

CO2- FOOTPRINT 2016

CA IMMO OFFICE PORTFOLIO

Stand: 28.02.2017

Presentation carbon-footprint, energy and water consumption by regional and total portfolio



CARBON-FOOTPRINT, ENERGY AND WATER CONSUMPTION IN THE OFFICE PORTFOLIO 2016¹⁾

					Energy	+ Heat				
	Power consumption in kWh 5)		Heating energy consumption in kWh		Total Carbon-Emission ⁴⁾ in kgCO ₂ /a		Water consumption in m ³		Rental offfice space existing data 2)	Rental office space portfolio total 3)
	/m² rental	Total	/m² rental	Total	/m² rental	Total	/m² rental	Total	in m²	in m²
	space		space		space		space			
Eastern Europe	212,98	131.543.405	135,40	83.626.782	122,61	75.728.993	0,66	408.036	617.644	643.694
Germany	106,42	31.227.549	74,62	21.896.582	77,11	22.628.665	0,31	91.733	293.444	293.444
Austria	82,19	12.072.669	90,80	13.338.399	21,94	3.222.145	0,49	71.909	146.895	149.782
Total	165,26	174.843.623	112,35	118.861.763	96,01	101.579.803	0,54	571.678	1.057.982	1.086.920

Changes 2016 to 2015

				Energy	+ Heat					
	Power consumption		Heating energy consumption		Total Carbon-Emission ⁴⁾		Water consumption		Rental offfice space	Rental office space
	in kWh ⁵⁾		in kWh		in kgCO₂/a		in m³		existing data	portfolio total
	/m² rental	Total	/m² rental	Total	/m² rental	Total	/m² rental	Total	in m²	in m²
	space		space		space		space			
Eastern Europe	+6,46%	+23,22%	-7,31%	+7,28%	-5,25%	+9,65%	-0,63%	+15,01%	+15,74%	+20,62%
Germany	+15,62%	+22,37%	+15,07%	+21,79%	+14,24%	+20,91%	+0,77%	+6,65%	+5,84%	+5,84%
Austria	-24,57%	-21,18%	+6,05%	+10,82%	-16,68%	-12,94%	+15,71%	+20,90%	+4,49%	+6,55%
Total	+6,54%	+18,46%	-0,99%	+10,09%	-0,13%	+11,04%	+2,77%	+14,28%	+11,19%	+14,23%

¹⁾ Basis: Properties with main usage office. The calculation of carbon emissions from power consumption and heat requirement (not adjusted for the weather) is based on 57 properties (of 60 in total) or 97 % of the rentable area of the office portfolio (as at 31 December 2016).

²⁾ Rentable office space (without vacancy)

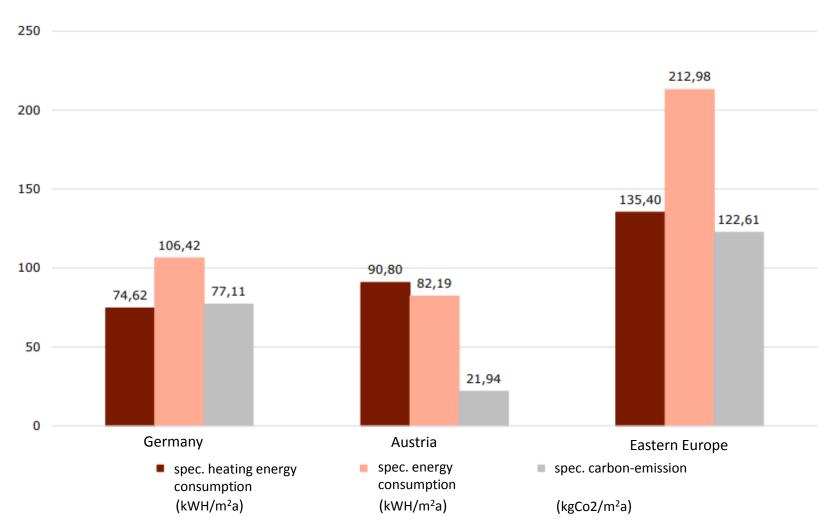
³⁾ Rentable office space with consumption costs;

⁴⁾ The calculation of carbon emissions caused by power and heating energy consumption take account of the so-called carbon dioxide equivalent, which differs between countries and sometimes regions. The higher the proportion of renewable energy in the production of electric power and heating, the lower the carbon dioxide equivalent. The source for the carbon dioxide equivalent are long distance heating providers, country-specific emissions per energy source according to GreenHouseGas[GHG]-Protocol, Gemis and other sources.

