

Data Appendix

Second Sustainability Report

About this data

RWTH's energy data management is currently being expanded and further measures are being taken to record and process our energy data more systematically in the future. The aim is to obtain more reliable and valid data for RWTH, particularly with regard to energy consumption. In addition, RWTH will in future report comprehensively in the context of the 'Klimaneutrale Landesverwaltung NRW (KNLV)', 'Climate Neutral State Administration NRW' initiative using the balancing tool provided by the Landesamt für Natur, Umwelt und Verbraucherschutz NRW (LANUV), State Office for Nature, Environment and Consumer Protection NRW'.

As some of the data published to date has been calculated on the basis of estimated values at relevant points and is subject to a number of conditions, we have decided not to publish the data again until the systematic collection and processing of the energy data has been completed in order to ensure consistency with future information and to avoid any misunderstandings when comparing the values.

In particular, these changes affect the sections "Operations - Energy", "Operations - Water" and "Operations - Greenhouse gas emissions (GHG-E)". Brief explanations of the content can be found at these points in the appendix.

The general data on the university can still be viewed. In the remaining sections, explanatory notes on the respective data have been added where necessary to improve comprehensibility.

If you have any questions, please do not hesitate to contact us at nachhaltigkeit@rwth-aachen.de.

Data	Year					Explanatory notes
	2018	2019	2020	2021	2022	
Governance – Facts about the University						
Year established					1870	
Faculties					9	The Faculty of Education, Faculty 9, ceased to operate in 1989
Profile Areas					8	
Clusters of Excellence					3	
Number of students	45.256	45.628	47.173	47.269	47.078	Persons, number in the winter semester
Number of employees (Profs + academic staff + technical and administrative staff)	9.655	9.826	10.156	10.249	10.272	Full-time equivalents
Graduates	7.164	7.085	6.657	7.344	7.133	
Number of promotions	904	1.007	1.017	979	962	
Number of habilitations	30	38	25	46	18	
Number of professorships	554	548	553	553	557	
Financial volume (Euro)	998.469.185	1.035.599.063	1.048.926.916	1.107.908.414	1.192.118.619	
Main use area <u>without</u> Fac.10/UKA (m²)	432.191	439.284	446.557	448.963	459.963	Includes usable areas 1-6****
Main use area <u>with</u> Fac.10/UKA (m²)	591.712	613.890	621.164	624.770	636.828	Includes usable areas 1-6****
Net usable floor area (energy relevant area, m²)	706.063	708.886	725.723	729.800	707.156	Buildings in which no energy is consumed are not included. Includes usable areas 1-9****

Operations – Energy

This section deals with the evaluation of operational energy procurements broken down by energy source (natural gas, district heating, heating oil) and compares the values from 2018-2022 in MWh.

The data is currently being revised and will be recorded via the KNLV tool in the future. The contents will be announced at a suitable point.

Operations – Water

This section looks at operational issues relating to water consumption (drinking water consumption, wastewater and evaporation water) and shows comparative values from 2018-2022 in m³.

The data is currently being revised and will be recorded via the KNLV tool in the future. The content will be announced at a suitable point.

Operations – Greenhouse Gas Emissions (GHG-E)

This section is intended to look at the operational topics relating to greenhouse gas emissions (in T CO₂-eq total and differentiated by Scope 1; 2 and 3) and show comparative values from 2018-2022 in t CO₂-equivalents.

The data is currently being revised and will be recorded via the KNLV tool in the future. The content will be announced at an appropriate point.

