

JPI Partner, EU Member State Total declared Water RDI Funding: 22¹ M€/yr France

Twelve French scientific research players have joined forces to found a national research alliance for the environment, AllEnvi, which now also comprises fifteen associate members. AllEnvi is the fourth such alliance created in France, after those for health (Aviesan), energy (Ancre) and digital technologies (Allistene), and its main objective is to ensure better synergy, both within metropolitan France and in the French overseas regions, between research players working on scientific issues relating to food, water, climate and territories. Global change does not only mean the climate, but also the environment, access to water, food, and sustainable agriculture. The existence of a strong, coordinated research sector working on these environmental questions is vital in finding solutions in line with the magnitude of the stakes. AllEnvi will associate all the research and higher education players concerned, reinforce cooperation between members as well as cooperation with other stakeholders, while submitting its priorities to the government and French and European funding agencies, and will be proposing the common research platforms required in many fields of knowledge. Current AllEnvi partners hire a huge percentage of the public scientific manpower dedicated to environmental sciences. The fields covered by AllEnvi include all aspects concerning water resources, aquatic ecosystems, continental coastal and sea, and the uses of these resources and ecosystems.

Onema, the French National Agency for Water and Aquatic Environments, is active in the field of environmental French public service. Created by the Law on water and aquatic environments, dated 30 December 2006, and the implementation decree dated 25 March 2007, it operates under the supervision of the ministry in charge of ecology and sustainable development. Onema organises and produces high-level science and technology advice to assist in formulating, implementing and evaluating public water policy. Its mission is to contribute to overall and sustainable management of water resources and aquatic ecosystems, with a view to restoring water quality and reaching the good chemical and ecological status by 2015 set by the European Water framework directive, adopted on 23 October 2000. The Agency also plays an active role in transferring scientific outputs, methods and tools, to practitioners. ONEMA has been leading with EU DG RTD, the "Science-Policy Interface" ad hoc activity established under the auspices of the Common Implementation Strategy of the Water Framework Directive (CIS-SPI) 2010-2012. The main goal of the activity is to ensure a dynamic interface to identify research needs and to boost usability of available (or to be produced) results to support the implementation of the WFD within the CIS framework. Onema is a partner of WatEur CSA and part of the stakeholder advisory group attached to the Water IPI. Research priorities include: I) status, functioning and services of aquatic ecosystems 2) well-balanced water resources management 3) preservation and restoration of aquatic ecosystems 4) aquatic environment chemical contamination related risks 5) water in urban areas) 6) Water quality and rural zones.

The <u>ANR</u> (French National Research Agency) is a research funding organisation. The Agency was established by the French government in 2005 to fund research projects, based on competitive schemes giving researchers the best opportunities to realize their projects and paving the way for groundbreaking

¹ Surveyed funding in 2010 (http://www.waterjpi.eu/images/documents/Water_JPI_Maturity_Template_20110420.pdf)



new knowledge. The role of the Agency is to bring more flexibility to the French research system, foster new dynamics and devise cutting edge-strategies for acquiring new knowledge. By identifying priority areas and fostering public-private collaborations, the ANR also aims at enhancing the general level of competitiveness of both the French research system and the French economy. The ANR's approach to funding allows French research to reinforce its international position and better integrate the framework of European cooperation. ANR funds are available in all scientific fields, for both fundamental and industrial research and for public research organisations as well as private companies (through public/private partnerships). ANR's general goal is to fund excellent research, while also facilitating innovation and interndisciplinary work and developing European and international collaborations.

The water issues are addressed in different interlinked components of the ANR work programme, in particular in:

- Some of the major societal challenges programmes (I efficient resource management and adaptation to climate change, 5- food security and demographic challenges, sustainability mobility and urban systems), and
- The "at the frontiers of research" programme.



Table on major RDI Funding Institutions

Funder Name	Ministry	Programme	Water Programme name (if any)	Target: Research / Innovation	Bottom- up / Top- down	Annual RDI Water Funding (M€)
ONEMA	Ecology		Research on continental and littoral waters and related environments - France"	Research and development	Both	14 (period 2008 – 2013)
ANR	Research & Industry	2014	Different challenges			7
ANR	Research & Industry	2011 - 2013	None			10 (3 years)



Table with publications and patents data

Indicator ²	SRIA theme	Publications		Patents	
		France	Europe ³	France	Europe
Raw data	Q١	4678	33531	3	59
	Q2	4334	37391	147	855
	Q3	19531	134254	108	759
	Q4	1473	15957	14	184
	Q5	2736	22514	34	329
	ALL	18049	142901	310	2256
Increasing rate ⁴		1.9	2.1	0.8	1.3
Patens per 1,000 publications	·				
Standardized by	Q١	71.0	53.7	0.0	0.0
population ⁵	Q2	65.8	59.9	2.2	1.4
(10 ⁶ Inhabitants)	Q3	296.3	215.0	1.6	1.2
	Q4	22.4	25.5	0.2	0.3
	Q5	41.5	36.0	0.5	0.5
	ALL	273.9	228.8	4.7	3.6
Standardized by	Q١	231.5	229.3	0.2	0.4
GDP ⁶	Q2	214.5	255.7	7.3	5.8
$(100 \times 10^3 \text{ M EUR})$	Q3	966.5	918.1	5.3	5.2
	Q4	72.9	109.1	0.7	1.3
	Q5	135.4	154.0	1.7	2.2
	ALL	893.2	977.2	15.3	15.4

 $^{^2}$ All data correspond to the period 1999 - 2013. 3 Considered as the 28 EU Member States plus the 12 Associated Countries.

