

UCD Citizen Science Community of Practice



The Decade of Citizen Science is here... Be part of it!

presented by Martin Brocklehurst

co-founder of the European Citizen Science Association (ECSA) & the Citizen Sciences Global Partnership (CSGP)

Wed May 3rd, 11am-12pm UCD O'Brien Centre for Science

sign up via eventbrite











European Citizen Science Association Launch - 2013

The Democratic Ambition:

Get 70 million people to take part in citizen science in Europe











EU POLICY MAKERS VIEWS OF CITIZEN SCIENCE IN 2014.



IT HAS A SOCIAL, EDUCATIONAL AND RESEARCH ROLE; BUT

DOES NOT PROVIDE STATISTICALLY RELIABLE DATA;

DOES NOT COVER LARGE ENOUGH GEOGRAPHIC AREAS;

DOES NOT COVER AREAS OF POLICY RELEVANCE TO THE EU;

DOES NOT HELP WITH SDG REPORTING;

IS TIME LIMITED AND IS LITTLE MORE THAN HOBBYING





Changing the Policy Perspective

Air Quality monitoring in Flanders 2016:

- 5% of population engaged
- Up to 50,000 take an interest
- Individuals invested in monitoring equipment
- Delivered high quality data at great density
- Changed air quality models for the city
- Created profound political change
- Drove behavioural change





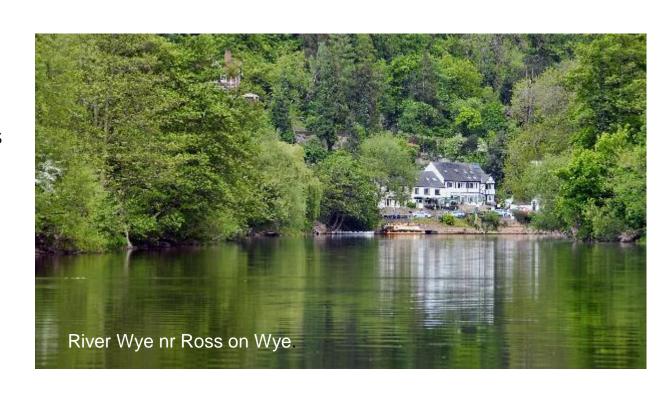


Changing the Policy Perspective

Citizen scientists to monitor English and Welsh rivers in £7m scheme

Sewage in English Rivers

- 824 spills or raw sewage every day
- River pollution becomes key issue in English local elections
- Creating profound political change
- Rivers Trust Promoting Citizen science
- Developing programmes to monitor river water quality
- Sharing global experience







2019 - EU Policy shifts on Citizen Science (CS)

