

UPDATED ENVIRONMENTAL STATEMENT 2016

ProCredit Institutions in Germany



Information about this statement

This Environmental Statement is the first since the complete validation of the environmental management system of the ProCredit institutions in Germany in 2015 and covers the calendar year 2016.

The circumstances described in the 2015 Environmental Statement continue to apply for this statement as there have been no significant changes at the locations. The following sections of the 2015 statement are unchanged and will not be repeated here:

- The ProCredit group at a glance
- Our environmental principles
- Implemented environmental measures in recent years – milestones
- The ProCredit Environmental Management System.

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

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

The first Environmental Statement for 2015, as well as further information material on the subject of environmental protection and sustainability at ProCredit, can be downloaded from our website via the following link:

<http://www.procredit-holding.com/en/vacancies-and-service/downloads.html>

The next validated Environmental Statement will be published by the end of 2018.

List of abbreviations and names

CO₂eq	carbon dioxide equivalent
E&S	environmental and social
EE	energy efficiency
EU	European Union
EMS	environmental management system
EUR	Euro
GEM	Group Environmental Management
GHG	greenhouse gases
GR	environmentally friendly projects
IPC	Internationale Projekt Consult GmbH
kWh	kilowatt hours
LED	light-emitting diode
PCB	ProCredit Bank
PCH	ProCredit Holding
PV	photovoltaic
SME	small and medium-sized enterprises
RE	renewable energy

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1. Foreword

2016 was a good year for the ProCredit group, particularly with regard to fulfilling our environmental and social responsibilities.

On the way to becoming a leading banking group for formal SMEs in South Eastern and Eastern Europe, the ProCredit group – which also operates banks in Germany and South America – took another successful step forward last year. Since 22 December 2016, the shares of ProCredit Holding AG & Co. KGaA, the parent company of the group, have been listed on the Frankfurt Stock Exchange's Prime Standard. Thus, we are open to investors who identify with our business policies, including our comprehensive sustainability and environmental strategies. These set out our objectives of minimising our direct and indirect environmental impact, increasing the environmental awareness of our clients and ensuring that our social impact is positive.

As a development-oriented banking group for SMEs, all of our operations are guided by our mission of promoting sustainable development with an ethical corporate culture and long-term business relationships. In line with this guiding principle, in May 2017 we became a member of the Social Stock Exchange (SSX) – Europe's only public market dedicated to impact investments. Membership was granted after the ratification of our Impact Report, which was approved by the SSX's independent admission committee. The report, which covers 2016, was published by both the SSX and PCH.

The Social Stock Exchange is the world's first regulated exchange for businesses and investors seeking to achieve a positive social and environmental impact through their activities. The Impact Report describes the influence of the ProCredit group on society, its employees and the environment in both qualitative and quantitative terms. It emphasises the three areas which the group has identified as most relevant with regard to its social and environmental influence: the provision of financial services to SME customers, the promotion of environmental awareness and protection, and staff development.

In addition, by the end of 2016, the environmental management system (EMS) at all German ProCredit institutions had been successfully validated in accordance with the EMAS regulation and had been granted ISO 14001 certification. This was the preliminary stage in achieving recognition for the whole group, and by September 2017 all ProCredit banks had been awarded ISO 14001 certification. Moreover, in the course of the external EMAS validation in September 2017, the EMS of the ProCredit institutions in Germany was adapted to meet the updated provisions of the EMAS Regulation and it now also complies with the current ISO 14001:2015 standard.

The ISO 14001 standard helps us to continue to operate and expand the EMS at all ProCredit banks in a transparent and credible manner. As a globally accepted and applied standard, it establishes requirements for an environmental management system with which an organisation can improve its environmental performance, meet legal and other obligations, and achieve environmental goals.

As from 2018, we will be publishing a regular sustainability report, which will be based on standards set by the Global Reporting Initiative (GRI). The GRI has established independent international standards that help companies and organisations to report on all relevant sustainability issues, including environmental and social issues.

In order to demonstrate our support for electric mobility and to be consistent with policy that is already adhered to by the group's banks, ProCredit Holding replaced its existing company vehicle with an electric car in October 2016. The BMW i-3 is now in regular use in Frankfurt and the surrounding area.

The milestones listed above represent significant progress for us in terms of environmental and social responsibility and serve as an example of the ProCredit group's comprehensive sustainability concept, which we will continue to implement in the future.

You can find out more about the subject of sustainability at ProCredit on our website or, for greater detail, read through our 2015 EMAS Environmental Report. We would particularly recommend that you take a look at the ProCredit Impact Report produced for the Social Stock Exchange, which is also published on our website.



2. Update of the EMAS Regulation

The annexes to the EMAS Regulation were updated after a resolution of the EU Commission dated 8 August 2017 and now include the provisions of the amendment to ISO 14001:2015. The updated EMAS Regulation (EU Regulation 2017/1505) entered into force on 19 September 2017. We have therefore undertaken a review of the context of our EMS as well as a life cycle analysis of the most important services and products of the ProCredit institutions and included it in our environmental guidelines as well as in this Environmental Statement 2016. The results of the analyses will be explained in more detail in the next two sections.

2.1. Context of Environmental Management System

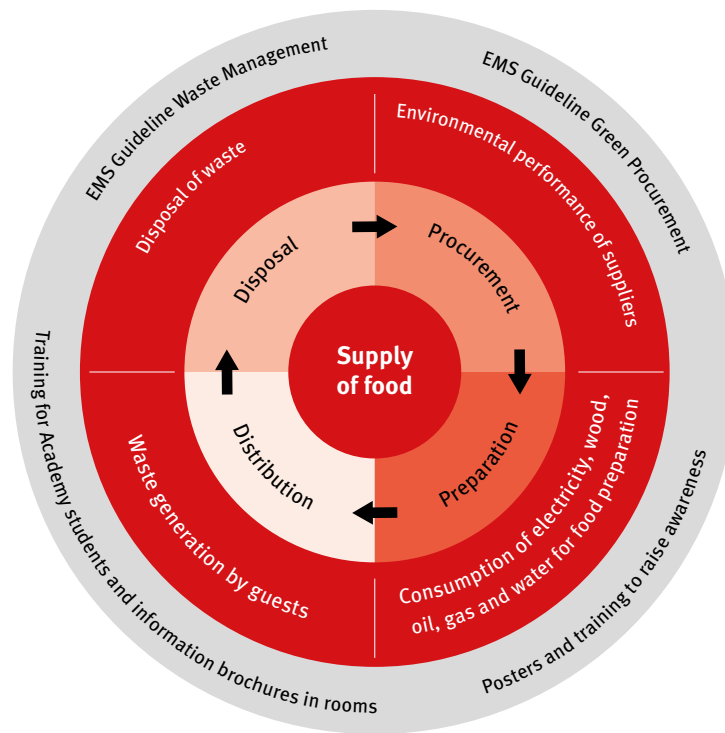
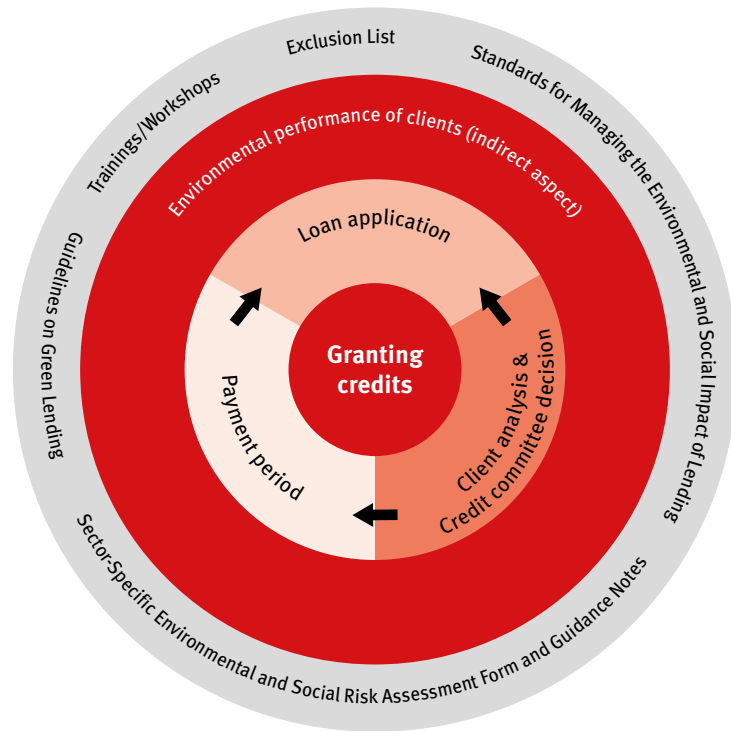
The context of the EMS was examined on the basis of a stakeholder analysis. We analysed the expectations, obligations, risks, opportunities and internal regulations relevant to the parties that have an interest in the EMS, such as employees, customers and shareholders, as well as the relevant authorities. This analysis is intended to provide our institutions with ways to improve their relationships with stakeholders, taking greater account of their interests by looking in context at their external and internal circumstances, such as cultural, social and political aspects, as well as their respective strategic objectives.

