

EUSALP & ALPGOV

“State of the art” of funding instruments at National level

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80 million people, 7 countries, 48 regions,
mountains and plains addressing together
common challenges and opportunities



Introduction

This document refers to the second report of activity 1 (research, mapping, comparative analysis and graphic design of the full framework of financial instruments in the area of research and innovation for the Alpine Macroregion) of the technical assistance service for strategic analysis and project proposal within the AlpGov project.

The subject of this report is a collection of the financial instruments related to R&I available at National level elaborated by EUSALP AG1 EU-Program Staff, in order to list and shortly describe them with synthetic fiche (integrated within the Platform of Knowledge)..

Subsequent releases will show the results at the 48 Regions' level and the final comparative and GAP analysis.

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1 Methodological report

1.1 Data source

The first step in the creation of this second report led to the analysis of the data in the section of business growth provided by EUROSTAT and the European Commission that allowed comparing the R&I investments and performance between Europe and EUSALP States. A brief comparison among Europe and the most innovative nation in the world was done.

http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en

<http://ec.europa.eu/eurostat/web/science-technology-innovation/overview>

In the first instance, the official sites of the Ministries were used (links are embedded in each State's section) in order to have a complete picture of the financial instruments of each EUSALP State, where Ministries invest differently parts of their budget in funds dedicated to research and innovation. Due to the fact that every single State has different ways of managing and communicating financing instruments, for some Countries, the sites referring to research and innovation agencies that directly manage the funds provided by the Ministries were used.

The second section, based on official national data, focuses on each State with reference to investments in research and innovation, as well as the description of any facility or agency that manages the funds.

The third and last section briefly describes the programmes and resources available for R&I within each EUSALP State.

We adopted these sources because they are accredited and constantly updated.

2 General analysis and comparison among the world and European reality

The European Innovation Scoreband¹ classifies each Member State into four different performance groups (average performance scores, calculated by the Summary Innovation Index):

1. *Innovation Leaders* with innovation performance more than 20% above the EU average (Denmark, Finland, **Germany**, the Netherlands, Sweden, and the United Kingdom).
2. *Strong Innovators* with a performance between 90% and 120% of the EU average. (**Austria**, Belgium, **France**, Ireland, Luxembourg, and **Slovenia**)
3. *Moderate Innovators* with performance between 50% and 90% of the EU average (Croatia, Cyprus, the Czech Republic, Estonia, Greece, Hungary, **Italy**, Latvia, Lithuania, Malta, Poland, Portugal, Slovakia, and Spain).
4. *Modest Innovators* with performance level below 50% of the EU average (Bulgaria and Romania).

Innovation performance in the EU continues to increase (EIS 2017 report), mainly thanks to improvements in human resources, innovation-friendly environment, own-resource investments, and attractive research systems.

The European innovation leader remains Sweden, followed by Denmark, Finland, the Netherlands, the UK, and **Germany**. Furthermore, Lithuania, Malta, the UK, the Netherlands, and **Austria** are the fastest growing innovators. In contrast, the EIS 2017 report emphasizes that while Europe is making progress in education and research, venture capital investments and the number of SMEs introducing innovations are falling. Another negative aspect concerns lifelong learning, which in general remains stagnant in Europe.

The EUROSTAT data for the year 2016 show that the Member States of the European Union (EU) spent all together over € 300 billion on Research & Development (R&D) (Source: Eurostat news release n.183/2017).

In a global comparison, R&D intensity in the EU was much lower than in South Korea (4.23% in 2015), Japan (3.29% in 2015) and the United States (2.79% in 2015), while it was about the same level as in

¹ The European Innovation Scoreboard provides a comparative analysis of innovation performance in EU countries, other European countries, and regional neighbours. It assesses relative strengths and weaknesses of national innovation systems and helps countries identify areas they need to address. http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_it

China (2.07% in 2015) and much higher than in Russia (1.10% in 2015) and Turkey (0.88% in 2015) (Source: Eurostat).

Focusing on EUSALP Member States, the following resources for research and development were allocated (the state of Liechtenstein is not present in the Eurostat data, while for Switzerland Confederation Eurostat data available regarding 2008 and 2012 are not comparable):

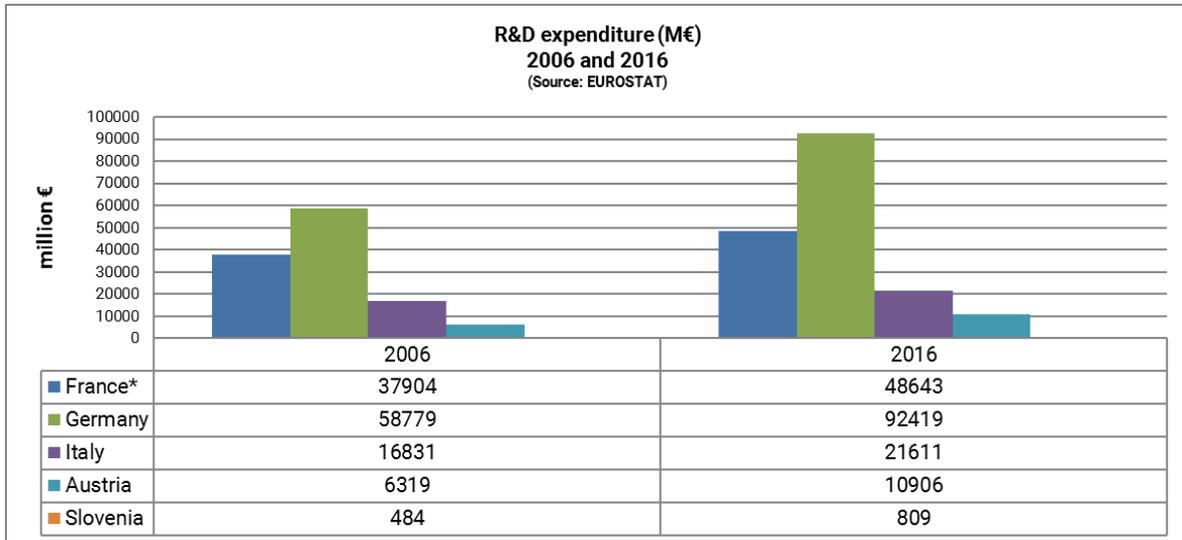


Figure 1 - Comparison 2006-2016 of EUSALP MS R&D expenditure in Million €. (* 2015 data instead 2016).

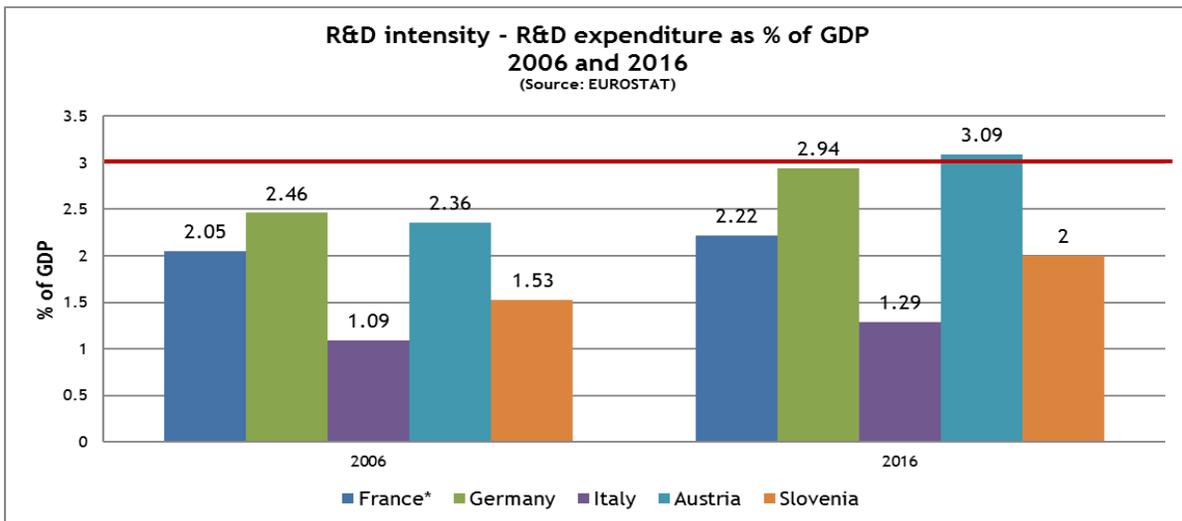


Figure 2 - Comparison 2006-2016 of R&D expenditure as % of GDP. The red line refers to European strategy 2020 target set to 3%. (* 2015 data instead 2016).

2.1 Focus on Member States

This second section based on official national data, is a focus for each State related to investments in research and innovation, as well as the description of any facility or agency that manages the funds.

2.1.1 Austria

The Austrian Ministry of Science, Research and Economy ([BMWF](#)) and the Austrian Ministry for Transport, Innovation and Technology ([BMVIT](#)) are responsible for research and technology, whilst the Ministry of Finance ([BMF](#)) allocates the financial resources.

