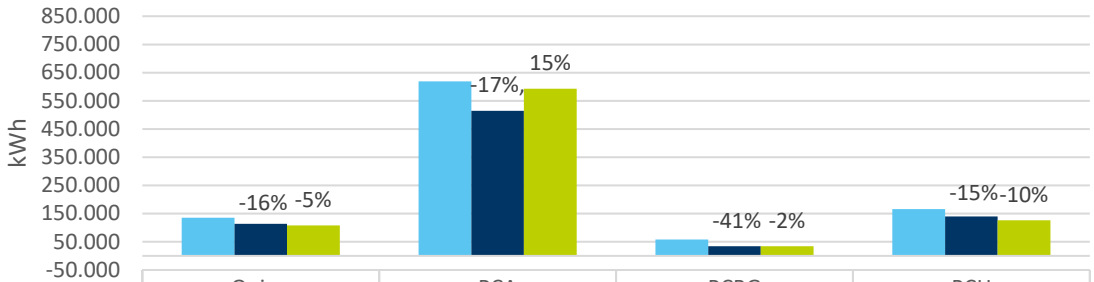
Paper consumption					
Indicator	**Unit**	**2021**	**2022**	**2023**	**Difference 2022/2023**
Total paper consumption	kg	1,176	991	1,314	+33%
Relative paper consumption	kg/FTE	3.6	2.9	3.4	+19%

3.2 Direct aspects per institution

3.2.1 Energy consumption

Energy consumption comprises figures for electricity, heating energy, company vehicle fuel consumption and the energy required for cooking.

[5] Due to the corrections made to the data for organic waste at the PCA and waste paper at the PCBD, the value for total household waste has changed..



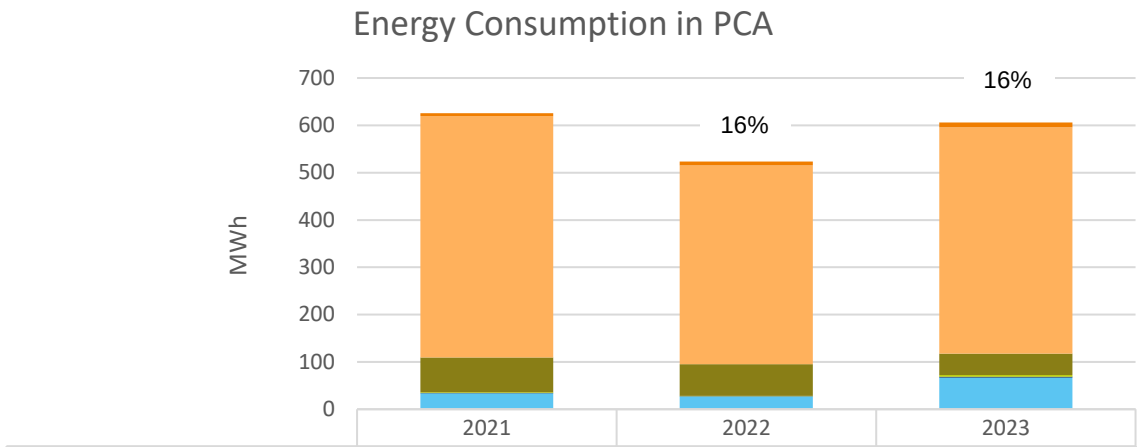
Heating	Quipu	PCA	PCBG	PCH
2021	134.836	618.534	58.282	165.863
2022	113.307	514.746	34.527	140.333
2023	107.971	592.774	33.976	126.485

Figure 1: Heating consumption[6]

In terms of heating, we have observed a decrease in consumption across three of our facilities. However, the Academy has seen an increase, primarily due to returning to regular operations after serving as a shelter for the refugees from Ukraine. The seminar rooms are now used for the Academies and training activities. [6]

At the beginning of 2023, PCH reduced the maximum temperature of the water boiler used for heating and hot water for the whole building. In addition, the central heating is set to save energy during the non-working hours for the building, which means after 23:00 until 4:00 on working days and completely off on Sundays. This not only helped reduce the heating consumption for PCBG and PCH but also indirectly reduced the heating consumption of the other tenants of the building.

[6] The percentages indicate the respective thermal energy consumption compared to the previous year. This applies to all of the following charts)



	2021	2022	2023
Liquid gas for cooking	5.905	7.766	9.882
Heating (wood)	510.055	420.457	478.400
Heating (oil)	74.247	66.722	45.652
Firewood (for Pizza oven)	1.257	641	3.336
Firewood (for chimney room)	368	607	1.993
Bio-LPG for space/water heating	33.864	26.961	66.729

Figure 2: Energy consumption for heating and cooking at PCA

We observed an upward trend in electricity consumption across all institutions, except for Quipu. This increase can be attributed to several factors. The continued office presence necessitated the use of computers, monitors, lights and air conditioning, contributing to the rise in energy use. The increased usage of rented electric vehicles in PCH contributed to the increase in electricity consumption.

At PCBG, the renovation that began in mid-November 2022, which was electricity-intensive, continued into the early part of 2023, further driving up the institution's electricity consumption.

The Academy continued to rely on its solar PV plant and green electricity purchased from a local energy provider as its primary sources of electricity. However, the installation of air purifiers in all seminar rooms and blue light filters in the HVAC systems, which began in 2022, continued to have an impact on electricity consumption in 2023.

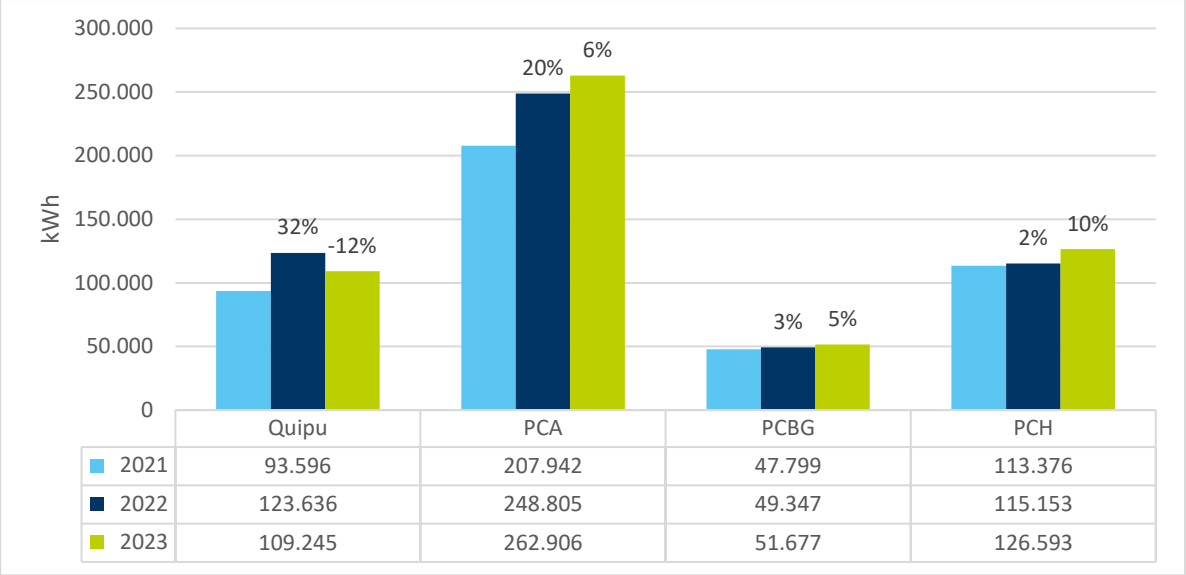


Figure 3: Electricity consumption[7]

As mentioned in Section 1.1, this year we are also reporting the electricity consumption from the data centre in Frankfurt as well as retroactive data reporting for the two previous years. The increase in 2023 is related to higher usage of air conditioning in the summer months to keep the servers cool. The figures can be found below:

Table 8: Electricity consumption of Quipu Data Centre

Electricity consumption of Quipu Data Centre					
Indicator	**Unit**	**2021**	**2022**	**2023**	**Difference 2022/2023**
Electricity consumption	kWh	783,016	918,603	1,008,931	+10%

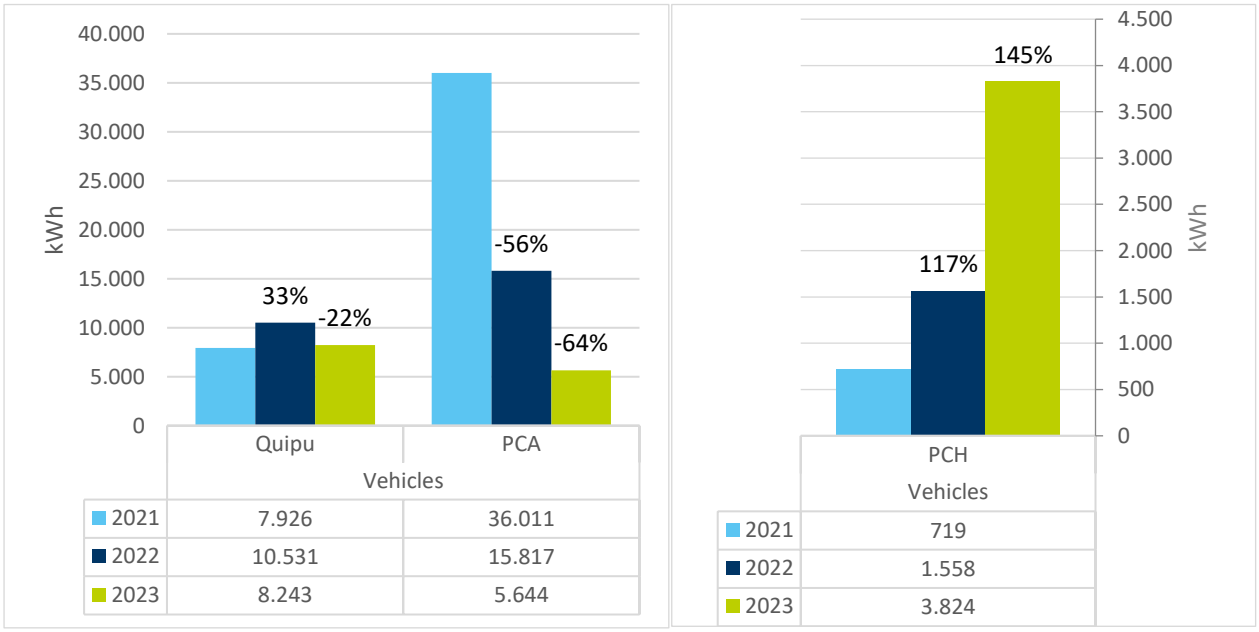


Figure 4: Fuel consumption of vehicles

In the past year, PCH and Quipu have reduced their fuel consumption from vehicles. The Academy sold one of their diesel cars and rented two electric cars with the same programme that PCH used. The only remaining vehicle is used to transport large objects. The reduction in fuel consumption at PCA is also since participants are no longer transported in Academy vehicles.

In contrast to the other institutions, PCH has seen an increase in fuel consumption, primarily due to renting another electric car designated for both business and personal use. The availability of more cars encouraged employees to use them for business and personal trips, and since many employees charge the vehicles at the building, we saw an increase in electricity consumption. Overall, we see this as a positive development, especially in terms of the personal use of EVs. Our aim in making the cars available for private use is to provide staff with the opportunity to rent the cars and charge them with clean electricity instead of owning a vehicle of their own. Although we are not reporting quantitative data on personal use of the cars, the feedback from users indicates that part of our objective is being met.

