



# **SPAIN**

and its collaboration with the European Commission's <u>science and knowledge service</u>

### Who are we?

The Joint Research Centre (JRC) is a department of the European Commission. Our mission is to support EU policies with scientific evidence throughout the entire policy process. We are independent of national, commercial or stakeholder interests.

Our 2 800 staff are based in Belgium, Germany, Spain, Italy and the Netherlands. In addition to performing our own research, we make sense of collective scientific knowledge from multiple sources for smarter EU policies. Capacity building is one of our key roles. We often work in partnerships with universities, government offices, agencies and stakeholders. • PETTEN

• GEEL

BUSSELS

• KARLSRUHE

SEVILLE

Joint Research Centre

# **JRC** priorities

Most of our scientific work is undertaken in direct support to EU policies. We add value by providing knowledge or services that others are less well placed to provide. And we strive for excellence in all our activities.

In carrying out our work, integrity is a core value: in our approach to science, in the way we treat people, and in avoiding conflicts of interest. We strive always to deliver on our commitments, to promote an open exchange of knowledge and to foster innovation.

Our scientific work covers a wide range of EU policy domains: energy and transport; sustainability and climate; migration; economic questions; education and employment; food, nutrition and health; digital transformation; and innovation. We endeavour to address new societal challenges as they emerge.



## **Examples of cooperation**

#### Monitoring culture and creativity in cities

In 2017, the JRC launched the first Cultural and Creative Cities Monitor to support policy makers in identifying local strengths and opportunities, compared to those of other similarly sized cities. It has inspired the branding and investment strategy of the city of Madrid to progressively improve its international ranking. In the second edition, Madrid ranked high in the category for creative and knowledge-based jobs in EU cities with more than 1 million inhabitants.

#### Tsunami early warning system

The JRC has developed the only worldwide automatic tsunami alert system - the EU Global Disaster Alerting Coordination System, and operates it together with the United Nations. Applying a numeric code developed by the University of Málaga, the System's calculation time for tsunami wave propagation and determination of tsunami height when reaching the coast was reduced from 40 minutes to just 15 seconds.

#### Maintaining a Forest Fire Information system allowing rapid response to forest fires

The Spanish Civil Protection, the National Research Council and several Spanish Universities work with the JRC on criteria to assess wildfire risks. The criteria feed into a European Decision Support mechanism under the European Forest Fire Information System operated by the JRC.

# Working together?



#### **USING OUR LABS AND INFRASTRUCTURE**

Since 2017 the JRC has opened up 16 of its physical research infrastructures to academia, research organisations and industry (including small and medium-sized businesses). There are opportunities for scientists to work and receive further training in JRC laboratories dealing with nuclear safety and security, chemistry, life sciences, physical sciences, ICT, and 'foresight' (the branch of scientific research that explores how the future will look).



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### SMART SPECIALISATION

The JRC hosts the Smart Specialisation Platform, which helps European countries and regions identify which research and innovation areas to invest in. The Platform takes into account a country or region's existing strengths and upcoming challenges. We have provided science-based advice for policymakers, businesses and research institutions. And we have developed more than one hundred Smart Specialisation Strategies for various European regions and Member States, e.g. for the agri-food and energy sectors. The Platform has helped foster many partnerships both within the EU and beyond.



#### **KNOWLEDGE CENTRES AND COMPETENCE CENTRES**

The JRC hosts several Commission Knowledge Centres and Competence Centres. These Centres bring together experts, stakeholders and knowledge from both within and outside the European Commission. Knowledge Centres are built around topics, while Competence Centres focus on analytical tools. Together, they inform policymakers, stakeholders and the general public about the latest scientific findings that are relevant for policy. They provide contextualised evidence, reviews, data analysis and data visualisation.

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### JRC SUPPORT FOR **STANDARDISATION**

Standardisation and harmonisation promote innovation and competitiveness. They also build consumer trust and are essential for the European single market. For these reasons, more than 70 % of the JRC's projects involve work on standardisation and harmonisation. The JRC also participates in more than 160 technical committees linked to standardisation organisations. The JRC also plays a key role in the development of reference materials. The JRC carries out research to lay the scientific foundations before a standard is adopted, for example, by developing analytical methods.





**USING OUR SITES AS LIVING** 

The JRC is offering startups the

chance to use 'living labs' at its

sites in Ispra, Italy, and Petten,

the Netherlands. We welcome

applications from those working in

the fields of mobility (ride sharing,

last mile delivery, robotaxis) and

digital energy (smart meters and

sensors, data analytics). Interested

parties wanting to test their tech in

a controlled, city-like environment

### **BRIDGING THE GAP BETWEEN** SCIENTISTS AND POLICYMAKERS

The JRC regularly organises or facilitates events known as 'Science meets Regions' and 'Science meets Parliaments'. At these events, scientists and policymakers are brought together to learn about each other's challenges, tackle issues specific to a given region or country, build relationships and promote a culture of evidence-based policymaking.



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### ACCESSING OUR DATABASES **AND MODELS**

In line with our values of openness and transparency, we grant access to the JRC's services, databases and tools, including more than 100 models.



### **COLLABORATIVE DOCTORAL PARTNERSHIPS**

In 2016, the JRC launched the Collaborative Doctoral Partnerships programme to establish strategic cooperation with institutions of higher education that have excellent research credentials and an international reputation. The programme is designed to train a new generation of doctoral students in specific scientific fields, with a focus on the science- policy interface.



#### with access to state-of-the-art labs, technical support and scientific ■ A Section Action and Action an expertise should apply here.



LABS

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# Did you know?

One of the JRC's six sites is located in the city of Seville. Areas of work focus on regional and economic modelling, smart specialisation and, fiscal policy analysis.

Scientists from the JRC and the University of Cadiz have developed a modelling tool to simulate the movement of litter in the Mediterranean Sea, the region with the highest concentrations of floating plastic debris in the world. JRC Artificial Intelligence researchers in Seville study human interactions with a one-metre-tall robot, to understand how humans behave when they interact with robots.

The Spanish member of the JRC Board of Governors is Pilar Santisteban of the Consejo Superior de Investigaciones Científicas. Five Spanish universities in Santander, Madrid, Valencia and Vigo are running Collaborative Doctoral Partnerships with the JRC.

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## If you want to know more...



# Your National Contact Points



**CONTACT YOUR JRC NATIONAL CONTACT POINTS FOR MORE INFORMATION** https://ec.europa.eu/jrc/en/working-with-us/jrc-national-contact-points