POLICY MAKERS ENGAGE WITH CITIZEN SCIENCE

...for thematic policies

CS in the policy cycle, for a robust evidence base

... for Open Science

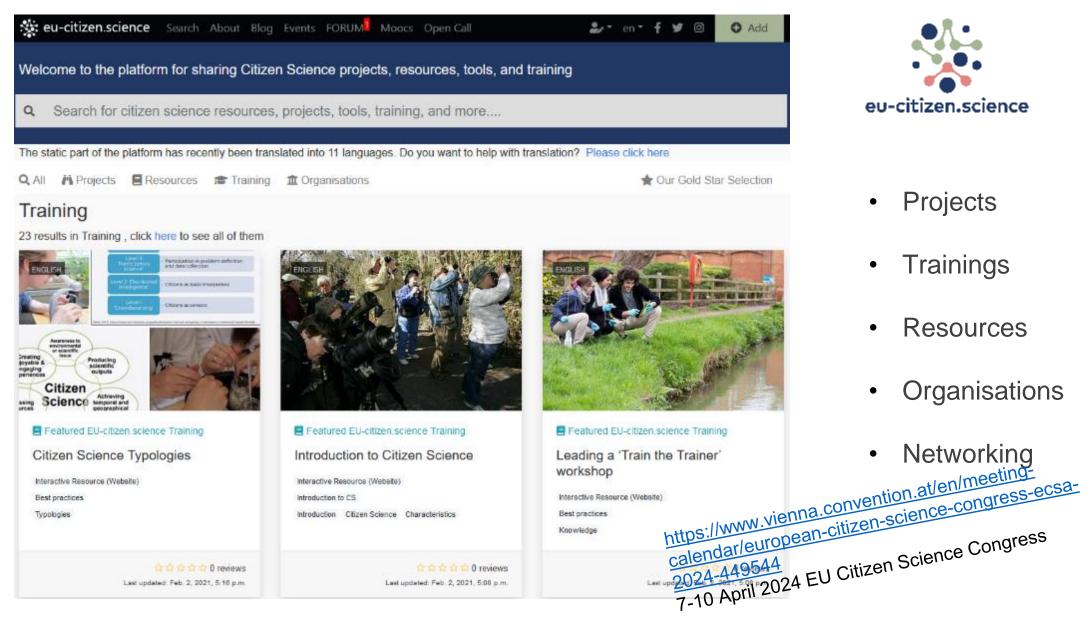
open access to research to enable public participation

... for Better Regulation

engage citizens as stakeholders & recognise their input to policy



EU-citizen.science. https://eu-citizen.science







2016 - Citizen Scientists Engaging with Global Policy Makers

Vector Carrying Mosquitoes

Muggenradar, Netherlands

Power of citizen science

Professional science alone cannot provide information at the scales and resolutions necessary to understand environmental change.

The dominant culture of science rarely accounts for different ways of knowing, and often fails to engage the public.







Mosquito Alert - Spain









2017 - CSGP Connecting Citizen Science with UN needs

























2022 - CSGP Established as Austrian Association with a Swiss Hub





















CITIZEN SCIENCE ASSOCIATIONS (CSAs)

Australian Citizen Science Association(ACSA)

CitizenScience.Asia

Citizen Science Association US (CSA)

CitSci Africa Association

European Citizen Science Association (ECSA)

Red Iberoamericana de Ciencia Participativa (RICAP)

FOUNDING PARTNERS

University of Natural Resources and Life Sciences (BOKU) University of Geneva (UNIGE)

HOSTING PARTNER

International Institute for Applied Systems Analysis (IIASA)

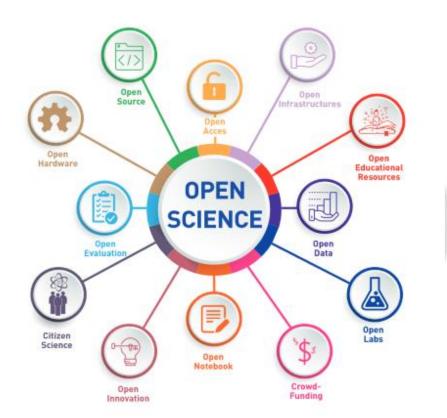
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International Institute for Applied Systems Analysis (IIASA) CS Center Zurich (UZH and ETHZ)

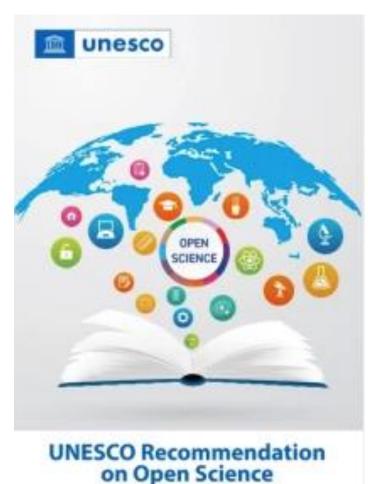




UNESCO Recommendation on Open Science



https://www.unesco.org/en/articles/unesco-sets-ambitious-internationalstandards-open-science



on Open Science







Democratic Opportunity - COVID Symptom Study 2022

PREDICTING COVID WITH 4.5 MILLION CITIZEN SCIENTISTS – UK; USA; Sweden

KEY FACTS

- Largest health-based CS project
- 4.5 million daily users
- 200 million health data reports
- 2 million test results
- 860,000 vaccine volunteers
- 20 Scientific Papers
- £2 million raised from Crowdfunding



