European Citizen Science Association

Annual Report 2022





Imprint

ECSA ANNUAL REPORT 2022



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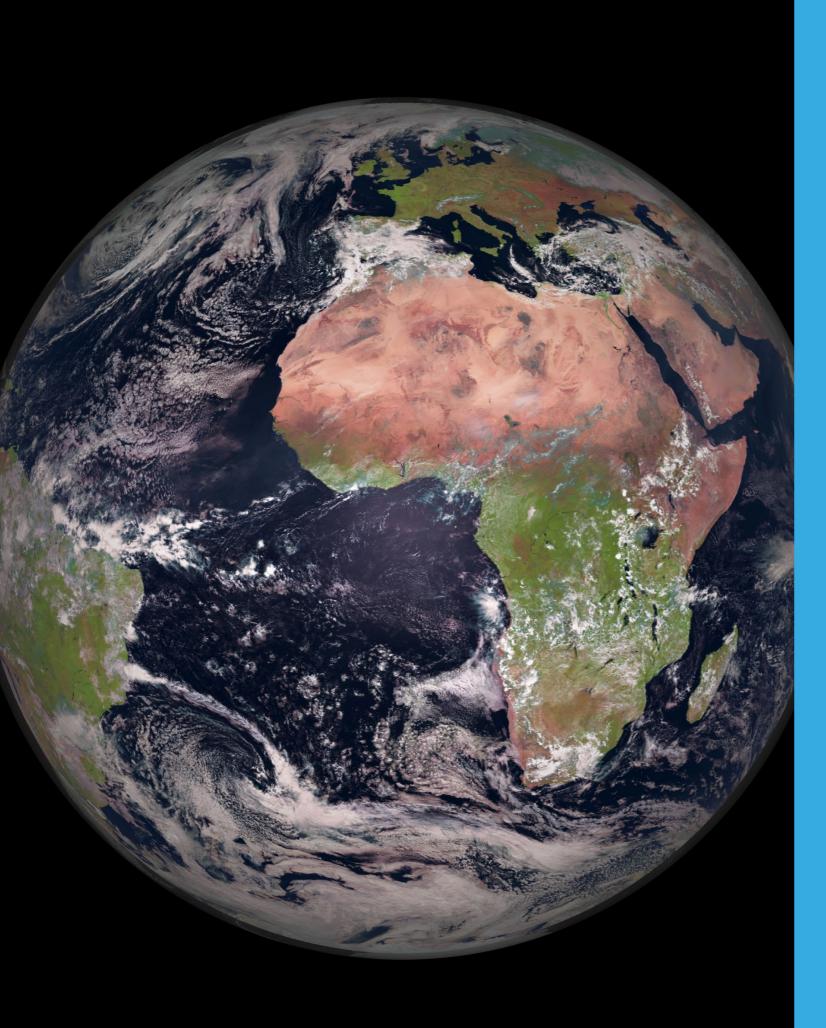
@EuCitSci



•• flickr.com/people/194835111@N03/

HOW TO CITE





ECSA Vision

A world where people are empowered to make a positive change through science.

ECSA Mission To make science and research open, accessible and valuable for everyone.

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ECSA Annual Report 2022

Editorial

Dear ECSA members, enthusiasts, and those interested in participatory science,

We are thrilled to present the 2022 edition of the European Citizen Science Association Annual Report, which highlights inspiring projects and amazing developments that have emerged from the ECSA network over the past year.

Your passion and commitment has been instrumental in the continued progress and impact of the citizen science movement, and we hope that this report will encourage you to continue pushing the boundaries of what is possible. At a time when Europe is facing major challenges from Russia's invasion of Ukraine, which has exacerbated the crisis caused by the pandemic, and other economic, social, and environmental challenges, our continued joint work is critical.

Amidst these challenges, the Intergovernmental Panel on Climate Change (IPCC) released a high-profile special report on the climate crisis, warning of its impacts while calling for urgent social and political changes. Climate change, along with habitat destruction, environmental pollution, and overfishing, continues to trigger mass extinctions. In November 2022, the United Nations Climate Change Conference and the United Nations Biodiversity Conference took place in Egypt and Canada, during which Europe pledged to become climate-neutral, and the world agreed upon a global framework for the conservation and sustainable use of biodiversity.

