## Direct and indirect greenhouse gas emissions<sup>1</sup> (GHG emissions) of Commerzbank AG

t CO <sub>2</sub> equivalents	2016		2017		<b>2018</b> <sup>2</sup>	
	AG Germany	AG abroad	AG Germany	AG abroad	AG Germany	AG abroad
SCOPE 1: DIRECT GHG EMISSIONS						
Energy supply	23,088	1,457	22,699	1,519	21,306	536
Natural gas	21,536	1,367	21,770	1,429	20,478	470
Heating oil	1,433	48	843	50	406	50
Diesel for back-up power <sup>3</sup>	119	42	86	40	122	15
Business travel (company car)	16,981	354	15,905	280	15,190	201
Bank vehicles <sup>4</sup>	15,898	252	15,002	222	14,355	158
Pool vehicles	1,083	102	903	58	836	44
Coolant and extinguishing agent losses	465	-	347	-	183	36
Coolant	465	-	347	-	183	36
Fire extinguishing agent	0	-	0	-	0	0
Total Scope 1	40,354	1,811	38,951	1,798	36,680	744
Total Scope 1 AG	42,3	45	40,7	49	37,4	53
SCOPE 2: INDIRECT GHG EMISSIONS (MARKET BASED)						
Energy supply	9,487	5,503	8,249	5,102	7,728	5,597
Electricity	0	5,224	0	4,928	0	5,465
District heating	9,487	279	8,249	174	7,728	133
Total Scope 2 (market based)	9,487	5,503	8,249	5,102	7,728	5,597
Total Scope 2 AG	13,3	51	13,3	51	13,3	26
SCOPE 2: INDIRECT GHG EMISSIONS (LOCATION BASED)						
Energy supply	98,922	12,274	88,990	11,858	88,629	7,688
Electricity	89,435	11,995	80,741	11,684	80,900	7,556
District heating	9,487	279	8,249	174	7,728	133
Total Scope 2 (location based)	98,922	12,274	88,990	11,858	88,629	7,688
Total Scope 2 AG	111,196		100,848		96,317	
SCOPE 3: OTHER INDIRECT GHG EMISSIONS						
Paper consumption <sup>5</sup>	5,877	164	6,536	132	5,209	110
Energy supply	10,524	1,859	10,005	1,755	9,465	1,228
Natural gas (in upstream and downstream emissions)	6,288	399	6,356	417	5,979	137
Heating oil <sup>2</sup> (in upstream and downstream emissions)	260	8	153	9	128	9
Diesel back-up power (in upstream and downstream emissions)	22	8	15	7	22	3
District heating (in upstream and downstream emissions)	2,677	79	2,328	49	2,181	37
Electricity from renewable energies	1,277	1,365	1,153	1,273	1,155	1,041
(pre-products and conversion losses)						
Business travel with indirect impact	15,089	4,937	13,770	4,413	13,032	3,424
Air travel	3,724	4,542	3,232	4,110	2,907	3,201
Rail travel	662	75	779	60	697	42
Greenhouse gas emissions of up- and downstream						
emissions from direct road traffic	7,933	266	7,429	203	7,095	150
Business trips with indirect impact	2,770	54	2,330	40	2,333	31
Logistic journeys	4,750	_	4,058	-	3,971	-
Commuting travel <sup>6</sup>	32,429	-	34,510	-	32,546	-
Water	304	27	275	26	269	20
Waste disposal	155	410	130	258	140	163
Total Scope 3	69,128	7,397	69,283	6,584	64,632	4,945
Total Scope 3 AG	75,8	67	75,8	67	69,5	577
Total overall (Scope 1, 2, 3)	119,149	14,711	116,483	13,484	109,040	11,316
Total overall (Scope 1, 2, 3) total AG	133,8	360	129,	967	120,	356

<sup>1</sup> Commerzbank AG Germany's consumption data, the data collection mode and the calculated CO<sub>2</sub> emissions have been verified since 2009 by the external company DNV GL Business Assurance Zertifizierung und Umweltgutachter GmbH. Since 2010, the verification process has been based on ISO 14064-3.

<sup>2</sup> For the year under review from 1 January to 31 December 2018, the current expanded VfU standard (version 1.1) of April 2016 was used to calculate carbon emissions. This is based on international environmental and climate reporting standards such as GRI and the GHG Protocol. – Data relating to subsidiaries based in properties belonging to Commerzbank AG Germany was subtracted at a blanket rate (based on the ratio of full-time equivalents).

<sup>3</sup> A projection was applied to data relating to Commerzbank AG Germany on the basis of the first nine months of the year due to a change in service providers for the fourth quarter of 2018.

<sup>4</sup> Business travel accounted for 55.3% of bank vehicle use in 2018.

<sup>5</sup> The number of external print-outs fell significantly in 2018. The higher consumption in 2017 was due to EU regulatory requirements.

<sup>6</sup> This calculation was made using the latest data provided by the Federal Statistical Office (Destatis) and on the basis of the average number of full-time equivalents in 2018.