Operations – Mobility	2018	2019	2020	2021	2022	Explanatory notes
Number of job tickets	1808	1771	1676	1472	1680	Mean values, as data was not collected for every month.
Vehicle fleet – vehicles						
Number of gasoline-powered vehicles				86	79	incl. working machines
Number of diesel-powered vehicles				107	102	incl. working machines
Number of hybrid vehicles				12	19	
Number of purely electrically powered vehicles				50	59	incl. electric scooters (e.g. Segway etc.)
Vehicle fleet – fuel consumption						
						2018/19: Germany-wide discussions about a possible ban on diesel vehicles (also in Aachen), RWTH procured more gasoline-powered vehicles during this period, slight increase in 2021/2022 presumably due to a slight easing of the pandemic situation 2020: falling fuel volumes due to the coronavirus pandemic and the associated restrictions
Gasoline (l)	25.394,52	35.874,25	28.723,29	33.499,40	36.419,29	
Diesel (l)	79.943,13	70.489,01	42.460,46	42.160,61	44.512,47	
Business trips						
Business trips – number in total	26.401	25.422	11.375	7.501	19.926	2021: 10,284 data records, of which 2,783 virtual events 2022: 20,887 data records, of which 961 virtual events From 2020: Recording of chargeable virtual events Differs from the sum of the number of trips by means of travel due to the various combinations of means of travel and/or services**
Number of domestic business trips	19.351	18.405	9.022	6.205	14.568	
Domestic business trips – % of total trips	73,30	72,40	79,31	82,72	73,11	
Number of business trips abroad	7.050	7.017	2.353	1.296	5.362	
Business trips abroad – % of total trips	26,70	27,60	20,69	172,80	26,91	
Air travel – total number of trips	6.564	5.991	1.222	626	2.942	
Number of trips by air – share of total trips (%)	24,86	23,57	10,74	8,35	14,76	

Passenger kilometers (km) – total	21.672.903	26.806.866	4.338.175	-	15.461.750	Until 2021: Based on information from two contract travel agencies. The total value was calculated based on the revenue share of trips not booked through these travel agencies. No data was available for 2021 at the time of reporting From 2022: Based on data from all travel agencies. Flight bookings not made via the contract travel agencies are not included.
Operations – Mobility	2018	2019	2020	2021	2022	Explanatory notes
Number of domestic air trips	2.043	1.652	375	211	320	
Number of domestic air trips – share of total air trips (%)	31,12	27,57	30,69	33,71	10,88	
Passenger kilometers (km) – domestic	796.822	1.333.657	324.727	-	171.679	No data was available for 2021 at the time of reporting.
Number of international trips	4.521	4.339	847	415	2.622	
Number of international trips – share of total trips (%)	68,88	72,43	69,31	66,29	89,12	
Passenger kilometers (km) – total international trips	20.876.081	25.473.209	4.013.448	-	15.290.071	No data was available for 2021 at the time of reporting.
Passenger kilometers (km) – continental Europe	2.426.051	3.874.741	556.188	-	2.540.681	No data was available for 2021 at the time of reporting.
Passenger kilometers (km) – intercontinental travel	18.450.030	21.598.468	3.457.260	-	12.749.390	No data was available for 2021 at the time of reporting.
Business trips with personal cars – total number	4.409	3.604	1.454	1.317	2.518	The values were corrected for the years 2018 to 2020.
Car trips – share of total trips (%)	16,70	14,18	12,78	17,56	12,64	see above
Passenger kilometers (km) – total	1.212.524	979.731	381.999	394.061	716.751	see above
Number of domestic car trips	3.546	2.906	1.320	1.151	2.056	see above
Total distance of domestic travel (km)	984.605	794.706	332.528	329.233	540.957	see above
Domestic car trips – % of total car trips	80,43	80,63	90,78	87,40	81,65	see above
Number of car trips abroad	863	698	134	166	462	see above
Total distance abroad (km)	227.919	185.025	49.471	64.828	175.794	see above
Car trips abroad – % of total car trips	19,57	19,37	9,22	12,60	18,35	see above
Business trips with rental cars – total number	2.019	1.888	702	641	1.263	
Business trips with rental cars – share of total trips (%)	7,65	7,43	6,17	6,23	6,05	
Passenger kilometers (km) – total	2.426.350	2.209.208	778.148	-	1.090.023	Data from the car rental framework contract partners; no data was available for 2021 at the time of reporting.
Number of domestic business trips with rental cars	1.702	1.529	587	563	1.099	
Domestic rental cars. – % of total rental car usage	84,30	80,99	83,62	87,83	87,02	
Number of business trips with rental cars abroad	317	359	115	78	164	
Rental cars abroad – % of total rental car usage	15,70	19,01	16,38	12,17	12,98	
Business trips by rail – total number	9.972	9.876	2.284	1.530	6.688	