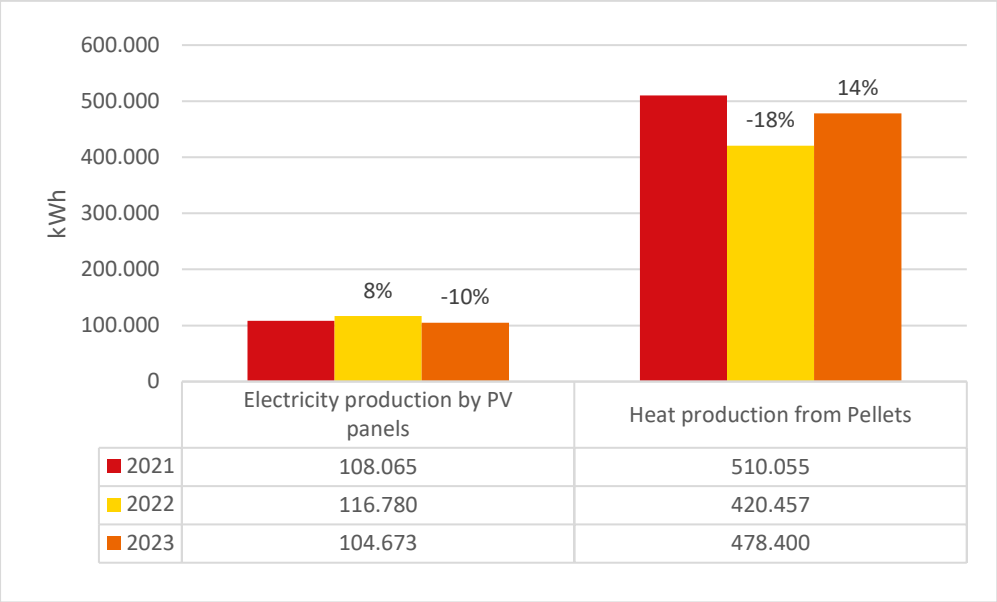
In addition, PCB, PCH and Quipu continued to promote cycling to work through their agreement with JobRad, also joining the Germany-wide Stadtradeln[8] initiative.

3.2.2 Renewable energy generation

During the past year, our Photovoltaic (PV) system in PCA experienced a malfunction that led to a 10% decrease in electricity production, despite the system having previously seen an 8% increase in production. We are actively addressing this issue with the aim of not only restoring but also improving our PV electricity production.

On the heating side, our wood pellet heating system has experienced a significant increase in production. Following a malfunction last year that resulted in an 18% decline in heat production from pellets, we have seen a rebound with an increase of 14% this year.

[8] STADTRADELN - Home



	Electricity production by PV panels	Heat production from Pellets
2021	108.065	510.055
2022	116.780	420.457
2023	104.673	478.400

Figure 5: Energy production at PCA

3.2.3 Emissions

In line with GHG Protocol standards and guidelines, our GHG emissions[9] are reported under the following three scopes:

- Scope 1 comprises emissions from stationary combustion to produce energy for heating and cooking, emissions from the use of fossil-fuel-powered company cars as well as fugitive emissions from air conditioning and refrigeration systems. Scope 1 also covers other emissions such as NO_x, SO_x and PM_{10}[10] as required by EMAS regulations (EU commission regulation EU 2018/2026).
- Scope 2 comprises emissions from purchased electricity. In our case there are no direct emissions from the electricity consumption, as electricity is either generated by PCA's own photovoltaic systems or has been purchased by all institutions from certified renewable electricity suppliers since 2016.
- Scope 3 comprises emissions resulting from business air travel. These are represented as CO_2eq and are estimated via atmosfair GmbH's web-based calculator. In addition, we have been calculating our portfolio emissions since 2021 as they represent a major part of our Scope 3 emissions in the group. The results and methodology for the whole group are presented in section 3.3.2.2.

[9] Total GHG emissions include CO_2, CH_4, N_2O, HCFCs, HFC, PFC, NF_3 and SF_6 and are based on International Energy Agency (2021), Emission Factors and the Intergovernmental Panel on Climate Change (IPCC) 2006 Guidelines for National Greenhouse Gas Inventories, apart from BioLPG and wood pellets. CO_2 emissions from wood pellets are not included in our gross emission calculation (we consider non-CO_2 emissions only, using a factor of 0.3g CO_2eq/MJ for the combustion of wood pellets according to the Renewable Energy Directive (RED II), Directive (EU) 2018/2001). The emission factor for BioLPG is 0.0603kg CO_2eq and is based on the World LPG Association (WLPGA) report "Role of LPG and BioLPG in Europe" (2019).

[10] The other air emissions are based on the emissions factors from the GEMIS 4.95 Database. For BioLPG, the emissions factors for LPG are used due to the lack of separate data for BioLPG.

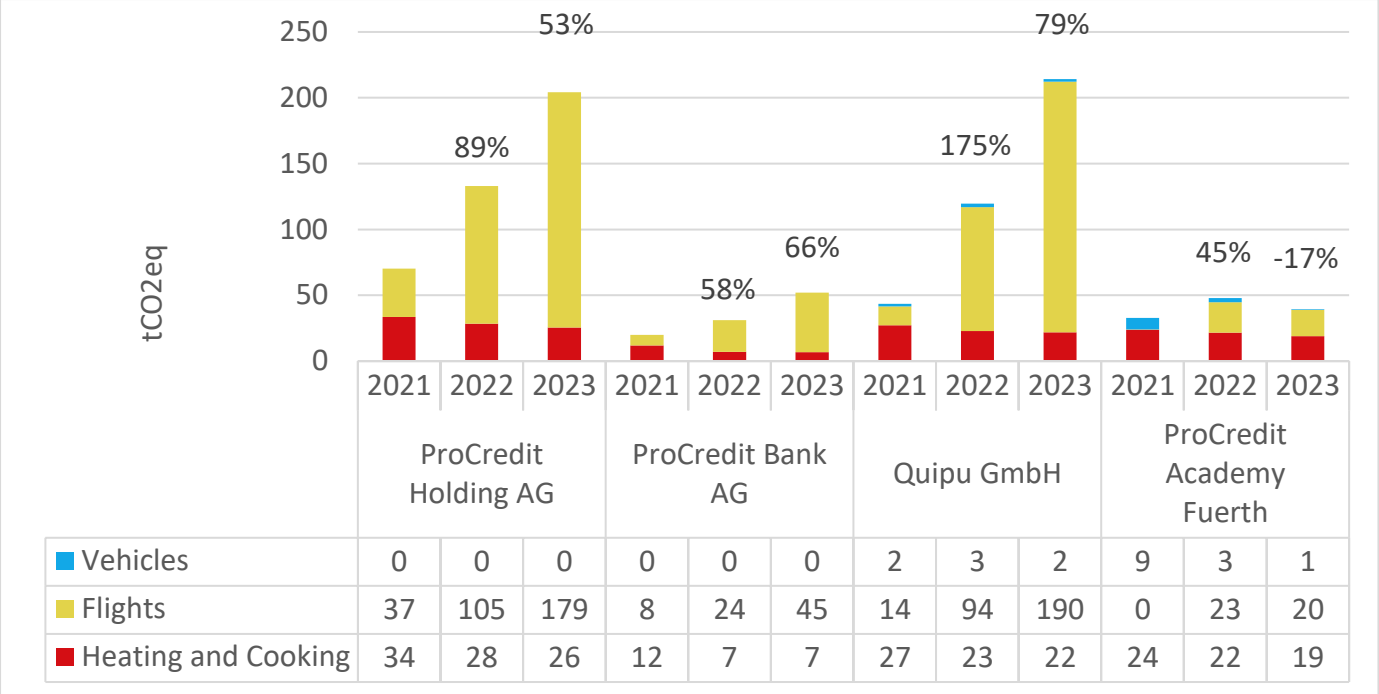


Figure 6: CO2eq emissions by source for all institutions

3.2.3.1 Scope 1 emissions

At PCH, PCBG and Quipu, natural gas is the source of heating energy. PCA's main source of heating is BioLPG, wood pellets and oil. For cooking, PCA uses LPG.

Emissions in this scope are correlated with the energy consumption. A decrease in heating consumption was observed at PCH, PCBG and Quipu. The CO_2eq emissions decreased for the Academy, despite an increase in heating consumption; this is due to the reduction in the oil used for heating. The other emissions have seen a rise due to the increase in other heating sources such as BioLPG and firewood.

The emissions from cooking grew in PCA due to the increase activity for training and seminars.

Table 9: Emissions from heating

Indicator Total heating emissions	Unit	PCH			PCBG			Quipu			PCA[11]		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
CO_2eq	tCO_2eq	33.5	28.3	25.5	11.8	7.0	6.9	27.2	22.9	21.8	22.4	19.9	16.7
NO_x	kgNO_x	27.5	23.3	21.0	9.7	5.7	5.6	22.4	18.8	17.9	171.0	142.0	161.8
SO_x	kgSO_x	2.0	1.7	1.5	0.7	0.4	0.4	1.6	1.4	1.3	87.3	73.5	75.5
PM_{10}	kgPM_{10}	1.2	1.0	0.9	0.4	0.2	0.2	0.9	0.8	0.8	35.2	29.1	32.7

[11] The difference in the CO_2eq emissions in comparison to the data presented in last year's Updated Environmental Statement for 2022 is due to the corrections of miscalculations for the usage in 2021 and 2022.

Table 10: Emissions from cooking

Indicator Total emissions from cooking11	Unit	PCA		
		2021	2022	2023
CO_2eq	tCO_2eq	1.34	1.76	2.25
NO_x	$kgNO_x$	1.15	1.32	2.17
SO_x	$kgSO_x$	0.64	0.71	1.23
PM_{10}	$kgPM_{10}$	0.33	0.24	0.78

As shown in Table 11, emissions from vehicles only account for a small part of the Scope 1 emissions. All institutions are aiming to reduce their use of fossil-fuel-powered vehicles and switch to electric vehicles. As for Quipu, they are looking for options on the market to replace the VW Caddy with electric cars. The Academy has only one car that runs on diesel, which is reserved for larger transportation needs and is not used often. In 2023, PCH added one more rental car to its fleet and it now has three electric vehicles available for the employees to rent for work and for personal purposes outside of working hours.

Table 11: Emissions from vehicles

Indicator Emissions from vehicles	Unit	PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
CO_2eq	tCO_2eq	-	-	-	-	-	-	2.0	2.7	2.0	8.7	3.2	0.7
NO_x	$kgNO_x$	-	-	-	-	-	-	0.8	0.1	0.0	0.1	0.1	0.0
SO_x	$kgSO_x$	-	-	-	-	-	-	0.1	0.1	0.1	0.3	0.1	0.0
PM_{10}	gPM_{10}	-	-	-	-	-	-	15.1	20.1	15.0	60.0	21.2	5.0

3.2.3.2 Emissions from electricity (Scope 2)

As all four ProCredit institutions have been using electricity from renewable sources since 2016, Scope 2 emissions are considered to be zero.

3.2.3.3 Emissions from business travel (Scope 3)

As illustrated in Figure 6, the majority of our CO_2eq emissions are still attributed to air travel, excluding PCA. In 2023, we observed a significant increase in our flight emissions. This was not only due to our operations gradually returning to pre-pandemic levels, but also due to a surge in travel requirements for various events and visits where the ProCredit group was represented.

In comparison to 2022, the number of flights taken last year increased by 72.1% due to increased business activities, and the associated CO_2 emissions increased by 29.8%. Nevertheless, we remain committed to our environmental responsibilities. We continue to promote hybrid meetings and only require in-person attendance when absolutely necessary. Essential business trips, such as strategic meetings, Academy training events, and client visits, are carefully planned and combined whenever possible to minimise our environmental impact. Our dedication to reducing the emissions from flights can also be seen when comparing such emissions with the 2019 data: 39% decrease in emissions compared to 2019 levels, despite the increase in business activities[12].

We are dedicated to further investigating the causes behind the increase in our flight emissions and implementing appropriate mitigation measures in the future.

Table 12: CO_2eq emissions from flights

Indicator Emissions from flights	Unit	PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
CO_2	tCO_2	14.3	41.6	68.7	3.6	9.9	17.9	5.8	37.0	71.7	0.2	7.2	7.4
Other GHG emissions	tCO_2eq	22.5	63.1	109.9	4.4	14.3	27.2	8.5	57.0	118.7	0.2	15.7	12.4

[12] More information about our 2019 figures can be found at Downloads - PCH (EN) (procredit-holding.com)

Figure 7: Flights

3.2.4 Food consumption

Food consumption remains a significant factor for PCA, and we continue to prioritise sustainable sourcing for all our institutions. As outlined in section 3.3.4, our primary sustainability criterion for food suppliers is the use of organic cultivation methods. When this is not feasible due to cost or availability, we turn to regional or local food suppliers as a more sustainable alternative.

In some instances, we find that regional producers with commendable environmental practices are a better choice than certified organic products from distant locations. This is particularly true for PCA, where numerous small local producers employ organic practices but lack certification due to their farm sizes. To support these local producers and the regional economy, we opt to source from them over organically certified but unfamiliar brands.

Regrettably, the pandemic led to the closure of some of PCA's suppliers due to decreased demand in the area. Since reopening, PCA has been actively working to revitalise the regional market and is supporting its previous suppliers. A notable example is the nearby Hüttenthal dairy, which supplies the Academy with milk and other dairy products on a weekly basis.

