**NERC and Joint Programming Initiatives**

Joint Programming Initiatives (JPIs) are a European Commission (EC) initiative to support intergovernmental collaborations to tackle grand societal challenges beyond a national level. They support European and wider coordination of national and regional research programmes and pooling of resources.

Joint Programming Initiatives (JPIs) were defined by the European Commission in 2008 as a part of building a European Research Area (ERA). The overall aim of joint programming is to pool national research efforts to tackle grand societal challenges that cannot be solved solely on the national level.

Members participate in joint activities on a voluntary basis to increase the value of national and European R&D funding. Through joint programming, members are motivated to coordinate national research activities and pool resources to benefit from complementarities and develop common research agendas. These joint initiatives avoid fragmentation, overcome bottlenecks and provide the long-term, stable research base that is needed to address major societal challenges.

Ten JPIs have been launched to date, and NERC provides the UK Research and Innovation lead for the following three:

* [JPI Healthy & Productive Seas and Oceans](http://www.jpi-oceans.eu/)
* [JPI Connecting Climate Knowledge for Europe](http://www.jpi-climate.eu/home)
* [JPI Water Challenges for a Changing World](http://www.waterjpi.eu/).

### JPI Healthy and Productive Seas and Oceans (JPI Oceans)

JPI Oceans was established in 2011 to provide a platform for EU Member States, Associated Countries and international partners involved in marine and maritime research.

Marine environments are critical to our wellbeing and development, providing key resources and a role in the global climate and earth systems. These environments are under increasing pressure from human activities and climate change. Due to their global nature it requires a co-ordinated research and monitoring approach to address these challenges.

JPI Oceans focuses on long-term collaboration between its members to align national research programmes and financial resources to address the challenges of protection, sustainable use and management of marine waters in an effective and coordinated way.

### JPI Connecting Climate Knowledge for Europe (JPI Climate)

JPI Climate was launched in 2011 by 17 member countries committed to aligning national climate research programmes and resources and support new collaborative actions.

Climate change can impact on all areas of our economic development, health and wellbeing, creating significant challenges that we must meet. Interdisciplinary research and innovation linking human-environment interactions is key to addressing these challenges.

JPI Climate aims to develop new knowledge and bring together existing knowledge, to provide policy makers and society with tools to address climate change and build resilience.

### JPI Water Challenges for a Changing World (JPI Water)

Launched in 2010, JPI Water tackles the societal challenge of achieving sustainable water systems for a sustainable economy in Europe and abroad.

Water is a critical resource for all human activity and is facing serious pressures as populations grow and develop. Securing and delivering fresh and safe water is a pan-European and global societal challenge for sustainable growth. Issues of water resources often have cross border or common factors and require joint approaches to address.

JPI Water aims to align its members to deliver a collaborative multidisciplinary approach to the water research and innovation needed to address these challenges.