Number of rail trips – share of total trips (%)	37,77	38,85	20,08	14,88	32,02	
Passenger kilometers (km) – total	4.758.123	4.735.693	1.012.483	782.059	3.130.071	Angaben der Deutschen Bahn, die Werte wurden für die Jahre 2018 bis 2020 korrigiert.
Number of domestic rail–only trips (excluding other modes of transport)	3.826	4.154	1.107	743	3.560	

Operations – Mobility	2018	2019	2020	2021	2022	Explanatory notes
Number of domestic rail journeys, incl. in combination with other means of transport	7.163	6.988	1.697	1.164	4.555	
Number of rail–only trips abroad	495	567	214	148	691	
Number of rail trips abroad in combination with other modes of transport	2.809	2.888	587	366	2.133	
Operations – Procurement and Disposal	2018	2019	2020	2021	2022	Explanatory notes
Total consumption of printer and copy paper (million sheets)	24,3	24,6	10,9	10,1 (A4) 0,48 (A3)	7,27 (A4) 0,12 (A3)	Evaluation takes into account retrievals via the RWTH-Kaufhaus
Parcel traffic						
Number of parcels sent				7.050	5.483	normal shipments via DHL only
Waste quantity (t)	1845,76	1859,24	1597,61	1552,47	1530,27	
Waste quantity/area (kg/m ²)	4,27	4,23	3,58	3,46	3,33	
Non-hazardous waste – absolute value (t)	1714,635	1711,67	1463,37	1401,475	1377,86	Contains residual waste and PPK (both disposed of by the City of Aachen) as well as other central disposal by the RWTH Aachen University's Waste Management Service Center (SCA).
of which residual waste (t)	1077,54	1060,82	919,17	850,86	878,12	Proportion of residual waste disposed of via the city of Aachen.
of which paper/cardboard (PPK) (t)	463,96	471,22	387,65	397,06	350,04	Proportion of PPK waste disposed of via the city of Aachen.
Non-hazardous waste - % of total waste	92,90	92,06	91,60	90,27	90,04	
Hazardous waste – absolute value (t)	131,12	147,57	134,24	151,00	152,41	
Hazardous waste – % of total waste	7,10	7,94	8,40	9,73	9,96	
Operations – Green Spaces	2018	2019	2020	2021	2022	Explanatory notes
Green spaces at RWTH (m ²)			1.260.000	-	1.359.090	Calculation of the current state by division 10.52 - Grounds Maintenance
Total green roof area (m ²)			ca. 30.000	-	31999,22	see above
Number of flowering meadows					6	From 2022/23: Change to mowing of lawns. Higher cut and less frequent mowing of areas rich in herbs/flowers.

Number of trees planted	10 (800)	(Reforestation Wilkensburg forest)
-------------------------	----------	------------------------------------