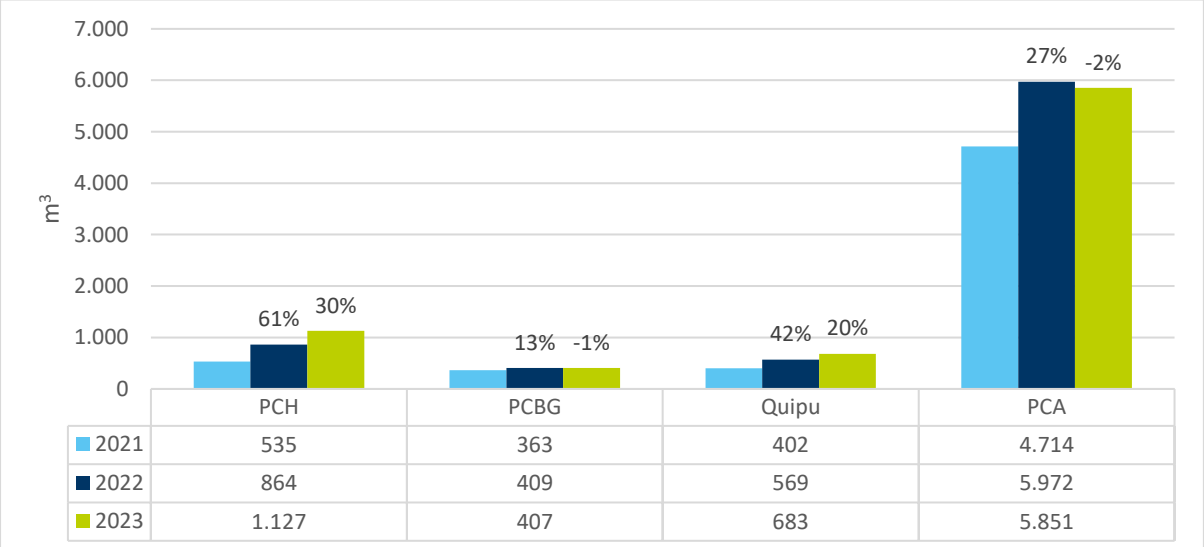
In addition to these efforts, we have implemented awareness training for all Academy employees and students. This training aims to educate our community about the importance of sustainable practices and the impact of our choices on the environment.

3.2.5 Water consumption

In 2023, the average water consumption increased, with increases specifically at PCH and Quipu. This rise is correlated to the increase in the number of employees in our offices and the continued use of water dispensers as a replacement for bottled water. At the beginning of 2023, we observed that running duration for the newly installed taps in the bathrooms was too long and employees were not using the stop function in an optimal manner. In response, we reduced the duration from 20 seconds to 10 seconds. Also, considering the more frequent droughts and water scarcity, we introduced an informational campaign to draw the attention of staff. After the campaign and the optimisation measure for the taps, water consumption declined by 10% compared to the previous year's level.

At Quipu, water dispensers and bathrooms are also being used during the meetings held by PCH and PCB. This is one of the major reasons for the increased water consumption in the Quipu premises. Nevertheless, we introduced an awareness campaign via the internal social media platform at Quipu in order to promote activities to save water.

PCA and PCB have seen a slight decrease in water consumption. This is due to the implementation of water-saving settings on flush systems at PCB after the renovations were completed. Additionally, reminders for water saving have been sent throughout the year, raising awareness about water conservation. The majority of water consumption is still for the swimming pool at the Academy, whose volume is approximately 2,000 m^3.



	PCH	PCBG	Quipu	PCA
2021	535	363	402	4.714
2022	864	409	569	5.972
2023	1.127	407	683	5.851

Figure 8: Water consumption

3.2.6 Paper consumption

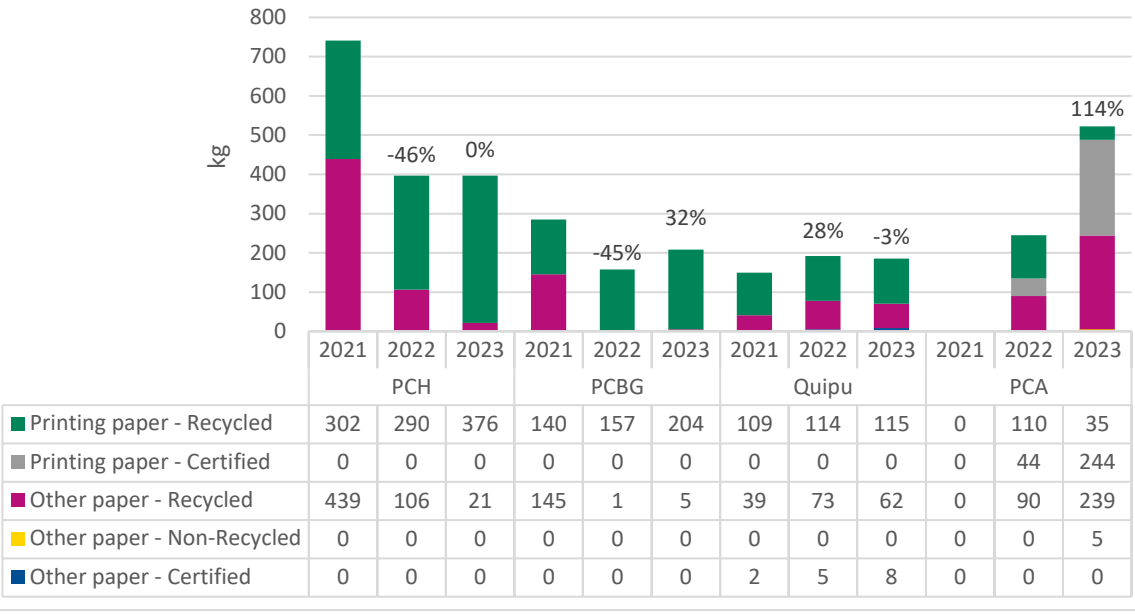
All of our institutions are exploring possibilities to further reduce paper use, and digitalising internal processes is one of the best measures to achieve this goal. The success of the transition that took place over the last four years can be seen in the 49% reduction from 2019 until 2023 in the paper consumption per FTE (in kg). Using printers with printing statistics per department and user helps to monitor paper consumption and address possible improvements.

In 2023, paper consumption saw an overall increase mainly due to the return to the offices. PCH's overall paper consumption remained stable. However, we saw a 30% increase in printing paper consumption, which is concentrated in a few departments. In contrast to the trend for printing paper, printing related to communication activities was reduced drastically. In 2023, only online channels were used for the communication of published documents such as the Annual Report or Impact Report, and this change compensated for the increase in printing paper. However, we will be exploring the reasons for the increase and ways to reduce consumption in 2024.

At Quipu, digital communication continues to be used wherever possible. E-signatures are used internally and, when accepted by law, also externally, and digital invoices are requested from our partners. Quipu successfully reduced its paper consumption in absolute terms and per employee.

For PCB, despite various initiatives, the goal of reducing paper use was not reached, with an overall increase of 30% in printing. This can be attributed to more people returning to the office in 2023, increased business activities and certain policies and rules that make printing unavoidable. Various initiatives were undertaken, such as sending awareness emails about printing less, providing a guide to set printers to duplex settings, holding meetings with different teams to brainstorm ideas on how to reduce printing, and calculating the printing consumption of the different teams. However, these measures did not significantly reduce printing, so we will be exploring other possibilities to reduce paper consumption in 2024.

Until 2023, the Academy calculated paper consumption using paper quantity ordered. In 2023, we developed a new method to report on the amount of printed paper rather than the ordered amount, and this helped us to monitor and report on consumption more precisely. New materials, notebooks, moderation paper and printing paper were ordered to meet the needs of the Academy as a teaching institution. In 2022, due to the usage of the premises to accommodate refugees from Ukraine, the overnight stays were much higher than in 2023. However, materials were not purchased for the purposes of an educational institution. In 2023, the Academy again started hosting course participants and guests for various seminars, so consumption of materials increased both in absolute terms and per overnight stay.



	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
	PCH			PCBG			Quipu			PCA		
Printing paper - Recycled	302	290	376	140	157	204	109	114	115	0	110	35
Printing paper - Certified	0	0	0	0	0	0	0	0	0	0	44	244
Other paper - Recycled	439	106	21	145	1	5	39	73	62	0	90	239
Other paper - Non-Recycled	0	0	0	0	0	0	0	0	0	0	0	5
Other paper - Certified	0	0	0	0	0	0	2	5	8	0	0	0

Figure 9: Paper consumption

3.2.7 Waste generation

Waste comprises household waste[13], e-waste and hazardous waste. For reporting purposes, usable electronic equipment is also recorded here, although it cannot be considered as waste as it is often still serviceable. The amount of household waste generated can be seen in Figure 10.

In 2023, total household waste saw a general decrease of about 12%. However, PCBG experienced an increase in waste across all four categories, which is mostly due to the increase in presence in the office.

Quipu introduced a return box for markers and pens to be sent back to the supplier, Edding, for recycling. This measure has been implemented at PCH since 2019. Quipu also continued their initiative to give employees the opportunity to buy functioning but no longer compliant laptops and mobile phones. This data is entered as usable electronic equipment. E-waste that cannot be sold is collected and recycled by the contracted company.

The campaign initiated by PCH with Labdoo to bring functioning laptops to users in need could not proceed due to general excessive demand for that service and their limited capacity. Therefore, all electronic waste was taken by a specialised company for recycling.

In 2023, PCH began taking part in Konica Minolta's Clean Planet Program[14] to return used printer cartridges for refill and reuse.

[13] Household waste is the waste produced in the facilities by employees and visitors and includes paper, organic, packaging and residual waste. For PCA, oil from the grease trap is also reported under household waste.
[14] https://cleanplanetprogram.konicaminolta.eu/de-de/about-clean-planet-program

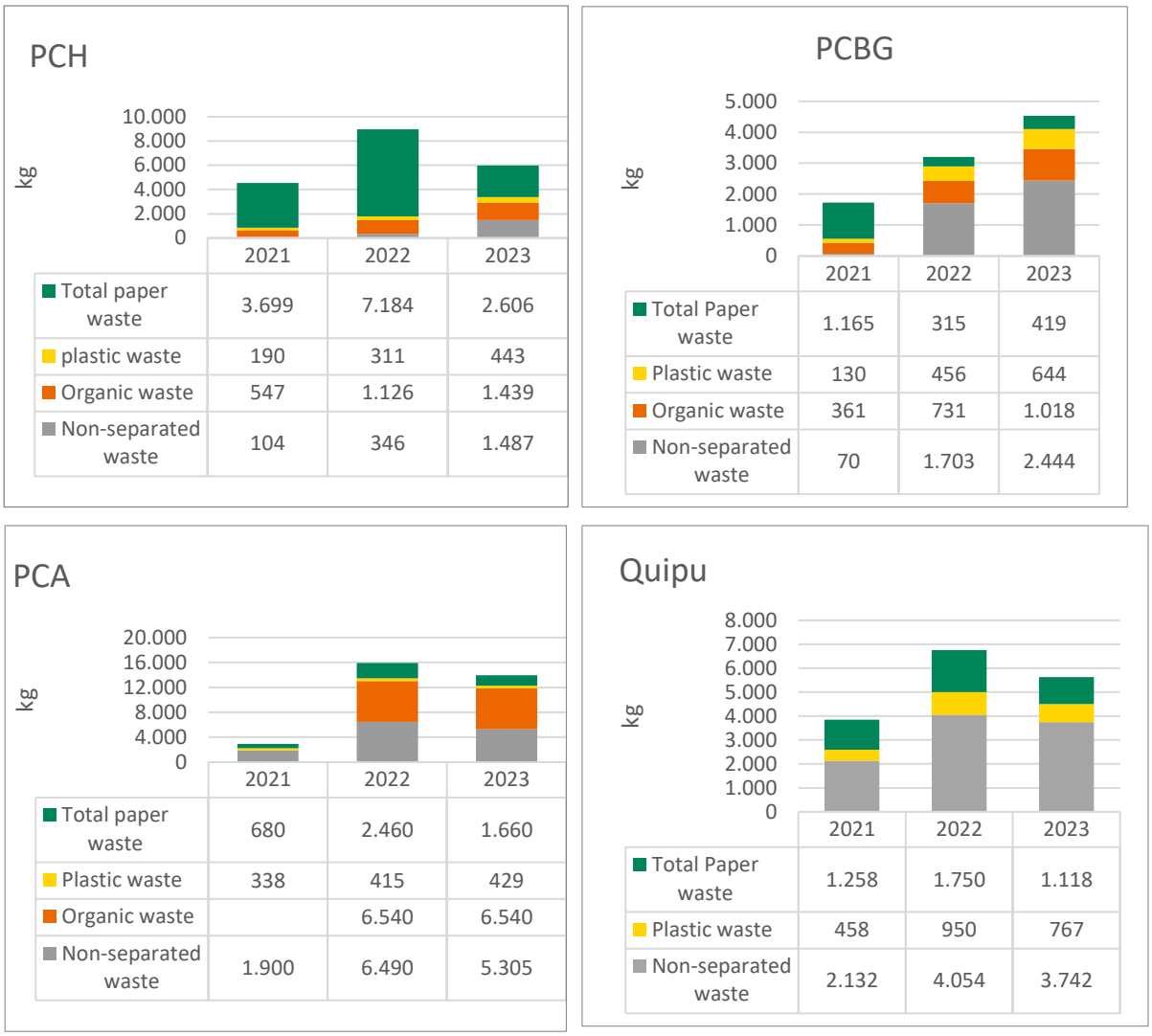


Figure 10: Household waste

Table 13: E-waste, usable electronic equipment and hazardous waste

Indicator	Unit	PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
E-waste	kg	697	730	221	-	-	378	802	524	731	-	-	-
Usable Electronic Equipment	kg	4	-	-	-	-	-	56	63	63	-	-	-
Hazardous waste	kg	-	-	1.05	-	-	-	8.4	33.3	15.0	-	-	-