However, as ProCredit has successfully operated an environmental management system for many years with transparent reporting lines, we were unable to identify any significant opportunities to better accommodate the interests and expectations of our stakeholders. One of the current expectations is for the ProCredit group to prepare a sustainability report. Work on this is already well underway and the group's first sustainability report for 2017 will be published at the end of March 2018.

2.2. Life cycle assessment

In order to meet the requirements of the new EMAS regulation, this year we have prepared the first complete lifecycle assessment of our main services, such as the provision of loans, IT services and accommodations for students at the Academy. The environmental aspects and impacts along the various stages in the provision of the services were identified, and the relevance, risks, opportunities and control options for these were analysed in order to determine the potential for improvement. Taking a renewed look at the opportunities and risks helps the institutions to identify long-term trends – such as climate risks or innovation potential – and to ascertain what the scope for action is while avoiding potentially undesirable developments. The following figure presents analyses for two examples: granting loans and catering for Academy guests.

As a whole, we have determined that our current environmental management guidelines enable us to control the resulting environmental impacts well. However, we will be introducing small changes next year.



Internal procedures to control aspects
 Main environmental aspects
 Lifecycle phases

Figure 1: Lifecycle analysis of the granting of loans by ProCredit Bank and catering for Academy guests.

3. Development of environmental aspects and impacts

Environmental aspects are elements or features of the business activities of an organisation that can have environmental impacts. Environmental aspects can be categorised as direct and indirect. Direct environmental aspects are those associated with the activities, products and services of the organisation over which it has direct control.

Paper consumption and the generation of waste or emissions, for example, can be considered direct aspects, as they are directly linked to the activities carried out on ProCredit premises and can therefore be controlled.

Indirect environmental aspects can result from the interaction of the organisation with third parties, which can be influenced by the organisation to a reasonable degree, such as the environmental performance of contractors, the procurement of office materials or food, etc. The environmental performance of the ProCredit banks is also an indirect aspect for ProCredit Holding, as is the environmental performance of its clients for ProCredit Bank Germany.

Similarly, various key environmental indicators are compared to German and European averages as well as to the 2016 EMAS benchmarks for the tourism sector¹ (annex 9.5). These comparisons are solely meant to give a general understanding of the success of the environmental management systems of the various institutions; therefore, the indicators used for comparison should not be understood as fixed targets, since our aim is to continuously improve the environmental performance wherever possible.

4. Direct aspects

The following section describes the most important direct environmental aspects of the ProCredit institutions in Germany. Environmental data quality has improved since 2015, as they are increasingly based on actual measurements rather than the estimates that were previously utilised. This is the case, for example, for Quipu's waste data, PCH's paper consumption, and the air travel data for the Academy. Items for which we still had to rely on estimates are shown in the footnotes of the tables below. The data are for the full calendar years 2015 and 2016.

There were no significant structural changes to the office or Academy premises. The data show where the institutions were able to improve their environmental performance as a result of newly introduced environmental measures, e.g. energy, water and paper consumption (both total and per employee).

1) The EMAS benchmarks are currently only relevant for the ProCredit Academy, as no benchmarks for the financial and IT sectors have been published yet. For this reason, other national and European averages are used for the comparison for ProCredit Bank, ProCredit Holding and Quipu.

Table 1: Environmental parameters 2015 – 2016²

General data	Unit	Total		ProCredit Holding		ProCredit Bank Germany		Quipu		ProCredit Academy	
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Employees ³	No.	302	299	110	100	62	65	98	102	32	31
Heated area ⁴	m ²	10,708	10,708	2,390	2,390	1,421	1,421	2,229	2,229	4,669	4,669
Overnight stays	No.	28,508	23,983							28,508	23,983
Cars (petrol)	No.	4.0	2.4	1.0	0.9			1.0	0.0	2.0	1.5
Cars (diesel)	No.	5.0	6.6					1.0	2.0	4.0	4.6
Cars (electric)	No.	0.0	0.3		0.3						
Energy											
Electricity generation	kWh	50,889	46,936							50,889	46,936
Total energy consumption	kWh	1,582,587	1,573,024	324,302	337,763	136,457	128,065	228,378	255,691	893,451	851,505
Electricity	kWh	493,271	469,393	115,858	112,832	74,355	66,146	99,197	104,677	203,861	185,738
Cooling energy ⁵	kWh	66,390	66,390	66,390	66,390						
Heating energy ⁶	kWh	901,338	897,680	133,007	150,238	62,102	61,919	116,292	136,554	589,937	548,969
Heating energy (weather adjusted)	kWh	1,046,538	1,015,345	162,269	177,281	75,764	73,064	141,876	161,134	666,628	603,866
Liquid gas for cooking	kWh	12,486	10,202							12,486	10,202
Fuel	kWh	109,103	129,359	9,047	8,303			12,888	14,460	87,168	106,596
Air Travel ⁸	km	2,811,996	2,541,795	875,033	962,206	227,879	168,371	1,576,530	1,105,070	132,554	306,148
Road travel	km	133,557	167,570	13,379	15,832			17,033	16,733	103,145	135,005
Printer paper											
Total⁹	kg	3,924	3,429	1,824	1,359	735	609	345	288	1,021	1,172
Recycled	kg	2,574	2,126	1,824	1,359	735	609	0	142	15	15
FSC certified	kg	1,005	1,157							1,005	1,157
Non-recycled	kg	345	147					345	147		
Water											
Water consumption ¹⁰	m ³	8,255	7,303	831	874	533	649	602	666	6,289	5,114
Waste											
Total	kg	112,629	96,655	24,246	21,857	12,711	13,218	6,715	6,637	68,957	54,880
Residual	kg	33,926	27,396	11,480	10,125	6,826	6,826	5,438	4,173	10,182	6,272
Paper	kg	16,531	16,384	7,823	5,823	2,959	2,878	600	1,996	5,150	5,687
Plastic	kg	10,262	10,096	4,554	4,554	2,708	2,708		129	3,000	2,705
Organic ¹¹	kg	38,400	34,161	0	1,355		806			38,400	32,000
Grease ¹²	kg	12,000	8,000							12,000	8,000
Used fat	kg	225	216							225	216
Electronic ¹³	kg	1,284	402	389	0	218	0	677	402	0	0