The COVID Symptom app: Predicting COVID-19 globally



Endorsed and amplified by

































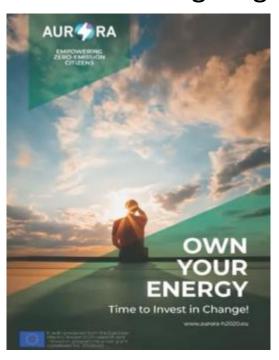


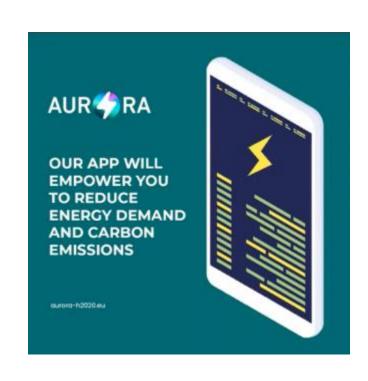




Economic Opportunity - Crowdfund Photovoltaic Facilities 2022

Climate Change – gather data & drive behaviour change









https://www.aurora-h2020.eu

https://twitter.com/AURORA H2020





Democratic & Economic Opportunity - Yoma Learning to Earning 2022

CS TO ENHANCE CLIMATE RESILIENCE Kenya, Nigeria, South Africa, Tanzania

KEY OBJECTIVES

- Coach and invest in three local African teams
- Aim to involve 3000 young people in local CS challenge
- Gather data to help local authorities improve services
- Reward with tokens redeemable for education opportunities
- Support through CitSci Africa Association
- Building on technology and methodology developed by Crowd4SDG







Democratic and Economic Risks 2023

- Distrust of CS data
- Inadequate funding for CS data
- Failure to integrate Citizen data and national statistics
- No protection for rights of CS to their data
- Ambiguous confidentiality for CS projects
- Highly fragmented CS programme
- Poor standards for data, and collection methods
- No information back to citizens in real time
- CS is not part of multi-lateral agreements
- Legal & Political challenges stop data collection







Mitigating Risks: A Global Convention on Citizen Science 2023

- Build on the Aarhus Convention: people's right to access environmental information and the UNESCO Open Science Recommendations
- Enshrine citizens rights to gather & collect data on the environment
- Require nations to integrate citizen data into National Statistical Data sets
- Protect the confidentiality & rights of participating citizens
- Identify global CS programmes
- Agree common global CS data systems
- Target: adoption at UN Environment Assembly in Feb/Mar 2024

INITED NATIONS ECONOMIC COMMISSION FOR FUROP

The Aarhus Convention An Implementation Guide









Future Events to watch out for

European

EU Green Week - Empowering and skilling citizens to become drivers towards a climate neutral and sustainable Europe through citizen science

ONLINE EVENT - 8th June 2023 12.00-14.00 CEST Registration details -

https://us02web.zoom.us/webinar/register/WN_6INIWaaPS0-H7I_7FD80dw

Global - UNSPBF / CSGP

Sustainability Research + Innovation - Panama Convention Centre ONLINE EVENT Citizen Science & Data for Decision Making

https://2023.sricongress.org/agenda

Monday 26th June 21.00 – 23.00HRS (Local Irish Time)

EARTH Voyager 1 from a distance of more than 6.4 billion kilometres.

Nothing in 6.4 billion kilometers on which we could survive:

One planet

EARTH Voyager 1 from a distance of more than 6.4 billion kilometres.

Volunteer to support the work of the Citizen Science Global Partnership



THE DECADE OF CITIZEN SCIENCE IS HERE BE PART OF IT

Martin Brocklehurst

Chair of the Board - Citizen Science Global Partnership Board Member European Citizen Science Association



















