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**Expenditure on science, research and development by the Federal Ministry of Education and Research (BMBF), by funding areas and funding priorities<sup>1</sup>**

		Millions of €			
Funding area Funding priority		ACTUAL			
		2020		2021	
		Total	Of which, R&D	Total	Of which, R&D
<b>A</b>	<b>Health research and health industry</b>	3,278.2	3,278.2	2,743.9	2,743.9
AA	Health research and health industry	3,278.2	3,278.2	2,743.9	2,743.9
AB	Radiation protection	0.0	0.0	0.0	0.0
<b>B</b>	<b>Bioeconomy</b>	306.1	306.1	294.8	294.8
<b>C</b>	<b>Civil security research</b>	105.1	105.1	78.2	78.2
<b>D</b>	<b>Nutrition, agriculture and consumer protection</b>	52.6	52.6	62.8	62.8
DA	Nutrition	4.2	4.2	5.4	5.4
DB	Sustainable agricultural economy and rural areas	45.4	45.4	53.1	53.1
DC	Health and economic consumer protection	3.1	3.1	4.3	4.3
<b>E</b>	<b>Energy research and energy technologies</b>	881.3	562.1	971.8	648.6
EA	Efficient energy conversion	224.3	224.3	224.2	224.2
EB	Renewable energy	226.8	226.8	305.6	305.6
EC	Nuclear safety and waste management	57.6	57.6	64.1	64.1
ED	Decommissioning of nuclear facilities	334.7	15.5	338.0	14.8
EF	Fusion research	37.9	37.9	39.8	39.8
<b>F</b>	<b>Climate, environment, sustainability</b>	1,175.4	1,175.4	1,247.5	1,247.5
FA	Climate, climate protection; global change	244.5	244.5	258.4	258.4
FB	Coast, marine and polar research, geosciences	456.0	456.0	499.6	499.6
FC	Environmental and sustainability research	254.9	254.9	256.4	256.4
FD	Ecology, nature conservation, sustainable use	220.1	220.1	233.1	233.1
<b>G</b>	<b>Information and communication technologies</b>	963.8	841.8	972.1	908.8
GA	Software systems; knowledge technologies	293.3	293.3	313.1	313.1
GB	Communication technologies and services	188.2	188.2	235.5	235.5
GC	Electronic, electronic systems	394.4	287.3	329.3	281.5
GD	Microsystems technology	52.3	52.3	51.2	51.2
GE	Multimedia, development of convergent information and communication technology	35.6	20.7	43.0	27.6
<b>H</b>	<b>Vehicle and traffic technologies including maritime technologies</b>	36.8	36.8	36.4	36.4
HA	Vehicle and traffic technologies	31.2	31.2	29.9	29.9
HB	Maritime technologies	5.7	5.7	6.5	6.5
<b>I</b>	<b>Aerospace</b>	126.0	126.0	123.6	123.6
IB	National space research and space technology	126.0	126.0	123.6	123.6
<b>J</b>	<b>Research and development to improve working conditions and in the service sector</b>	81.6	81.6	88.3	88.3
JA	Research to improve working conditions	51.9	51.9	60.6	60.6
JB	Research in the service sector	29.7	29.7	27.7	27.7
<b>K</b>	<b>Nanotechnologies and materials technologies</b>	721.0	721.0	754.6	754.6
KA	Nanotechnologies	293.6	293.6	302.7	302.7
KB	Materials technologies	427.4	427.4	451.9	451.9
<b>L</b>	<b>Optical technologies</b>	214.3	214.3	333.9	333.9
<b>M</b>	<b>Production technologies</b>	280.4	280.4	283.5	283.5
<b>N</b>	<b>Regional planning and urban development; construction research</b>	32.1	32.1	36.3	36.3
NA	Regional planning, urban development, housing	2.5	2.5	2.3	2.3
NB	Construction research	29.5	29.5	34.0	34.0