General data	Unit	Total		ProCredit Holding		ProCredit Bank Germany		Quipu		ProCredit Academy	
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Emissions¹⁴											
Total CO ₂ eq emissions	t	880	790	323	335	77	58	400	249	80	148
Electricity (incl. cooling energy) ¹⁵											
CO ₂ eq	t	81	45	74	43	6	2	1	1	0	0
SO ₂	kg	152	146	50	49	20	18	27	28	55	51
NO _x	kg	273	261	89	87	36	32	48	51	99	91
Particulate matter	kg	18	18	6	6	2	2	3	3	7	6
Heating¹⁶											
CO ₂ eq	t	96	111	33	38	16	15	29	34	18	24
SO ₂	kg	20	26	2	2	1	1	1	2	16	22
NO _x	kg	70	81	25	28	12	12	22	25	12	16
Particulate matter	kg	4	4	1	1	0	0	1	1	1	2
Business travel											
CO ₂ eq fuel	kg	34,086	40,378	2,814	2,535	0	0	4,019	4,520	27,253	33,323
CO ₂ eq air travel (direct)	kg	251,400	231,605	81,919	96,497	21,699	15,515	135,076	83,461	12,706	36,132
CO ₂ eq air travel (indirect)	kg	414,577	358,506	130,628	156,238	34,072	24,355	231,029	126,350	18,848	51,563
Cooking gas											
CO ₂ eq	t	3	3							3	3
SO ₂	kg	1	1							1	1
NO _x	kg	2	2							2	2
Particulate matter	kg	0	0							0	0

- 2) The data in the table refer to the total for the full year, apart from the data for employees, heated areas and cars, which refer to the average for each year.
- 3) Data for employees represent the average for the respective year and include employees who are working in Germany, excluding staff on maternity and parental leave. The PCH data also include staff from the Exchange Programme. Quipu's data refer only to staff working at the Frankfurt headquarters.
- 4) Data for heated area refers to office space, not including storage areas and parking spaces.
- 5) Cooling energy data are only available for PCH; for the other institutions, it is included in the electricity usage. The PCH data for 2016 cooling energy were calculated based on data for 2015, because the invoices for 2016 were not available yet.
- 6) For all other heating data calculations, the actual figures have been used and not the weather-adjusted figures. Some of the 2016 the heating data for ProCredit Bank were extrapolated from 2015 figures. The data for 2015 has been corrected because the invoice is now available.
- 7) The climate factors for the weather adjustment can be found in Annex 9.3.
- 8) Complete air travel data for Academy staff for 2015 are not yet available; the figure therefore includes estimates.
- 9) Quipu began collecting data about the consumption of printer paper in April 2015; data for the previous months have been extrapolated.
- 10) The water consumption data for 2015 of ProCredit Bank Germany were corrected because the invoice is now available. Some of the 2016 water use data for ProCredit Bank were extrapolated from 2015 figures; this is because actual measurements for the first half-year are not available and the supplier experienced data loss.
- 11) PCH and PCB did not separate organic waste from other waste in 2015; waste volumes are based on calculations.
- 12) 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.
- 13) Data for Academy e-waste are included in the data for Quipu's e-waste.
- 14) Conversion factors for emissions are stated in Annex 9.1. Only the CO₂eq emissions could be obtained from the electricity supplier. All other emission data were obtained using the GEMIS model, taking as a basis the average German energy mix. The GEMIS model provides a very conservative estimate, since all of our institutions obtain an energy mix from energy suppliers with an above-average proportion of renewable energy sources.
- 15) CO₂ emissions from the electricity consumption of the Academy and Quipu are considered zero as these institutions have a contract with a renewable energy supplier. As of June 2016, this also applies for the premises of ProCredit Bank Germany, and since August 2016, for those of ProCredit Holding.
- 16) Due to the renewable origin of the input material, pellet heating at the Academy is considered to have zero emissions; the emissions shown arise from the oil heating system that serves as a back-up for the pellet heating system.

The following table shows the core indicators required by EMAS III for the ProCredit institutions in Germany. The indicators are shown per employee, per square meter or per overnight stay.

Table 2: Core annual indicators for 2015 - 2016 in accordance with EMAS III

General data	Unit	Total		ProCredit Holding		ProCredit Bank Germany		Quipu		ProCredit Academy	
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Energy											
Total energy/employee	kWh/pp	5,246	5,265	2,948	3,372	2,213	1,958	2,330	2,507	27,920	27,292
Total energy/overnight stay	kWh/night									31	36
Electricity (incl. cooling energy)/employee	kWh/pp	1,855	1,793	1,657	1,789	1,206	1,011	1,012	1,026	6,371	5,953
Electricity (incl. cooling energy)/surface area	kWh/m ²	52	50	76	75	52	47	45	47	44	40
Heating energy/employee	kWh/pp	2,988	3,004	1,209	1,500	1,007	946	1,187	1,339	18,436	17,595
Heating energy/surface area	kWh/m ²	84	84	56	63	44	44	52	61	126	118
Fuel/employee	kWh/pp	362	433	82	83			132		2,724	3,417
Share of renewable energy (electricity, cooling and heating energy)	%	67%	64%	23%	30%	48%	48%	46%	43%	93%	90%
Materials											
Printer paper/employee	kg	13	11	17	14	12	9	4	3	32	38
Printer paper/overnight stay	kg	0.04	0.05							0.04	0.05
Water											
Water/employee	m ³ /pp	27.4	24.7	7.6	8.7	8.6	9.9	6.1	6.5	196.5	163.9
Water/overnight stay	m ³ /night	0.2	0.2							0.2	0.2
Waste											
Total waste/employee	kg/pp	373	323	220	30	218	202	69	66	2,155	1,759
Total waste/overnight stay	kg/night	2.4	2.3							2.4	2.3
Emissions											
Total CO ₂ emissions/employee	tCO ₂ eq/pp	2.9	2.6	2.9	3.3	1.2	0.9	4.1	2.4	2.5	4.7
Total CO ₂ emissions/overnight stay	tCO ₂ eq/night	0.003	0.006							0.003	0.006
Biodiversity											
Heated area/employee ¹⁷	m ² /pp	35	36	22	24	23	22	23	22	146	150

17) Because most of the buildings are rented, only the heated area and not the entire building area is taken into account.