⁵⁾ Energy consumption, including tenants' energy supply. A specific value of 50 KWh/m²a is assumed in consumption data not including tenants' energy Supply.

Specific carbon-emission, heating energy and energy consumption in the office portfolio





Presentation carbon-emission, energy and water consumption "like for like"



Like for like = Comparison of properties in the portfolio of 2015 and 2016

Change between 2015 and 2016 (only properties in the portfolio in both years)

					Energy -	+ Heat			
	Power consumption in kWh		Heating energy consumption in kWh		Total Carbon-Emission in kgCO ₂ /a		Water consumption in m³		Rental office space
	/m² rental	Total	/m² rental	Total	/m² rental	Total	/m² rental	Total	in m²
	space		space		space		space		
Eastern Europe	-6,74%	-2,39%	-16,73%	-12,85%	-11,21%	-7,07%	-13,25%	-9,20%	+4,67%
Germany	+15,90%	+16,67%	+13,13%	+13,88%	+14,16%	+14,91%	+0,53%	+1,19%	+0,66%
Austria	-24,05%	-27,51%	+0,77%	-3,82%	-14,26%	-18,17%	+2,76%	-1,92%	-4,56%
Total	-3,76%	-1,70%	-9,33%	-7,39%	-5,05%	-3,02%	-8,51%	-6,55%	+2,14%

Presentation carbon-emission, energy and water consumption owner-occupied areas



Carbon-Emission, energy and water consumption in the office portfolio 2016 1)

					Energy	+ Heat			
	Energy consumption in kWh 4)		Heating energy consumption in kWh		Total Carbon-Emission ³⁾ in kgCO ₂ /a		Water consumption in m ³		Owner occupied rental area 2)
	/m² rental space ²⁾	Total	/m² rental space ²⁾	Total	/m² rental space ²⁾	Total	/m² rental space ²⁾	Total	in m²
Joachimsthaler Straße	14,60	16.233							
20			25,41	28.261	12,85	14.286	0,27	303	1.112
Europa-Allee 22	35,70	44.977	112,38	141.604	40,70	51.284	0,14	171	1.260
Tower 185	111,00	73.482	65,00	43.030	78,21	51.772	0,39	256	662
Klaus-Mann-Platz 1	49,55	33.593	37,68	25.550	34,57	23.441	0,22	146	678
Rennweg	96,33	170.315	78,95	139.590	17,30	30.593	0,24	417	1.768
Total	61,79	338.600	68,98	378.035	31,27	171.375	0,24	1.293	5.480

¹⁾ Basis: The calculation of carbon emissions from power consumption is based on 5 properties or 100 % of the owner-occupied office area. The calculation of carbon emissions from heat requirement is based on 5 properties or 100 % of the owner-occupied office area.

²⁾ owner-occupied rental area consumption costs.

³⁾ The calculation of carbon emissions caused by power and heating energy consumption take account of the so-called carbon dioxide equivalent, which differs between countries and sometimes regions. The higher the proportion of renewable energy in the production of electric power and heating, the lower the carbon dioxide equivalent. The source for the carbon dioxide equivalent are long distance heating providers, country-specific emissions per energy source according to GreenHouseGas[GHG]-Protocol, Gemis and other sources.

⁴⁾ Energy consumption, including tenants' energy supply. A specific value of 50 KWh/m²a is assumed in consumption data not including tenants' energy Supply.

Certified office properties by region



in m²	Total office portfolio	Certified office portfolio	Share of certified office properties in %	
Austria	135.859	17.500,0	13%	
Germany	210.226	133.063,0	63%	
Eastern Europe	673.243	520.927,9	77%	
current	1.019.328	671.490,9	66%	

By book value. Basis: Office properties with portfolio values >€10 m, excluding Tower 185, the sale of which was closed in January 2018.

in €m	Total office portfolio	Certified office portfolio	Share of certified office properties in %
	050	754.4	700
Germany	958	751,4	78%
Austria	260	60,5	23%
Eastern Europe	1.596	1.267,8	79%
Total	2.814	2.079,7	74%

By book value. Basis: Office properties with portfolio values >€10 m, excluding Tower 185, the sale of which was closed in January 2018.