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		Millions of €			
Funding area Funding priority		ACTUAL			
		2020		2021	
		Total	Of which, R&D	Total	Of which, R&D
<b>O</b>	<b>Innovations in education</b>	782.3	475.3	823.5	456.5
OA	Educational reporting, international assessments	241.1	126.7	271.6	138.1
OB	Educational research	502.4	309.8	519.8	286.2
OC	New media in the education	38.8	38.8	32.1	32.1
<b>P</b>	<b>Humanities; economics and social sciences</b>	1,021.8	1,021.8	1,092.6	1,092.6
PA	Humanities research	578.3	578.3	543.3	543.3
PB	Social scientific research	209.1	209.1	234.6	234.6
PC	Economic and finance scientific research	67.4	67.4	61.6	61.6
PD	Infrastructures	167.0	167.0	253.1	253.1
<b>Q</b>	<b>Innovation funding for SMEs</b>	104.8	104.8	99.1	99.1
QB	Technology support for SMEs	8.5	8.5	8.5	8.5
QC	Technology transfer and innovation consulting	96.3	96.3	90.6	90.6
<b>R</b>	<b>Innovation-relevant underlying conditions and other cross-cutting activities</b>	873.9	731.7	944.0	789.1
RA	Technology Assessment	2.5	2.5	2.6	2.6
RB	Structural cross-cutting activities	416.2	325.8	396.2	299.0
RC	Demographical change	82.3	82.3	82.7	82.7
RD	Sports promotion and sports research	0.7	0.7	0.5	0.5
RE	Others	372.3	320.5	462.0	404.2
<b>T</b>	<b>Funding organisations, restructuring of the research field in acceding areas; construction of universities and primarily university-specific special programmes</b>	2,677.0	717.2	2,743.6	811.6
TA	Basic funding of research institutions	0.0	0.0	0.0	0.0
TB	Others	2,677.0	717.2	2,743.6	811.6
<b>U</b>	<b>Large-scale equipment for basic research</b>	1,408.0	1,408.0	1,530.6	1,530.6
<b>Z</b>	<b>Global reduced expenditure; budget reserve<sup>3</sup></b>	-	-	-	-
<b>Total expenditure</b>		<b>15,122.7</b>	<b>12,272.5</b>	<b>15,261.2</b>	<b>12,420.6</b>

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**Expenditure on science, research and development by the Federal Ministry of Education and Research (BMBF), by funding areas and funding priorities<sup>1</sup>**

Millions of €					
Funding area Funding priority		TARGET <sup>2</sup>			
		2022		2023	
		Total	Of which, R&D	Total	Of which, R&D
<b>A</b>	<b>Health research and health industry</b>	3,064.8	3,055.5	2,781.7	2,778.4
AA	Health research and health industry	3,064.8	3,055.5	2,781.7	2,778.4
AB	Radiation protection	0.0	0.0	0.0	0.0
<b>B</b>	<b>Bioeconomy</b>	274.5	274.5	243.9	243.9
<b>C</b>	<b>Civil security research</b>	78.7	78.7	83.5	83.5
<b>D</b>	<b>Nutrition, agriculture and consumer protection</b>	68.3	68.3	69.9	69.9
DA	Nutrition	5.5	5.5	5.6	5.6
DB	Sustainable agricultural economy and rural areas	58.5	58.5	59.9	59.9
DC	Health and economic consumer protection	4.3	4.3	4.4	4.4
<b>E</b>	<b>Energy research and energy technologies</b>	1,038.2	674.9	1,018.3	655.1
EA	Efficient energy conversion	434.4	434.4	411.7	411.7
EB	Renewable energy	137.5	137.5	153.2	153.2
EC	Nuclear safety and waste management	51.1	51.1	44.9	44.9
ED	Decommissioning of nuclear facilities	374.4	11.2	374.4	11.2
EF	Fusion research	40.7	40.7	34.1	34.1
<b>F</b>	<b>Climate, environment, sustainability</b>	1,338.5	1,338.5	1,357.8	1,357.8
FA	Climate, climate protection; global change	275.9	275.9	255.2	255.2
FB	Coast, marine and polar research, geosciences	533.5	533.5	587.0	587.0
FC	Environmental and sustainability research	335.6	335.6	336.7	336.7
FD	Ecology, nature conservation, sustainable use	193.6	193.6	178.8	178.8
<b>G</b>	<b>Information and communication technologies</b>	1,274.0	1,149.6	1,438.1	1,304.8
GA	Software systems; knowledge technologies	396.0	396.0	461.3	461.3
GB	Communication technologies and services	386.3	386.3	451.6	451.6
GC	Electronic, electronic systems	398.7	290.3	428.4	311.8
GD	Microsystems technology	49.9	49.9	52.0	52.0
GE	Multimedia, development of convergent information and communication technology	43.1	27.2	44.8	28.0
<b>H</b>	<b>Vehicle and traffic technologies including maritime technologies</b>	38.5	38.5	39.5	39.5
HA	Vehicle and traffic technologies	31.6	31.6	32.4	32.4
HB	Maritime technologies	6.9	6.9	7.1	7.1
<b>I</b>	<b>Aerospace</b>	138.7	138.7	142.3	142.3
IB	National space research and space technology	138.7	138.7	142.3	142.3
<b>J</b>	<b>Research and development to improve working conditions and in the service sector</b>	154.0	154.0	146.2	146.2
JA	Research to improve working conditions	145.3	145.3	137.1	137.1
JB	Research in the service sector	8.7	8.7	9.1	9.1
<b>K</b>	<b>Nanotechnologies and materials technologies</b>	831.7	831.7	797.7	797.7
KA	Nanotechnologies	455.4	455.4	416.1	416.1
KB	Materials technologies	376.3	376.3	381.7	381.7
<b>L</b>	<b>Optical technologies</b>	378.4	378.4	383.6	383.6
<b>M</b>	<b>Production technologies</b>	224.3	224.3	229.7	229.7
<b>N</b>	<b>Regional planning and urban development; construction research</b>	38.4	38.4	39.3	39.3
NA	Regional planning, urban development, housing	2.1	2.1	2.2	2.2
NB	Construction research	36.2	36.2	37.1	37.1