4.1. Heat energy usage

There was an overall reduction in heat energy consumption for the four institutions, which is primarily attributed to the savings achieved by ProCredit Bank Germany.

As the heating technology had not been replaced by another method, the significant change can be explained by more efficient use of the existing technology. Unfortunately, the Academy had to resort to using the oil-fired boiler instead of the wood pellet boiler in order to achieve the required temperatures in the drinking/hot water system so as to prevent contamination with Legionella bacteria, which pose a health hazard. The oil-fired boiler was used for the process of thermal disinfection because it reaches the required temperatures more quickly. However, this was barely visible in terms of energy consumption; the effect was more evident in the emissions values for CO₂ as well as in the percentage of renewable energy in total energy consumption.

Our heat energy consumption continues to be well below the German average for heat energy usage of 5,463 kWh/pp for office buildings. ProCredit Holding consumed 1,500 kWh/pp, ProCredit Bank 946 kWh/pp, and Quipu 1,339 kWh/pp. With consumption of 17,595 kWh/pp by the ProCredit Academy, here too we are below the average heat energy usage in Germany for accommodation businesses of 18,269 kWh/pp.

4.2. Electricity consumption and generation

Electricity consumption was slightly reduced, both per employee and per square meter in the total consumption for all four ProCredit institutions. All of our office-based institutions are well below the national average of 2,177 kWh/pp for comparable businesses. In 2016, various lighting systems at the Academy were converted to LED lighting, which resulted in a decrease in electricity consumption from 44 kWh to 40 kWh per square meter. The Academy's electricity consumption of 5,953 kWh/pp and 40 kWh/m² is thus below the national average of 7,829 kWh/pp for accommodation businesses and well below the EMAS benchmark of 80 kWh/m².

The Academy's solar panels had an output similar to that in 2015 and was therefore able to offset 25% of its electricity consumption in the following year. Due to the change of electricity suppliers, ProCredit Holding and ProCredit Bank further increased the share of electricity generated from renewable energy sources.

4.3. Fuel consumption of company-owned vehicles

Fuel consumption of company-owned vehicles is a relevant environmental aspect for the Academy due to the regular use of shuttles to transport students and other visitors from the Frankfurt airport to the Academy and vice versa. Before 2016 a great number of these trips were carried out by an external company. At the beginning of 2016 a new travel policy was introduced for Academy students, whereby all arriving participants take public transportation to the institution instead. All departing guests are now driven to the airport solely with Academy-owned vehicles; an external transport company is no longer used for this purpose. This enabled the number of shuttles to be reduced by half, but the Academy's fuel consumption increased due to the decision to use its own vehicles.

4.4. Emissions

Most, or 75%, of emissions are caused by business travel by air, while 25% are caused by the consumption of energy (electricity, heating, and fuels).

Overall, CO₂ emissions decreased from 2.9 to 2.6 tons per employee. This is attributed to the reduction of air travel on the part of ProCredit Bank and Quipu. At the same time, emissions due to air travel increased slightly for ProCredit Holding and doubled for the Academy. This is due to the numerous flights taken to participate in the continuing professional development programme offered by the Management Academy, which had about twenty participants per programme session.

In comparison, other emissions arising from road transport, electricity consumption and heating are at a lower level, due to the CO₂-neutral purchase of electricity by the institutions and the pellet heating system at the Academy.

4.5. Food consumption

Food will continue to be purchased for all four institutions in compliance with environmental and social criteria such as regional origin, eco- or Fair Trade certification. At the Academy, the list of foods that are sourced from organic and/or regional farms is being continuously expanded. For example, sugar is now purchased from an organic farm in North Hessen, and milk is delivered from a regional dairy in large containers, which reduces the amount of packaging.

4.6. Water consumption

Water consumption at ProCredit Holding, the bank and Quipu has risen slightly, but this is compensated for by the low level of consumption at the Academy. For this reason, overall water consumption in 2016 decreased by around 12% relative to 2015, i.e. from 8,255 m³ to 7,303 m³.

The water consumption level of the ProCredit institutions, i.e. 8.7 m³/pp at ProCredit Holding, 8.6 m³/pp at ProCredit Bank and 6.5 m³/pp at Quipu, falls both above and below the national average of 8.1 m³/pp (Umweltbehörde Hamburg, 2001).

One reason for the nearly 14% increase in water consumption at ProCredit Holding is the replacement of uncarbonated bottled mineral water with tap water since mid-2016. Water carafes are available to all employees. In addition, there was an increase in water consumption due to broken toilet flushes, which had to be repaired repeatedly.

In 2016, the Academy replaced all shower heads with water-saving models. This effectiveness of this measure, together with training of all incoming language course participants as well as Banker and Management Academy attendees on environmental issues, is demonstrated in the reduction of total water consumption.

The water consumption of the Academy of 0.2m³/overnight stay is above the EMAS benchmark for accommodation businesses of 0.14 m³/overnight stay, yet still well below the European average of 0.4 m³ per overnight stay.

4.7. Printer paper consumption

With the exception of the Academy, all institutions were able to reduce their paper consumption. At the Academy, total consumption as well as per overnight stay consumption increased slightly, as many teaching materials are produced and also printed at the Academy. The reduction in paper consumption at the other institutions attests to the success of the staff training sessions that were held in 2016.

The share of non-recycled printing paper has dropped to 4% and is expected to be further reduced through further examination of alternatives.

The paper consumption in kilogram per employee in 2016 was 14 kg at ProCredit Holding, 9 kg at ProCredit Bank, and 3 kg at Quipu. At the Academy this figure was 0.05 kg per overnight stay.

4.8. Waste generation

The waste management systems were improved in most institutions in 2016. In Quipu’s offices, packaging waste is now separated from the residual waste; previously, only paper waste was separated from residual waste. ProCredit Holding introduced new waste bins in the employees’ offices, with clear labels and posters explaining the correct way to separate waste (see Figure 2).

At the Academy, the same measure was implemented to instruct all guests on the correct way to separate waste. The fact that the Academy’s residual waste fell sharply in 2016 compared to 2015 is an indicator of the success of the newly introduced waste collection



Figure 2: Poster explaining how to separate waste

system in combination with the training for participants. Nevertheless, the Academy's residual waste generation of 0.26 kg/overnight stay still exceeds the 2016 EMAS benchmark of 0.16 kg/overnight stay, yet is still far below the European average of 1.0 kg/overnight stay.

4.9. Land use

There were no changes in land use in 2016, with the exception of the fact that six trees were planted in the Academy's garden.

5. Indirect aspects

The daily operations of the ProCredit institutions in Germany indirectly impact the environment in various ways. For example, the indirect influence of the parent company ProCredit Holding is determined to a large extent by the ProCredit banks, which also cooperate very closely with the parent company with regard to environmental and sustainability issues, while the indirect influence of ProCredit Bank Germany is mainly contingent on the environmental impact of its customers. Particular attention should be paid to green finance, which helps ProCredit customers around the world to make environmentally friendly investments.

A more detailed description of the indirect environmental impacts, including the unchanged significance matrix of the environmental aspects of ProCredit institutions in Germany, as well as more information on green finance, can be found in the EMAS Environmental Statement 2015, as well as in other publications on the topic of sustainability on our website.