The IPCC's report on the climate crisis and the agreements made at the United Nations conferences highlight the urgent need for societal and political transformation in response to environmental issues, calling for the involvement of science, pluralistic knowledge, and strengthened democratic processes. It is clear that we must overturn the way of life that has characterised an unsustainable Global North in recent decades. As we cannot leave this mission to those who seek power through simplistic messages and misanthropic narratives, we need to pluralise scientific knowledge in social debate and strengthen democratic processes at the local and global levels. Science, including social sciences and humanities, formal- and applied sciences must be part of the solution to society's most pressing problems. As we face these societal challenges, the citizen

Involving citizens in research can generate critical mass evidence-based data, identify complex problems, find innovative solutions, and ultimately strengthen societal resilience.

science community has a crucial role to play.

Let's work together and use our collective tools to address these challenges and make a positive impact on our world.

At ECSA, we believe that citizen science has the potential to bring together individuals from diverse social, cultural, and economic backgrounds to tackle societal challenges in a multi-faceted way. Our commitment to promoting inclusion, diversity, and participation in research processes has helped bring society closer and foster greater collaboration and solidarity.

We are pleased to share with you the latest updates on ECSA's **progress in advancing citizen science** and its application. As we reflect on the past year, we are proud to report that our efforts have resulted in a significant increase in membership and a growing interest in citizen science.

We are pleased to share that our newsletter now has **2,260 subscribers**, our Twitter following has **grown by 23% to 5,600 followers**, and the eucitizen.science platform saw a **64% increase in users to 2.800**.

Fifteen ECSA working groups continue to bring together experts and interested parties to work on specific topics related to citizen science. ECSA hosted 11 webinars in 2022, which are available on our YouTube channel. The ECSA team participated in over twenty different events to present and develop citizen science concepts and ideas. One of the highlights of the

year was the ECSA2022 conference hosted by the Museum für Naturkunde Berlin in October. The conference focused on Citizen Science for Planetary Health, attracting 274 submissions and over 400 participants. We can look back fondly on a successful conference with many engaging and informative discussions.

We hope that this brief overview of our annual report piques your interest, and we invite you to read it to learn more about our work and accomplishments. Thank you for your continued support and interest in citizen science and ECSA.

Yours, **Dorte Riemenschneider**Managing Director



Organisation

1.1. General Assembly

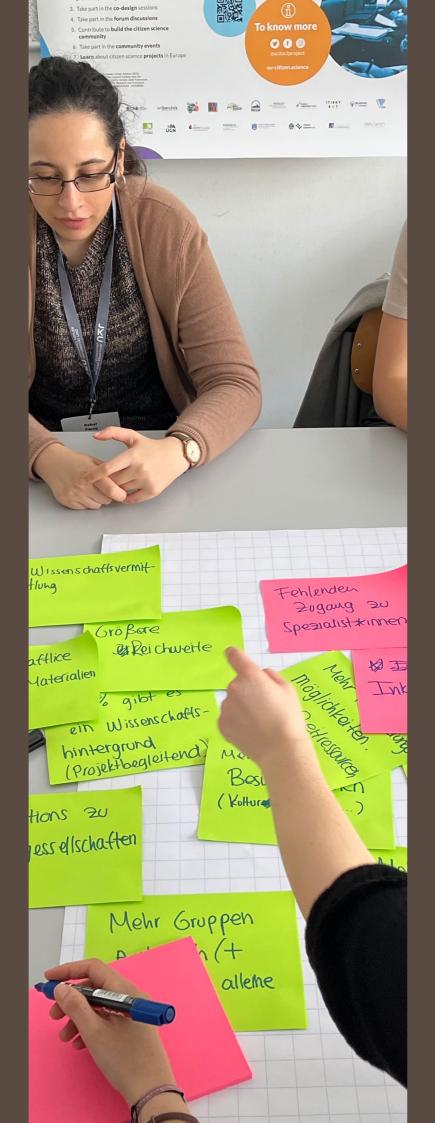
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The General Assembly, consisting of the ECSA members, is held annually and approves the budget for the coming financial year. It receives the annual report and discharges the Board of Directors.

The General Assembly elects the President, the Executive Committee and the Board of Directors.

It appoints the Advisory
Board, approves the
working groups, determines
the membership fees and
decides to amend the
Statutes.





