

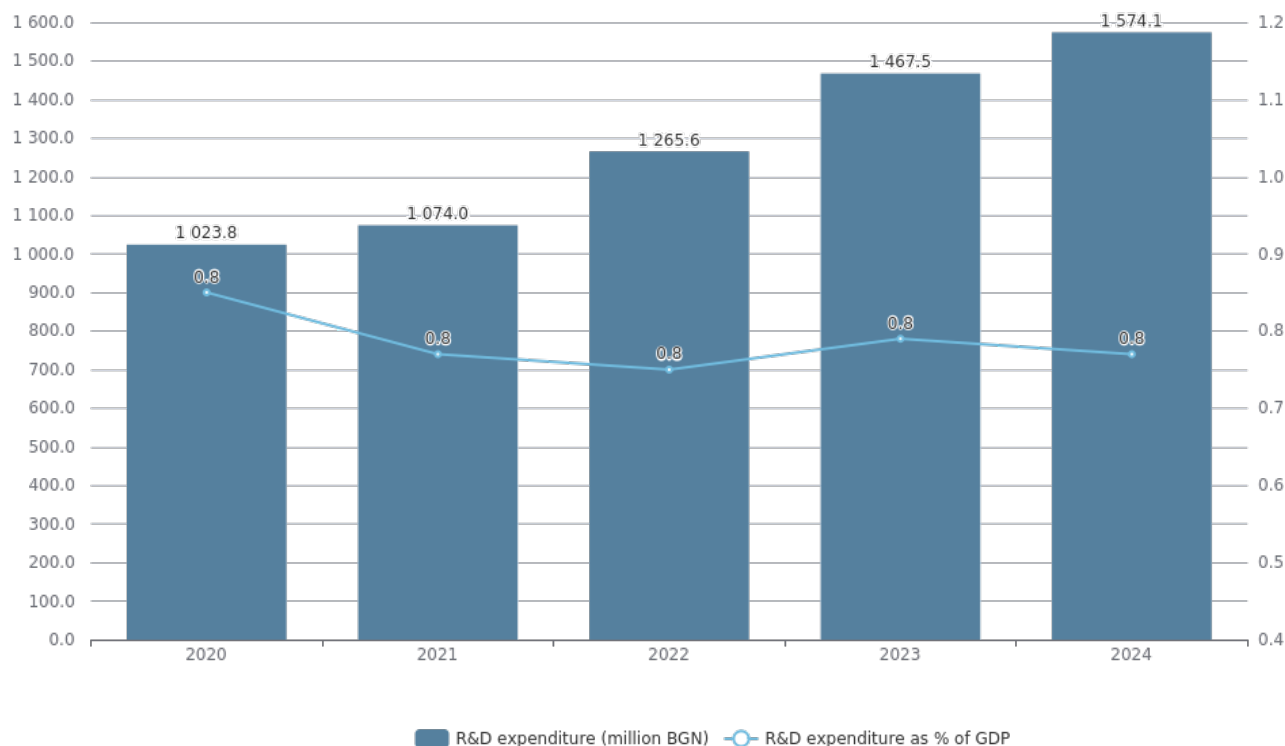


RESEARCH AND DEVELOPMENT ACTIVITY (R&D) - 2024 - PRELIMINARY DATA

In 2024, the total amount of expenditure on research and development activity (R&D) was 1 574.1 million BGN, which was 7.3% more than the previous year. The annual growth tendency is retained for the period 2020 - 2024.