Society – International. – Social Initiatives – Equal Opportunities	2018	2019	2020	2021	2022	Explanatory notes
Proportion of international students (%)	23,10	24,70	26,40	28,30	30,10	Nationality, Consideration of the respective winter semester (01.12.)
Proportion of international professors (%)	11,70	12,50	12,70	13,80	15,10	Nationality, as at the reporting date of 31.12.
Proportion of international academic staff (%)	17,90	19,00	19,30	20,20	21,30	Nationality, as at the reporting date of 31.12.
Proportion of international technical and administrative employees (%)	4,70	4,80	5,00	5,40	5,40	Nationality, as at the reporting date of 31.12.
Number of incoming exchange students	1.224	977	900	1.080	1.145	
Number of outgoing exchange students	1.354	1.247	765	1.220	1.485	
Proportion of employees with permanent contracts (%)	38,1	39,0	38,9	38,8	39,2	Excluding faculty 10; consideration of full-time equivalents
Gender quota						
Share of female students (%)	32,50	32,90	32,60	32,80	30,10	Consideration of the respective winter semester (01.12.)
Proportion of female professors (%)	17,70	17,50	19,00	20,50	22,13	As at the reporting date of 31.12.
Proportion of female academic staff (%)	31,20	31,30	32,20	32,60	33,50	As at the reporting date of 31.12.
Proportion of female tech. and administrative employees (%)	45,00	45,60	45,50	45,60	46,50	As at the reporting date of 31.12.
Proportion of female rectorate members (%)	17	17	29	29	29	Reporting date at the beginning of each year, rounded figures
Proportion of female university council members (%)	50,00	44,40	50,00	50,00	50,00	
Proportion of female senate members (%)	34,60	34,60	38,50	30,80	38,50	Consideration of the members with voting rights
Proportion of female deans (%)	11,10	22,20	22,20	19,40	21,20	
Share of female department heads (%)	54,50	54,50	54,50	50,00	50,00	
Average age of academic staff (years)	32,9	32,8	32,9	33,8	34,0	Excluding faculty 10; consideration of full-time equivalents
Average age of non-academic staff (years)	44,9	44,8	44,6	44,9	45,3	Excluding faculty 10; consideration of full-time equivalents
Number of childcare places – regular, under 3 years old	199	243	243	234	212	Restrictions on allocation due to staff shortages
Number of childcare places – regular, 3 to 6 years old	184	214	214	221	227	
Number of children participating in vacation camps (6 to 12 years)	204	221	154	141	114	Change in offering through cooperation with external provider
Number of university sports courses p.a.	2.000	2.500	620	2.100	2.500	
Number of participants in university sports courses per week	15.000	20.000	N/A	15.500	23.000	2021: Lower participation due to strict corona measures
Number of university sports instructors p.a.	520	600	200	420	530	
Number of sports offered by University sports p.a.	92	100	82	98	108	

Society – Internationalization – Social Initiatives – Influence on Society	2018	2019	2020	2021	2022	Explanatory notes
Third-party funds (in million €)	385,2	426,8	403,7	422,7	487,7	
Share of third-party funds – Federal Government (in million €)	132,4	153,4	156,5	178,3	217,7	
Share of third-party funds – EU (in million €)	26,5	27,3	27,3	30,0	32,2	
Share of third-party funds – DFG (in million €)	97,0	104,8	100,1	104,0	116,2	
Share of third-party funds from other public/private sources (in million €)	37,9	38,7	35,6	35,0	39,2	
Donors industry/business (in million €)	91,4	102,7	84,3	75,4	82,4	
Number of endowed professorships	18	14	12	11	12	

** Example: A trip is made with a company vehicle or by riding with another traveler. Nevertheless, own hotel costs are incurred.
In this case, no travel expense type is entered for means of travel, nevertheless the persons have carried out a business trip alone or together

**** Usable space:

- NUF 1: Residential and social spaces, e.g. recreation rooms, tea kitchens....
- NUF 2: Office/administration, e.g. offices, meeting rooms, office technology rooms...
- NUF 3: Workshops/labs/halls, e.g. electronics labs, metal workshops, test halls...
- NUF 4: Storage, e.g. warehouses, archives, collection rooms, cold storage rooms...
- NUF 5: Teaching, e.g. lecture halls, seminar rooms, exercise rooms, Cip pool...
- NUF 6: Medical rooms, e.g. operating theaters, radiotherapy rooms, first aid rooms
- NUF 7: Ancillary space, e.g. toilets, checkrooms, changing rooms, shower rooms, storage rooms...
- NUF 8: Technical space, e.g. operating equipment, UPS rooms, ventilation and air conditioning systems...
- NUF 9: Traffic space, e.g. corridors, stairwells, entrance halls....