Three main funding agencies, the [FWF](#) (Austrian Science Fund), [FFG](#) (Austrian Research Promotion Agency) and the [AWS](#) (Austria Wirtschaftsservice GmbH) manage the funding for research, technology development and innovation on behalf of the Ministries.

The Austrian Science Fund (FWF) is Austria's central funding organization for basic research. Its mission is to support the ongoing development of Austrian science and basic research at international level. The FWF contributes to the creation of value and wealth in Austria through cultural development and the advancement of the knowledge-based society.

In 2016, 624 projects received support from the Austrian Science Fund (FWF), amounting to a total of € 183.8 million (approval rate of 23.7%) (Source: www.fwf.ac.at).

The Austrian Research Promotion Agency (FFG) is the national funding institution for applied industrial research in Austria. The Agency offers numerous services to Austrian companies, research institutes and researchers. The FFG manages public funding programmes; provides consultancy services in all phases of technological development and innovation; supports integration with European research programmes and networks; promotes the interests of Austria at European and international level.

In 2016 the Austrian Research Promotion Agency (FFG) approved 3,186 projects with a total funding volume of € 398.3 million (cash value) and the approval rate for project proposals was 65.4% (Source: www.ffg.at).

Austria wirtschaftsservice (AWS) is Austria's national promotional bank. "AWS" offers financial assistance (loans, guarantees, grants and/or equity) and consultancy to companies, from the pre-seed phase up to the expansion stage.

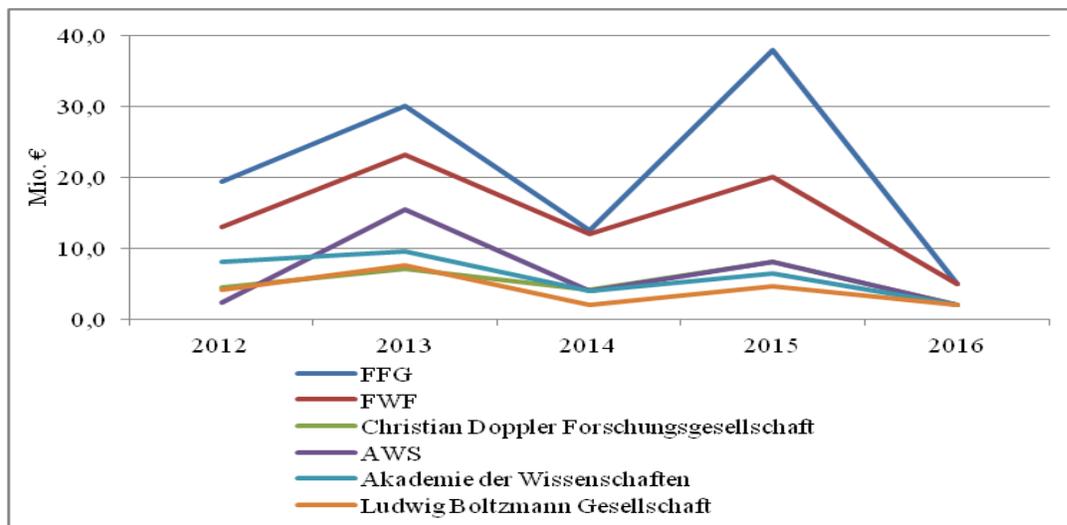
In 2016 the Austria Wirtschaftsservice (AWS) approved 3,874 funding applications (mainly credits and guarantees), with an overall financing volume of € 810.9 million. The approval rate (including competitions and calls for proposals) was 48.3% (70.5% for guarantees and 79.6% for credits) (Source: www.awsg.at).

	M € in 2016	% approval rate	N. of projects
FWF	183.8	23.7	624
FFG	398.3	65.4	3186
AWS	810.9	48.3	3874

Breakdown by beneficiary of the National Foundation for Research, Technology and Development (in M. €).

	2012	2013	2014	2015	2016
FFG	19.4	30.0	12.5	37.9	5.0
FWF	13.0	23.2	12.0	20.0	5.0
Akademie der Wissenschaften	8.0	9.5	4.0	6.5	2.0
Christian Doppler Forschungsgesellschaft	4.5	7.0	4.2	8.0	2.0
Ludwig Boltzmann Gesellschaft	4.1	7.6	2.0	4.6	2.0
AWS	2.3	15.5	4.0	8.0	2.0
Total:	51.3	92.8	38.7	85.0	18.0

Source: BMF



2.1.2 France

The national R&D expenditure (GERD) counts € 47.9 billion and represents the 2.24% of 2014 Gross Domestic Product (French superior instruction and research State, April 2017). In 2015 France had a well-balanced disciplinary profile qualified by a strong math specialization.

The gross domestic expenditure for experimental research and development (GERD = gross national expenditure per R&D) had a yearly mean growth 1.6% in the last 15 years. This growth was mainly related to domestic expenditure dynamism for R&D due to business (1.9% on average year basis).

The companies make 65% of research and development activities on domestic territory and finance 61% of the National Expenditure in R&D.

In 2014, funding of R&D by French businesses or the government, known as gross national expenditure on R&D (GNERD), accounted for € 51.4 billion, i.e. 2.40% of the country's national wealth (GDP). In 2014, businesses were the main funders of R&D activities, funding 62% of GNERD (diagram below).

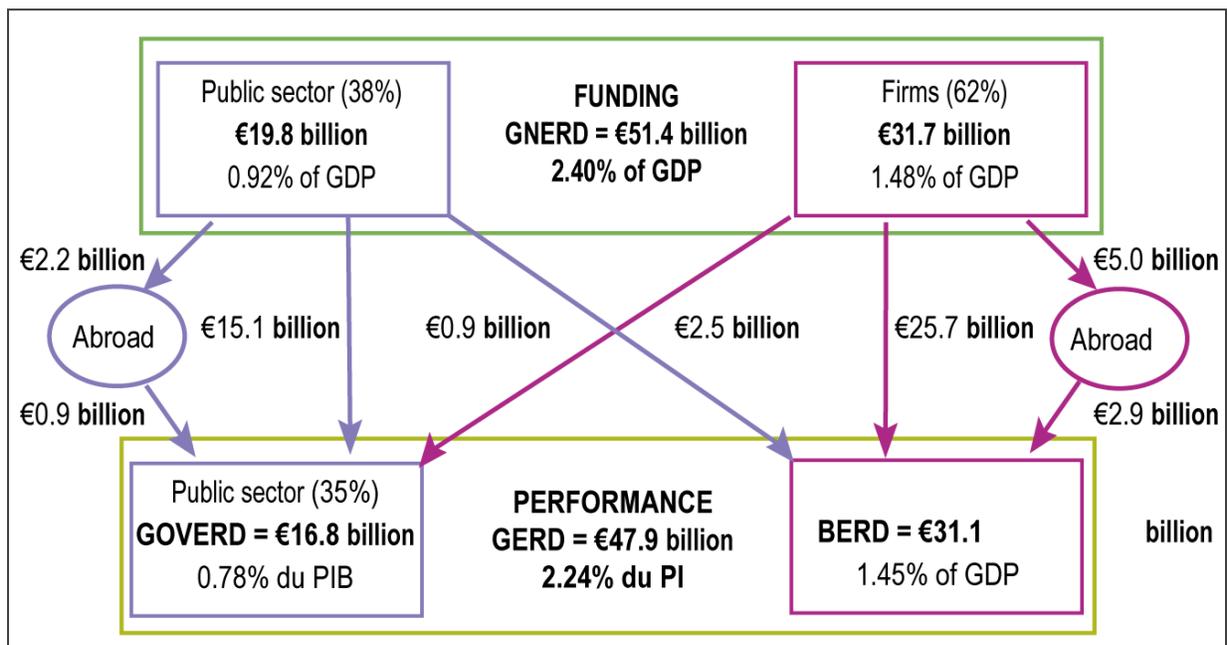


Figure 3 – Financing and execution of R&D in France in 2014 (Source: fiche 26 publication.enseignementsup-recherche.gouv.fr)

The French research policy is conducted by [M.E.N.E.S.R.](#) (Ministère de l'éducation, de l'enseignement supérieur et de la recherche). Research activities are carried out in higher education institutions and national research organizations (public research). In total, approximately 575,800 people are engaged in research and development in France, including 266,700 researchers (researchers and support staff).

Diagram below represents the organization of R&I in France.