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**Expenditure on science, research and development by the Federal Ministry of Education and Research (BMBF), by funding areas and funding priorities<sup>1</sup>**

		Millions of €			
Funding area Funding priority		TARGET <sup>2</sup>			
		2022		2023	
		Total	Of which, R&D	Total	Of which, R&D
<b>O</b>	<b>Innovations in education</b>	1,011.2	533.3	868.7	514.6
OA	Educational reporting, international assessments	400.1	173.1	390.5	181.7
OB	Educational research	574.9	324.0	448.4	303.2
OC	New media in the education	36.2	36.2	29.7	29.7
<b>P</b>	<b>Humanities; economics and social sciences</b>	1,146.6	1,146.6	1,090.6	1,090.6
PA	Humanities research	637.5	637.5	663.1	663.1
PB	Social scientific research	206.3	206.3	211.8	211.8
PC	Economic and finance scientific research	53.7	53.7	55.0	55.0
PD	Infrastructures	249.0	249.0	160.8	160.8
<b>Q</b>	<b>Innovation funding for SMEs</b>	231.4	231.4	346.7	346.7
QB	Technology support for SMEs	9.0	9.0	9.2	9.2
QC	Technology transfer and innovation consulting	222.4	222.4	337.4	337.4
<b>R</b>	<b>Innovation-relevant underlying conditions and other cross-cutting activities</b>	1,198.7	1,032.0	1,180.1	1,011.2
RA	Technology Assessment	2.6	2.6	5.1	5.1
RB	Structural cross-cutting activities	660.5	553.5	718.4	607.8
RC	Demographical change	86.2	86.2	80.4	80.4
RD	Sports promotion and sports research	0.2	0.2	0.2	0.2
RE	Others	449.1	389.4	376.0	317.7
<b>T</b>	<b>Funding organisations, restructuring of the research field in acceding areas; construction of universities and primarily university-specific special programmes</b>	2,918.9	932.5	3,014.3	952.6
TA	Basic funding of research institutions	0.0	0.0	0.0	0.0
TB	Others	2,918.9	932.5	3,014.3	952.6
<b>U</b>	<b>Large-scale equipment for basic research</b>	1,583.3	1,583.3	1,658.7	1,658.7
<b>Z</b>	<b>Global reduced expenditure; budget reserve<sup>3</sup></b>	-509.2	-509.2	-484.0	-484.0
<b>Total expenditure</b>		<b>16,521.9</b>	<b>13,393.9</b>	<b>16,446.6</b>	<b>13,362.0</b>

1 According to the Federal Government's planning system 2009. Expenditure was implemented in accordance with the Federal Government's planning system 2009. Expenditure of non-university research organisations are distributed among funding areas and funding priorities. Discrepancies with regard to earlier publications are due to subsequent changes of assignments to funding areas and funding priorities or rather due to subsequent changes in the allocation to R&D. Possible rounding differences.

2 Distribution among funding areas and funding priorities partly estimated or extrapolated.

3 ACTUAL figures are needed to break down the BMBF's total expenditure reduction by funding areas and funding priorities.

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This table also appears in the Federal Report on Research and Innovation as Table 6.

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

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