3.2.8 Land use

In 2023, Quipu's average floor space increased to 2839 m², accounting for the full year's use of the additional workspace rented since July 2022 at Koenigsberger Str.1. Land use at the other institutions stayed the same, as can be seen in the table below.

Table 14: Land use

Indicator	Unit	PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Total area[15]	m²	2,390	2,390	2,390	1,421	1,421	1,421	2,258	2,549	2,839	5,184	5,184	5,184
Total area/ employee	m²/ FTE	19.7	19.6	22.1	23.7	24.3	21.2	17.1	18.7	19.5	295.4	194.3	172.1
Heated area[16]	m²	2,390	2,390	2,390	1,421	1,421	1,421	2,258	2,549	2.839	5,184	5,184	5,184
Heated area/ employee	m²/ FTE	19.7	19.6	17.3	23.7	24.3	21.2	17.1	18.7	19.5	295.4	194.3	172.1
Sealed area[17]	m²	954	954	954	503	503	503	517	575	633	9,652	9,652	9,652
Semi-natural (unsealed) area	m²	28	28	28	17	17	17	217	242	266	2,598	2,598	2,598

3.3 Indirect aspects per institution

The daily operations of the ProCredit banks (including PCBG) indirectly affect the environment in various ways. The most significant factor is the banks' loan portfolios, which are characterised by their special focus on green investments and the mandatory consideration of environmental and social risks when loan requests are evaluated. ProCredit Holding has especially strong influence with respect to the indirect aspects, due to its central role in shaping the strategy, processes and standards of the entire group with regard to environmental

[15] The total area corresponds to the proportional floor space at the location, including the floor area of the building, the traffic areas (paths and car park on the site), open spaces and semi-natural (unsealed) areas.
[16] The data for the heated area refers to office space, not including storage areas and parking spaces.
[17] For leased areas, the proportion of sealed/unsealed areas was set based on the share in the total leased area at the location.

protection and sustainability. The environmental performance of the other ProCredit institutions is therefore considered an indirect environmental aspect of ProCredit Holding.

A detailed overview of the different levels of control and environmental relevance of the indirect aspects of the four ProCredit institutions in Germany can be found in the last full environmental statement. There were no changes in 2023.

3.3.1 Green loan portfolio

Our green loan portfolio is strongly driven by investments in renewable energy. Due to high and volatile electricity prices, there is substantial interest in solar energy systems, with rooftop installations for internal consumption and utility scale projects being the most common investments in 2023.

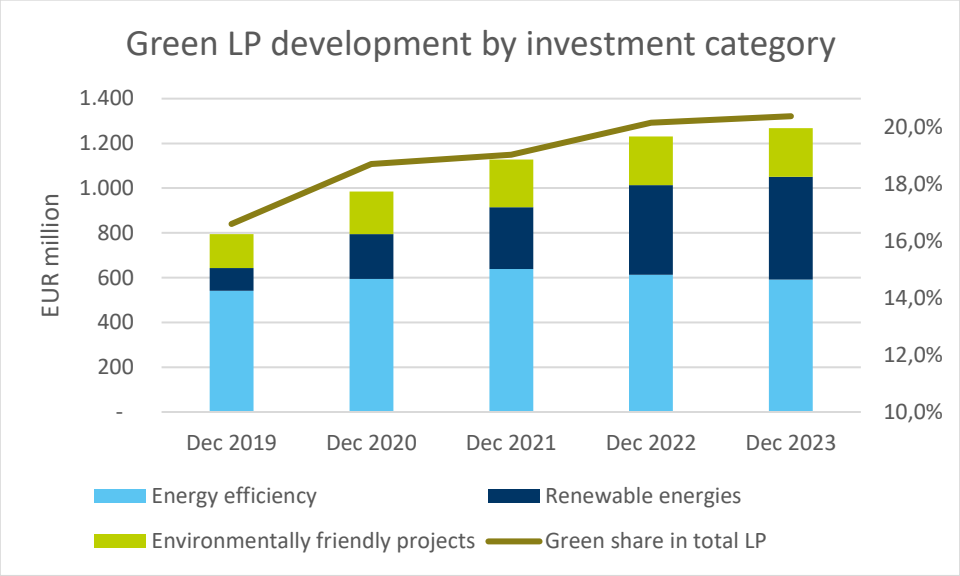


Figure 11: The ProCredit group's outstanding green loan portfolio by investment category

3.3.2 Our group target to reach net-zero emissions in 2050

At the group level, we have developed a Climate Action Strategy to align with the 1.5°C scenario of the Paris Climate Agreement. Our goal is to cut at least 90% of our Scope 1, 2 and 3 emissions by 2050. Our Climate Action Strategy includes a comprehensive impact analysis of our operating and financial activities. We have established near-term targets grounded in scientific methodology and validated by the Science Based Targets initiative (SBTi).

3.3.2.1 Decrease in Scope 1 and 2 emissions

Since 2015, we have been implementing a robust internal environmental management system to mitigate the impact of our operations on the climate and environment. We measure and monitor CO_2 emissions related to our operations (Scope 1 and 2); these mainly stem from electricity, heating and vehicle use.

Our goal, on the group level, is to reduce emissions by 42% by 2030 through a variety of measures. We aim to increase the share of renewable electricity use by investing in our own photovoltaic systems and partnering with clean energy suppliers. As of 2023, we have already increased the share of electric cars to 45% of our fleet. Additionally, we are implementing energy efficiency measures at our premises. The head offices in six countries of operation have been awarded EDGE green building certificates, with ProCredit Bank Ukraine being the most recent to certify in 2023.

3.3.2.2 Accounting for the CO_2 emissions of our loan portfolio

We're on a client-centric journey towards net-zero Scope 3 emissions, acknowledging the financial sector's role in real economy decarbonisation. We are using Partnership for Carbon Accounting Financials[18] (PCAF) as our methodology to count and disclose the emissions stemming from our financed activities. The emissions from the financed activities for 2022 and 2023 can be found in Section 7.2.

Our plan is to actively engage with clients to support their transition to net-zero emissions. Specifically, by 2027 we aim to engage with clients responsible for 28% of our loan portfolio's CO_2 emissions, focusing on the agriculture and manufacturing sectors.

We've dedicated 20% of our loan portfolio to support green investments, aiming to increase this share to 25% in the medium-term. As of 2023, we have financed 859 MWp of photovoltaic systems, with 306 MWp already in production. We're committed to being the primary financial partner for decarbonisation in our countries of operation.

We ensure continuous compliance with our Exclusion List, avoiding activities with significant environmental impact, like mining and oil extraction. These combined efforts underline our commitment to a sustainable future.

[18] More details about the PCAF methodology can be found in Impact Report 2022 page 112. Downloads - PCH (EN) (procredit-holding.com)

3.3.3 Green seminars

As in previous years, two green seminars were held at the Academy in 2023, the first in March and the second one in September. The latest regulations and developments regarding climate change, our net-zero approach as well as ongoing topics such as developments in all pillars and digitalisation, were discussed at both seminars. A working group was also established to discuss coal-related activities and their environmental impact.

A significant focus was placed on the net-zero topic, highlighting the ongoing development of our climate change strategy. The banks expressed a strong desire to be included and contribute to the process and development of this strategy, underlining our commitment to a sustainable future.

Thanks to the group-wide integration of Microsoft 365, both seminars had a high level of participation from all banks, including the permanent participants from the Environmental Management Unit and at least one board member from each bank. The online format also helped to engage colleagues from the various departments related to each topic discussed.

3.3.4 Environmental and social (E&S) risk assessment

In addition to the general business and financial analysis, ProCredit also carries out an assessment of its clients' activities regarding their impact on society and the environment. We have continuously improved our environmental and social risk assessment methodology since the beginning of our banking activities: to this end, we focus not only on selected environmentally friendly clients or investments but assess all our clients against ESG aspects.

Client activities that are not on our Exclusion List (for more details, please see our Code of Conduct) are assessed for potential risks (low, medium or high) in terms of the environment, society, health and safety, based on the sector and the amount of the loan (risk exposure). Activities with a medium or high environmental and social risk are individually reviewed and evaluated in accordance with the respective international standards. Every business client, regardless of the assigned risk category, is also examined and evaluated with regard to social issues, occupational safety and working conditions. Depending on the potential

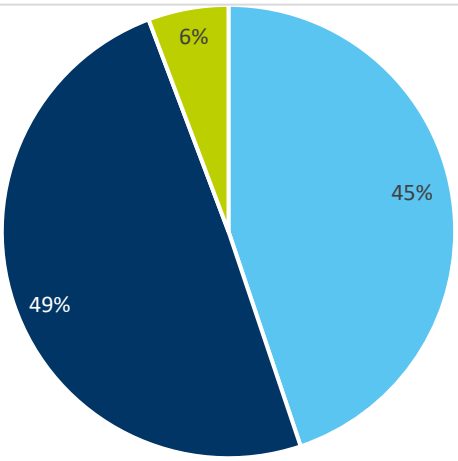


Figure 12: Outstanding total loan portfolio by environmental risk category

environmental, social and credit risk, an external and independent environmental and social impact assessment is also required. Figure 12 displays the total loan portfolio distribution according to the environmental risk class for 2022 and 2023.

In 2023, as in previous years, we organised a comprehensive training event for Environmental Risk Officers and Environmental Management Units to build capacity in E&S risk assessment. The online training focused on deepening the participants' understanding of the ProCredit group's approach to assessing E&S risk while also providing detailed information about the potential E&S risks deriving from the medium- and high-risk industries which we finance. The participants took part in self-guided learning sessions; practical sessions, where they were given a potential case to analyse; and interactive sessions, where they had the opportunity to exchange information with the trainers and other participants.

3.3.5 The ProCredit Plastic Strategy

In response to the exponential growth of plastic waste in the environment, in 2020 ProCredit developed a group methodology for lending to clients engaged in plastic production, which entailed examining each client's products (for more details, please see the Impact Report 2021). Since then, we have been actively engaging with our clients who manufacture plastic products to explain our strategy and encourage them to improve the sustainability of their businesses.

In 2022, three main KPIs were defined to measure the first component of our Plastic Strategy, which consists of creating awareness among our clients and engaging with them about ways to reduce plastic pollution. According to the defined KPIs, we set some targets in 2022:

- Engage in conversation with all our loan clients involved in the manufacture of blacklist and greylist single-use plastic products by the end of 2023
- Have no loan portfolio in blacklist products or have an exit strategy by the end of 2023
- By the end of 2023, define measurable actions with clients who make items in the greylist category as binding covenants to loan agreements to improve the sustainability of their products
- Communicate our Plastic Strategy to all our loan clients who manufacture whitelist products by the end of 2024

The results from 2023 are as below:

- We communicated our strategy to 98% of our loan clients involved in the manufacture of blacklist and greylist single-use plastic products at the end of 2023
- We have no loan clients producing blacklist products without an exit strategy by the end of 2023
- By the end of 2023, we analysed 87% of our loan clients producing items in the greylist category. We defined measurable actions as binding covenants in loan agreements for 59% of these clients and found that 41% of them already have sustainable business models.
- We communicated our plastic strategy to 57% of our loan clients producing whitelist products by the end of 2023

In addition, we continued to actively participate in the Finance Leadership Group on Plastic, convened by UNEP FI, with the aim of providing constructive input to the Intergovernmental Negotiating Committee (INC) on ending plastic pollution from a private finance perspective and building awareness and readiness in the private financial sector to respond to the future treaty.