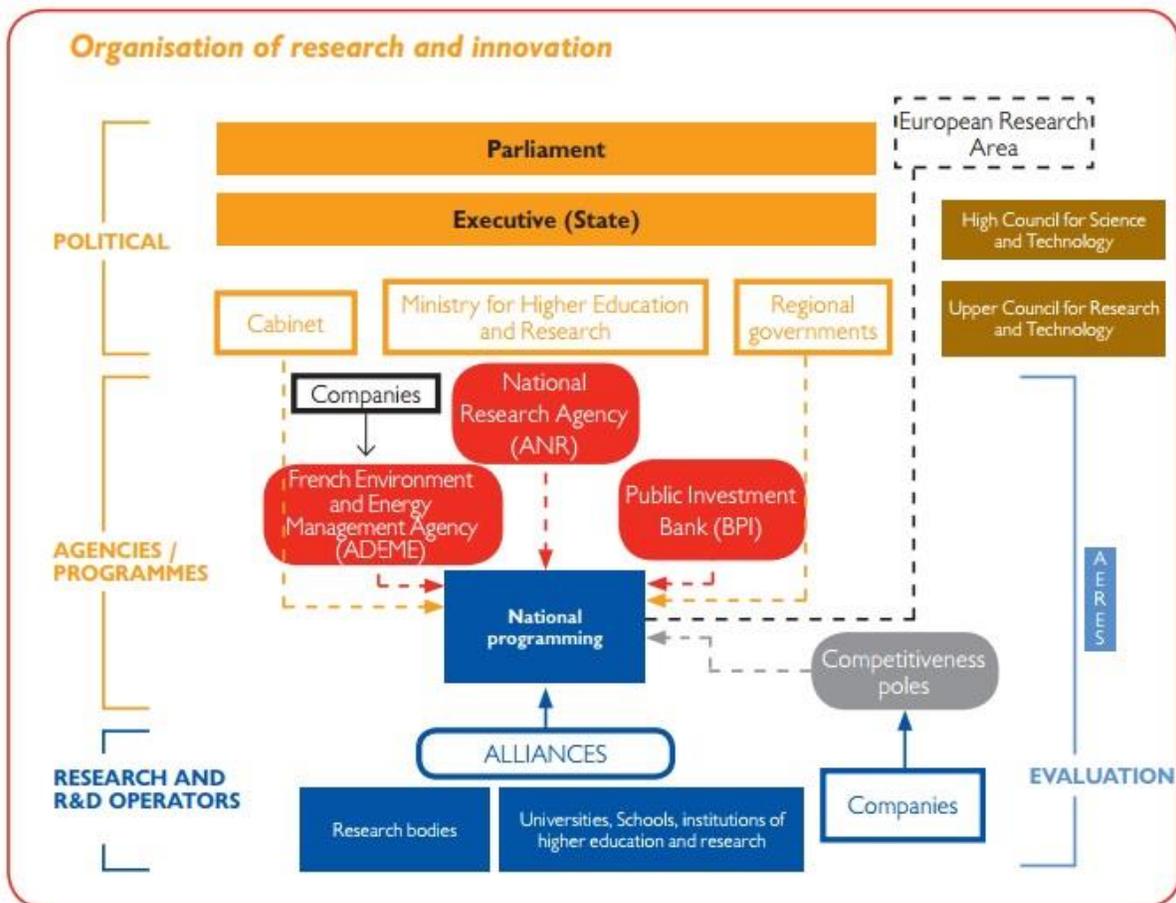


Figure 4 - Organisation of research and innovation in France. (Source: Strategy for Research, Development and Innovation 2014-2020 Period - ADEME).

Three public institutions manage a large part of public funds for research and innovation in France:

- **French Environment and Energy Management Agency (ADEME)**

ADEME is a public agency under the joint authority of the Ministry for an Ecological and Solidary Transition and the Ministry for Higher Education, Research and Innovation.

ADEME is responsible for the guidance, planning and coordination of research in the following areas of action: energy and climate; sustainable consumption, waste management and materials management; sustainable land management and preservation and remediation of environments (soil and air) (Source: ademe.fr).

The ADEME budget appropriations are spread over six main programmes:

- a) € 223 million for the "renewable heat" programme;
- b) € 191 million for the "Waste and circular economy" programme;
- c) € 45 million for the "Buildings" programme;
- d) € 13 million for the "Communication / Training" programme;
- e) € 26 million for the "Energy / Climate Territorial Initiatives" programme;
- f) € 27 million for the programme "Polluted sites and urban wastelands";
- g) € 30 million for the "Research" programme;
- h) € 35 million for other programmes.

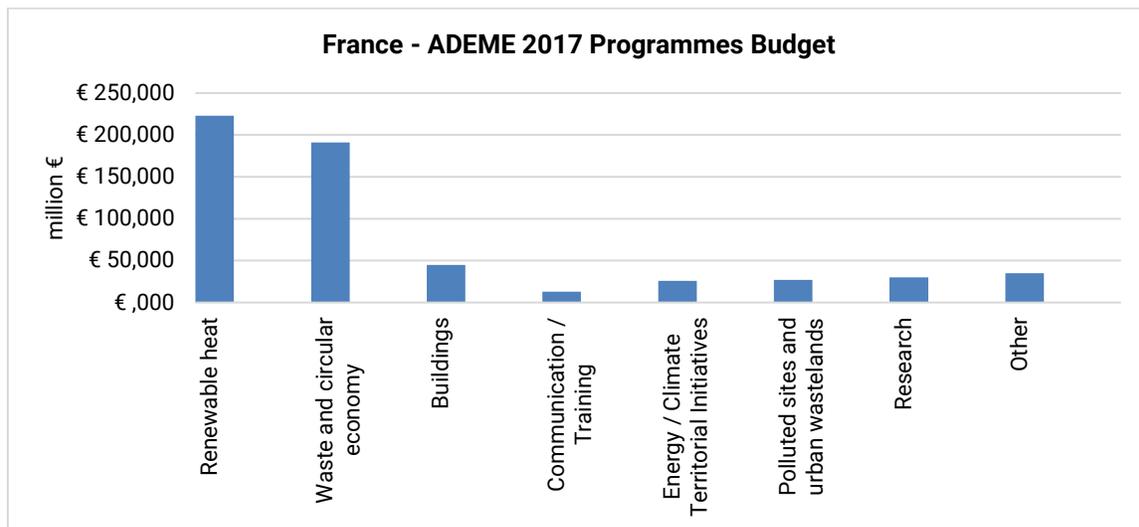


Figure 5 – ADEME budget appropriations in 2017. (Source: Ademe.fr)

- **National Research Agency (ANR)**

The National Research Agency ([ANR](#)) is a public administrative institution under the supervision of the Ministry responsible for research. ANR's mission is to implement funding for research projects in France.

Each year the ANR prepares a Work Programme that describes research priorities and funding instruments. The Ministry of Research annually allocates funds to calls for proposal to the agency basing on its WP framework.

Furthermore, in line with its mission as a project-based research funder, ANR establishes partnerships with other funders including:

- National Solidarity Fund for Autonomy (CNSA),
- Ministry of Defense (Defense Procurement Agency – DGA),
- Ministry of Health (General Directorate for Care Provision, DGOS),
- Ministry of Food, Agriculture, and Forests (MAAF),
- Ministry of Environment, Energy and the Sea (MEEM)
- General Secretariat for Defense and National Security (SGDSN).

The 2018 WP is divided into four cross-disciplinary components, each with its own budget. Each component has funding instruments, calls for proposals and special programmes. Each component uses a wide range of funding instruments (Source: Ademe.fr).

- Component 1 “Research and Innovation” described in the AAPG, combines both acquisition of fundamental knowledge and targeted, often finalized, research;
- Component 2 “Specific actions excluded from the AAPG”: actions focused on precise objectives justifying a very fast response or a particular system;
- Component 3 “Construction of the European Research Area (ERA) and international appeal of France”: make French teams and funding systems increase the extent and appeal of national research and contribute to construction of the ERA, available to research workers,
- Component 4 “Economic impact of research and competitiveness”: to develop partnerships with enterprises and transfer the findings from public research to the business community.

- **Public Investment Bank (BPI France)**

[BPI France](#), Public Investment Bank offers a lot of solutions to support the growth and internationalization of companies, and its main priority is to provide useful means for companies' innovation.

Supporting public policies, BPI France acts to meet three objectives:

- Support business growth;
- Prepare for future competitiveness;
- Contribute to the development of an ecosystem favorable to entrepreneurship.

The BPI France press release of 31/03/2016 points out that support and financing for innovation increased by 20% to a total of € 1.3 billion in 2015.

2.1.3 Germany

The German system is based on the coordination between the federal government (Bundesland) and the 16 states (Länder) through the Joint Science Conference (Gemeinsame Wissenschaftskonferenz, GWK), which develops multi-annual programmes for education, research and innovation.

The Federal Ministry of Education and Research ([BMBF](#)) has the greatest responsibility for research policies at the national level, while the Federal Ministry for Economic Affairs and Energy ([BMWi](#)) and the Federal Ministry of Defense ([BMVg](#)) are involved in some areas related to innovation and technology. At any rate, research and development in Germany are conducted by various public and private institutions.

A special feature of R&D in Germany is the involvement of large non-university research institutions, which apply for funds on a competitive basis. These mainly belong to the four leading research organizations of international renown:

- the Max Planck Society;
- the Fraunhofer-Gesellschaft;
- the Helmholtz Association;
- the Leibniz Association.

Another important institution is the **German Research Foundation (DFG)**, an autonomous association of private law for German science and research. The DFG is opened to all branches of science and humanities. It is composed of German research universities, non-university research institutes, scientific associations and academies of sciences and humanities. Most of the funds come from the federal government (67.7% in 2016) and the Laender (32.2 % in 2016), which are represented in all grants committees. (Source: [DFG website](#)).