⁴ Increasing Rate is the number of publications or patens in 2009-2013 divided by the number in 1999-2003 (considering ALL water topics).

⁵ Population obtained from http://en.wikipedia.org/wiki/List_of_countries_by_population. 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

PRENCH NATIONAL CENTER FOR SCIENTIFIC RESEARCH CNRS I00 THE FRENCH NATIONAL RESEARCH AGENCY FRENCH MINISTRY OF NATIONAL EDUCATION, HIGHER EDUCATION AND RESEARCH FRENCH NATIONAL INSTITUTE FOR AGRICULTURAL RESEARCH INRA 20 FRENCH NATIONAL CENTER FOR SPATIAL STUDIES CNES I5 Q2 THE FRENCH NATIONAL RESEARCH AGENCY ANR 100
THE FRENCH NATIONAL RESEARCH AGENCY ANR 90 FRENCH MINISTRY OF NATIONAL EDUCATION, HIGHER EDUCATION AND RESEARCH MENESR 25 FRENCH NATIONAL INSTITUTE FOR AGRICULTURAL RESEARCH INRA 20 FRENCH NATIONAL CENTER FOR SPATIAL STUDIES CNES 15
FRENCH MINISTRY OF NATIONAL EDUCATION, HIGHER EDUCATION AND RESEARCH MENESR 25 FRENCH NATIONAL INSTITUTE FOR AGRICULTURAL RESEARCH INRA 20 FRENCH NATIONAL CENTER FOR SPATIAL STUDIES CNES 15
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THE PRENCH NATIONAL RESEARCH AGENCE
FRENCH NATIONAL CENTER FOR SCIENTIFIC RESEARCH CNRS 78
FRENCH MINISTRY OF NATIONAL EDUCATION, HIGHER
EDUCATION AND RESEARCH MENESR 24
FRENCH MINISTRY OF FOREIGN AFFAIRS AND
INTERNATIONAL DEVELOPMENT MAEDI 16
WATER AGENCY OF SEINE-NORMANDIE AESN 16
Q3 FRENCH NATIONAL CENTER FOR SCIENTIFIC
RESEARCH CNRS 100
THE FRENCH NATIONAL RESEARCH AGENCY ANR 83
FRENCH NATIONAL CENTER FOR SPATIAL
STUDIES CNES 30
Q4 THE FRENCH NATIONAL RESEARCH AGENCY ANR 100
FRENCH NATIONAL CENTER FOR SCIENTIFIC RESEARCH CNRS 76
FRENCH MINISTRY OF FOREIGN AFFAIRS AND
INTERNATIONAL DEVELOPMENT MAEDI 65
FRENCH CENTER FOR INTERNATIONAL COOPERATION
ON AGRICULTURAL RESEARCH FOR DEVELOPMENT CIRAD 53
FRENCH NATIONAL INSTITUTE FOR AGRICULTURAL
RESEARCH INRA 47
Q5 FRENCH NATIONAL CENTER FOR SCIENTIFIC RESEARCH CNRS 100
THE FRENCH NATIONAL RESEARCH AGENCY ANR 80
FRENCH MINISTRY OF NATIONAL EDUCATION, HIGHER
EDUCATION AND RESEARCH MENESR 30
FRENCH NATIONAL CENTER FOR SPATIAL STUDIES CNES 25
FRENCH MINISTRY OF FOREIGN AFFAIRS AND
INTERNATIONAL DEVELOPMENT MAEDI 24
ALL FRENCH NATIONAL CENTER FOR SCIENTIFIC RESEARCH CNRS 100



THE FRENCH NATIONAL RESEARCH AGENCY	ANR	100
FRENCH INSTITUTE OF RESEARCH FOR DEVELOPMENT	IRD	20
FRENCH MINISTRY OF NATIONAL EDUCATION, HIGHER		
EDUCATION AND RESEARCH	MENESR	20
FRENCH NATIONAL INSTITUTE FOR AGRICULTURAL		
RESEARCH	INRA	17



SRIA theme	Performing Institutions	Intensity of citations
QI	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	100
	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE INRA	57
	PRES UNIVERSITE DE TOULOUSE	20
	PIERRE MARIE CURIE UNIVERSITY PARIS 6	20
	UNIVERSITY OF PAUL SABATIER TOULOUSE III	18
Q2	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	100
	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE INRA	30
	PRES UNIVERSITE DE TOULOUSE	29
	UNIVERSITY OF PAUL SABATIER TOULOUSE III	20
	IRSTEA	18
Q3	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	100
	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE INRA	24
	PIERRE MARIE CURIE UNIVERSITY PARIS 6	18
	ATOMIC ENERGY ALTERNATIVE ENERGIES COMMISSION CEA	17
	PRES UNIVERSITE DE TOULOUSE	16
Q4	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE INRA	100
	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	81
	FRENCH AGRICULTURAL RESEARCH CENTRE FOR INTERNATIONAL DEVELOPMENT CIRAD	41
	IRSTEA	40
	PRES UNIVERSITE DE TOULOUSE	28
Q5	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	100
	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE INRA	69
	PRES UNIVERSITE DE TOULOUSE	29
	IRSTEA	25
	UNIVERSITY OF PAUL SABATIER TOULOUSE III	21
ALL	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	100
	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE INRA	43
	PRES UNIVERSITE DE TOULOUSE	25
	UNIVERSITY OF PAUL SABATIER TOULOUSE III	18
	IRSTEA	16