5.1. Green Loan Portfolio

The ProCredit banks offer specialised loans for investments in energy efficiency, renewable energies and other environmentally friendly technologies and activities, as part of our aim to promote economic development that is as environmentally and socially sustainable as possible.

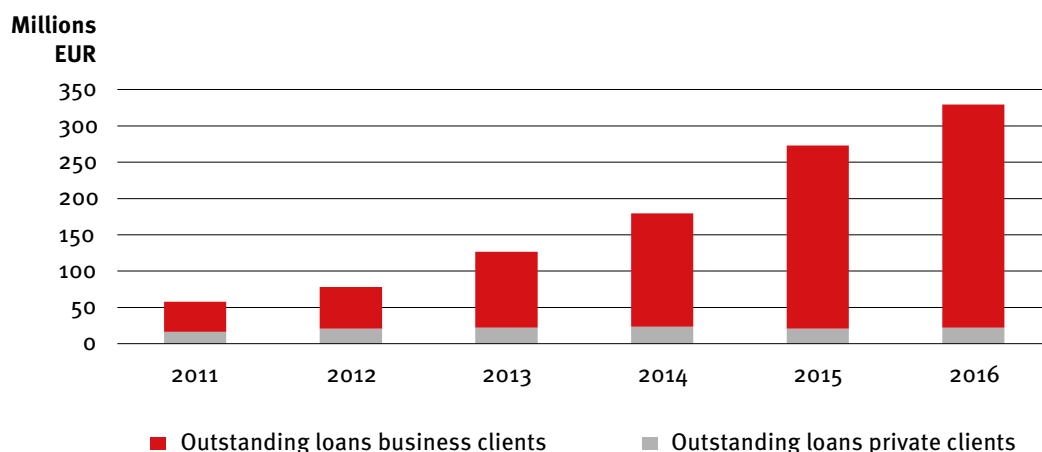


Figure 3: The ProCredit group's green loan portfolio for private and business clients

Figure 3 shows the development of the green loan portfolio from 2011 - 2016. Relative to the previous year, the green loan portfolio continued to grow, from EUR 242 million in December 2015 to EUR 307 million in December 2016. Figure 4 shows the composition of the green loan portfolio. The composition changed only slightly compared to the previous year. In December 2016, 70% of the portfolio consisted of investments in energy efficiency, 12% in renewable energies and 18% in environmentally friendly technologies/environmental protection measures.

In order to support the positive development of the portfolio and to continuously develop the ProCredit approach to green finance, a workshop with the Environmental Coordinators of the ProCredit institutions and other environmental managers is organised twice a year. An EMS workshop was held in April 2016 with a focus on the further technical development of the environmental management system. In addition, a Green Finance Seminar was organised in September 2016, in which a management board member from every bank participated and strategic topics were addressed.

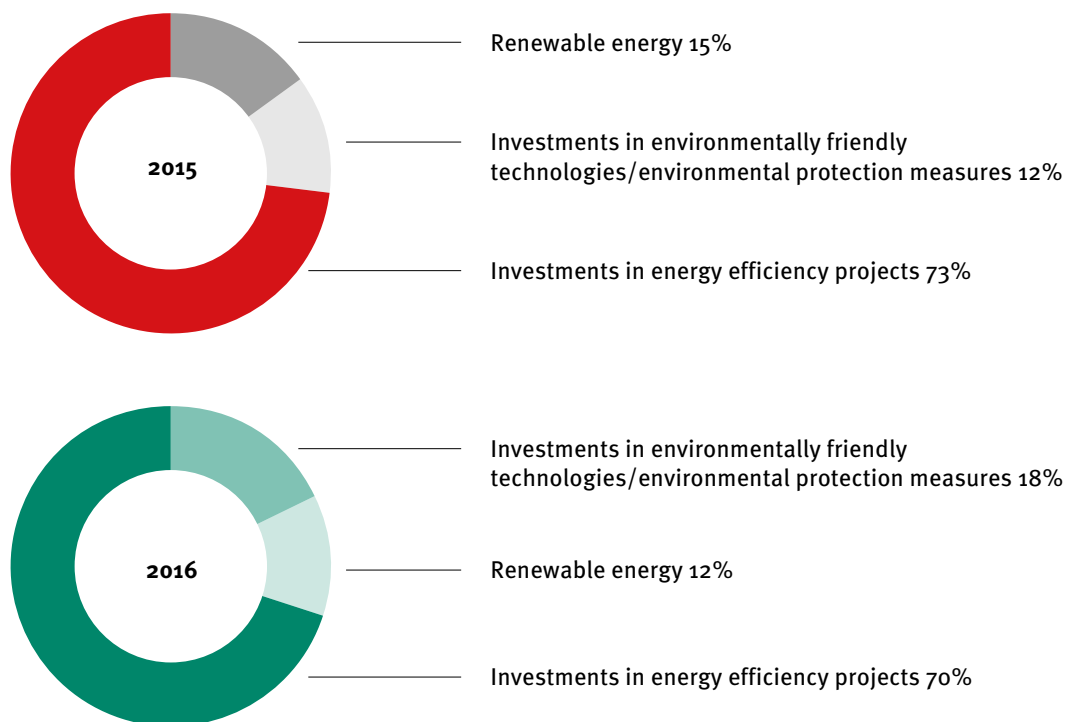


Figure 4: The ProCredit group’s green loan portfolio broken down by investment type, as at December 2015 and 2016 (volume)

5.2. Environmental and social risks of our lending activities

In addition to performing a business analysis, we also assess our clients in terms of the impact their activities have on society and the environment.

Table 3 shows that the breakdown of the ProCredit group’s business and agricultural loan portfolio by environmental and social risk class has changed little compared with the previous year. In December 2016, 56% of the business and agricultural loan portfolios were classified as posing a low environmental and social risk, 41% were classified as posing a medium risk and 3% a high risk.

Table 3: Development of the ProCredit group’s business and agricultural loan portfolios by environmental and social risk class (EUR ’000)

Date	Low		Medium		High	
	Volume	%	Volume	%	Volume	%
Dec. 2015	2,005,273	55.76%	1,514,995	42.13%	75,925	2.11%
Dec. 2016	1,738,112	55.82%	1,292,693	41.51%	83,064	2.67%

In 2016, the status of the implementation of the Group Standard for the Management of Environmental and Social Risk in Lending in the five ProCredit banks in Macedonia, Albania, Kosovo, Bulgaria and Serbia was reviewed. The resulting recommendations for improvement were discussed with the individual banks and during the Credit Risk Seminar at the end of 2016 with representatives of all banks and the responsible environmental and social risk officers. The officers further developed the Group Standard during a two-day workshop to further improve the assessment of the environmental and social risk in lending. Refresher training courses for bank employees were subsequently organised in the individual banks.

5.3. Procurement and supplier management

In the procurement process, ProCredit institutions also aim to find environmentally friendly suppliers for office supplies, equipment, food, etc. in order to indirectly have a positive impact on the environment.

Procurement and supplier management remains largely unchanged compared to the previous year. The Academy acquired a new supplier, a regional dairy. Furthermore, existing suppliers are continuously asked to expand the number of organic products on offer.

