

JPI Partner, EU Member State

Denmark



Total declared Water RDI Funding: 11.5¹ M€/yr

The aim of Innovation Fund Denmark is to support the development of knowledge and technology, including advanced technology, in order to strengthen research and innovative solutions that may benefit growth and employment in Denmark. The Fund is involved in a number of international networks, such as: All JPI's (except Cultural Heritage, which is administrated by the Danish Council for Independent Research) and the BONUS-programme (research cooperation within the Baltic-sea region). The Fund is also involved in a number of ERA-nets, and is currently involved in the preparation of new proposals. The politically defined research programmes related to this JPI is the Programmes on sustainable energy and environmentally friendly technologies. In 2014 the politically decided funding for the programmes is 42 million Euros. The programmes address a wide range of topics, of which some are related to water. These two programmes aim to strengthen the interaction between publicly financed research and the rest of society, such as privately finances research, private organisations, public institutions and the corporate world. The Fund allocates specific funds to international cooperation.

The <u>Danish Ministry of the Environment</u> is responsible for administrative and research tasks in the areas of environmental protection and planning. At the regional and local levels, much of the administrative responsibility has been delegated to municipalities. The Ministry consists of three agencies and several independent Environment Centres across the country. One independent appeal board is also linked to the Ministry. The Danish Environmental Protection Agency is responsible for implementation of the <u>Danish Action Plan on Ecoinnnovation</u> (2010-2011). This programme addresses water research, but also air pollution, waste management and natural resources research. The programme focuses on the development, testing and demonstration of technology. Important programme drivers include relevant legislation and environmental challenges. In the field of water, research highlights include: detection of drinking water quality and pollution, efficient industrial water treatment, municipal wastewater Management and extreme rainfall events.

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



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€)
Agency of the Environment	Ministry of the Environment	MUDP	One of the focus areas are water	Research/ Innovation	Bottom- up	9.40 ¹
Innovation Fund Denmark	Ministry of Higher Education and Science	Programmes on Environmentally Friendly Technologies and Sustainable Energy	No ²	Research/ Innovation	Bottom-up / Top-down	5.10
The Danish Council for Independent Research	Ministry of Higher Education and Science		No	Research	Bottom- up	
Danish National Research Foundation	Ministry of Higher Education and Science		No	Research	Bottom- up	
Carlsberg Foundation	Private		No	Research	Bottom- up	
The Velux Foundations	Private		No	Research	Bottom- up	

¹ Total for the programme

² Programme on environmentally friendly technologies, which includes water research



Table with publications and patents data

Indicator ⁱ	SRIA theme	Publications		Patents	
		Denmark	Europe ²	Denmark	Europe
Raw data	QI	1155	33531	2	59
	Q2	925	37391	27	855
	Q3	4026	134254	22	759
	Q4	363	15957	6	184
	Q5	542	22514	6	329
	ALL	3599	142901	71	2256
Increasing rate ³		2.0	2.1	1.2	1.3
Patens per 1,000 publications		DK: 19.8	I ; Europ	e: 15.78	
Standardized by	QI	205.0	53.7	0.0	0.0
population ⁴	Q2	164.2	59.9	4.7	1.4
(10 ⁶ Inhabitants)	Q3	714.5	215.0	3.9	1.2
	Q4	64.4	25.5	1.1	0.3
	Q5	96.2	36.0	1.1	0.5
	ALL	638.8	228.8	12.7	3.6
Standardized by	QI	472.7	229.3	0.7	0.4
GDP⁵	Q2	378.6	255.7	10.9	5.8
(100 x 10 ³ M EUR)	Q3	1647.8	918.1	9.0	5.2
	Q4	148.6	109.1	2.6	1.3
	Q5	221.8	154.0	2.5	2.2
	ALL	1473.0	977.2	29.2	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



Tables on Funders and Performers obtained from publications analyses

SRIA theme	Funding Institutions	Acronym	Intensity of citations
QI	DANISH MINISTRY OF HIGHER EDUCATION		
	AND SCIENCE	UFM	100
	VILLUM KANN RASMUSSEN FOUNDATION	VKRF	22
	CARLSBERG FOUNDATION		16
Q2	DANISH MINISTRY OF HIGHER EDUCATION		
	AND SCIENCE	UFM	100
	TECHNICAL UNIVERSITY OF DENMARK	DTU	43
	VILLUM KANN RASMUSSEN FOUNDATION	VKRF	29
Q3	DANISH MINISTRY OF HIGHER EDUCATION		
	AND SCIENCE	UFM	100
	DANISH NATIONAL RESEARCH FOUNDATION	DG	20
	CARLSBERG FOUNDATION		19
Q4	DANISH MINISTRY OF HIGHER EDUCATION		
	AND SCIENCE	UFM	100
	UNIVERSITY OF COPENHAGEN	KU	35
	AARHUS UNIVERSITY	AU	19
Q5	DANISH MINISTRY OF HIGHER EDUCATION		
	AND SCIENCE	UFM	100
	MINISTRY OF FOREIGN AFFAIRS OF DENMARK	DANIDA	26
	VILLUM KANN RASMUSSEN FOUNDATION	VKRF	23
ALL	DANISH MINISTRY OF HIGHER EDUCATION		
	AND SCIENCE	UFM	100
	MINISTRY OF FOOD, AGRICULTURE AND		
	FISHERIES OF DENMARK	FVM	16
	VILLUM KANN RASMUSSEN FOUNDATION	VKRF	13

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¹ The Ministry for Higher Education and Science includes two councils: The Danish Council for Strategic Research and The Danish Council for Independent Research.



SRIA theme	Performing Institutions	Intensity of citations
QI	AARHUS UNIVERSITY	100
	UNIVERSITY OF COPENHAGEN	82
	TECHNICAL UNIVERSITY OF DENMARK	29
Q2	TECHNICAL UNIVERSITY OF DENMARK	100
	UNIVERSITY OF COPENHAGEN	99
	AARHUS UNIVERSITY	86
Q3	UNIVERSITY OF COPENHAGEN	100
	AARHUS UNIVERSITY	99
	TECHNICAL UNIVERSITY OF DENMARK	77
Q4	AARHUS UNIVERSITY	100
	UNIVERSITY OF COPENHAGEN	89
	TECHNICAL UNIVERSITY OF DENMARK	12
Q5	UNIVERSITY OF COPENHAGEN	100
	TECHNICAL UNIVERSITY OF DENMARK	90
	AARHUS UNIVERSITY	77
ALL	UNIVERSITY OF COPENHAGEN	100
	AARHUS UNIVERSITY	98
	TECHNICAL UNIVERSITY OF DENMARK	58