The DFG 2016 annual report shows that over 31,000 projects have received almost € 3 billion of funding (for more details see the 2016 annual report).

Since 2005, the federal government and the Länder have concluded a "Pact for research and innovation" in order to strengthen the competitiveness of the scientific system. The agreement was last updated in December 2014 for the years 2016 to 2020. It applies to the German Research Foundation (DFG) and the four main non-university research organizations: the Fraunhofer-Gesellschaft, the Helmholtz Association, the Max Planck Society and the Leibniz Association.

Furthermore, the Stifterverband is a foundation association, which alone provides around € 22.5 million in funding for education, research and science.

The central contact point for any question concerning research and innovation funding in Germany, is the Federal Funding Advisory Service on Research and Innovation. Its range of duties include identifying suitable funding programmes, advising on the federal, state and EU research and funding scenario, assisting in the classification of project ideas and recommending specialist partners.

In 2015 the gross national expenditure on research and development (GERD) was around € 89 billion. The German private sector, which contributes about two thirds of total R&D funding, is also the main investor in new methods, products and applications.

Public research funding plays a major role in research and development in Germany, with almost one third of total spending provided by federal and state governments. Government is thus the main sponsor of research in Germany alongside the industry sector.

Hereafter a focus on 2017 target, regarding R&D Federal Government expenditure by departments: the total expenditure is € 17.2 billion.

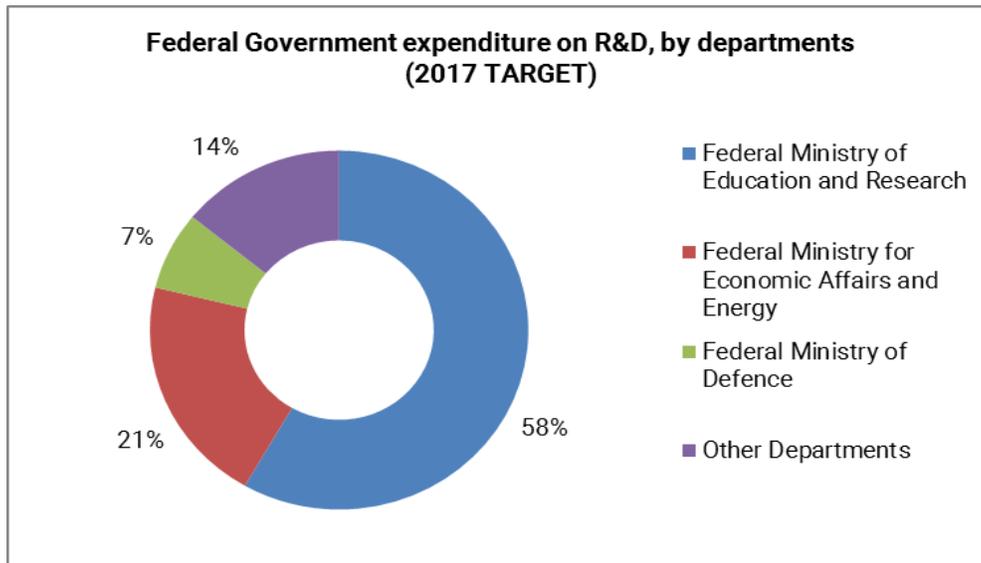


Figure 6 - Federal Government expenditure on R&D, by departments (2017 TARGET). (Data: Federal Ministry of Education and Research – BMBF’s Data Portal).

2.1.4 Italy

With the reference to the sources of financing, an ISTAT analysis reveals the fact that in 2015 spending on R&D was mainly financed by the private sector (companies and non-profit institutions). Private sector contributes up to 52.7% (about 11.7 billion), followed by the sector of public institutions with 38.0% (8.4 billion), and foreign financiers (companies, public institutions or foreign universities) participating in 8.3% of spending (1.8 billion) in R&D.

In 2015, in current price terms Italy’s gross domestic expenditure on Research and Development (GERD) was nearly € 22.2 billion, with an increase of 1.7% compared to 2014.

Italy’s Government support R&D activities, measured by the Government budget appropriations or outlay for R&D (GBAORD), grew comparing the forecast expenditure settled in 2015, passing from € 8.4 billion to € 8.6 billion. (Source: ISTAT).

Italian public research system and the sources of research funding are articulated and fragmented. In fact, in R&D sector, many relationships are activated by different subjects, included the interactions with foreign institutions and actors, generating a fragmentation and an overlap between the actions developed in the sector. Two large areas of reference get the public research funds: basic research and applied research. For both areas, funding supports projects defined as "strategic at national level" and

specific research projects conducted by research bodies, universities, consortiums or consortium companies, companies, foundations, etc.

In general, research (both basic and applied) is produced above all in the academic field and in public research institutions, with varying degrees of involvement of the private sector, but always with strong public support and non-profit institutions.

Public funds for Italian research are primarily of national origin, allocated through loans granted by the Ministries. The funding supports the public institutions in charge of research on one hand (Universities and public research organizations), the companies and other private entities that carry out research projects on the other hand.

The following Ministries invest in research: the Ministry of Education, University and Research ([MIUR](#)), the [Ministry of Health](#), the [Ministry of the Environment](#), the Ministry of Agricultural, Food and Forestry Policies ([MIPAAF](#)) and the Ministry for Economic Development ([MISE](#)).

The MISE manages, in addition to multiple funds dedicated to the development of the productive sector, the FIT (Fund for Technological Innovation), now known as the “Fund for sustainable growth”.

Currently, the main funds or programmes managed by MIUR are:

- the FFO (Ordinary Fund for Universities), intended for the overall functioning of the Universities;
- the FOE (Fund for Public Research Institutions), intended for the overall financing of Public Research Institutions supervised by the Ministry of Education;
- the PRIN (Research Projects of Relevant National Interest), intended for Universities;
- the FIRB (Basic Research Fund), for Universities and Research Institutes that collaborate with companies.

2.1.5 Slovenia

The R&D budget is divided between the [Ministry of Education, Science, and Sport](#) and the [Ministry of economic development and technology](#), and their respective agencies. The [Ministry of Education, Science, and Sport](#) is responsible for planning and implementing higher education, science and technology, and it publishes several public annual competitions and calls, including national and international scholarship programmes.

In 2016 the allocations of Slovenian government budget for research and development (GBARD) amounted to € 162.8 million. The budget appropriations foreseen for R&D for 2017 amounted to € 172.3 million. (Source: [SURS](#)).

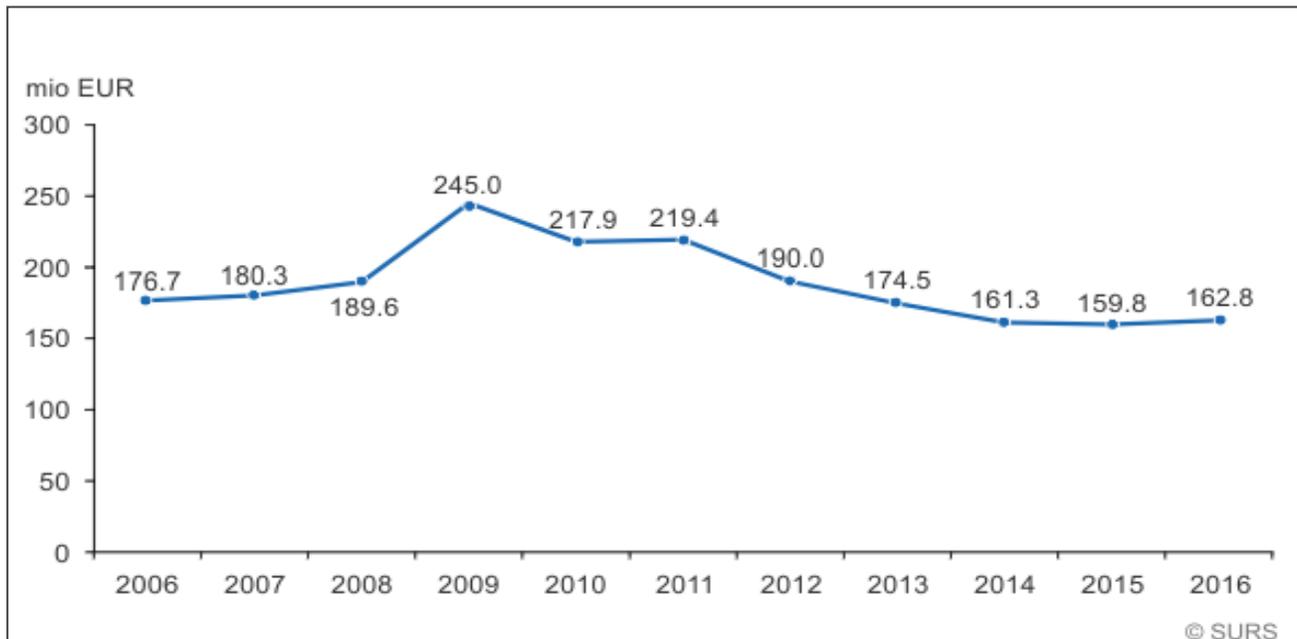


Figure 7 - Government budget allocations for R&D, final budget, Slovenia (Source: SURS).

