

■ Table 1.1.9 1 / 2

Federal Government expenditure on science, research and development to business enterprises, by economic activities¹

Millions of €				
Economic activity ²	ACTUAL			
	2020		2021	
	Total	Of which, direct project funding ³	Total	Of which, direct project funding ³
A 01-03 Agriculture, forestry and fishing	32.4	32.2	22.6	20.8
B 05-09 Mining and quarrying	3.0	1.2	3.6	1.6
C 10-33 Manufacturing	2,471.9	2,149.2	2,119.2	1,762.2
C 10-12 Manufacture of food products; manufacture of tobacco products	15.0	3.0	17.5	3.6
C 13-15 Manufacture of textiles and wearing apparel; manufacture of leather and related products	17.0	2.7	19.4	3.5
C 16-18 Manufacture of wood and products of wood and cork (except furniture); manufacture of paper and paper products; publishing, printing and reproduction of recorded media	11.2	3.3	13.1	4.6
C 19 Manufacture of coke and refined petroleum products	5.8	0.5	0.5	0.5
C 20-21 Manufacture of chemicals and chemical products; manufacture of basic pharmaceutical products and pharmaceutical preparations	516.2	497.0	104.8	76.3
C 22-23 Manufacture of rubber and plastic products; manufacture of other non-metallic mineral products	57.6	24.1	56.3	22.6
C 24-25 Manufacture of basic metals and fabricated metal products, except machinery and equipment	71.7	27.9	73.1	29.7
C 26 Manufacture of computer, electronic and optical products	627.5	588.9	646.6	594.1
C 27 Manufacture of electrical equipment	182.0	167.1	99.8	85.8
C 28 Manufacture of machinery and equipment n.e.c.	250.1	172.6	311.6	219.8
C 29-30 Manufacture of motor vehicles, trailers and semi-trailers, manufacture of other transport equipment	690.8	651.6	748.5	707.9
C 31-33 Manufacture of furniture, other manufacturing, repair and installation of machinery and equipment	27.2	10.6	28.0	13.7
D 35 Energy supply (without mining)	66.8	56.9	67.1	56.2
E 36-39 Water supply, sewerage, waste management and remediation activities	339.8	329.4	335.1	320.8
F 41-43 Construction	31.8	12.1	33.1	12.7
G 45-47 Wholesale and retail trade and repair of motor vehicles and motorcycles	29.5	10.0	25.4	8.9
H 49-53 Transportation and storage	77.2	71.5	46.4	41.5
I 55-56 Accommodation	0.6	0.3	1.2	0.7
J 58-63 Information and communication	205.2	150.6	248.6	195.4
K 64-66 Financial and insurance activities	37.8	37.3	83.9	82.7
L-T 68-98 Other service activities by enterprises and members of the professions⁴	910.8	746.4	1,144.2	903.2
Total expenditure⁵	4,206.8	3,597.2	4,130.5	3,406.7
Of which, R&D	3,815.5	3,216.9	3,756.5	3,044.8

■ Table 1.1.9 2 / 2

Federal Government expenditure on science, research and development to business enterprises, by economic activities¹

Millions of €				
Economic activity ²	ACTUAL			
	2022		2023	
	Total	Of which, direct project funding ³	Total	Of which, direct project funding ³
A 01-03 Agriculture, forestry and fishing	21.4	20.3	25.0	24.2
B 05-09 Mining and quarrying	3.4	1.9	3.2	2.0
C 10-33 Manufacturing	1,823.2	1,482.6	1,955.6	1,657.3
C 10-12 Manufacture of food products; manufacture of tobacco products	21.3	6.7	22.2	8.6
C 13-15 Manufacture of textiles and wearing apparel; manufacture of leather and related products	21.3	6.9	22.9	9.9
C 16-18 Manufacture of wood and products of wood and cork (except furniture); manufacture of paper and paper products; publishing, printing and reproduction of recorded media	19.2	11.6	19.1	12.4
C 19 Manufacture of coke and refined petroleum products	1.1	1.1	0.9	0.8
C 20-21 Manufacture of chemicals and chemical products; manufacture of basic pharmaceutical products and pharmaceutical preparations	135.4	111.2	171.7	149.8
C 22-23 Manufacture of rubber and plastic products; manufacture of other non-metallic mineral products	50.1	18.6	73.0	43.1
C 24-25 Manufacture of basic metals and fabricated metal products, except machinery and equipment	74.5	31.2	75.9	36.2
C 26 Manufacture of computer, electronic and optical products	431.4	378.8	416.4	375.0
C 27 Manufacture of electrical equipment	132.7	117.0	132.7	119.2
C 28 Manufacture of machinery and equipment n.e.c.	329.6	245.2	329.3	259.4
C 29-30 Manufacture of motor vehicles, trailers and semi-trailers, manufacture of other transport equipment	569.1	532.3	645.1	611.5
C 31-33 Manufacture of furniture, other manufacturing, repair and installation of machinery and equipment	37.3	22.1	46.2	31.2
D 35 Energy supply (without mining)	78.9	68.2	89.7	80.1
E 36-39 Water supply, sewerage, waste management and remediation activities	371.6	357.4	407.2	395.3
F 41-43 Construction	35.2	15.6	38.8	21.1
G 45-47 Wholesale and retail trade and repair of motor vehicles and motorcycles	33.2	14.9	34.9	19.6
H 49-53 Transportation and storage	66.0	60.9	68.2	63.3
I 55-56 Accommodation	1.2	1.2	1.0	0.8
J 58-63 Information and communication	291.5	236.8	357.9	306.8
K 64-66 Financial and insurance activities	22.3	20.9	18.9	18.0
L-T 68-98 Other service activities by enterprises and members of the professions⁴	1,587.4	1,236.8	1,690.1	1,368.9
Total expenditure⁵	4,335.3	3,517.3	4,690.4	3,957.4
Of which, R&D	3,928.6	3,125.9	4,262.2	3,546.1

1 Until 2022, including "Energy and climate fund"; as of 2023, including "Climate and transformation fund". Possible deviations from earlier publications due to subsequent changes in the allocation to the classification of economic activities are possible. Possible rounding differences.

2 Breakdown pursuant to Classification of Economic Activities - 2008 edition (based on NACE 2008 - Nomenclature statistique des activités économiques dans la Communauté européenne).

3 Including expenditures for contracts in the framework of ministerial and defence-related R&D.

4 Including research and development in business enterprise institutions.

5 Differences with regard to the figures in table 1.1.8 may be due to rounding.

Last update: November 21, 2024

Source: Special evaluation of the Federal Ministry of Education and Research

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

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