1.2. Board

President



▲ Johannes Vogel

Director of the Museum für Naturkunde, Berlin, Germany, Leibniz Institute for Evolution and Biodiversity Science.



In 2020, the General Assembly confirmed the President proposed by the Board for a period of six years. The President is invited to the board meetings in an advisory role or as the deciding vote in a tie situation.

Executive Board



▲ Susanne Hecker

Head of Science Programme Society and Nature, Museum für Naturkunde, Berlin, Germany.



▲ Enrico M. Balli

Chief communication officer, EPOS-ERIC, Rome, Italy (until August 31).



The ECSA General Assembly appointed the Executive Board for a three-year period on 28 November 2020. The Executive Board appoints the managing director and annually calls for the General Assembly.

→ https://www.ecsa.ngo/about-us/

ECSA Annual Report 2022

1. Organisation

Board of Directors



▲ Rosa Arias

Science for Change, Barcelona, Spain



▲ Jaume Piera

Instituto de Ciencias del Mar (ICM-CSIC), Barcelona, Spain



▲ Martin Brocklehurst

KempleyGREEN Consultants, UK



▲ Susanne Tönsmann

Beraterin Förderinstrumente, Faculty
Development, Prorektorat Forschung und Faculty,
Universität St.Gallen (HSG), Switzerland



▲ Barbara Kieslinger

Zentrum für Soziale Innovation, Austria



▲ Treasurer • Svetlana Klessova

Director, Research and Innovation Partnerships G.A.C. Group, Issy-les-Moulineaux, France



▲ Gitte Kragh

Cıtizen science Netværket, ScienceAtHome, Aarhus University, Denmark



During the General Assembly on 28 November 2020 the Board of Directors and the Treasurer were elected for a three-year period.

Advisory Board



The Advisory Board consists of up to 12 non ECSA members. It advises ECSA on strategic decisions, policy matters, and comments upon the annual report and ECSA accounts.



Darlene Cavalier

Arizona State University, SciStarter, Science Cheerleaders, ECAST, USA



Julie Dirwimmer

Quebec Office of the Chief Scientist, Canada



Sven Schade

Joint Research Centre of the European Commission, Varese, Italy



Renee Sieber

McGill University, Montreal, Canada



Henrietta L. Moore

Institute for Global Prosperity, University College London, UK



Dan Stanton

Arizona State University, USA.



José Miguel Rubio Iglesias

European Environment Agency, Copenhagen, Denmark



1.3. Headquarters team

Managing director:

O Dorte Riemenschneider

Project officers:

- Enrico Maria Balli
- Carolina Doran
- Claudia Fabó Cartas
- François Jost
- Claire Murray
- Nikita Sharma

Communications and community managers:

- Simona Cerrato
- Beatriz Noriega Ortega
- Paul Sorrell

Accountant:

Marcos Pereira

Student assistants:

- Chrysanthi Bairaktari
- Alicia Moreno Muñoz

The headquarter team values and represents inclusivity and diversity and aims to be composed of both female and male members.



Photo: Ben Kriemann 🚺 🔺



Community & communications

2.1. Membership

>>

As of December 2022, ECSA has a total of 246 individual and organisational members (Figure 1) from over 40 countries, across Europe and beyond (Figure 2).

This is an increase of 9% from 2021.

The number of organisational members increased by 6 and the number of individual members by 15.