3.3.6 Procurement and supplier management

In 2023, we began to update our sustainable procurement process. Keeping sustainability at the forefront is still a major part of our procurement process at ProCredit. We expect our suppliers to adhere to our core values, requiring them to sign a compliance agreement whenever a new contract is made, or an old one is renewed.

As a part of the revised process, we have updated the Sustainable Suppliers Guidelines. These guidelines lay out a new set of criteria and a questionnaire that all ProCredit institutions are expected to adapt to their local conditions. In addition to introducing a new definition of a supplier, a crucial step in identifying which suppliers will be considered for further assessment, we have developed a new matrix that differentiates significant suppliers from those that are not significant to the institution.

The new version of the guidelines also introduces a new scoring system to measure our suppliers' sustainability. This score is designed to play a role in the decision-making process for the procurement of new suppliers and in the reporting on the sustainability of our supply chain.

For the year 2023, we adhered to our established process for reporting supplier data. This was a necessary step as we were transitioning to our new procurement strategy. As we finalise these changes, which we aim to put into effect from 2024, we are aligning our reporting process with ongoing sustainability reporting needs.

All ProCredit institutions located in Germany have also completed the screening of their current suppliers, with the following results at the end of 2023:

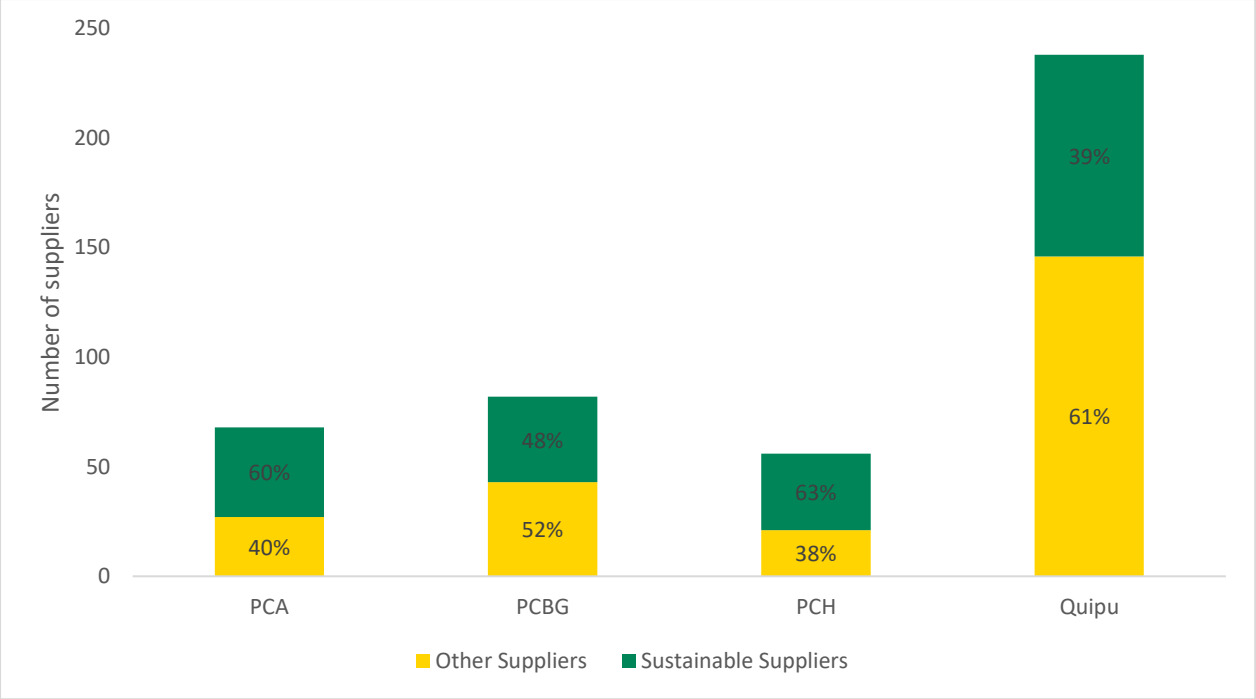


Figure 13: Supplier analysis

The products or services supplied by the vendors and the number of suppliers vary greatly among the institutions. For example, most suppliers for PCA are involved in the food industry, whereas most of the suppliers for PCH, PCBG and Quipu provide intangible services such as legal or consulting services; most of these suppliers could not be identified as sustainable. Quipu also provides hardware and software to other ProCredit institutions; they therefore have more suppliers in the field of “information and communication” than the other institutions.

In line with our strategy, we consistently aim to engage with non-sustainable suppliers to improve their practices. We are aiming to define an engagement process within the updated guidelines as a further step.

3.3.7 Staff awareness

Environmental and social topics continue to be integral to our group’s long-term training programmes, including the Onboarding Programme, the Banker Academy and the Management Academy. These programmes serve as crucial platforms for deepening the understanding of our values and equipping participants to propagate key principles, such as the EMS. Regular, intensive training courses, seminars, and events are held at all ProCredit institutions to enhance environmental consciousness among both employees and clients.

Moreover, all ProCredit institutions conduct regular training sessions aimed at heightening staff awareness about broad environmental and social issues. These sessions also introduce the integrated EMS, continually highlighting that our employees are the most vital stakeholders for the system’s ongoing enhancement.

The training's focus evolves annually: this year, we concentrated on environmental, social, and governance (ESG) training for all staff across all four institutions. The annual all-staff training plays a crucial role in fostering a culture of sustainability and aligning our organisation with ESG principles. All ProCredit institutions carry out continuous internal campaigns to raise awareness, employing various communication channels for this purpose. At PCH, we have maintained a wiki platform where each institution can share recommendations and tips on sustainable shops, restaurants, and activities in and around Frankfurt.

The Academy held training sessions on energy consumption, water consumption, and waste awareness for all employees and students. Quipu continued its awareness posts and events on Viva Engage, covering topics such as zero waste shops, weekly farmers' markets, urban gardening in Frankfurt, European week of packaging waste reduction and many more.

Furthermore, PCBG upheld its commitment to sustainability by receiving the cycle-friendly employer certificate in July 2024 and offering a DB bike flat rate for employees. We also organised awareness-raising/staff events, including a forest hike with staff and a clean-up walk.

4 Conclusions

The year 2023 marked a significant milestone for the ProCredit group, demonstrating resilience and growth amidst challenges. The group's commitment to sustainable profitability and positive impact orientation was validated by improvements in profitability and cost efficiency in its banks.

Despite an increase in total energy consumption in our German institutions due to an expanded workforce, we are pleased to report that we managed to decrease relative energy consumption, underscoring our commitment to sustainable growth and energy efficiency.

ProCredit's dedication to reducing its environmental footprint was evident in its continuous analysis and monitoring of its activities. The development of a Climate Action Strategy aligned with the 1.5°C scenario of the Paris Agreement further underscored this commitment. The group's goal to cut at least 90% of its scope 1, 2, and 3 emissions by 2050 is a testament to its dedication to sustainability

The group's green loan portfolio saw a consistent rise, accounting for 20.4% of the total portfolio. This progress, coupled with a new medium-term target of 25%, aligns with the group's net-zero strategy.

We remain dedicated to reducing emissions across all three scopes. As part of this commitment, we have invested in comprehensive Environmental, Social, and Governance (ESG) training for all our staff. This training is designed to foster a culture of sustainability and responsibility throughout our organisation.

In conclusion, 2023 was a year of growth and sustainability for the ProCredit group. Despite facing challenges, the group demonstrated resilience and a strong commitment to sustainable

profitability, environmental stewardship and positive impact orientation. The group’s achievements in 2023 set a strong foundation for continued progress in the years to come.

5 Contact person

For questions concerning the Environmental Statement 2023, please contact:

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The current version of the Environmental Statement and other materials about the ProCredit group's commitment to sustainability can be downloaded from https://www.procredit-holding.com/downloads/

6 Statement of the environmental auditors

Michael Hub
Umweltgutachter
Berater Umwelt, Qualität, Sicherheit

ENVIRONMENTAL VERIFIERS' DECLARATION ON VERIFICATION AND VALIDATION ACTIVITIES

Michael Hub and Dr. Georg Sulzer with EMAS environmental verifiers registration numbers DE-V-0086 and DE-V-0041, accredited or licensed for the scope (NACE-Code)

- 64 Financial service activities
- 62.02 Computer consultancy activities
- 62.01.9 Other Computer programming activities
- 85.42.4 Tertiary education
- 85.5 Other education

declare to have verified whether the whole organisation as indicated in the updated environmental statement of the organisation

ProCredit institutions located in Germany

Sites:

ProCredit Holding AG, Rohmerplatz 33-37, D-60486 Frankfurt am Main
ProCredit Bank, Rohmerplatz 33-37, D-60486 Frankfurt am Main
Quipu GmbH, Königsberger Straße 1, D-60487 Frankfurt am Main
ProCredit Academy, Hammelbacher Straße 2, D-64658 Fürth-Weschnitz

with registration number DE-125-00059

meets all requirements of

Regulation (EC) No 1221/2009 last amended by Regulation (EU) 2018/2026 (EMAS)

on the voluntary participation by organisations in a Community

eco-management and audit scheme

By signing this declaration, we declare that

- the verification and validation have been carried out in full compliance with the requirements of EMAS,
- the outcome of the verification and validation confirms that there is no evidence of non-compliance with applicable legal requirements relating to the environment,
- the data and information of the updated environmental statement of the organisation reflect a reliable, credible and correct image of all the organisation activities, within the scope mentioned in the environmental statement.

This document is not equivalent to EMAS registration. EMAS registration can only be granted by a Competent Body under EMAS. This document shall not be used as a stand-alone piece of public communication.

Frankfurt am Main, 2024-07-18

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Akkreditierungs- und Zulassungsgesellschaft
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Accreditation-No: DE-V-0086

7 Annex

7.1 Environmental objectives and programmes (2022-2023)

Table 15: Environmental objectives and programmes

Annual environmental objectives (if not otherwise indicated)	Institution	Measure	Evaluation criteria	Status	Degree of achievement
Energy consumption 2023					
Maintain the electricity consumption at 2022 level in absolute terms	**PCA**	• Provide EMAS training for students and staff • Provide energy-saving tips for students on day of arrival • Install “switch off” screensavers with the help of IT on teachers’ and all admin laptops/computers • Conduct random control of guests’ rooms every 2 months, 20 rooms out of 100: cleaning staff will check the rooms for plugged-in devices, turned-on heaters, lights • Upgrade tables in the restaurant area to those that do not need a tablecloth (currently washed every 2nd day)	kWh	Not realized - new targets implemented	Increase in consumption by 6% We have implemented all the targeted measures. Only the tables were changed at the end of the year. The effects are expected in the new year.
Reduce consumption by 2% of 2022 levels in absolute terms	**PCA**	• Provide EMAS training for students and staff • Provide energy-saving tips for students on day of arrival • Conduct random control of guests’ rooms every 2 months, 20 rooms out of 100: cleaning staff will check the rooms for plugged-in devices, turned-on heaters, lights	kWh	Not realized - new targets implemented	Increase in consumption by 15%. We have implemented all the targeted measures, but with the return to regular operation as a training center in 2023, consumption has increased.