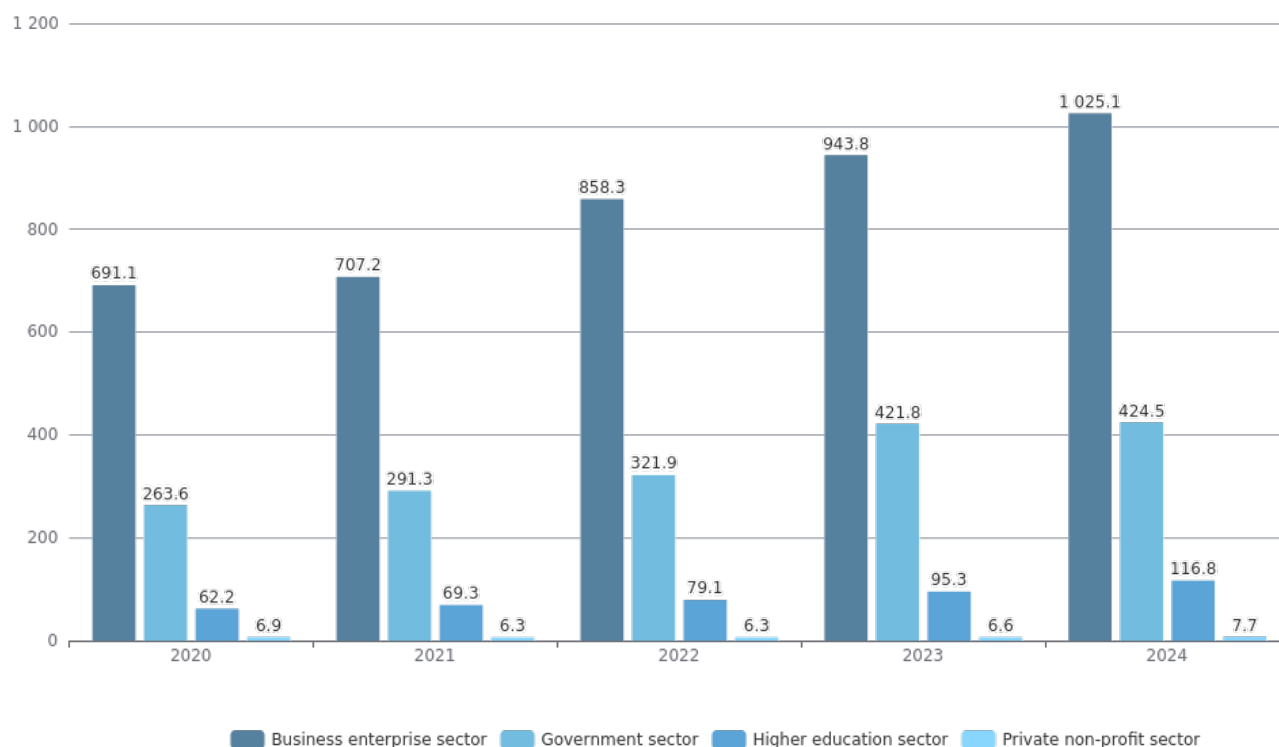
R&D intensity (R&D expenditure as a percentage of the gross domestic product) amounted to 0.77% and it was 0.02 percentage points lower than in 2023.

Figure 1. R&D expenditure



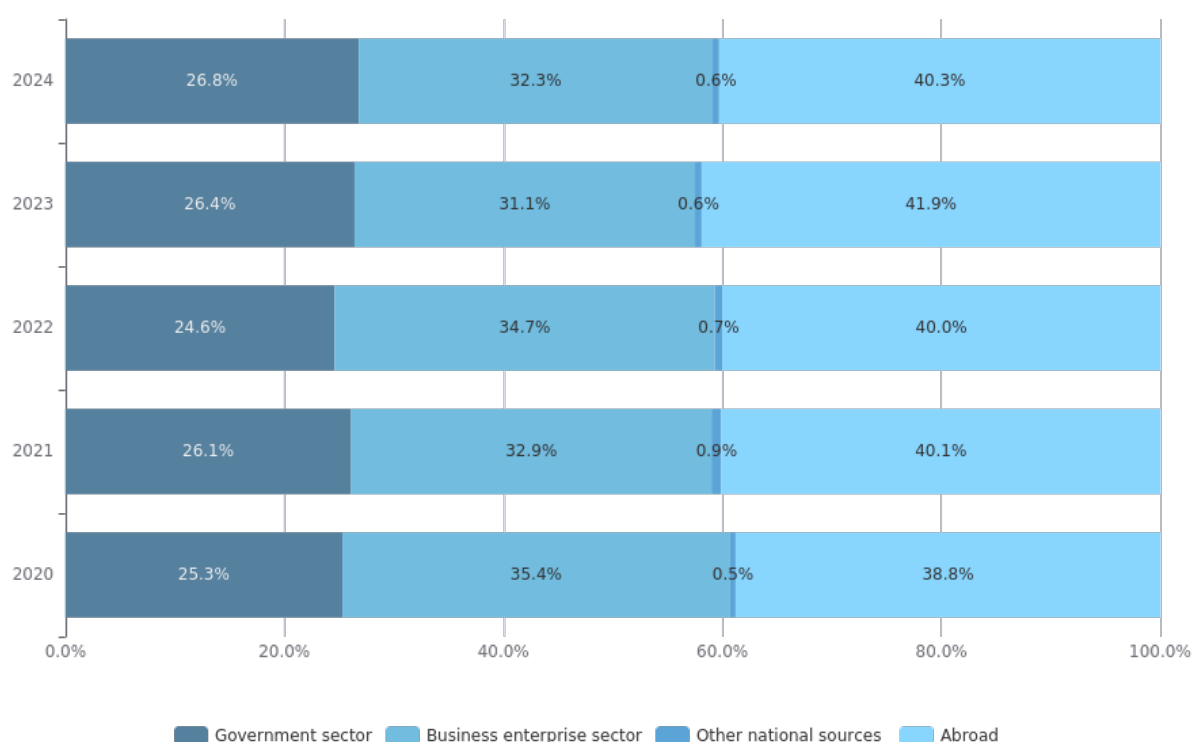
The Business enterprise sector was the largest of the four institutional sectors of R&D performance, with a share of 65.1% of the total R&D expenditure in 2024. It was followed by the Government sector, whose research institutes and organizations formed 27.0%. The spending on R&D by tertiary schools and university hospitals amounted to 7.4% and to 0.5% by the non-profit organizations, respectively.