The main agency dedicated to research and innovation is “Javna agencija za raziskovalno dejavnost Republike Slovenije”, abbreviated in [ARRS](#).

Slovenian Research Agency is a legal person of public law. The Article 4 of the Status of Public Agency of the Republic of Slovenia for Research Activity establishes that it *shall perform professional, developmental and executive tasks relating to implementation of the adopted National Research and Development Program within the framework of the valid budget memorandum and the national budget, as well as tasks of promoting research activity consistent with the purpose for which it was founded.*

Hereafter the diagram represent the “Funds for research programmes by discipline in 2016” (Source: ARRS website).

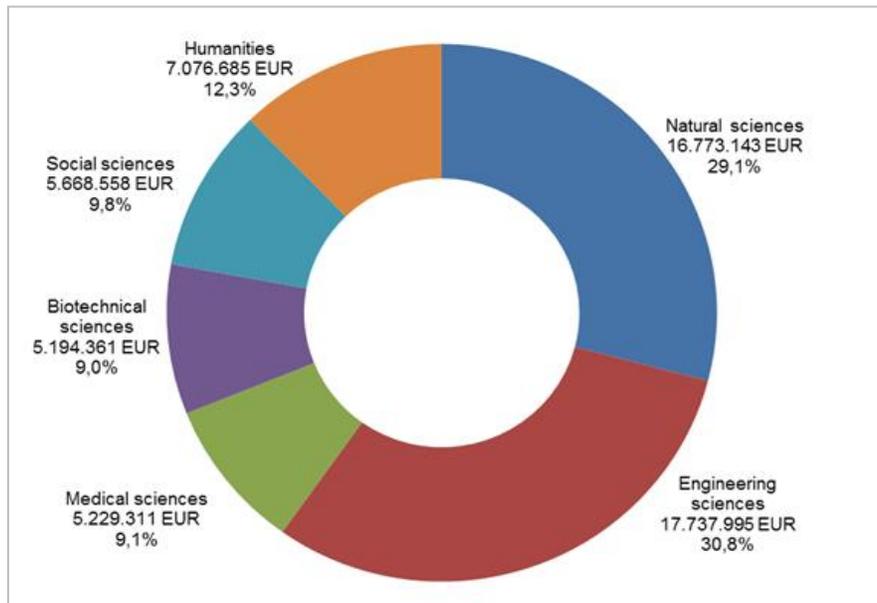


Figure 8 - Funds for research programmes by discipline in 2016 (Source: ARRS).

2.1.6 Liechtenstein

Liechtenstein is an industrial, commercial, service and education center with an international focus. The innovative strength of the economy is given by the lack of raw materials and mineral resources on the territory. In order to promote economic competitiveness, Liechtenstein supports and participates specifically in research programmes and institutions.

[The Ministry for General Government Affairs and Finance](#) has launched a platform to make “*Liechtenstein become a springboard for innovation*”: [IMPULSE Liechtenstein](#). The tool was created in order to provide an ideal ground for people to realize ideas and bring them to market, all within a government framework that supports the proposals. The solutions offered are **LVC** - an ideal legal form for the development of innovations, in order to provide innovators a more secure legal framework, and ensure fairer treatment in the early stages; the “**Innovation Club**” tool in order to “*provide businesses with an effective mechanism for telling the Government what they need, establishing a reliable process for promoting innovation in the operating environment or other areas in which the State is involved*”.

2.1.7 Switzerland

Switzerland is among the countries with the highest R&D expenditure in relation to their gross domestic product. The private sector supports the cost of over two thirds of R&D spending in Switzerland, which currently amounts to around 3% of GDP, or around CHF 16 billion. (Source: www.sbf.admin.ch).

The main Swiss research promotion bodies are:

- the Swiss National Fund for Scientific Research ([FNS](#));
- the Association of Swiss Academies of Sciences;
- the Commission for Technology and Innovation ([CTI](#)), Innosuisse in January 2018.

These bodies receive subsidies from the Confederation via the SERI (The State Secretariat for Education, Research and Innovation) to promote research and innovation. (Source: SERI website)

1. The **Swiss National Science Foundation** (SNSF) is a private foundation; it is the most important federal instrument for promoting research and nurturing the next generation of scientists. It will receive a federal credit of around CHF 4.1 billion between 2017 and 2020. The private foundation, which was set up in 1952, supports scientific research at universities and independent research institutes. The main thrust of the SNSF's activity is the financing of high-quality individual projects in the sphere of independent basic research. The promotion of young scientific talent is achieved through grants for future and advanced researchers, as well as exchange programmes with various partner countries. The SNSF has also been assigned by the Federal Council and Parliament to carry out various research solutions:
 - a) the National Research Programmes (NRPs)
 - b) the National Centers of Competence in Research (NCCR)
2. The **Commission for Technology and Innovation** (CTI) rebranded as **Innosuisse** (January 2018) is the Swiss Confederation's promotional body for science-based innovation. Its mission is to build bridges between research and the market with the aim of supporting and accelerating innovation processes. It works as a catalyst for innovation by bringing companies into contact with research institutes via innovation projects. Its tasks also include supporting science-based entrepreneurship, founding and establishing science-based companies. The CTI also supports the utilization of knowledge and the transfer of knowledge and technology between institutes of higher education, business and society.

CTI/Innosuisse main tasks are:

- Promoting innovation projects;
- Promoting entrepreneurship;
- Promoting knowledge and technology transfer (KTT) between universities and industry in order to foster innovative projects and start-up ideas.

The Federal Decree on the financing of the activities of the Commission for Technology and Innovation (CTI) in the years 2017-2020, dated 13 September 2016, defines the following amounts:

- CHF 139.2 million for the promotion of energy research (support of Swiss centres of expertise for energy research, promotion of specific innovation projects in the energy sector);
- CHF 35 million for the Bridge promotion programme, jointly managed by the CTI and the Swiss National Fund for Scientific Research.

3. Swiss Academies of Arts and Sciences is an association of four academies of sciences:

- a) the Swiss Academy of Sciences (SCNAT),
- b) the Swiss Academy of Humanities and Social Sciences (SAHS),
- c) the Swiss Academy of Medical Sciences (SAMS) and the Swiss Academy of Engineering Sciences (SATW).

Complemented by the centers of excellence TA-SWISS and Science et Cité, the association is intended to enable the expertise and resources of member institutions to be pooled together for the purpose of jointly addressing the following core tasks:

- i. Early identification and communication of socially-relevant developments in the areas of education, research and innovation, as well as their potential consequences;
- ii. Efforts to raise awareness of ethically based responsibility both in the production and practical application of scientific knowledge;
- iii. Fostering dialogue based on a partnership between science and society with the aim of promoting mutual understanding;

The academies serve as a bridge between science and society. They promote greater public understanding of scientific issues, foster cooperation with relevant institutions abroad and international organizations, conduct studies and research on science and science policy and support research work by providing scientific assistance.

The academies and centres of excellence will receive CHF 169 million in federal funding for the budgetary period 2017-2020.

3 Database analysis

This chapter is about data analysis collected per each EUSALP Member State.

3.1 Dataset overview

Database contains 43 National-Programmes and Funds.

The number of mapped programmes for each EUSALP status are shown in the following table:

EUSALP MS	N. National Programmes
Austria	11
France	9
Germany	7
Italy	6
Liechtenstein	4*
Slovenia	2
Switzerland	6

* of which 2 are agreements with neighboring states.

3.2 Focus on Member States

The following chapter contains the description and a comment of the data collected in the second analysis per each Member state.

3.2.1 Austria

- **COIN – Cooperation & Innovation (FFG)**

Since 2015, the Federal Ministry of Science, Research and Economy, through the [COIN program](#), helps to promote innovation in Austria through a better and wider transposition of knowledge.

Two funding lines form the programme:

The "Network" supports technology transfer focusing on production-oriented cooperation projects to develop and improve innovative products and processes.

The second "Aufbau" (capacity building) supports the construction of R&D & I skills and infrastructures at the universities of applied sciences and research centers, with the aim of increasing collaboration between the applied sciences and companies (in particular SMEs).

The total budget forecast for the period 2017-2018 is € 13 million.

- **CHRISTIAN DOPPLER RESEARCH ASSOCIATION**

The [Christian Doppler Research Association](#) promotes the cooperation between science and the private sector.

The objectives are:

- fund research-oriented basic research,
- offer companies effective access to new knowledge and
- operate in the interface between business and science.

The Austrian Science Fund (FWF) funds the basic research, while the Austrian Research Promotion Agency (FFG) primarily supports the research carried out by the companies.