Annual environmental objectives (if not otherwise indicated)	Institution	Measure	Evaluation criteria	Status	Degree of achievement
Install heating thermostats on every heater	**PCBG**	Install thermostats on every heater in the bank	Number of installed thermostats	Cancelled	Because of the relocation plan
Reduce heating consumption by 5% compared to 2022 levels	**PCH**	- Reduce heating during the night and weekends - Implement solutions to enable automatic control of heaters - Continue to turn the central heating down in summer months	kWh	Achieved	-10% reduction
Energy consumption 2024					
Maintaining electricity consumption at the 2023 level in both absolute and relative terms	**PCA**	1 Every year, EMAS training courses are held for students and staff. Students are given tips on energy and resource conservation on the day they arrive. 2. Installation of "switch-off" screensavers with the help of the IT department on the laptops/computers of teachers and all administrative staff	kWh kWh/ON		
Maintaining heating energy consumption at the 2023 level in absolute and relative terms	**PCA**	Continuous maintenance and inspection of heating systems to ensure that all systems are working efficiently	kWh/ON		
Greenhouse gas emissions 2023					
Compensate carbon emissions	**Quipu**	Compensate GHG flight emissions for all Quipu offices from the total flights occurring in 2023, up to EUR 6,000	t CO_2eq compensated	Achieved	
Achieve CO_2 neutrality in building emissions (heat and electricity)	**PCH**	Switch to renewable heating, by having an impact on landlord	Contract with a renewable heating provider	Cancelled	Due to the limitations from landlord side, we cancelled this target until the next update from landlord
Develop methodology to reduce and/or offset flight emissions	**PCH**	Conduct research to identify a meaningful way to reduce flight emissions	Methodology	In progress	Research conducted; methodology will be implemented in 2024

Annual environmental objectives (if not otherwise indicated)	Institution	Measure	Evaluation criteria	Status	Degree of achievement
Greenhouse gas emissions 2024					
Implement reduction measures for flight emissions	**PCH**	• Update travel policy to integrate sustainability aspects and option to choose low-emission flights • Update the data entry methodology to reflect the choices	Updated travel policy Updated guideline for data management		
Compensate carbon emissions	**PCBG**	Compensation payments to FirstClimates for all flight emissions	Certificate of compensation payment		
Compensate carbon emissions	**Quipu**	Compensate GHG flight emissions for all Quipu offices from the total flights occurring in 2023, up to EUR 6,000	t CO_2eq compensated		
Fuel consumption 2023					
Replace VW Caddy by leasing a second e-car	**Quipu**	Replace diesel cars through leasing and using e-cars	Fuel consumption data	Achieved	Contract is signed, e-car will be delivered mid 2024
Become an employer perceived as cycle friendly	**PCBG**	Obtain respective certificate and use it in job ads, etc.: https://tool.cfe-certification.eu/de	Achieving certification in 2023	Achieved	
Fuel consumption 2024					
Paper consumption 2023					
Ensure that yearly consumption level of printing paper does not exceed 170 kg	**Quipu**	Employ paper optimisation measures: routing business processes on digital documents	Paper consumption data	Achieved	115kg
Reduce printing paper by 3% per employee compared to previous year	**PCBG**	Conduct evaluation project with departments which print most; conduct awareness-raising measures for all staff	Number of print-outs per staff compared to 2022	Postponed and adjusted	

Annual environmental objectives (if not otherwise indicated)	Institution	Measure	Evaluation criteria	Status	Degree of achievement
Paper consumption 2024					
Understand the increase in paper consumption	**PCH**	Analyse reasons for increase per department and propose solutions to reduce consumption	Results from the analysis		
Reduce printing paper by 1% per employee compared to previous year	**PCBG**	- Help define digitalisation KPIs - Lobby priorities for projects (of "poorly performing departments") - Awareness raising for all staff	Number of print-outs per staff compared to 2023		
Water consumption 2023					
Reduce total freshwater consumption by 2% of 2022 in absolute terms	**PCA**	• Provide EMAS training for students and staff • Provide water-saving tips for students on day of arrival • Upgrade tables in the restaurant area to those that do not need a tablecloth (currently washed every 2nd day)	m^3	Achieved	All measures were implemented. A decrease of 2% was recorded.
Reduce water consumption in the restrooms by 5%	**PCH**	• Reduce the duration of water dispensed from the taps Raise awareness among employees	Comparison of monthly average water consumed before and after the implementation of the measure	Achieved	Following the implementation of the measures, a decrease of 14 % was recorded compared to the same period (Sep - Dec) of the previous year.
Water consumption 2024					
Limit water consumption to 7.0m^3 per FTE	**PCH**	Continue awareness-raising among employees (screen savers, informative emails)	Water consumption per FTE at the end of 2024		
Reduce bottled water consumption to zero, from 40 litres per month	**PCH**	Replace bottled water with refillable carafes in the meeting rooms	Litres of bottled water ordered after implementation		

Annual environmental objectives (if not otherwise indicated)	Institution	Measure	Evaluation criteria	Status	Degree of achievement
Reduce consumption in the pool area compared with 2023	**PCA**	1. Every year, EMAS training courses are held for students and staff. Students receive tips on saving energy and resources on the day they arrive. 2. Cooperation with local schools to raise awareness of water conservation planned for 2024 (from 08.2024)	Water consumption at the end of 2024		
Waste management 2023					
Keep e-waste level below 1,000 kg	**Quipu**	Extend life of equipment by selling usable equipment, donating, replacements and proper disposal	Observation and control checks	Achieved	794 kg
Reduce total waste generated in absolute terms by 5% of 2022 level	**PCA**	• Purchase packaging-free food items wherever possible to reduce plastic waste • Print only when necessary; students and teachers will be encouraged to reuse training materials (e.g. the back unused side of printed materials for a second round of training) • Use online attendance sheets wherever possible	Kg waste generated at the end of the year	Cancelled	
Improve waste segregation	**PCA**	• Provide EMAS training for students and staff • Follow stringent waste segregation process Perform random controls of guests' rooms (every 2 months, 20 rooms out of 100) for waste segregation with the help of a template			
Reduce packaging waste by 10%	**PCH**	Introduce and disseminate reusable packaging	Compare weight of waste in Q3 vs Q1	Postponed	Due to the staff capacity postponed to 2024

Annual environmental objectives (if not otherwise indicated)	Institution	Measure	Evaluation criteria	Status	Degree of achievement
Define methodology for print cartridge disposal	**PCH**	Add the process of disposing printer cartridges to the waste management manual	Updated manual	Achieved	Printer cartridges are returned for recycling via the Konica-Minolta Clean Planet program.
Waste management 2024					
Increase the quality of waste separation	**PCH**	• Rethink structure of garbage bins to be more effective in waste separation • Re-introduce waste management quiz for new employees	Report from cleaning staff about waste quality		
5% reduction of packaging waste	**PCH**	Introduce and disseminate reusable packaging	Waste weight in Q3 and comparison to waste amount in 2023		
More precise evaluation of consumption: kg/ON + daily guest	**PCA**	Integration of day guests into data collection	Kg/(ON + day guest)		
Environmental awareness 2023					
Increase environmental awareness among PCBG staff	**PCBG**	Hold smaller campaigns, staff events, communicate recent developments in the EMS, consumption data, current/public green topics and conduct training Example: clean-up day in FFM	Submit proof of smaller campaigns, pictures of staff participating in events, training materials and lists of participants, etc.	Achieved	
Raise awareness of PCH staff about EMS and general environmental issues	**PCH**	Conduct general training with PCH staff, including the special topic of sustainable agriculture and global developments in line with the group-wide approach	Share of PCH staff who participate in the workshop	Achieved	
		Implement quarterly internal communication on green finance activities in line with the group-wide approach	Quarterly publishing of marketing materials	Achieved	
Environmental awareness 2024					
Increase environmental awareness among PCBG staff to good levels	**PCBG**	- At least three external events for staff	Proof of smaller campaigns, pictures of staff participating in		

Annual environmental objectives (if not otherwise indicated)	Institution	Measure	Evaluation criteria	Status	Degree of achievement
		- Communicate recent EMS developments - Conduct yearly EMS training - Consider "Lauf für mehr Zeit", AIDS run, etc.	events, training materials and lists of participants, etc.		
Raise awareness of PCH staff about EMS and general environmental issues	**PCH**	Conduct general training with PCH staff, special focus on net-zero strategy of group and internal environmental management in PCH	Share of PCH staff participating in workshop		
		A campaign about the sustainable benefits (JobRad, E-cars and JobTicket, corporate benefits, etc.)	Published campaign materials		
Sustainable suppliers 2023					
Continue to select environmentally friendly suppliers whenever possible	**Quipu**	Replace suppliers that do not comply with core principles and select new suppliers that comply with our environmental criteria	Number of sustainable suppliers		
Ensure that at least 50% of selected suppliers are sustainable	**PCA**	Choose new suppliers according to GL 4 with a strong emphasis on regional and sustainable certified enterprises Define a more effective approach for PCA in collaboration with PCH	Share of sustainable suppliers	Achieved	
Increase percentage of sustainable suppliers to 75% of total	**PCBG**	Conduct reliable supplier screening; possibly reduce number of suppliers; collect confirmations from certain suppliers, etc.	Sustainable suppliers tool for screening and tracking percentage of sustainable suppliers = min. 75%		
Conduct evaluation of suppliers in accordance with the new criteria	**PCH**	Evaluate and report on the sustainability of the suppliers in accordance with the new approach	The report	Postponed	The new guidelines will be published in 2024
Sustainable suppliers 2024					
Implement updated guidelines	**PCH**	Implement group guidelines for sustainable suppliers in PCH procurement	Documented new process		
Implement updated guidelines	**Quipu**	Implement group guidelines for sustainable suppliers in Quipu procurement	Documented new process		

Annual environmental objectives (if not otherwise indicated)	Institution	Measure	Evaluation criteria	Status	Degree of achievement
Implement updated guidelines	**PCA**	Implement group guidelines for sustainable suppliers in PCA procurement	Documented new process		
Various other milestones or targets in 2023					
Maintain freshwater quality (to prevent formation of Legionella bacteria)	**PCA**	Conduct monthly checks of the swimming pool and yearly checks of the water tank by an external company	n/a	Achieved	
Maintain air conditioning	**Quipu**	Contract maintenance of air conditioning in offices on an annual basis	Maintenance reports	Achieved	
Various other milestones or targets in 2024					
Define minimum criteria for own investment	**PCBG**	Define minimum criteria for own investment	Document/text incorporated on criteria for own investment		
Increase public awareness about sustainability at ProCredit	**PCBG**	Social media posts / accompanied by overall marketing campaign	Proof of campaign/advertisement/press		
Group-wide high-level EMS targets 2023					
Support ProCredit institutions in maintaining and further developing EMS	**PCH (ProCredit Group)**	Provide support for all pillars whenever needed	Guidelines, standards developed, supported cases, internal training materials	Achieved	
Increase the share of electric and hybrid cars in the car fleet compared to 2022		Whenever a vehicle is replaced, the new order should be for either electric or plug-in Hybrid cars that are already in the fleet should be replaced when necessary	% of electric or plug-in hybrid cars in the fleet	Achieved	The percentage increased from 52% to 61%
Maintain the number of flights at 2019 level		Combine face-to-face meetings with online meetings to prevent too many people flying Switch to online training for certain types of technical training	Number of flights compared to 2019	Achieved	21% lower than 2019 levels

Annual environmental objectives (if not otherwise indicated)	Institution	Measure	Evaluation criteria	Status	Degree of achievement
		Combine several meetings to prevent short trips			
Harmonise green financing methodology within the group with international finance providers (EU Taxonomy, EIB)		Update Group Green Finance Guidelines to improve the quality of assessments (through alignment with EU Taxonomy and international standards) to evaluate the positive impact		In progress	The project started with an analysis of production machinery, the EU Taxonomy and IFI eligibility criteria and will continue in 2023, with the alignment of the DNSH principle
Become CO_2-neutral in own operations (Scope I and 2 emissions)		Hold discussion with the banks to obtain interim targets for further reduction of direct emissions (including shifting to RE suppliers for building energy and installation of rooftop PV) Realise own 3 MW PV project: ProEnergy (95% PCH ownership and 5% PCB Kosovo) Compensate remaining CO_2 externally	CO_2eq	Partially achieved	The ProEnergy solar power plant is connected to the grid but is awaiting Gold Standard certification
Adjust reporting on suppliers in accordance with the updated guidelines		Update definition of supplier Conduct sector-based evaluation of sustainability Differentiate between low-, medium-, high-risk sectors	Updated guideline and reporting methodology	In progress	
Define science-based target-setting for Scope 3 emissions		Define target and strategies to decarbonise our portfolio	Defined targets	Achieved	42% decrease of Scope 1, 2 emissions by 2023 Engagement with the clients responsible from 28% of portfolio emissions by 2027
Conduct employee commuting survey		Conduct a group-level survey among employees to enable calculation of commuting emissions	Survey results	Postponed	