organisational members



Countries





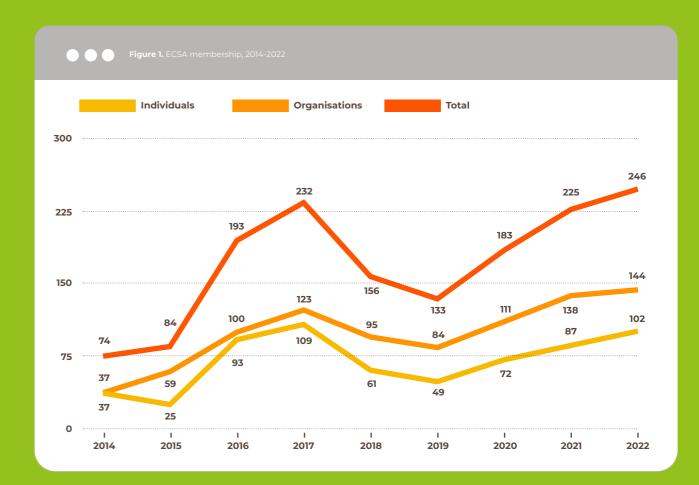
Increase from

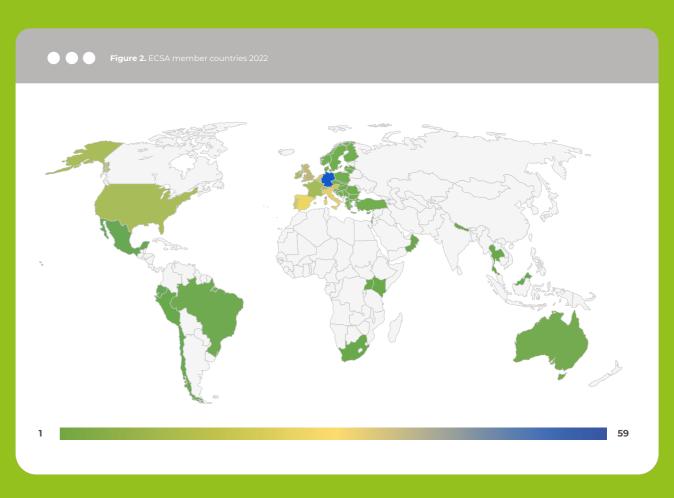
2021



New organisational members







2. Community and communication

2.2. European Citizen Science Platform

>>

Born from the EU-Citizen. Science project in 2020, the European Citizen Science Platform (eucitizen. science) has now become a frequented and populated platform of the broader citizen science community in Europe. The platform will further thrive within the European Citizen Science project started in August 2022. In that context, it will represent the main place to share project profiles, resources, training, ideas and more to connect with the community and further evolve as the online counterpart of the association itself.

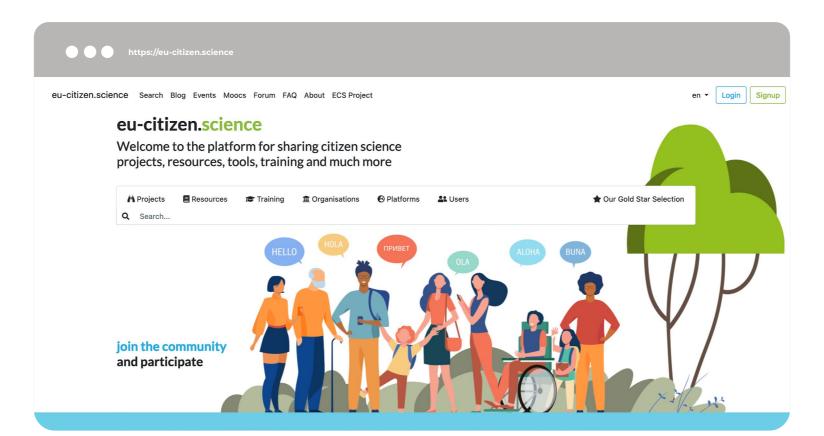
The European Citizen Science Platform has been built by the community and for the community. The platform is open to everybody and parts of it are available in 12 languages. By the end of 2022, the platform gathers more than 200 resources on citizen science and over 60 training resources. The latter are designed or can be used explicitly for the goals of teaching or training on the practice of citizen science. The platform also offers 24 free online training modules on citizen science in a wide array of themes: from introduction to citizen science over research design and methods, engagement and impact to communication and regulations and ethics. These are self-directed and can be taken anytime. You can find over 240 profiles of projects that are engaging the public in research via citizen science activities.

You can get inspired by all kinds of initiatives, learn about them and from their experience and collaborate, also online from the other side of the world.

The platform also features a blog collecting stories, interviews and good readings, a forum, the possibility to discover people and organisations to connect with, and a calendar with events on citizen science.

Profiles on the platform	End of 2021	End of 2022
Projects	211	244
Resources	169	201
Training resources	57	64
Organisations	175	237
Platforms	8	16
Users	1,700	2,880

Table 1. Growth of the platform from the end of 2021 to the end of 2022



During 2022 there was a significant increase in visitors from about 32,000 unique visitors in 2021 to almost 40,000 unique visitors in 2022. However, page views slightly declined from 220,000 page views in 2021 to 214,000 in 2022. Therefore, in 2022 more users visited the platform than in 2021 but overall visited less pages on the platform.

