



CITIZEN SCIENCE ELEVATING RESEARCH & INNOVATION THROUGH PUBLIC PARTICIPATION



Interaction between citizens, scientists and policy makers is essential to enrich research and innovation, and reinforce trust of society in science. I am proud of the hundreds of thousands involved citizens that already contributed to research and innovation and look forward to continue opening up research towards society and the world.

Mariya Gabriel Commissioner for Innovation, Research, Culture, Education and Youth

WHAT IS CITIZEN SCIENCE AND WHY IS IT IMPORTANT?

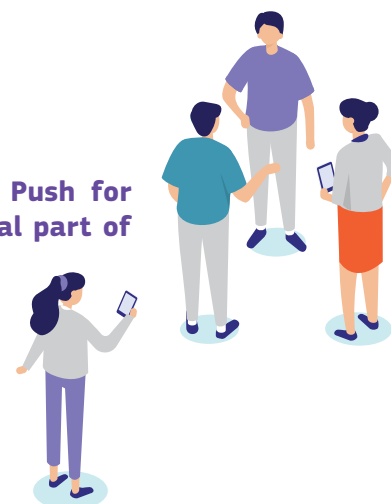
Citizen science can be described as the **voluntary participation of non-professional scientists in research and innovation** at different stages of the process and at different levels of engagement, from shaping research agendas and policies, to gathering, processing and analysing data, and assessing the outcomes of research.

Active engagement with citizens and society has the potential to **improve research and its outcomes and reinforce societal trust in science**. It can increase

- **relevance** and **effectiveness** by ensuring that R&I aligns with needs, expectations and values of society
- **creativity** and **quality** by enlarging the collective capabilities, the scope of research and the quantity and quality of data
- **transparency, science literacy** and **confidence of the public in research**

CITIZEN SCIENCE AS PART OF EU POLICY

Citizen engagement is at the core of the Von der Leyen Commission's **New Push for European Democracy** and more participatory decision-making, and an **integral part of the EU's Open Science policy priority** and the **European Research Area**.



HORIZON 2020

- > **2000 projects** with societal engagement
- > **20 dedicated citizen science** projects, receiving
- € 60 million** from the 'Science with and for Society' part of the programme

The projects have already **involved hundreds of thousands of citizens** to contribute to all areas of science, from physics and medicine to the social sciences. Together, they have built up European capacities, networks of practice and knowledge on how to successfully engage citizens in R&I.

HORIZON EUROPE

The Horizon Europe Programme will reinforce interaction between science and society by promoting the co-creation of R&I agendas and by involving citizens and civil society directly in 'doing' research and innovation. It will do so across the Programme and through dedicated activities, while monitoring citizens' contributions and the uptake of R&I in society.

Selection of projects from H2020 and the European Institute of Innovation and Technology (EIT)

Cities-Health is involving citizen groups in experiments in five cities to explore how pollution in their living environment is affecting their health. An interactive toolkit has been produced, customised to different stakeholders and domains, with focus on air pollution, noise pollution and health factors.

D-NOSES tackles the problem of odours pollution by developing coordinated case studies in 10 countries. The International Odour Observatory Platform has the potential to become the one-stop-shop for all to participate in activities in their own local area using the Odour Collect app.

DITOs organised over 700 events, engaging over 550,000 people across Europe in Do-It-Yourself science throughout Europe.

Citizen Observatories projects – **WeObserve**, **LandSense**, **SCENT**, **GroundTruth 2.0**, **GROW** – enable citizens to become the 'eyes' of policy makers and to complement environmental monitoring systems.

EIT Food Citizen Science aims to increase consumer trust in the food system, inspiring citizens to become change agents as non-professional scientists, in the transition towards an inclusive and trusted food system based on science.

EU-Citizen.Science is an online platform for sharing knowledge, tools, training and resources for citizen science.

EUvsVirus Hackaton and Matchaton gathered more than 21,000 participants to create 2,164 multi-disciplinary, multi-nationality teams with innovative solutions, then sparked the development of 2,235 new cross-European partnerships by matching the best 120 teams with 458 supportive partners.

GRECO is involving citizens in the design of new photovoltaic solutions and in the provision of materials data.

REINFORCE aims to engage more than 100,000 citizens to contribute to advances in frontier physics, with citizen scientists managing the data avalanche and developing their own investigations.

SPARKS organised an interactive touring exhibition and 200 innovative participatory activities. The project produced a toolkit to prepare Science Espressos, Reverse Science Cafés, Pop-up Science Shops and Scenario Workshops together with a handbook with practical guidelines.