Figure 2. R&D expenditure by institutional sectors (Million BGN)



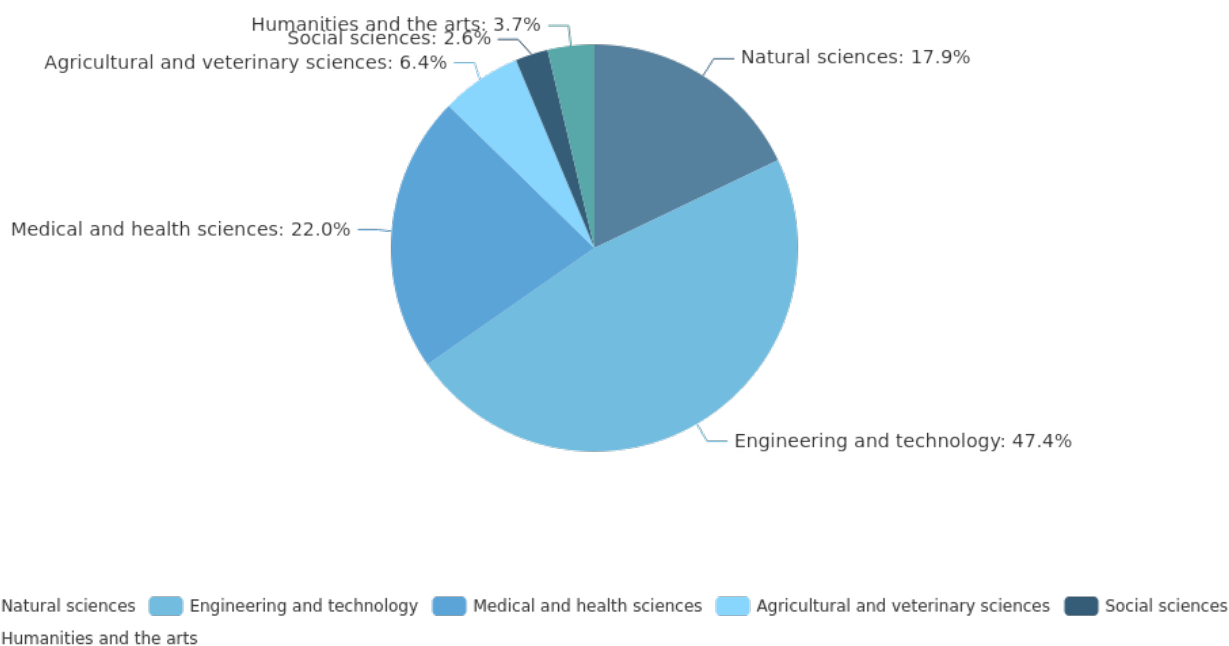
The R&D activity was financed from the state budget, businesses, other national sources and from abroad (Figure 3). In 2024, largest was the share of foreign sources of funds for R&D - 40.3%. The Business enterprise sector financed 32.3% of the total R&D expenditure, and the state budget - 26.8%.