Annual environmental objectives (if not otherwise indicated)	Institution	Measure	Evaluation criteria	Status	Degree of achievement
Group-wide high-level EMS targets 2024					
Supporting the ProCredit institutions in the maintenance and further development of the EMS	**PCH (ProCredit Group)**	Supporting all Pillars of the EMS if necessary	Guidelines, developed standards, case support, internal training material		
Definition of a strategy for inclusive financing (including other social financing categories)		Market research in the countries in which we operate Memberships in international organizations such as the Financial Alliance for Women	Strategy for inclusive finance		
Active participation in the Finance Leadership Group on Plastics		Supporting with preparation of documents Participation in webinars and seminars	Published documents, Number of events participated		
Harmonization of the methodology for green financing within the Group with international finance providers (EU Taxonomy, EBRD)		Groupwide implementation of actualized criteria	Confirmation of the banks about the application of the new tools with the new criteria		
Further developing the Group's equity base towards sustainability		Placement of a green Tier 2 subordinated bond	Press release of the subordinated bond		
Development of our Net Zero concept and a transition plan Publication and implementation of the new guideline for sustainable suppliers		Development of the plan for the transition to net-zero emissions in 2050, starting with the achievement of our medium-term targets in Scope 1, 2 and 3	Transition plan		
Publication and implementation of the new guideline for sustainable suppliers		Publication of actualized guidelines Trainings Training of the responsible employees	Local guidelines of ProCredit Institutions Confirmation of implementation		

7.2 GHG emissions of lending portfolio by sector activity

Table 16: GHG emissions of lending portfolio by sector activity

	Total 2022				Total 2023			
Sector activity	Total outstanding (EUR m)	Attributed emissions (t CO_2 eq.)	Emission intensity (kt CO_2 eq./ EUR bn)	Data quality score (1=high, 5=low)	Total outstanding (EUR m)	Attributed emissions (t CO_2 eq.)	Emission intensity (kt CO_2 eq./ EUR bn)	Data quality score (1=high, 5=low)
Agriculture (A)	850.1	358,424	422	4.2	816.6	364,486	446	4.3
Minerals (B)	15.4	4,674	303	4.1	14.1	5,409	384	4.4
Industry (C)	1237.4	259,634	210	4.2	1174.6	274,828	234	4.4
Utilities (D)	29.3	22,185	757	4.6	27.4	80,481	2937	4.6
Water distribution (E)	24.1	11,929	495	4.1	33.3	19,875	597	4.3
Construction (F)	362.1	15,751	44	4.2	373.8	18,574	50	4.4
Retail (G)	1417.5	53,822	38	4.2	1391.0	54,347	39	4.4
Transport (H)	236.7	26,448	112	4.2	256.1	29,751	116	4.4
Leisure (I)	156.5	2,391	15	4.2	170.8	2,799	16	4.4
Information and communication (J)	60.2	2,428	40	4.3	67.7	3,370	50	4.4
Financial services (K)	15.7	271	17	4.1	11.9	326	27	4.3
Real estate (L)	142.8	1,998	14	4.3	163.3	1,691	10	4.4
Scientific and technical activities (M)	67.1	2,863	43	4.3	68.5	3,183	46	4.4
Administrative services (N)	67.0	3,234	48	4.2	70.1	4,999	71	4.4
Regional administration (O)	1.2	39	34	4.0	0.6	23	41	4.3
Education (P)	39.9	460	12	4.2	42.3	526	12	4.4
Healthcare (Q)	53.1	1,839	35	4.4	63.1	2,100	33	4.3
Recreation (R)	9.7	458	47	4.3	8.4	524	62	4.4
Other services (S)	13.9	677	49	4.2	13.3	647	49	4.5
Activities of households as employers (T)	0.0	4	98	4.5	0.0	4	98	4.5
Total	**4799.7**	**769,527**	**160**	**4.2**	**4766.9**	**867,942**	**182**	**4.4**

7.3 Environmental parameters 2021-2023

Table 17: General indicators

Indicator	Unit	Total			PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Employees	No.	373	376	412	132	137	149	69	67	74	146	144	156	26	28	33
Employees	FTE	331	343	381	121	122	139	60	58	67	132	136	145	18	27	30
Total area[15]	m²	14,486	14,569	14,651	982	982	982	520	520	520	734	817	899	12,250	12,250	12,250
Heated area[16]	m²	11,253	11,544	11,834	2,390	2,390	2,390	1,421	1,421	1,421	2,258	2,549	2,839	5,184	5,184	5,184
Sealed area[17]	m²	11,626	11,684	11,742	954	954	954	503	503	503	517	575	633	9,652	9,652	9,652
Semi-natural area (unsealed)	m²	2,860	2,885	2,909	28	28	28	17	17	17	217	242	266	2,598	2,598	2,598
Overnight stays	No.	4,538	22,638	17,904	-	-	-	-	-	-	-	-	-	4,538	22,638	17,904

Table 18: Travel

Indicator	Unit	Total			PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Road travel																
Cars (petrol)	No.	1.0	0.9	0.1	-	-	-	-	-	-	-	-	-	1.0	0.9	0.1
Cars (diesel)	No.	4.8	4.0	3.1	-	-	-	-	-	-	2.0	2.0	2.0	2.8	2.0	1.1
Cars (electric)	No.	3.6	4.9	5.6	1.2	2.0	3.0	-	-	-	1.0	1.0	1.0	1.4	1.9	1.6
Travelled distance	km	75,291	64,335	60,625	4,159	9,060	22,235	-	-	-	13,712	16,135	15,551	57,420	39,140	22,839
Air travel																
Number of flights	No.	196	781	1,136	105	349	482	33	99	158	56	310	471	2	23	35
Travelled distance	km	232,381	985,785	1,796,065	138,294	430,151	763,924	32,552	100,174	186,331	60,005	399,852	776,320	1,530	55,608	69,490

Table 19: Energy indicators

Indicator	Unit	Total			PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Energy generation																
Electricity generation (renewable)[19]	kWh	108,065	116,780	104,673	-	-	-	-	-	-	-	-	-	108,065	116,780	104,673
Heating energy generation (renewable)[20]	kWh	510,055	420,457	478,400	-	-	-	-	-	-	-	-	-	510,055	420,457	478,400
Energy consumption																
Total energy consumption	**kWh**	2,275,063	2,294,771	2,450,759	279.958	257.045	256.903	106.081	83.874	85.653	236.358	247.474	225.459	869.650	787.775	874.543
Electricity[21]	kWh	1.245.729	1.455.544	1.558.623	113.376	115.153	125.863	47.799	49.347	51.677	876.612	1.042.239	1.118.176	207.942	248.805	262.906
Heating energy	kWh	977,515	802,913	861,206	165,863	140,333	126,485	58,282	34,527	33,976	134,836	113,307	107.971	618,534	514,746	592,774
Heating energy (weather-adjusted)[22]	kWh	1,072,419	1,022,681	1,128,661	189,084	186,643	173,284	66,441	45,921	46,547	155,061	151,831	150,080	661,832	638,285	758,750
Liquid gas for cooking	kWh	5,905	7,766	9,882	-	-	-	-	-	-	-	-	-	5,905	7,766	9,882
Fuel	kWh	44,656	27,906	17.712	718.78	1,558.48	3,824.3	-	-		7,926.10	10,531	8,243	36,011	15,817	5.644

[19] Electricity is generated using PV systems.
[20] Heating energy is generated at PCA from wood pellets.
[21] Excluding electricity for PCH's electric car. That amount is included under "Fuel". Quipu's data includes Data Centre consumption
[22] The climate factors for weather adjustment can be found in Annex 7.6.

Table 20: Resource consumption

Indicator	Unit	Total			PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Paper consumption																
Total	**kg**	1,176	991	1,314	741.2	396.6	397.1	285.2	157.9	208.6	149.2	191.6	185.5	-	244.7	522.5
Recycled	kg	1,173.9	941.5	1,056.3	741.2	396.6	397.1	285.2	157.9	208.6	147.6	186.7	177.0	-	200.3	273.5
FSC-certified	kg	1.7	49	252,4	-	-	-	-	-	-	1.7	4.9	8.4	0.0	44.4	244.0
Water																
Water consumption	m^3	6,014	7,814	8,067	535	864	1,127	363	409	407	402	569	683	4,714	5,972	5,851

Table 21: Waste and usable electronic equipment

Indicator	Unit	Total			PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Household waste[23]																
Total	**kg**	15,191	37,347	32.277	5,241	9,697	6,196	1,726	3,206	4,526	4,706	7,341	6.421	3,518	17,105	15,134
Organic waste	kg	907	28,017	8.997	547	1,126	1,439	361	731	1,018	-	-	-	-	6,540	6,540
Packaging waste	kg	1,117	2,132	2.283	190	311	443	130	456	644	458	950	767	338	415	429
Non-separated waste	kg	4,206	12,593	12.978	104	346	1,487	70	1,703	2,444	2,132	4,054	3.742	1,900	6,490	5,305
Total paper waste	kg	6,801	13.109	7.403	3.699	7.184	2.606	1.165	1.715	2.019	1.258	1.750	1.118	680	2,460	1,660
Waste from grease trap[24]	kg	600	1,200	1,200	-	-	-	-	-	-	-	-	-	600	1,200	1,200

[23] Since 2017, Quipu has had separate disposal containers for paper and packaging waste.
[24] Data for waste from the grease trap are calculated based on the volume of the storage containers and the number of pick-ups that are made.

Indicator	Unit	Total			PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Electronic waste and usable electronic equipment																
E-waste recycled	kg	1,499	1,254	1.330	697	730	221	-	-	378	802	524	731	-	-	-
Usable electronic equipment	kg	60	63	63	4	-		-	-	-	56	63	63	-	-	-
Hazardous waste (batteries, light bulbs, toner)																
Total hazardous waste	kg	8.37	33.29	16.04	-	-	1.05	-	-	-	8.37	33.29	14.99	-	-	-

Table 22: Emissions

Indicator	Unit	Total			PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Energy emissions[25]																
Total CO_2eq emissions	t	166	332	509	70	133	204	20	31	52	44	120	214	33	48	39
Total CO_2eq emissions with compensation	t	123	237	59	70	133	204	-10	31	52	30	25	-237[26]	32	48	39
Total NO_x emissions	kg	235	193	210	28	23	21	10	6	6	23	20	19	174	144	164
Total SO_2 emissions	kg	93	78	80	2	2	2	1	-	-	2	1	1	88	74	77
Total PM10 emissions	kg	132	155	193	1	1	1	-	-	-	1	1	1	130	153	191
Heating[27]																
CO_2eq	t	94.9	78.1	70.9	33.5	28.3	25.5	11.8	7.0	6.9	27.2	22.9	21.8	22.4	19.9	16.7
NO_x	kg	230.6	189.8	206.4	27.5	23.3	21.0	9.7	5.7	5.6	22.4	18.8	17.9	171	142	161.8
SO_2	kg	91.6	77	78.7	2.0	1.7	1.5	0.7	0.4	0.4	1.6	1.4	1.3	87.3	73.5	75.5

[25] The conversion factors for emissions are listed in Annex 4. There are no direct emissions from electricity consumption, as electricity is generated by PCA's own photovoltaic systems and has been purchased by the other institutions from certified green electricity suppliers since 2017. Total emissions include CO_2, CH_4, N_2O, HFC, PFC, NF_3 and SF_6. The values of 2019 and 2020 vary from previous reports due to the update of emission factors (IEA, Emission factor 2021).

[26] Quipu GmbH offset the flight emissions from all Quipu offices up to EUR 6,000

[27] The reported CO_2eq emissions refer to the oil heating, pellet heating and BioLPG held as a contingency reserve.

