

■ Table 1.6.5 1 / 4

Expenditure of non-higher education science institutions, by fields of science¹

Millions of €							
Type of institution	Year (ACTUAL)	Total expenditure	Of which,				
			Natural sciences	Engineering	Medicine	Agricultural sciences	Social sciences and humanities
1. Helmholtz Centres (national research institutions)	2017	4,285	2,147	1,342	764	z	z
	2018	4,405	2,269	1,327	776	z	z
	2019	4,726	2,530	1,302	858	z	z
	2020	4,931	2,534	1,425	930	z	z
	2021	5,432	2,596	1,801	989	z	z
	2022	5,381	2,488	1,831	1,014	z	z
Of which, R&D expenditure	2017	4,272	2,135	1,342	764	z	z
	2018	4,391	2,257	1,326	776	z	z
	2019	4,711	2,517	1,301	857	z	z
	2020	4,916	2,521	1,424	930	z	z
	2021	5,416	2,583	1,800	989	z	z
	2022	5,372	2,479	1,831	1,014	z	z
2. Max Planck Institutes ² (100% R&D)	2017	2,026	1,649	81	60	z	z
	2018	1,993	1,619	86	z	z	z
	2019	2,101	1,686	94	68	z	91
	2020	2,197	1,771	97	73	z	z
	2021	2,110	1,716	98	50	z	z
	2022	2,414	1,982	125	48	z	z
3. Fraunhofer Institutes (100% R&D)	2017	2,293	476	1,581	110	48	78
	2018	2,562	590	1,710	121	z	74
	2019	2,749	638	1,835	126	54	96
	2020	2,887	706	1,908	140	53	79
	2021	2,881	715	1,882	144	54	87
	2022	3,117	773	2,041	155	53	94
4. Institutions of the Leibniz Association	2017	1,738	862	171	159	83	463
	2018	1,808	861	217	163	82	484
	2019	1,924	863	223	176	122	539
	2020	1,972	875	254	190	118	535
	2021	2,058	927	263	209	116	543
	2022	2,172	996	234	219	121	601
Of which, R&D expenditure	2017	1,477	735	139	155	77	370
	2018	1,567	765	174	160	79	389
	2019	1,647	778	173	171	115	410
	2020	1,693	792	201	184	110	406
	2021	1,773	839	206	200	111	416
	2022	1,898	910	192	211	118	467

■ Table 1.6.5 2 / 4

Expenditure of non-higher education science institutions, by fields of science¹

Millions of €							
Type of institution	Year (ACTUAL)	Total expenditure	Of which,				
			Natural sciences	Engineering	Medicine	Agricultural sciences	Social sciences and humanities
5. Public institutions (excluding libraries, archives and museums; excluding institutions of the Leibniz Association)	2017	3,409	1,239	911	409	623	227
	2018	2,922	1,152	486	412	634	239
	2019	3,147	1,251	559	412	678	248
	2020	3,269	1,230	635	472	663	270
	2021	3,603	1,299	621	702	703	277
	2022	3,609	1,305	652	671	706	275
Of which, R&D expenditure	2017	1,471	449	229	156	469	168
	2018	1,439	435	201	155	472	177
	2019	1,519	477	234	148	480	180
	2020	1,582	467	269	174	478	194
	2021	1,898	580	281	349	484	203
	2022	1,856	544	316	314	490	192
6. Scientific libraries, archives and museums (excluding institutions of the Leibniz Association)	2017	1,406	84	13	17	12	1,280
	2018	1,430	91	13	18	13	1,295
	2019	1,555	100	14	19	14	1,409
	2020	1,545	102	13	18	13	1,399
	2021	1,553	101	14	20	16	1,403
	2022	1,686	109	14	12	8	1,544
Of which, R&D expenditure	2017	491	27	1	2	1	459
	2018	511	29	1	5	4	472
	2019	548	32	1	5	4	505
	2020	541	33	1	5	4	498
	2021	551	45	1	5	5	494
	2022	570	36	1	1	1	530
7. Other research institutions ³	2017	1,940	391	545	196	64	744
	2018	2,192	447	595	267	70	814
	2019	2,194	486	619	227	54	808
	2020	2,235	510	648	213	58	806
	2021	2,623	651	675	366	58	874
	2022	2,995	729	747	391	82	1,046
Of which, R&D expenditure	2017	1,454	358	466	110	48	472
	2018	1,705	424	515	178	55	534
	2019	1,748	467	539	130	38	575
	2020	1,773	489	566	114	41	563
	2021	2,133	629	594	262	39	610
	2022	2,379	701	656	278	52	692