5.4. Staff awareness

The success of the EMS is inextricably linked to the environmental awareness of each and every ProCredit employee. For this reason, all our employees are trained in environmental issues, and new courses and trainings take place every year.

In 2016, the ProCredit group continued its efforts to develop the environmental awareness of its employees, for example by conducting training courses on environmental management for new employees and by periodically hanging environment-themed posters on the premises (see Figure 4). In addition, environmental topics are also included in the language courses as well as in the Banker and Management Academy and are intensively discussed in courses lasting several days. An environmental action day was also organised for the employees of ProCredit Holding, ProCredit Bank and Quipu in September 2016. During a joint hike, the participants explored the flora and fauna of the Taunus area.



Our daily activities have a huge impact on available water resources. Pressures on the availability of fresh water are increasing, mainly as a result of population growth, pollution and the high demands of agriculture and industry.

According to the German Federal Environment Agency, the daily average water consumption level in Germany is **130** liters per person.

How we can contribute to reducing water consumption?

Water saving tips

- Fix leaking taps
- Install automatic faucets provided with aerators
- Use the dishwasher only for full loads
- Take shorter showers and turn off the water while soaping
- Install water-efficient shower heads
- Replace single-flush toilets with dual-flush toilets

Are these measures efficient?

- Installing water saving low-flow aerators could reduce water consumption by between **30 and 55%**
- By fixing a leaky tap that drips just once a second, approximately **11,400 litres** of water could be saved in a year. This is enough water to take 300 showers (based on a five-minute shower)
- Each minute less you spend under the shower could save up to 285 litres of water a month and **3,465** litres a year (based on one shower per day)
- Replacing conventional showerheads with more efficient, low-flow ones would reduce water consumption by more than **50%**

By acting responsibly, we can make a positive change.

Bottled water consumption at PCH

23627 bottles of water each year

1654 kg CO₂ just for the bottle production, packaging and transportation*

9400 km = 9 months of intensive driving

By switching to tap water, PCH will reduce its yearly carbon footprint by an amount equivalent to the emissions from driving 9,400 km with PCH's car, or 9 months of intensive driving.

Where does Frankfurt's drinking water come from?

Frankfurt's drinking water comes from catchment areas which are specially protected against contamination.

- City area: 17%
- Hessian Ried marsh: 36%
- Vogelsberg area, the Spessart and the Kinzig Valley: 48%

The Frankfurt water network comprises **2000** kilometers of pipes.

Mainova AG is responsible for distributing the drinking water to households and businesses in Frankfurt.

We are sure that by reflecting on our consumption habits, we can make a positive change.

* http://www.ggb.de/Endbericht_Oekobilanz_GDB_2008.pdf

Figure 5: Environmental information poster about water

6. Environmental objectives and programme (2016 - 2017)

Environmental objectives: (unless otherwise stated, by the end of the relevant year)	Institution	Measures	Evaluation criteria	Current status 2017
Electricity consumption 2016				
Reduce electricity consumption by 5%	ProCredit Academy	Continuously replace defective circulation pumps with electricity-saving pumps	Specific electricity consumption kWh/pp or kWh/overnight stay in relation to 2015	All measures implemented, four circulation pumps were replaced
		Increase energy awareness of the guests through communication measures (all new groups receive an introduction to the EMS) and carry out spot checks of the rooms		
		Replace kitchen lighting with LED lighting		
	ProCredit Holding	Install and test LED lighting for offices		LED lights in the testing phase
Electricity consumption 2017				
Reduce electricity consumption by 5%	ProCredit Academy	Continuously replace defective circulation pumps with electricity-saving pumps	Specific electricity consumption kWh/pp or kWh/overnight stay in relation to 2016	
		Increase energy awareness of the guests through communication measures (all new groups receive an introduction to the EMS) and carry out spot checks of the rooms		
		Replace lighting with LEDs in Language Centre		
		Replace old dryer with a more energy-efficient model		
		Replace old glass washer with a more energy and water-efficient model		
	ProCredit Holding	Install LED lighting in offices and where appropriate, in corridors	Installed LEDs	
		Introduce sleep mode and/or auto power-off for electronic devices (e.g. for PCs)	Configured sleep modes and automatic power-off modes	
		Replace multifunction printers with printers that are verifiably environmentally friendly (e.g. Blue Angel certification)	Blue Angel or other verification	
Ongoing shift towards "green IT"	ProCredit Bank Germany	Equip new conference room with an electronic white board with video conferencing capability	Availability of a white board	
		Replace multifunction printers with printers that are verifiably environmentally friendly (e.g. Blue Angel certification)	Electricity consumption	

Environmental objectives: (unless otherwise stated, by the end of the relevant year)	Institution	Measures	Evaluation criteria	Current status 2017
Heating energy consumption 2016				
Reduce heating energy consumption by 5%	ProCredit Academy	Increase the energy awareness of guests and employees through communication measures on the efficient use of heating and hot water	Specific heat energy consumption kWh/overnight stay in relation to 2015	Training is carried out on a regular basis.
Heating energy consumption 2017				
Reduce heating energy consumption by 5%	ProCredit Academy	Increase the energy awareness of guests and employees through communication measures on the economical use of hot water and heating - develop stickers for the different rooms	Specific heating energy consumption kWh/overnight stay (average in 2015 compared to average in 2017)	
		Discontinue use of the 2nd oil-fired boiler		
Greenhouse gas emissions 2016				
Reduce vehicular emissions by 50% in relation to 2015	ProCredit Academy	Formulate new transportation guidelines so that guests use public transportation instead of the shuttle service	Number of shuttle trips per year	50% fewer shuttles (no more pick-up service at airport)
		Partly offset PCA's emissions by planting 6 trees per year	Calculations	Six trees were planted in 2016
Reduce all GHG emissions by 25% in relation to 2015	ProCredit Bank Germany	Change from current electricity provider Mainova for the ground floor to a supplier of electricity from renewable energy sources	Total GHG emissions	Change finalised in July 2016
Compensate for CO ₂ emissions from air travel (partial)		Conduct market review and select a credible provider (e.g. atmosfair, first climate, etc.)	Compensation certificate	Compensation with atmosfair
Reduce overall GHG emissions by 15% in relation to 2015	ProCredit Holding	Change from current electricity provider Mainova to a supplier of electricity from renewable energy sources	Total GHG emissions	Change finalised
Greenhouse gas emissions 2017				
Construct a CO ₂ -neutral swimming pool	ProCredit Academy	Ensure that new swimming pool will not increase the Academy's CO ₂ emissions. Connect swimming pool to the pellet boiler. Install a solar thermal heating system and expand the photovoltaic system.	Technical planning and heat and power consumption	
Compensation for CO ₂ emissions from air travel (partial)	ProCredit Holding	Conduct market review and select a credible provider (e.g. atmosfair, first climate, etc.)	Certificate	
	Quipu			