Figure 3. Structure of R&D expenditure by source of funds



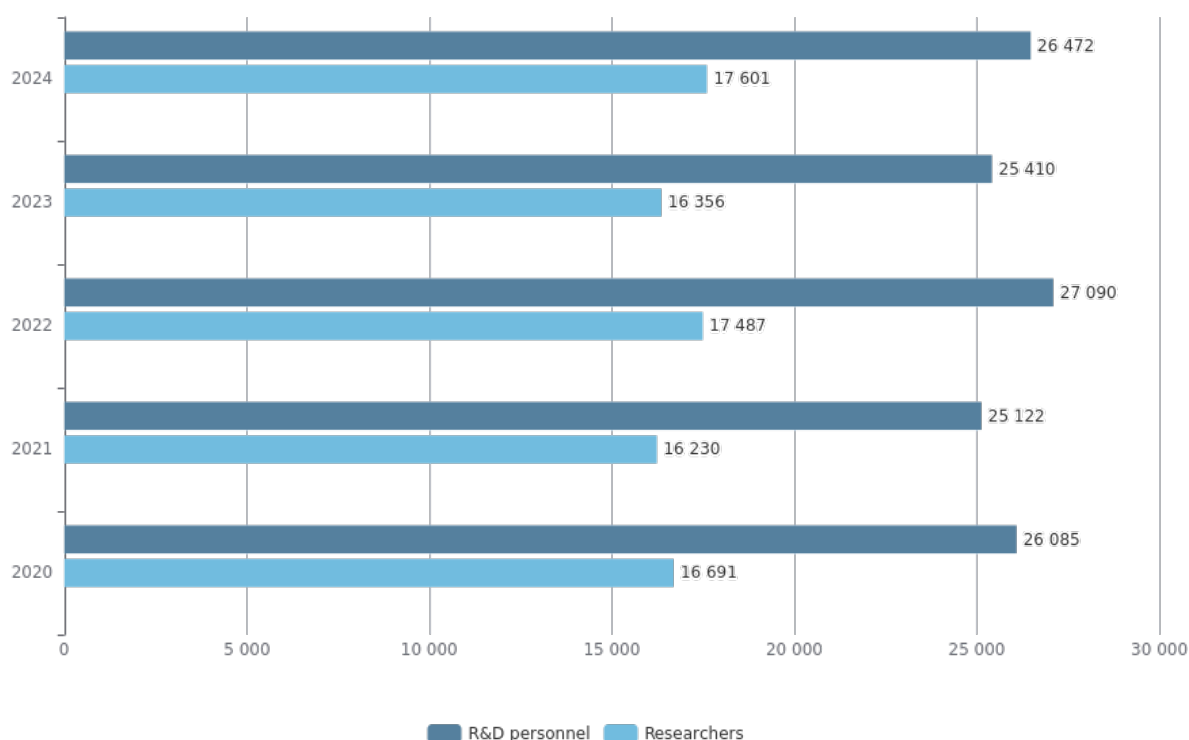
Regarding R&D expenditure by fields of science in 2024, as in the previous year, the highest share belonged to the R&D expenditure in engineering and technology sciences - 47.4% (746.2 million BGN), followed by the medical and health sciences with a share of 22.0% (346.0 million BGN) and the natural sciences - 17.9% (281.9 million BGN).

