

JPI Partner, EU Candidate Country Total declared Water RDI Funding: 4.1 M€/yr Turkey

TÜBITAK is the leading agency for management, funding and conduct of research in Turkey. The Council is an autonomous institution and is governed by a Scientific Board whose members who are selected from prominent scholars from universities, industry and research institutions. TÜBITAK is responsible for promoting, developing, organizing, conducting and coordinating research and development in line with national targets and priorities. TÜBITAK acts as an advisory agency to the Turkish Government on science and research issues, and is the secretariat of the Supreme Council for Science and Technology, the highest S&T policy making body in Turkey. Setting its vision as to be an innovative, guiding, participating and cooperating institution in the fields of science and technology, which serves for improvement of the life standards of Turkish society and sustainable development of Turkey, TÜBITAK not only supports innovation, academic and industrial R&D studies but also in line with national priorities develops scientific and technological policies and manages R&D institutes. Furthermore, TÜBITAK funds research projects carried out in universities and other public and private organizations, conducts research on strategic areas, develops support programs for public and private sectors, publishes scientific journals, popular science magazines and books, organizes science and society activities and supports undergraduate and graduate students through scholarships. More than 1,500 researchers work in 15 different research institutes of TÜBITAK where contract research as well as targeted and nation-wide research is conducted.

Four Directorates are related to this JPI, covering the areas of Technology and Innovation, Academic Research, Policy and International Cooperation.

The Support Programme for Scientific and Technological Research Projects (1001) was established to support research for generating new information, interpreting scientific findings, or solving technological problems on a scientific basis, and projects with advanced technology applications. The purpose of the programme is to increase Turkey's competitive capacity in the international market within prioritised areas. Universities and public and private institutions can apply for this programme.

International Industrial R&D Projects Grant Program (1509) is designed to encourage Turkish companies to carry out international projects such as EUREKA, EUROSTARS and European Union Framework Programmes. Any Turkish company with one or more partners from participating countries can apply for funding. Project application should be made simultaneously with the application to the international joint programme or at most in one month after.

Other Support Programmes of TÜBITAK devote additional funds for research and innovation in water only for national research. This is the case of the <u>Support Programme for Scientific and Technological Research Projects</u> or the <u>Public Sector Research and Development Projects Funding Programme</u>.

Water as a research area is also prioritised in National Science, Technology and Innovation Strategy (2011-2016) which is prepared by TÜBITAK. The vision of Turkey during the upcoming National Science, Technology and Innovation Strategy (UBTYS) 2011-2016 is to contribute to new knowledge and develop innovative technologies to improve the quality of life by transforming the former into products, processes, and services for the benefit of the country and humanity. In this regard the studies have been conducted to prepare National R&D and Innovation Strategy for Water in accordance with the decision of Turkish Supreme Council for Science and Technology.

 $^{^1 \} Surveyed \ funding \ in \ 2010 \ (http://www.waterjpi.eu/images/documents/Water_JPl_Maturity_Template_20110420.pdf)$



Table on major RDI Funding Institutions

| Funder Name Ministr | ry Programme | Water Programme name (if any) | Target: Research / Innovation | Bottom- up / Top- down | Annual RDI Water Funding (M€) |
|---|--|--|---|---------------------------------|---|
| Ministry of Science, land Technology | Industry Technological Product Investme Support | - ent | This fund is provided for RDI studies on high-tech products in general | Bottom-up | I.8 M€ |
| Ministry of Energy at Natural Resources | nd Energy Efficient Industry Projects Incentives | - | A vast group of industrial sectors can benefit from the funds, including agriculture and fisheries | Bottom- up | 18,1.M€ |
| Ministry of Transportation, Mar and Communication | | <u>-</u> | Private sector, academia and research centres who are working on electronic communication and aeronautics are the target groups | Bottom- up | 7.2 M€ |
| South Marmara Regi Development Agenc | | | Local actors (private and public) working on any R&D field can benefit from this fund | Bottom- up | 0.017M€ |

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¹ There are 26 regional development agencies in Turkey, which have been established in line with the Turkey's accession process to EU. These agencies work for enabling local actors as facilitators of local development. All of these agencies have different sorts of incentives and funds at relatively small amounts.



Table with publications and patents data

| Indicator ¹ | SRIA theme | Public | Publications | | Patents | |
|-------------------------------|--------------------------|--------|---------------------|--------|---------|--|
| | | Turkey | Europe ² | Turkey | Europe | |
| Raw data | Q١ | 702 | 33531 | 0 | 59 | |
| | Q2 | 1938 | 37391 | 3 | 855 | |
| | Q3 | 4630 | 134254 | I | 759 | |
| | Q4 | 985 | 15957 | 3 | 184 | |
| | Q5 | 756 | 22514 | 4 | 329 | |
| | ALL | 7095 | 142901 | 18 | 2256 | |
| Increasing rate ³ | | 4.0 | 2.1 | 4.3 | 1.3 | |
| Patens per 1,000 publications | TR: 2.53 ; Europe: 15.78 | | | | | |
| Standardized by | Q١ | 9.2 | 53.7 | 0.0 | 0.0 | |
| population⁴ | Q2 | 25.3 | 59.9 | 0.0 | 1.4 | |
| (10 ⁶ Inhabitants) | Q3 | 60.4 | 215.0 | 0.0 | 1.2 | |
| | Q4 | 12.8 | 25.5 | 0.0 | 0.3 | |
| | Q5 | 9.9 | 36.0 | 0.0 | 0.5 | |
| | ALL | 92.5 | 228.8 | 0.2 | 3.6 | |
| Standardized by | Q١ | 115.0 | 229.3 | 0.0 | 0.4 | |
| GDP ⁵ | Q2 | 317.4 | 255.7 | 0.5 | 5.8 | |
| (100 x 10 ³ M EUR) | Q3 | 758.2 | 918.1 | 0.1 | 5.2 | |
| | Q4 | 161.3 | 109.1 | 0.5 | 1.3 | |
| | Q5 | 123.8 | 154.0 | 0.6 | 2.2 | |
| | ALL | 1161.8 | 977.2 | 2.9 | 15.4 | |