ECSA coordinated 12 monthly meetings of the **SwafS** (Science with and for Society) citizen science working group, including 20 citizen science projects funded under the 'Science with and for Society' programme of the EU to exchange project updates and results, discuss methodologies and common issues in the projects and explore possible synergies and collaboration. These meetings showed a consistently high number of participants, gave impetus to organise joint events and fostered a well-functioning cooperation with other projects that will be continued in 2023 as part of the ECS project.

2. Community and communication

2.3. Communication

>>

ECSA aims to foster citizen science in Europe and beyond, establishing it as a recognised, promoted and funded approach. Communication is key to achieving this goal, and must be addressed to the internal team, members, working groups, and to various external audiences and stakeholders. Over the past years ECSA has undergone rapid growth, as has its international reputation. Consequently, the expectations in terms of visibility, and the responsibilities that this entails, are very high. As the association has grown, so has its communication, and ECSA has increased its public presence through various channels and its impact on different audiences.

ECSA participated in many events in 2022, both as an association and as a project partner (see Event participation). We also hosted workshops and webinars to share experiences and knowledge, as well as the ECSA2022 conference. Here we report the most immediate results through direct contact with our members and followers, the newsletter and social media.

All communication channels and contacts are listed in Table 2.

Newsletter

ECSA sent out eighteen newsletters in 2022. This year, subscribers rose by 6.5% (from 2,122 in January to 2,260 in December).

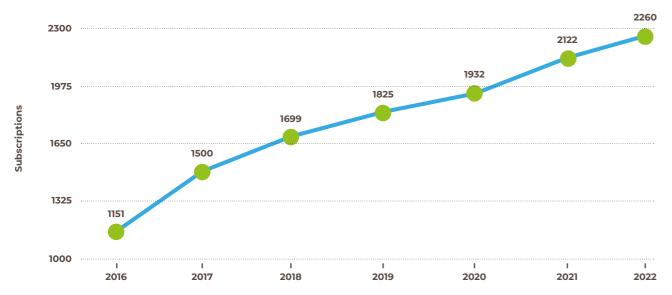


Figure 3. Growth of the subscribers to the ECSA newsletter

Social media

We saw continued growth in audience and engagement on our two main social media accounts in 2022. Twitter, where ECSA is most active, saw a 23% increase in followers (from 4,556 to 5,605 followers).

On Facebook, the number of people following ECSA's page increased by 12% (2,502 to 2,805) in the last year.



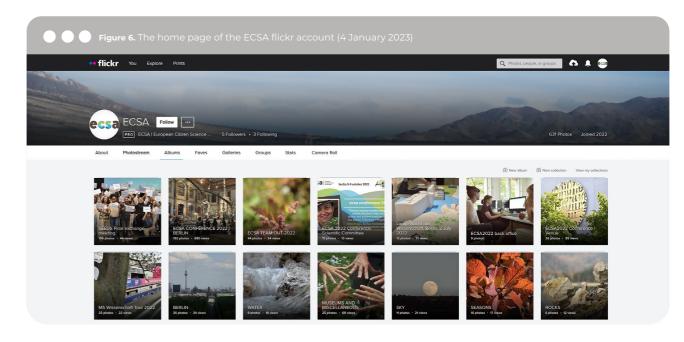
Figure 4. Growth on Twitter since 2019

Figure 5. Growth on Facebook since 2019

LinkedIn has grown very significantly, going from 581 followers on 31 January 2022 to 1373 by the end of the year, which corresponds to an increase of 136%.

Flickr

Photos and video are effective communication tools to convey achievements, results and activities with immediacy. At the beginning of 2022, ECSA created a Flickr profile to collect images. Today it contains more than 600 photos illustrating various key ECSA activities. It will progressively build an archive of quality photographs for use in any communications product. All photos are made available with the creative commons licence (CC BY-NC-SA Attribution-NonCommercial-ShareAlike).



YouTube

The ECSA YouTube channel collects and makes publicly available videos produced by ECSA or within individual projects. These videos include communication tools for dissemination of citizen science, and recordings of events organised by ECSA and the projects we work on. Recordings of the plenary sessions of the ECSA conferences are also available.