Environmental objectives: (unless otherwise stated, by the end of the relevant year)	Institution	Measures	Evaluation criteria	Current status 2017
Food consumption 2016				
Reduce the ecological footprint of food consumption	ProCredit Academy	Define a list for the purchase of foodstuffs which are either organically certified, regionally grown or originate from fair trade	Procurement guidelines	Completed
Food consumption 2017				
Reduce the ecological footprint of food consumption	ProCredit Academy	Offer two vegetarian options per meal	Meal plan	
Paper consumption 2016				
Raise awareness among the ProCredit Academy's business partners about their paper consumption	ProCredit Academy	Adapt the e-mail signature of all employees to include a reminder to think twice before printing	Informational e-mail	Completed
Reduce paper consumption by 10% in relation to 2015	Quipu	Monitor monthly paper consumption	Printer paper consumption kg/employee	Ongoing
		Set double-sided printing as default setting, monitor the printer page counter		Completed
		Switch to electronic invoices and contracts in customer transactions		Completed
		Use recycled paper		Completed
	ProCredit Bank Germany	Monitor the number of printouts and talk to employees (raise awareness)		Completed
		Switch from paper terms and conditions (and "client files") to electronic versions		Completed
		Use electronic signatures to sign documents, e.g. PDFs		Completed
		Introduce printers that require an electronic key		Completed
Reduce paper consumption by 5% in relation to 2015	ProCredit Holding	Carry out a project to optimise paper consumption: Analyse departmental processes, optimise and automate where possible	Printer paper consumption kg/employee	Project still in planning phase

Environmental objectives: (unless otherwise stated, by the end of the relevant year)	Institution	Measures	Evaluation criteria	Current status 2017
Paper consumption 2017				
Reduce paper consumption by 5% in relation to 2016	ProCredit Bank Germany	Implement a document management system for at least one department (process efficiency)	Number of printouts compared to 2016	
Reduce paper consumption by 15% in relation to 2016	ProCredit Holding	Carry out a project to optimise paper consumption: Analyse departmental processes, optimise and automate where possible	Paper consumption	
		Improve consumption data collection and reporting		
		Reduce the number of smaller printers in the different departments		
Reduce paper consumption by 10% in relation to 2016	Quipu	Introduce an ERP solution for the use of electronic documents in financial matters		
		Introduce electronic signatures to sign documents, e.g. PDFs		
Water consumption 2016				
Reduce water consumption by 5% in relation to 2015	ProCredit Academy	Replace shower heads with water-saving models		Completed
Reduce water consumption by 10% in relation to 2015	Quipu	Increase awareness about saving water in the kitchen	Specific water consumption (m ³ /pp or per overnight stay)	Completed
		Install faucet aerators at all sinks		Aerators not installed yet
Reduce water consumption by 5% in relation to 2015	ProCredit Bank Germany	Install faucet aerators at all sinks		Completed
	ProCredit Holding			Test run for aerators
Water consumption 2017				
Reduce drinking water consumption by 5% in relation to 2016	ProCredit Academy	Raise awareness about saving water with stickers in the bathrooms and “stop” stickers on the toilet flushes	Specific water consumption (m ³ /overnight stay, average in 2015 compared to average in 2017)	
Reduce drinking water consumption by 5% in relation to 2016	ProCredit Holding	Install faucet aerators at all sinks	Water consumption	

Environmental objectives: (unless otherwise stated, by the end of the relevant year)	Institution	Measures	Evaluation criteria	Current status 2017
Wastewater generation 2016				
Reduce degree of contamination in wastewater	ProCredit Bank Germany	Reduce the use of “ungreen” cleaning products to a minimum	Purchase receipts	Ongoing
Wastewater generation 2017				
Reduce wastewater generation by 5% in relation to 2016	Quipu	Adjust toilet flushes in all bathrooms	Water consumption	
Reduce the number of non-environmentally friendly cleaning products	ProCredit Bank Germany	Purchase own cleaning products or change cleaning company	Number of non-environmentally friendly cleaning products	
Waste production 2016				
100% waste separation	ProCredit Academy	Label all waste containers according to type of waste. Set up recycling stations in the corridors	Replace waste bins	Completed
	Quipu	Install separate waste containers for paper	Replace waste bins	Completed
Dispose of 100% of electronic waste in a sustainable way	Quipu	Replace devices in a verifiable way	Waste disposal certificate	Completed
		Introduce sustainable waste disposal system		Completed
Waste production 2017				
100% waste separation	ProCredit Academy	Monitor waste separation by students and staff members	Volume of waste	
Improve waste separation and disposal	Quipu	Improve the waste separation process and disposal according to type of waste	Monitoring and control	
Improve waste separation and disposal		Improve the waste separation process and disposal according to type of waste	Monitoring and control	
Introduce a waste separation process	ProCredit Holding	Introduce a process to measure waste volume, to be carried out twice per year	Measurements and extrapolation results for the year	

Environmental objectives: (unless otherwise stated, by the end of the relevant year)	Institution	Measures	Evaluation criteria	Current status 2017
Environmental awareness 2016				
Ensure that 100% of employees are familiar with the EMS	Quipu	Present and distribute the EMS presentations and documents over the intranet	List of participants, communication materials	Completed
	ProCredit Bank Germany	Conduct training courses for (new) employees to inform them about the latest status of the bank's EMS and to obtain suggestions for improvement		Ongoing
	ProCredit Holding	Communicate new developments in the EMS via an internal campaign and provide training for all employees		Ongoing
Raise environmental awareness through a one-day event for all ProCredit institutions in Germany	ProCredit Holding, ProCredit Bank Germany, Quipu	Hold event related to environmental issues		Hike: In September 2016, the flora and fauna of the Taunus were explored
Environmental awareness 2017				
Regularly communicate information about the EMS to all employees	ProCredit Bank Germany	Communicate innovations in the EMS, development of consumption data, news, etc.	Environmental management section on the new intranet, e-mails from the Environmental Officer at ProCredit Bank Germany	
	ProCredit Holding	Communicate developments and innovations in the EMS and provide regular updates on improvement measures	Environmental management section in SharePoint and internal communication channels	
Information on implemented improvement measures is regularly communicated to employees	ProCredit Holding	Provide regular information on the implementation of improvement measures	Content of e-mails sent as part of the Green Initiative 2016	

Environmental objectives: (unless otherwise stated, by the end of the relevant year)	Institution	Measures	Evaluation criteria	Current status 2017
Internal Environmental Management System 2017				
Ongoing group-wide support in improving internal environmental performance	ProCredit Holding	Improve the iEMS data collection and presentation tool. Develop a new tool or development of the iEMS to include sustainability indicators	New version of the tools	Ongoing
Management of Environmental and Social Risks of Lending 2016				
Consolidation and improvement of E&S risk management in lending	ProCredit Holding	Perform a review of the implementation level of the new approach to E&S risk assessment in the group		Completed
		Carry out refresher seminars and workshop discussions in connection with E&S risk assessment		Completed
Management of the Environmental and Social Risk in Lending 2017				
Support the ProCredit institutions with regard to E&S risk management	ProCredit Holding	Adapt and monitor the implementation of the E&S risk management approach	Visits to the banks, updated Group Standards	
		Update and carry out E&S training sessions	Training materials	
Green Finance 2016				
Expand the green loan portfolio	ProCredit Holding	Support the ProCredit group in the further development of the green loan portfolio		Ongoing
		Provide on-location support and update the green finance criteria in the individual banks	Further develop the green loan portfolio	Ongoing
		Organise and carry out a half-yearly workshop for ProCredit employees involved in green finance		Completed