The CD Laboratories have a budget between € 110,000 and € 700,000 per year. Financing takes place through the Federal Ministry of Science, Research and Economy, the National Foundation for Research, Technology and Development as public funding sponsors and by the companies as cooperation partners. (Source: cdg.ac.at)

- **General Programme (FFG)**

With its permanent open calls and wide range of funding models for the development of new products, processes and services, the FFG [General Programmes](#) strengthen the competitiveness of companies based in Austria.

The funding strategy of General Programme (experimental development) is fundamentally based on the bottom-up principle. It is open to all branches of industry and research topics and eligible to companies and projects of all sizes. General Programme aims to strengthen the competitiveness of companies based in Austria by funding the development of new products, processes and services. Co-operation with scientific partners as well as involvement of young researchers is possible. The financing can take the form of grants, subsidized loans, bank guarantees or interest subsidies.

In 2015, the Austrian Research Promotion Agency (FFG) allocated just less than € 233 million to the General Programme in funds (including liabilities and loans). (Source: Austrian Research and Technology Report 2016)

- **SME Package (FFG)**

The FFG [SME package](#) provides SMEs with adequate funding at every stage of their research and development activities.

Programmes within SME packages are easy to apply for SMEs and fast in terms of funding. For example: "Patent.Scheck" supports SMEs and start-ups at an early stage of issues related to the protection of their innovative ideas. "Projekt.Start" supports the preparatory work for a concrete research and development project in the FFG basic programme. With "Markt.Start", FFG supports small and medium-sized businesses in successfully bringing their innovations to market.

- **BRIDGE – the Programme (FFG)**

[BRIDGE](#) was established in 2005 as a joint initiative of FFG and FWF to promote projects at the interface between basic scientific research at institutes and experimental development in companies.

Funding is open to all research topics.

In 2015, the Austrian Research Promotion Agency (FFG) allocated more than € 17 million to the BRIDGE programme in funds (including liabilities and loans). (Source: Austrian Research and Technology Report 2016).

- **"Beyond Europe" – The Programme (BMFWF)**

The Federal Ministry of Science, Research and Economics (BMFWF) considers the extension and especially the operation in the field of internationalization activities as an important point, to strengthen the research position in Austria with measures that meet the challenges and current trends. [Beyond Europe](#) promotes this Federal aim.

The Budget (2016-2017) was € 4.6 million.

- **Future Mobility (BMVIT)**

The [Future Mobility](#) programme supports system-oriented innovation in the fields of passenger and goods transport based on user needs. Complementing these user-oriented themes, the programme also supports technical innovation in the fields of transport infrastructure and vehicle technology. This combination encourages development of synergistic solutions designed to address current mobility challenges and helps to create a sustainable future-oriented framework for mobility research.

In 2015, the Austrian Research Promotion Agency (FFG) allocated € 21.6 million to the Future Mobility programme in funds (including liabilities and loans). (Source: Austrian Research and Technology Report 2016).

- **STADT DER ZUKUNFT (FFG-BMVIT)**

The goal of [Stadt der Zukunft](#) programme is to develop new technologies, technological systems and urban services considering the single building, the district up to the entire city, in order to combine the highest resources efficiency with a high degree of attractiveness for residents and businesses.

In particular, the development of a sustainable energy system is a central concern of Austrian research and development policy. For energy research, therefore, the following objectives are pursued:

- Sustainable energy system;
- Reduction of the climatic impact;
- Increase competitiveness;
- Increasing the quality of research and development.

The budget available for 2017 -2018 is € 6 million.

- **ICT of the Future (BMVIT)**

The Austrian Federal Ministry for Transport, Innovation and Technology (BMVIT) finances "ICT of the Future", with the general aim of raising Austria to the level of Leader innovator in the European context. (Source: bmvit.gv.at/en/innovation/ict/index.html).

The programme aims to: develop leading technologies in the field of ICT at a global level, also interconnected with social challenges; reaching positions of leadership in competitive markets; establish and extend a driving position as a place of research; improve the availability of a sufficient number of qualified researchers as the backbone of the excellent research and development of ICT.. The available annual budget is approximately € 20 million.

- **Laura Bassi Centres of Expertise**

The "Laura Bassi Centres of Expertise" initiative programme is unique in Europe. It focuses on equal opportunities and a modern research culture interfacing science and industry. The aim is to provide an impetus to establish a new research culture in Austrian science scenario. (Source: General Information on the Interim Evaluation of "Laura Bassi Centres of Expertise").

For a total period of 7 years (2013 -2020), researchers have a budget of around € 25.5 million, including corporate contributions. (Source: ffg.at/content/die-laura-bassi-centres-2-foerderperiode)

- **Rural Development Program 2014 – 2020**

The [RDP](#) mainly supports investments that contribute to the environmental and climate topics, with the innovation of the rural sector as a transversal goal. The RDP therefore plays an important role in linking environmental and climate issues with the development of the competitiveness of the agri-food sector and rural businesses.

The Austrian Rural Development Program (RDP) has a 7-year budget of € 7.8 billion (€ 3.94 billion from the EU budget and € 3.76 billion of national co-financing, as well as € 111 million of additional national financing subsidies).

3.2.2 France

- **Programme d'Investissements d'Avenir - PIA3**

The Future Investment Program ([PIA3](#)) has three priorities:

- Education and public research (€ 2.9 billion);
- Research evaluation (€ 3 billion);
- Innovation and business development (€ 4.1 billion).

For a total of € 10 billion, in particular, PIA 3 will contribute € 6 billion to sustainable development and green growth.

PIA 3's goal of contributing to sustainable development and green growth is divided into three categories:

1. finance new technological solutions related to the energy transition, the circular economy, green chemistry, biodiversity conservation, mobility control, improvement of urban functioning. (for example: projects for the first commercialization of solar and wind energy technologies, or experimentation with a new mode of delivery in an urban environment);
2. impose eco-conditionality on project support, particularly in industry;
3. foster projects that indirectly contribute to energy saving and sustainable development.

- **BPI France, financial solutions**

The public institution *Banque Publique d'Investissement* ([Bpi France](#)) provides financial support for small and intermediate-sized enterprises and accompanies their innovation projects, from aid for R&D activity, to loans from its own funds for industrial development in innovative companies.

The innovation financing of the activities of companies are divided into two main categories:

1. individual assistance (in the form of subsidies, recoverable advances and zero-rate loans) and loans (start-up equity loans, innovation loans, etc.) provided by the Bpifrance network deployed in all of the Regions;
2. financing of collaborative projects (FUI, PSPC, FSN, IFP, CMI) carried out by the Bpifrance Expertise and Programmes Department in Paris, in the form of subsidies and recoverable advances.

In 2016 Bpifrance continued to serve as a center for innovation aid (grants, repayable advances and zero-interest loans), keeping the amount of its aid at € 1.3 billion. (Source: ANNUAL FINANCIAL REPORT Bpifrance Financement 2016).

- **BPI France - France Investissement Energie Environnement (FIEE)**

Bpifrance has strengthened its offer dedicated to the Energy and Ecological Transition (TEE) sector through the creation of the "France Investissement Energie Environnement fund" ([FIEE](#)), with a budget of € 100 million.

- **NATIONAL RESEARCH AGENCY**

As already defined in the previous section, the NRA draws up a work program and the financial instruments available each year.

Funds allocated to calls for proposals in the framework of the WP originate from the work subsidy assigned annually to the agency by the Ministry of Research (Source: [anr.fr](#)).

Two categories of funding instruments are used (WP2018) within the generic call for proposals (corresponding to the principal "Research and innovation" component) and their expectations and characteristics determine the key points in the selection and monitoring of projects:

- The "individual" category refers exclusively to the "Young Researchers" tool (JCJC).
- The "collaborative research" category offers three tools: "Collaborative Research Projects" (PRC), "Collaborative Research Projects involving the Enterprise" (PRCE) and "International Collaborative Research Projects" (PRCI).

The report of the 2016 ANR activity shows the allocations for each instrument "Generic call for proposal":

- - JCJC (€ 64 million);
- - PRCE (€ 23.5 million);
- - PRCE (€ 77.8 million);
- - PRC (€ 213.5 million).

- **Institut national de la santé et de la recherche médicale - ESPRI et ATIP Avenir**

To allow young researchers (without nationality restrictions) to create and manage a research team, INSERM and CNR launch an annual call for proposals in the framework of a partnership. The program ESPRI et ATIP Avenir therefore aims to promote mobility and attract young researchers.

The trained teams will work to strengthen the research of the host unit by independently developing their own research projects. Amount allocated is €270.000, minimum for 3 years.

- **FONDS FHF RECHERCHE ET INNOVATION**

The [FHF Research and Innovation Fund](#) was created in 2014 upon the initiative of the French Hospital Federation to unify all health innovators.

The Fund has been supported since its inception by partners such as: Sham, Sofaxis, MNH Group, Dalkia, Pasteur Mutuality Group and AIA Associés, to which many others are now added.

The FHF Fund supports innovative projects from their emergence to their diffusion.

Every year, the FHF fund aims to distribute the best innovations (medical, technological, social, organizational, educational, etc.) to as many public health institutions as possible. To this end, it carries out a wide range of monitoring and evaluation activities and implements a distribution system that includes the financing and management of changes, so as to guarantee an effective implementation of innovations within the institutions.