Table 2. ECSA communication channels

Channel	Link
Website and newsletter	ecsa.ngo
EU-Citizen.Science platform	eu-citizen.science
Email	info@ecsa.ngo
Social media	Link
Twitter	@EUCitSci
in Linkedin	de.linkedin.com/company/eucitsci
f Facebook	@ECSAcommunity
Flickr	www.flickr.com/photos/194835111@N03/albums
YouTube	www.youtube.com/@ecsa-europeancitizenscienc6914



Citizen Science for Planetary Health ECSA conference

The ECSA 2022 Conference on Citizen Science for Planetary Health took place October 5-8 in Berlin, Germany, organised and hosted by the **Museum** für Naturkunde Berlin.

More than 400 international researchers, students. practitioners and policy-makers participated. The contributions to the conference — from keynotes and talks, to interactive sessions and posters gave high-level insights and discussions for the benefit not only of the fields of citizen science and planetary health, but ultimately also for life on our planet Earth (Figure 7). Three keynote

speakers — Brigitte Baptiste (Universidad Ean,

Colombia), Sabine Gabrysch (Potsdam Institute

for Climate Impact Research, Germany), Peter Elias, (University of Lagos, Nigeria) — offered the opportunity to reflect and share experiences with a global perspective. Additionally, the ECSA2022 conference offered 101 talks in 20 sessions, 106 posters in 4 sessions, 15 interactive sessions, 10 working groups meetings, 10 stands at the Citizen Science Market and featured one satellite event and 5 social events, including the opening ceremony, the social dinner and 3 further excursions.

The programme and the proceedings of the ECSA2022 conference are accessible on the ECSA website (ecsa.ngo/conferences/).

The recording of the keynote speeches and of the plenary sessions are available on the ECSA youtube channel:

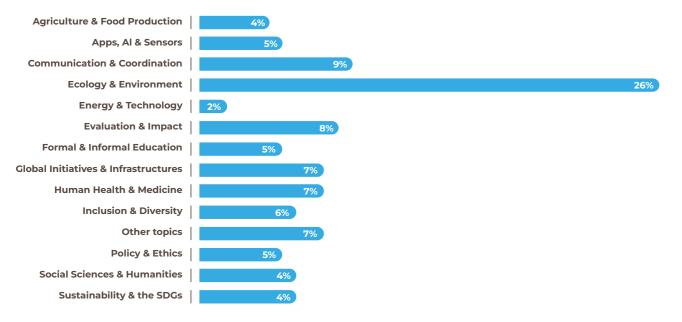
Day 1: https://www.youtube.com/watch?v=oVhY8xNPdwM

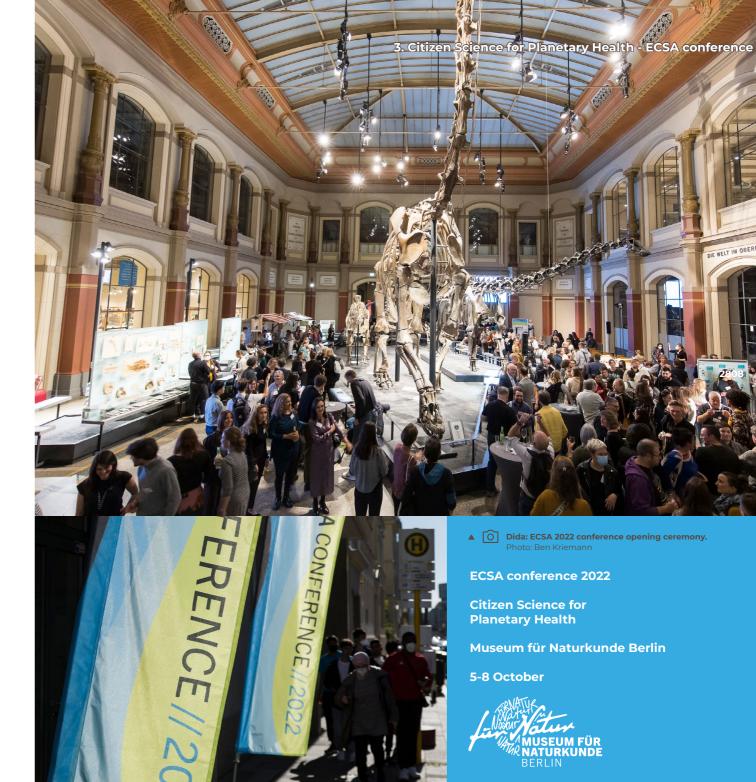
Day 2: https://www.youtube.com/watch?v=z-0CpRxRCxA