4. Structure of R&D expenditure by fields of science, 2024



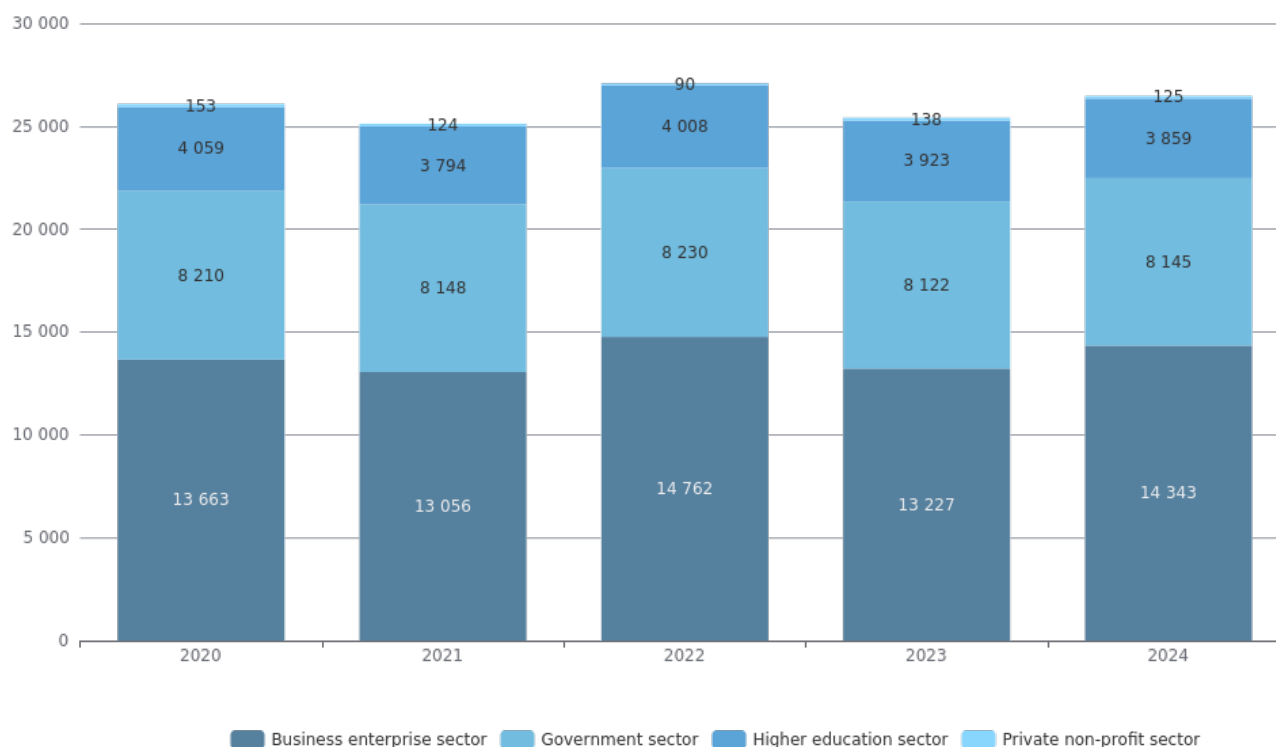
In 2024, the personnel engaged in research and development activity amounted to 26 472 persons (in full-time equivalent), which was 4.2% more than the previous year (Figure 5). The share of women in the total R&D personnel was 48.2%. The number of researchers in full-time equivalent was 17 601 persons, which was 7.6% more in comparison with 2023.

Figure 5. R&D personnel (in full-time equivalent)



In 2024, the main part of the R&D personnel was concentrated in companies and research institutes in the business enterprise sector - 54.2% of the total R&D personnel (in full-time equivalent), or 14 343 persons. In organizations and institutions of the government sector 8 145 persons were involved in R&D activity, which constituted 30.8%. In the higher education sector 3 859 persons carried out research and development, with a relative share of 14.6%.

Figure 6. R&D personnel (in full-time equivalent) by institutional sectors



Methodological notes

Research and experimental development (R&D) comprise creative and systematic work undertaken in order to increase the stock of knowledge - including knowledge of humankind, culture and society - and to devise new applications of available knowledge. R&D activity covers basic research, applied research and experimental development.

The indicator 'R&D expenditure' is defined as all expenditure for R&D performed within a statistical unit, whatever the source of funds. The R&D expenditure comprises current costs and expenditure for acquisition of tangible and intangible fixed assets on R&D.

The indicator 'R&D personnel' measures the human resources going directly into R&D activity, responsible for the creation, application and dissemination of new knowledge. R&D personnel include all persons engaged directly in R&D, as well as those providing direct support to R&D (R&D managers, administrators, technicians and clerical staff). R&D personnel comprise researchers and other R&D personnel. Personnel in full-time equivalent (FTE) are calculated on the basis of working time spent on R&D activity during the reference year.

According to the methodological manual 'Frascati' (Guidelines for Collecting and Reporting Data on Research and Experimental Development - Frascati Manual, OECD, 2015), adopted by Eurostat, R&D expenditure and R&D personnel are distributed in four institutional sectors:

- Business enterprise sector - includes all enterprises whose primary activity is production of market goods and services (other than those included in Higher education sector);
- Government sector - comprises all institutional units, which are non-market producers and provide common services to satisfy the individual and collective needs of society and which are predominantly budgetary financed (other than those included in Higher education sector);
- Higher education sector - includes all universities, colleges, other institutions of post-secondary education, research and development sectors of higher education institutions and university hospitals;
- Private non-profit sector - includes foundations, associations, etc. providing non-market services.

More information and data from the survey on R&D activity can be found in Information System [INFOSTAT](#).