In 2017, the FHF Fund supported innovative projects, carried out in French public health institutions, associating an institution and a research group and focusing on organizational innovation. The selected projects received funding ranging between € 15,000 and € 50,000 per year, for a maximum of two years.

- **I-LAB**

The National Competition for the creation of enterprises was founded in 1999 and became i-LAB in 2014. It was created by the desire of the Ministry of Higher Education, Research and Innovation (MESRI) to encourage entrepreneurship, especially among students, recent graduates and researchers, to strengthen support for the creation of innovative businesses and better support for the development of start-ups.

The competition is open to all those who have an innovative project to create new products.

“[i-LAB](#)” in collaboration with Bpifrance, supports the best projects with significant financial support. The grant to finance the research and development program for the finalization of the innovative product, process or technological service can reach € 450,000 The loan is mainly provided by M.E.S.R.I., with the participation of Bpifrance Financement.

The total amount is € 12 million.

- **Fonds d'Expérimentation pour la jeunesse (FEJ)**

The Experimentation Fund for Youth ([FEJ](#)), under the authority of the Minister of Youth and Community Life, was established in 2009 by Article 25 of the Law n. 2008-1249 of 1 December 2008. In 2014 the FEJ became the instrument operational and financial framework of the presidential initiative entitled "France commits itself". The Total Group, a historical partner of the FEJ, is also involved in this new scheme, which is partially funded under the "Innovative Projects for Youth" program of the Future Investments Program (PIA3).

The fund aims to finance experimental programs aimed to fostering students' academic success, contributing to equality of opportunity and improving the sustainable social and professional integration of young people under the age of twenty-five. The FEJ stimulates innovative initiatives in the experimental field.

Based on three main criteria, 15 actions were selected to address the main issues in today's society: their innovative nature; their social usefulness and their ability to develop very quickly on the territory.

A permanent call for projects is launched on the FEJ website.

In the period 2014-2017, € 50 million were mobilized to support the development of socially innovative projects (including the share provided by the TOTAL group).

- **Single Interministerial Fund (FUI)**

The Single Interministerial Fund ([FUI](#)), finances synergetic R&D projects identified by the Competitiveness clusters (Pôles de Compétitivité), in order to support applied research, product development or services with a Time-to-Market of approximately 5 years.

The characteristics of a project financed with the FUI are the following:

- No imposed theme.
- Collaborative project with at least 2 industrialists and 1 academic.
- Project size from € 1.5 to 6 million (average size).

Since 2005, all requests for projects for competitiveness clusters have allowed to support 1,735 projects, for an amount of R&D expenditure of almost € 7.3 billion, a public funding of over € 2.9 billion of which more than € 1.7 billion from the State. (Source: competitivite.gouv.fr/les-financements-des-projets-des-poles/les-appels-a-projets-de-r-d-fui-375.html)

3.2.3 Germany

- **Industrial Community Research (IGF)**

The program aims to promote research projects, scientific and technological development and pre-competitive research. Another important aspect of the program is the dissemination of results, particularly among SMEs.

Scientific and technical research projects are eligible for support without particular attention to specific technological sectors. Research projects must be transversal, have new knowledge, particularly in the field of exploitation and use of modern technologies, and bring economic benefits to the group of SMEs. There are also special financing options such as "Leittechnologien für KMU", "PLUS" and "CORNET" which serve to promote the transfer of knowledge and development of the network, or to thematically link research projects, from basic research to application or to connect them internationally.

The [Federal Ministry for Economic Affairs and Energy](#) currently provides around €169 million for outstanding research projects and for creating networks between SMEs and research institutions.

- **Inno-kom**

The aim of the funding program is to support the innovative capacity of non-profit external research institutions to enhance the innovative strength of structurally weak regions in Germany in a sustainable way.

The eligible projects fall into the following categories: preliminary research projects (VF); market-oriented research and development projects (MF); Contributions to investments (IZ). (foerderinfo.bund.de/de/inno-kom-820.php). In 2017, € 71 million were foreseen for this purpose. (Source: Financial Report 2017 – BMF).

- **WIPANO**

[WIPANO](#) is a financing program of the Federal Ministry of Economics and Energy (BMWi), which supports and promotes innovative standardization projects and the protection of intellectual property. In particular supports universities and non-university research institutions in the identification, protection and marketing of research results.

The grant is paid in the form of equity financing (maximum 70% of the eligible expenditure, the total amount of the grant per project is limited to € 84,000).

- **GO-INNO**

[Go-INNO](#) promotes external consultancy for the preparation and implementation of process and technical innovations through:

- Potential analysis (e.g. profile of strengths and weaknesses, marketability of planned innovation, time required)
- Concept of implementation and / or project management (e.g. determination of appropriate technology providers, monitoring through management of external projects).

In 2017, € 7.3 million were available (for the measure "BMW innovation bonuses (go-Inno)" and central advisory centres). (Source: Financial Report 2017 - BMF).(foerderinfo.bund.de/).

- **Innovative SMEs (KMU-INNOVATIV)**

The Federal Ministry of Education and Research (BMBF) has opened a number of its specialized programmes of research funding especially for projects of cutting-edge research in SMEs. The industrial research and pre-competitive development projects are funded to strengthen the innovation capability of SMEs in Germany.

- **Zentrales Innovationsprogramm Mittelstand (ZIM)**

[ZIM](#) is the basic programme of the Federal Ministry of Economics and Energy (BMWi) for market-oriented technology funding of innovative SMEs in Germany. The programme offers SMEs a transparent funding opportunity with coordinated uniform funding conditions. In this context, funding is provided for financing cooperation, network projects and individual projects. Within ZIM there are different possibilities to cooperate with transnational partners.

For 2017 financial amount is around € 548 million. (Source: Financial Report 2017 - BMF)

- **INNOVATION PROGRAMME of Federal Ministry of Food and Agriculture (BMEL)**

The aim of the [innovation program](#) is to support innovation in Germany in all sectors of agriculture and the food industry. The funding supports the development of innovative and internationally competitive products, processes and services based on new scientific evidence. Furthermore, practical innovations are supported on behalf of the Landwirtschaftliche Rentenbank. The German Agricultural Innovation Partnership (DIP) supports promising, already funded projects in order to provide, for example, products developed to the market.

The program topics range from the selection and protection of plants, agricultural technology and sustainable land management, livestock breeding, animal husbandry and health, food safety and consumer health protection.

About 36 million €/year are foreseen for the implementation of the program.

3.2.4 Italy

- **Programma Nazionale per la Ricerca 2015-2020 (PNR)**

The financial investment of the Ministry of Education, University and Research in the [PNR](#) is about € 2.5 billion of resources in the first three years, moreover the MIUR each year allocates a further € 8 billion of funding to Universities and Public Research Institutions.

The PNR 15-20 defines six programs consistent with six macro-objectives:

- Internationalization, coordination and integration of national initiatives with European and global initiatives;
- centrality of investing in human capital;
- selective support for research infrastructures;
- public-private collaboration;
- the South;
- efficiency and quality of expenditure (preparatory to all the others).

Each of these macro-objectives corresponds to an intervention program and the specific lines of action. The 15-20 NRP does not identify priorities among the different disciplines, but proposes an organization in twelve areas: Aerospace; Agrifood, Cultural Heritage; Blue growth; Green chemistry; Design, creativity and Made in Italy; Power; Smart factory; Sustainable mobility; Health; Smart, Secure and Inclusive Communities; Technologies for Living Environments.

- **NOP Governance and Institutional Capacity ESF-ERDF 2014-2020**

The Programme Governance and Institutional Capacity contributes to the objectives of Europe 2020 through institutional capacity-building, by supporting the national PA reform strategy and enhancing coordination between the various levels of government in the implementation of public investments and Administrative Capacity-Building Plans. The measures are intended to innovate the methods, models, procedures and manners in which the services, solutions and tools are offered, for a more efficient and effective Public Administration, closer to the territories, citizens and businesses. (Source: <http://www.pongovernance1420.gov.it/en/>).

The Programme has a financial envelope of € 827,699,996.00, comprising EU and national resources. The national resources amount to € 243,899,999.00. More developed regions (North and Centre of Italy) have a financial envelope of € 101,999,994.00 (12.32% of the total budget).

- **Programma Nazionale di Ricerca in Antartide (PNRA)**

The [National Program of Research in Antarctica](#), is financed by Ministry of Education, University and Research (MIUR) and is in its thirty-third (XXXIII) Antarctic campaign (2017-2018).

The strategic direction and the evaluation of the research to be financed and implemented in Antarctica is entrusted to the National Scientific Commission for Antarctica.

The CNR (National Research Council) ensures the scientific coordination of activities and, in agreement with Miur and Csna, provides for the dissemination of results and management of scientific data.

The shipments, the responsibility of the organization in the operational areas and the management of the infrastructures are entrusted to the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA). The financial requirement of the PNRA for the three-year period 2012-2014 was estimated at a total of € 70 million (source: "*Strategic planning for the three-year period 2012-2014*").