■ Table 1.6.5 3 / 4

Expenditure of non-higher education science institutions, by fields of science¹

Millions of €							
Type of institution	Year (ACTUAL)	Total expenditure	Of which,				
			Natural sciences	Engineering	Medicine	Agricultural sciences	Social sciences and humanities
8. Total (sum 1. to 7.)	2017	17,097	6,848	4,644	1,714	840	3,050
	2018	17,312	7,029	4,434	1,813	857	3,179
	2019	18,397	7,554	4,646	1,886	931	3,380
	2020	19,037	7,728	4,980	2,037	911	3,381
	2021	20,259	8,006	5,353	2,480	950	3,469
	2022	21,374	8,382	5,644	2,510	975	3,862
Of which, R&D expenditure	2017	13,484	5,830	3,839	1,357	653	1,805
	2018	14,168	6,119	4,013	1,450	667	1,919
	2019	15,022	6,595	4,177	1,505	700	2,046
	2020	15,589	6,779	4,465	1,621	693	2,031
	2021	16,761	7,106	4,864	1,999	698	2,094
	2022	17,605	7,425	5,162	2,021	720	2,277
For information:							
Federal institutions performing R&D	2017	2,887	1,137	833	409	356	152
	2018	2,370	1,049	409	z	350	z
	2019	2,558	1,153	469	z	373	60
	2020	2,707	1,138	547	z	387	z
	2021	3,008	1,195	538	z	399	z
	2022	2,989	1,179	566	z	403	z
Of which, R&D expenditure	2017	1,250	431	204	156	320	139
	2018	1,196	413	176	z	314	z
	2019	1,274	456	203	z	329	58
	2020	1,351	448	238	z	341	z
	2021	1,663	559	253	z	344	z
	2022	1,627	523	287	z	348	z
Länder and local government institutions performing R&D (including institutions of the Leibniz Association)	2017	522	102	78	0	268	75
	2018	552	103	77	z	284	z
	2019	589	98	90	z	305	83
	2020	563	92	88	z	275	z
	2021	595	104	84	z	303	z
	2022	620	126	86	z	303	z
Of which, R&D expenditure	2017	222	19	25	0	149	29
	2018	243	22	25	z	158	z
	2019	245	21	31	z	151	30
	2020	231	19	30	z	137	z
	2021	234	21	28	z	140	z
	2022	229	21	28	z	142	z

■ Table 1.6.5 4 / 4

Expenditure of non-higher education science institutions, by fields of science¹

Millions of €							
Type of institution	Year (ACTUAL)	Total expenditure	Of which,				
			Natural sciences	Engineering	Medicine	Agricultural sciences	Social sciences and humanities
Higher education institutions	2017	831	180	313	66	11	262
	2018	898	189	347	71	11	281
	2019	911	181	351	87	12	279
	2020	976	196	393	89	13	285
	2021	1,219	203	482	214	14	305
	2022	1,273	199	502	227	15	331
Of which, R&D expenditure	2017	651	157	252	63	9	169
	2018	753	180	303	69	9	191
	2019	753	170	300	84	10	189
	2020	806	181	338	86	11	191
	2021	1,031	191	417	208	12	202
	2022	1,072	183	434	221	12	221

z = value not stated for reasons of confidentiality, but included in the total.

1 Including funds that cannot be divided up among the Länder.

2 Including legally independent institutes.

3 Including academies.

Last update: January 24, 2025

Source: Special evaluation of the Federal Statistical Office

This work is licensed under a Data licence Germany attribution 2.0.

<https://www.govdata.de/dl-de/by-2-0>