Indicator	Unit	Total			PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Particulate matter	kg	37.7	31.1	34.5	1.2	1.0	0.9	0.4	0.2	0.2	0.9	0.8	0.8	35.2	29.1	32.7
Cooking																
CO_2eq	t	1.34	1.76	2.25	-	-	-	-	-	-	-	-	-	1.34	1.76	2.25
NO_x	kg	1.15	1.32	2.17	-	-	-	-	-	-	-	-	-	1.15	1.32	2.17
SO_2	kg	0.64	0.71	1.23	-	-	-	-	-	-	-	-	-	0.64	0.71	1.23
Particulate matter	kg	0.33	0.24	0.78	-	-	-	-	-	-	-	-	-	0.33	0.24	0.78
Fuel													**Business travel**			
CO_2eq fuel	t	10.8	5.9	2,7	-	-	-	-	-	-	2.0	2.7	2.0	8.7	3.2	0.7
NO_x	kg	3.6	2.0	1.0	-	-	-	-	-	-	0.8	1.0	0.7	2.8	1.0	0.2
SO_2	kg	0.4	0.2	0.1	-	-	-	-	-	-	0.1	0.1	0.1	0.3	0.1	0.0
Particulate matter	kg	75.1	41.3	19.9	-	-	-	-	-	-	15.11	20.08	14.98	60.0	21.2	4.95
CO_2eq air travel (direct)	t	23.9	95.8	165.8	14.3	41.6	68.7	3.6	9.9	17.9	5.8	37.0	71.7	164	7.2	7.4
CO_2eq air travel (indirect)	t	35.6	150.1	268.2	22.5	63.1	109.9	4.4	14.3	27.2	8.5	57.0	118.7	211	15.7	12.4

7.4 Core annual indicators for 2021-2023

Table 23: Relative indicators

Indicator	Unit	Total			PCH			PCBG			Quipu			PCA		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Energy																
Total energy/employee	kWh/FTE	4,796	4,653	4,486	2,501	2,494	2.187	1,906	1,631	1,467	1,941	2,099	1,840	52,020	34,153	34.540
Electricity/employee[4]	kWh/FTE	1,398	1,565	1.443	935	947	909	798	845	772	708	907	751	11,849	9,324	8.727
Heating energy/employee (weather-adjusted)	kWh/FTE	3,241	2,982	2,962	1,560	1,534	1,251	1,109	786	695	1,173	1,114	1,032	37,711	23,921	25,187

Heating energy/heated area (weather-adjusted)	kWh/m²	95	89	95	79	78	73	47	32	33	69	60	53	128	123	146
Fuel/employee	kWh/FTE	135	81	46	6	13	28	-	-	-	60	77	57	2,052	593	187
Resource consumption																
Paper consumption/employee	kg/FTE	3.6	2.9	3.4	6.1	3.3	2.9	4.8	2.7	3.1	1.1	1.4	1.3	0	9.2	17.3
Paper consumption/overnight stay	kg/OS	-	0.01	0.03	-	-	-	-	-	-	-	-	-	-	0.01	0.03
Water/employee	m³/FTE	18.2	22.9	21.2	4.4	7.1	8.1	6.1	7	6.1	3	4.2	4.7	268.6	223.8	194.2
Water/overnight stay	m³/OS	1.0	0.3	0.3	-	-	-	-	-	-	-	-	-	1.0	0.3	0.3
Household waste																
Total waste/employee	kg/FTE	41.2	109,1	86,3	37,4	73,7	43,1	28,8	78,9	91,5	29,1	49,6	38,7	200.5	1,376.3	502.4
Total waste/overnight stay	kg/night	0.8	1.6	0.8	-	-	-	-	-	-	-	-	-	0.8	1.6	0.8
Emissions																
Total CO_2 emissions/employee	tCO_2eq/FTE	0.5	1.0	1.3	0.6	1.1	1.5	0.3	0.5	0.8	0.3	0.9	1.5	1.9	1.8	1.3
Total CO_2 emissions (with compensation)/employees	tCO_2eq/FTE	0.4	0.7	1.3	0.6	1.1	1.5	-0.2	0.5	0.8	0.2	0.2	1.5	1.9	1.8	1.3
Total CO_2 emissions/overnight stay	kg CO_2eq/night	7.2	2.1	2.2	-	-	-	-	-	-	-	-	-	7.2	2.1	2.2
Area																
Total area/employee	m²/FTE	34	33.7	31.1	8.1	8	17.3	23.7	24.3	21.2	17.1	18.7	19.5	295.4	294.3	172.1
Heated area[24]/employee	m²/FTE	34	33.7	31.1	19.7	19.6	17.3	23.7	24.3	21.2	17.1	18.7	19.5	295.4	294.3	172.1
Sealed area/employee	m²/FTE	35.1	34.1	30.8	7.9	7.8	6.9	8.4	8.6	7.5	3.9	4.2	4.4	550	361.7	320.4
Unsealed area/employee	m²/FTE	8.6	8.4	7.6	0.2	0.2	0.2	0.3	0.3	0.3	1.6	1.8	1.8	148	97.4	86.2

7.5 Emission factors

Table 24: Emission factors

Type	Unit	Year	CO_2eq	NO_x	SO_2	PM_{10}
Electricity						
Average German energy mix[28][29]	g/kWh	2015	527	0.488	0.272	0.033
	g/kWh	2016	523	0.440	0.290	0.015
	g/kWh	2017	485	0.408	0.224	0.010
	g/kWh	2018	468	Not published		
	g/kWh	2019	401	Not published		
EWS Schönau (PCBG, PCH)	g/kWh	2016 and later	0	Green electricity is produced entirely from hydro, wind or solar power, thus producing no further emissions		
Entega (PCA)	g/kWh	2016 and later	0			
Heating and fuel[30]						
Natural gas	g/kWh	2017	202	0.186	0.012	0.007
Heating oil (diesel)	g/kWh	2017	267	0.213	0.284	0.024
Wood pellets	g/kWh	2017	155	0.337	0.149	0.075
Firewood	g/kWh	2017	404	0.195	0.128	0.186
Diesel	g/kWh	2017	267	1.303	0.118	0.027
Gasoline	g/kWh	2017	250	0.257	0.135	0.018

[28] Source for CO_2 emissions of the German electricity mix: https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2020-04-01_climate-change_13-2020_strommix_2020_fin.pdf
Total greenhouse gas emissions (CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbonate, SF_6) are denoted in carbon dioxide equivalents.
[29] Source of NO_x, SO_2, PM_{10} emissions https://www.umweltbundesamt.de/themen/luft/emissionen-von-luftschadstoffen/spezifische-emissionsfaktoren-fuer-den-deutschen
[30] Source for CO_2 emissions (Scope1) apart from BioLPG: GHG protocol. Based on IPCC 2006 Guidelines for National Greenhouse Gas Inventories
Source for CO_2 emissions from BioLPG: World LPG Association (WLPGA) (2019) on the “Role of LPG and BioLPG in Europe"; see: https://www.wlpga.org/wp-content/uploads/2020/03/The-Role-of-LPG-Bio-LPG-in-Europe-The-2019-Report.pdf
Source for other emissions: GEMIS (Globales Emissions-Modell Integrierter Systeme) Version 4.95 - 04/2017

LPG	g/kWh	2017	227	0.154	0.081	0.016
BioLPG (Emissions other than CO_2 are taken for LPG)	g/kWh	2017	60.3	0.186	0.012	0.007

7.6 Lower heating value

Table 25: Lower heating value

Fuel	Lower heating value	Unit
Diesel and heating oil	10.033	kWh/L
Gasoline	9.106	kWh/L
Wood pellets	4.861	kWh/kg
Natural gas	9.333	kWh/m³
LPG/BioLPG	7.095	kWh/L
Firewood	4.333	kWh/kg

Source: Emission factors from Cross-Sector Tools (March 2017, GHG protocol); based on IPCC (2006)

7.7 Climate factors for weather adjustment of heating energy data

Table 26: Climate factors

City	Postcode	Climate factor			
		2019	2020	2021	2022
Frankfurt, Bockenheim	60486	1.25	1.33	1.14	1.33
Frankfurt, Bockenheim	60487	1.27	1.34	1.15	1.34
Fürth	64658	1.16	1.22	1.07	1.24

Source: Deutscher Wetterdienst: http://www.dwd.de/DE/leistungen/klimafaktoren/klimafaktoren.html

7.8 Indicators and benchmarks for comparison

Table 27: Indicators and benchmarks for comparison

Indicator for offices		Unit	Source
Electricity (estimate for offices in Germany 2013)	2,177.0	kWh/(pp a)	Bundesministerium für Wirtschaft und Industrie (2015): Energieverbrauch des Sektors Gewerbe, Handel, Dienstleistungen (GHD) in Deutschland für die Jahre 2011 bis 2013: https://www.bmwi.de/ Redaktion/DE/Publikationen/Studien/sondererhebung-zur-nutzung-erneuerbarer-energien-im-gdh-sek- tor-2011-2013.html
Heating energy (average for offices in Germany 2013)	5,463.0	kWh/(pp a)	
Heating (PassivHaus)	Specific space heating demand ≤15 kWh/(m^2/year)		Passive House Institute criteria for non-residential buildings (PassivHaus Institut, 2013, p.1)
Cooling (PassivHaus)	Specific useful cooling demand ≤15 kWh/(m^2/year)		Passive House Institute criteria for non-residential buildings (PassivHaus Institut, 2013, p.1)
Primary energy	Total specific primary energy demand) ≤ 120 kWh/(m^2/year)		Passive House Institute criteria for non-residential buildings (PassivHaus Institut, 2013, p.1)
Total water use	6.4	m^3/FTE/year	Best Environmental Management Practice for the Public Administration Sector Reference Document on (europa.eu)
Total waste generation in office buildings in 2019	1) <200 2) Zero waste generated in the office buildings is sent to landfill	kg/FTE/year	Best Environmental Management Practice for the Public Administration Sector Reference Document on (europa.eu)
Paper consumption	1) Lower than 15 2) Office paper used is 100% recycled or certified according to an ISO Type I ecolabel (2) (e.g. EU Ecolabel)	Sheets of paper/FTE/ working day)	Best Environmental Management Practice for the Public Administration Sector Reference Document on (europa.eu)

Heating energy (average for office buildings)	133	kWh/(m² a)	Energieeffizienz bei Büroimmobilien. dena-Analyse über den Gebäudebestand und seine energetische Situation: https://effizienzgebaeude.dena.de/fileadmin/dena/Dokumente/Pdf/9143_dena-Analyse_Energieeffizienz_bei_Bueroimmobilien.pdf ergieeffizienz_bei_Bueroimmobilien.pdf

EMAS Benchmark for Hotels 2016		**Unit**	**Source**
Building energy (heating and electricity)	180	kWh/(m² a)	Reference document issued by the European Commission on Best Environmental Practices, including indicators for environmental performance and benchmarks of excellence for the tourism sector (2016): https://eur-lex.europa.eu/eli/dec/2016/611/oj LEX%3A32016D0611%20
Electricity	80	kWh/(m² a)	
Water	140	L/night	
Residual waste	0.16	kg/night	
EMAS Benchmark for Offices 2019		**Unit**	**Source**
Building energy (heat and electricity)	100	kWh/(m² a)	Reference document issued by the European Commission on Best Environmental Practices, including indicators for environmental performance and benchmarks of excellence for the public administration sector (2019): https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019D0061
Water	6.4	m³/(FTE a)	
Residual waste	200	kg/(FTE a)	
Paper consumption	18.5	kg/(FTE a)	

Indicators for hotels		**Unit**	**Source**
Building energy (average, European hotels in 2006)	306	kWh/m²	ECOTRANS e.V., University Stuttgart (2006): Umweltleistungen europäischer Tourismusbetriebe: https://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=file&fil=LIFE00_ENV_NL_000810_LAYMAN.pdf
Building energy (average, European hotels in 2006)	77	kWh/night	
Water (average, European hotels in 2006)	394	L/night	
Residual waste	1	kg/night	
Electricity (average, German hotels 2012)	12	kWh/night	Hotel und Energie, Eine Sonderveröffentlichung der Fachzeitschrift Hotelbau, August 2015 ISSN: 1865-5130 https://www.hotelbau.de/download/downloadarchiv/hotel+energie2015.pdf
Heating (average, German hotels 2012)	136	kWh/m²	
Heating (reference value, German hotels in 2012)	28	kWh/night	

Electricity (average, German hotels 2013)	7,829	kWh/pp	Bundesministerium für Wirtschaft und Industrie (2015): Energieverbrauch des Sektors Gewerbe, Handel, Dienstleistungen (GHD) in Deutschland für die Jahre 2011 bis 2013: https://www.bmwi.de/Redaktion/DE/Publikationen/Studien/sondererhebung-zur-nutzung-erneuerbarer-energien-im-gdh-sektor-2011-2013.html
Heating (average, German hotels 2013)	18,269	kWh/pp	Bundesministerium für Wirtschaft und Industrie (2015): Energieverbrauch des Sektors Gewerbe, Handel, Dienstleistungen (GHD) in Deutschland für die Jahre 2011 bis 2013: https://www.bmwi.de/Redaktion/DE/Publikationen/Studien/sondererhebung-zur-nutzung-erneuerbarer-energien-im-gdh-sektor-2011-2013.html