- **National Rural Network Programme 2014- 2020**

The [National Rural Network Programme](#) supports agricultural development policies through the exchange of experiences and territorial knowledge, aims to improve the implementation and management of rural development programs.

The planned budget for 7-year period is almost € 115 million (€ 59.6 million from the EU budget and € 55 million national funding).

- **Fondo per la crescita sostenibile**

In 2012, with the "Decreto Crescita", the FIT - Fund for technological innovation took the name of "[Fund for sustainable growth](#)".

The Fund has three strategic lines of action:

- the promotion of research, development and innovation projects;
- the re-launch of areas that in crisis situations through the signing of program agreements;
- the promotion of the international presence of companies and the attraction of investments from abroad.

In addition there are the '*Special Projects for Development and Competitiveness*', i.e. integrated actions aimed both at consolidating the production structure and internationalization. The benefits of the Fund are granted in the form of subsidized financing. The total amount is € 600 millions.

- **PRIN**

The [PRIN program](#) (Research Projects of Relevant National Interest) finances public research projects to favor the strengthening of national scientific bases and make more effective the participation in the initiatives related to the European Union Framework Programs.

Projects can address issues related to any research field (and related sectors) in the context of:

Life sciences (LS); Physical, chemical and engineering sciences (PE); Social sciences and humanities (SH). The program is divided into three distinct lines of intervention:

- "Principale" with a budget of € 305,000,000.00;
- "Giovani" with an endowment of € 22,000,000.00;
- "Sud" with a budget of € 64,000,000.00.

The total amount for 2018 is € 391 million. (Source: <http://www.miur.gov.it/web/guest/-/bando-prin-2017>).

3.2.5 Liechtenstein

- **Innovationsscheck**

The objective of this funding program is to facilitate Liechtenstein's small and medium-sized enterprises (SMEs) to launch continuous research and innovation activities and to reduce obstacles to cooperation with research institutions. SMEs can use the know-how of research institutes and thus gain access to the latest state of science. SMEs can turn to research institutes and universities and take advantage of tailor-made research and development services. SMEs have the opportunity to individually involve the best scientific experts from Liechtenstein or around the world for their innovative ideas and projects. The funding program aims to facilitate Liechtenstein's small and medium-sized enterprises (SMEs) to launch continuous research and innovation activities and to reduce obstacles to cooperation with research institutions. The Budget available is 300.000 CHF.

- **KTI Zusammenarbeit mit Liechtenstein (switch to Innosuisse from January 2018)**

In November 2016 the Government of the Principality of Liechtenstein and the Swiss State Secretariat for Education, Research and Innovation (SERI) signed an agreement, which allows Swiss and / or Liechtenstein companies to launch projects with Liechtenstein research institutions without restrictions.

CTI (Confederation's innovation promotion agency) provided some CHF 200 million in funding every year. From 1 January 2018, Innosuisse took over the functions of the CTI. (Source: CTI – a successful chapter for Switzerland 1996 to 2017).

- **Schweizerischer Nationalfonds (SNF)**

Since 1969, the Principality of Liechtenstein has granted the SNSF an annual contribution of CHF 50,000.00. On behalf of the Confederation, the SNSF finances basic research in all scientific disciplines. An agreement between the Government of the Principality of Liechtenstein and the SNSF enables Liechtenstein citizens and persons residing in Liechtenstein to benefit fully from the services and grants.

- **Österreichischer Wissenschaftsfonds (FWF)**

An agreement between the Government of the Principality of Liechtenstein and the FWF allows Liechtenstein citizens and persons residing in Liechtenstein to fully benefit from services and funding.

3.2.6 Slovenia

- **Agency for R&I**

Three instruments are involved for stable funding and steady allocation of funds for research groups:

- Research programmes
- Infrastructure programmes
- Founding obligations

The research groups are either formed inside a research organization (universities, other institutes) or include researchers affiliated to other research organizations. Started in 1999, nowadays this instrument funds about 300 research groups.

Every 6 years the research groups are evaluated according to evaluation criteria such as scientific excellence, impact, as well as research group vitality. Only foreign experts are in charge to carry out the peer reviewing of the research-group works.

One aim of the evaluation procedure is to determine the volume of fund for the following period which depends on the funding volume of the previous period, scores, and effectiveness of research groups in getting funds from the Agency's research projects. In addition funds can be obtained from international projects, research for business and other public institutions too.

- **Target research programmes (CRP)**

In 2001 a system for inter-sectoral cooperation for planning and implementing R&D projects was created for specific areas of public interest, called CRP, target research programmes.

The Ministry Holding Portfolio of Science in cooperation with Agency and other Ministries, adopted these CRP programmes as a special form of scientific and research programme, which contributes to set and implement strategic objectives for Slovenian development. Ministries in cooperation with other involved users, design CRPs and public/private research entities carry out the projects.

The objective of CRP is to guarantee a research support, target oriented for the following points:

- Preparation of documents for long term development plans, as well as solutions for implementation at different levels and priority areas: national, inter-ministerial, inter-departmental, inter-sectoral, individual;
- Evaluation and monitoring of the implementation of basic policies, based on the documents on pt.1 and related systemic solutions;
- Implementation of policy objectives and measures able to adapt the system to changes of domestic/international circumstances,

CRP programmes can be inter/multi-disciplinary and inter-institutional. The following CRPs are currently available (06.03.2017):

- Resolution and strategic orientation of development of Slovenian agriculture and food industry in 2020 with different amounts already invested (2011 – 408000 €, 2012 – 376000 €, 2013 – 410000 €). Until 2020 the investment will be almost equal and depending on budgetary funds.
- Declared institutional interests (2015 onwards)

- **Rural Development Programme (National)**

The RDP of Slovenia supports actions regarding restoring, preserving and enhancing of ecosystems related to agriculture and forestry, competitiveness of agri-sector and sustainable forestry, and social inclusion and local development in rural areas.

The planned budget for 7-year period is € 1.1 billion (of which € 838 million from the EU budget).

3.2.7 Switzerland

- **BRIDGE**

Bridge is jointly managed by the CTI and the Swiss National Fund for Scientific Research.

Bridge includes two types of activities:

- Bridge Proof of Concept supports young researchers who aim to develop an application or service based on their research results. Projects can be targeted at any type of innovation or research field.
- Bridge Discovery is aimed at experienced researchers. The goal is to facilitate interactions between basic and applied research in order to realize the innovative potential of research

results. The projects presented must focus on technological innovations, but should also demonstrate the social and economic impact of the innovation to be developed. Bridge Discovery allows researchers to continue their vision during the critical pre-competitive phase. CHF 70 million has been earmarked for this purpose for 2017–2020. (Source: bridge.ch/de/)

- **National Research Programmes (NRPs)**

The national research programmes ([NRP](#)) generate scientific knowledge aimed at solving the most urgent problems, the projects are therefore focused on interdisciplinary and trans-disciplinary research, as well as technology transfer. NRP projects are solution-oriented and closely coordinated with other projects of the programme (data exchange, methodology seminars, exchange of preliminary and final results, collaboration on the programme synthesis).

The potential themes and priorities for a NRP can be proposed to the State Secretariat for Education, Research and Innovation (SERI) from: federal offices, research institutes, research groups or individuals. The Federal Council makes the final selection of the topics.

The NRPs have a duration of six to seven years and have a budget of CHF 10-20 million.

- **Sinergia – interdisciplinary, collaborative and breakthrough**

[SINERGIA](#) provides funding for collaboration projects consisting of groups based at different research institutions. The Sinergia grants aim to support experienced researchers from different research areas who can collaborate to do pioneering research, pursue new research topics / enter new fields of research. There is a fixed time window for submitting applications (1st June – 1st December). The total amount for 2016 was CHF 40.7 million. (Source: SNF Statistics 2016 – full version).

- **Swiss Programme for Research on Global Issues for Development (r4d programme)**

The joint r4d programme between the Swiss Agency for Development and Cooperation (SDC) and the Swiss National Science Foundation (SNSF) is aimed at researchers in Switzerland and in developing and emerging countries who wish to carry out inter- and trans-disciplinary research projects.

From 2012 to 2022, the r4d programme has a total budget of CHF 97.6 million. (Source: snf.ch/en/funding/programmes/r4d-programme/Pages/default.aspx#Documents).

- **Investigator initiated clinical trials (IICT)**

The special programme for Investigator Initiated Clinical Trials (IICTs) of the Swiss National Science Foundation supports independent clinical studies. The studies must be of great clinical relevance and of public relevance.

For 2017, the SNSF has allocated a total of CHF 10 million.

(Source: snf.ch/en/funding/programmes/iict/Pages/default.aspx#).

- **SwissEnergy Programme**

The [SwissEnergy](#) programme was set up by the Federal Council to promote energy efficiency and renewable energy.

The programme consists of five main topics (mobility, electrical appliances and electricity efficiency, Industry and services, Building, Renewable energy) and three horizontal priorities (Cities / towns / areas / regions; Initial and continuing education; Communication).

The programme provides an annual availability of around € 48 million up to 2020.