Environmental objectives: (unless otherwise stated, by the end of the relevant year)	Institution	Measures	Evaluation criteria	Current status 2017
Green Finance 2017				
Further develop green finance	ProCredit Holding	Support the ProCredit group with the development and expansion of green finance	Percentage of green portfolio in the total portfolio, new reporting standards for the green portfolio	
		Support the ProCredit group with the development of innovative green finance products		
Further development of environmental reporting		Develop and implement extended CO ₂ and environmental reporting for the portfolio		
Various other milestones or developments in 2017				
ISO 14001:2015 certification of the institutions of the ProCredit group	ProCredit Holding	Supervise and coordinate all activities for the EMAS/ISO 14001:2015 certification of the ProCredit institutions (follow-ups, audits, monitoring, etc.)	Certificate	
Implement sustainability reporting		Make preparations for the reporting of sustainability indicators under the EMAS regulations for the German ProCredit institutions (in 2016)	Report	
	Develop a reporting framework for GRI sustainability reporting for the ProCredit group			

7. Contact person

For questions regarding the Environmental Statement, please contact:

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The current version of the Environmental Statement can be downloaded at
www.procredit-holding.com



8. Statement of the environmental verifiers

Michael **H**ub
Umweltgutachter
Berater Umwelt, Qualität, Sicherheit

ENVIRONMENTAL VERIFIER'S DECLARATION ON VERIFICATION AND VALIDATION ACTIVITIES

Michael Hub and Dr. Georg Sulzer with EMAS environmental verifiers registration numbers DE-V-0086 und 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 & Co. KGaA, 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

meet all requirements of

Regulation (EC) No 1221/2009 last amended by Regulation (EC) 2017/1505

of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community

eco-management and audit scheme (EMAS).

By signing this declaration, we declare that

- the verification and validation has been carried out in full compliance with the requirements of Regulation (EC) No 1221/2009 last amended by Regulation (EC) 2017/1505,
- 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 Regulation (EC) No 1221/2009. This document shall not be used as a stand-alone piece of public communication.

Done at Frankfurt am Main on 02.11.2017



Michael Hub, environmental verifier
 DAU-Accreditation-No: DE-V-0086




Georg Sulzer, environmental verifier
 DAU-Accreditation-No: DE-V-0041

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Zugelassen von der DAU – Deutsche
 Akkreditierungs- und Zulassungsgesellschaft
 für Umweltgutachter mbH, Bonn
 DAU-Zulassungs-Nr.: DE-V-0086

9. Annex

9.1 Emission factors

Type*	Unit	CO ₂ equivalent	NO _x	SO ₂	PM ₁₀
Electricity (average German energy mix)	g/kWh	-	0.488	0.272	0.033
Electricity (Lichtblick - Quipu)	g/kWh	5.8	Apart from the CO ₂ eq emission factors, no other emission factors could be obtained from the electricity suppliers. Therefore, we have taken the average values for the German energy mix.		
Electricity (Mainova – PCH until Aug 2016, PCBs ground floor until Jul 2016)	g/kWh	408			
Electricity (EWS Schönau - PCB fully from Jul 2016, PCH fully from Aug 2016)*	g/kWh	0			
Electricity (Entega - PCA)*	g/kWh	0			
Natural gas	g/kWh	250	0.186	0.012	0.007
Heating oil	g/kWh	320	0.216	0.286	0.025
Wood pellets	g/kWh	29	0.337	0.149	0.075
Diesel	g/kWh	313	1.303	0.118	0.027
Petrol	g/kWh	311	0.257	0.135	0.018
LPG	g/kWh	270	0.176	0.112	0.014

* The CO₂eq emission factor for the 2015 energy mix was obtained from the respective energy suppliers. The information for 2016 was unfortunately not yet available at the time this environmental report was drafted. (Lichtblick, Mainova, Elektrizitätswerke Schönau (EWS) or Entega). The source for all other emission data was GEMIS (Globales Emissions-Modell Integrierter Systeme), Version 4.94 – issued March 2015.

9.2 Lower heating value

Fuel	Lower heating value	Unit	Source
Petrol	9.21	kWh/l	International Energy Agency (2006): Handbuch Energiestatistik: https://www.iea.org/publications/freepublications/publication/statistics_manual_german.pdf
Diesel	10.17	kWh/l	
LPG	6.54	kWh/l	
Wood pellets	5.00	kWh/kg	http://heizkostenrechner.eu/heizwert-brennwert-tabelle.html

9.3 Climate factors for the weather adjustment of heating energy data

Location	Postcode	Climate factor 2015	Climate factor 2016	Source
Frankfurt, Bockenheim	60486	1.22	1.18	Deutscher Wetterdienst (2015) Klimafaktoren: http://www.dwd.de/DE/leistungen/klimafaktoren/klimafaktoren.html
Fürth	64658	1.13	1.10	

9.4 Indicators and benchmarks for comparison

Indicators 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-sektor-2011-2013.html
Heating energy (estimate for offices in Germany 2013)	5,463.0	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-sektor-2011-2013.html
Water (general estimate for offices in Germany)	8.1	m³/(pp a)	Freie und Hansestadt Hamburg Umweltbehörde (2001): Wasserpraxis: http://www.hamburg.de/content-blob/138102/a595789b38ff3bb28b5f7b6cde95f5a2/data/wasserleitfaden.pdf
Water (estimate for offices in Germany 2013)	5.5	m³/(pp a)	Karger, R., Hoffmann, F. (2006): Wasserversorgung: Gewinnung - Aufbereitung - Speicherung – Verteilung, Springer: http://www.springer.com/de/book/9783834813800
Paper (general estimate for offices in Germany)	49.5	kg/(pp a)	Umweltbundesamt (2015): Auftakt zum bundesweiten Wettbewerb „Büro & Umwelt“ 2015: https://www.umweltbundesamt.de/themen/auftakt-bundesweiten-wettbewerb-buero-umwelt-2015

EMAS Benchmark for Hotels 2016	Unit	Source
Building energy (heating and electricity)	180 kWh/(m² a)	European Commission reference document on best practices in environmental management, sector environmental performance indicators and benchmarks of excellence for the tourism sector (2016): http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32016D0611
Electricity	80 kWh/(m² a)	
Water	L/overnight stay	
Residual	0.16 kg/overnight stay	

Indicators for hotels	Unit	Source
Building energy (average, European hotels in 2006)	306 kWh/m²	ECOTRANS e.V., University Stuttgart (2006): Umweltleistungen europäischer Tourismusbetriebe: http://sutour.ier.uni-stuttgart.de/englisch/downloads/Umweltleistungen%20europaeischer%20Tourismusbetriebe.pdf
Building energy (average, European hotels in 2006)	77 kWh/bed night	
Electricity (average, European hotels in 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, European hotels in 2013)	18,269 kWh/pp	
Water (average, European hotels in 2006)	394 L/overnight stay	ECOTRANS e.V., University Stuttgart (2006): Umweltleistungen europäischer Tourismusbetriebe: http://sutour.ier.uni-stuttgart.de/englisch/downloads/Umweltleistungen%20europaeischer%20Tourismusbetriebe.pdf
Residual	1 kg/overnight stay	

9.5 Environmental performance of the ProCredit institutions in Germany compared to indicators and benchmarks