 $^{^{\}rm I}$ All data correspond to the period 1999 - 2013

² Considered as the 28 EU Member States plus the 12 Associated Countries.

³ Increasing Rate is the number of publications or patens in 2009-2013 divided by the number in 1999-2003 (considering ALL water topics).

⁴ Population obtained from http://en.wikipedia.org/wiki/List_of_countries_by_population.
⁵ Gross Domestic Product (GDP), nominal, obtained from http://en.wikipedia.org/wiki/List_of_countries_by_GDP_%28nominal%29



Tables on Funders and Performers obtained from publications analyses

| SRIA theme | Funding Institutions ¹ | Acronym | Intensity of citations |
|---------------|-----------------------------------|---------|------------------------|
| QI | THE SCIENTIFIC AND TECHNOLOGICAL | | 100 |
| | RESEARCH COUNCIL OF TURKEY | TUBITAK | |
| | ISTANBUL UNIVERSITY | | 15 |
| | KARADENIZ TECHNICAL UNIVERSITY | KTU | 15 |
| | EGE UNIVERSITY | EGE | 13 |
| Q2 | THE SCIENTIFIC AND TECHNOLOGICAL | | |
| | RESEARCH COUNCIL OF TURKEY | TUBITAK | 128 |
| | TURKISH ACADEMY OF SCIENCES | TUBA | 16 |
| | SELCUK UNIVERSITY | | 14 |
| | ISTANBUL UNIVERSITY | | 12 |
| Q3 | THE SCIENTIFIC AND TECHNOLOGICAL | | |
| | RESEARCH COUNCIL OF TURKEY | TUBITAK | 100 |
| | ISTANBUL UNIVERSITY | | 14 |
| Q4 | THE SCIENTIFIC AND TECHNOLOGICAL | | |
| | RESEARCH COUNCIL OF TURKEY | TUBITAK | 100 |
| | MINISTRY OF FOOD, AGRICULTURE AND | | |
| | LIVESTOCK | | 26 |
| | AKDENIZ UNIVERSITY | | 17 |
| | CUKUROVA UNIVERSITY | CU | 15 |
| Q5 | THE SCIENTIFIC AND TECHNOLOGICAL | | |
| | RESEARCH COUNCIL OF TURKEY | TUBITAK | 100 |
| | CUKUROVA UNIVERSITY | CU | П |
| ALL | THE SCIENTIFIC AND TECHNOLOGICAL | | |
| | RESEARCH COUNCIL OF TURKEY | TUBITAK | 100 |
| | ISTANBUL UNIVERSITY | | 12 |

¹ All of the universities are providing funds for scientific research, but they are generally exclusive for their academic personnel. Thus, they may not be considered as main national funders.



| SRIA theme | Performing Institutions | Intensity of citations |
|---------------|-------------------------------|------------------------|
| | | |
| QI | ORTA DOGU TEKNIK UNIVERSITY | 100 |
| | ISTANBUL TEKNIK UNIVERSITY | 90 |
| | ISTANBUL UNIVERSITY | 70 |
| | KARADENIZ TEKNIK UNIVERSITY | 55 |
| Q2 | ISTANBUL TEKNIK UNIVERSITY | 100 |
| | ISTANBUL UNIVERSITY | 57 |
| | EGE UNIVERSITY | 44 |
| | DOKUZ EYLUL UNIVERSITY | 41 |
| Q3 | ISTANBUL TEKNIK UNIVERSITY | 100 |
| | ISTANBUL UNIVERSITY | 57 |
| | ORTA DOGU TEKNIK UNIVERSITY | 51 |
| | EGE UNIVERSITY | 44 |
| Q4 | EGE UNIVERSITY | 100 |
| | TARIM VE KOY ISLERI BAKANLIGI | 87 |
| | CUKUROVA UNIVERSITY | 87 |
| | HARRAN UNIVERSITY | 81 |
| Q5 | ISTANBUL TEKNIK UNIVERSITY | 100 |
| | EGE UNIVERSITY | 55 |
| | ORTA DOGU TEKNIK UNIVERSITY | 52 |
| | KARADENIZ TEKNIK UNIVERSITY | 49 |
| ALL | ISTANBUL TEKNIK UNIVERSITY | 100 |
| | EGE UNIVERSITY | 63 |
| | ISTANBUL UNIVERSITY | 55 |
| | ANKARA UNIVERSITY | 47 |