The ECSA2022 conference was supported by DFG - Deutsche Forschungsgemeinschaft

Deutsche Forschungsgemeinschaft

Figure 7. Thematic distribution of the ECSA2022 conference





ECSA CONFERENCE // 2022 citizen science for planetary health

O Dida: ECSA 2022 conference closing ceremony.

berlin 5-8 october

Workshops and webinars

4.1. Stories about women in citizen science

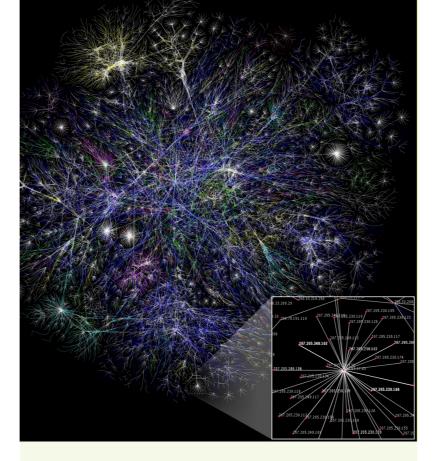
② 11 February 2022

ECSA celebrated the 2022 International Day of Women and Girls in Science. This is promoted every year by UNESCO. Together with the ECSA Storytelling and Other Arts working group, we shared stories from many people (of all genders) in our community, who are particularly engaged in this field. One day a year is not enough to achieve equal opportunities for all, however these symbolic moments are inspiring and need our strong support.



www.youtube.com/c/ecsaeuropean citizenscienceassociation





4.2. Data protection for vulnerable groups

② 22 February 2022

The challenges and possible solutions of data protection for vulnerable groups were the main topics of this webinar. The speakers presented the guidelines and desirable practices when working with vulnerable groups to assure their rights are protected. This webinar was jointly organised by ECSA and **Panelfit**.



www.eventbrite.de/e/data-protectionvulnerable-groups-and-citizen-sciencetickets-250042442677

▲ O Internet map 1024. Photo: Matt Britt

◀ O Working group meeting at ECSA 2022 conference. Photo: ECSA

4.3. Collaboration in citizen science

② 16 March 2022

This webinar, organised by LIBER and ECSA working groups together with Leiden University, was designed to discuss different approaches to citizen science, with the purpose of discovering synergies and potential opportunities for collaboration. The speakers discussed achievements and activities to advance citizen science at libraries and universities, and explored new ways to embed citizen science activities for research and education purposes through sharing best practices, policies, and programmes.



www.youtube.com/watch?v=dlgSOFC
pm-U&list=PLB6IBD9OG9pDCIYmyx_
CrChiDERCWEUCV&index=15



4.4. Planetary health and why we need diverse citizen science perspectives and stakeholders to support it

② 7 April 2022

On World Health Day 2022, Kim Grützmacher from the Museum für Naturkunde Berlin introduced the ECSA2022 conference dedicated to planetary health. This webinar introduced the holistic concept of planetary health starting from two urgent questions: what is planetary health? And why do we need diverse citizen science perspectives and stakeholders to support it?

The aim was to show that it will take diverse synergies and collaboration with the entire citizen science community and various scientific disciplines to implement the best of possible futures on our human-inhabited planet.

4.5. Air quality

② 28 April 2022

The fundamental concepts of air quality were presented at this webinar: how to investigate what is healthy air and what is not, how to measure the different key parameters, and how air impacts our health. The technologies and research approaches available in this field were also presented.



www.youtube.com/watch?v=ib1tMH EJ09c&list=PLB6IBD9OG9pDCIYmyx_ CrChjDERCWEUCV&index=17





4.6. Citizen science for peace

② 24 May 2022

Peace is more than the absence of war, it is implicated in questions of power and of social, global and ecological justice. This webinar explored the many ways in which citizen science, digital vigilantism, and ham radio operators can work for peace — not only in times of the current war. Accordingly there are many ways of promoting peace through monitoring activities, collaborative tinkering, information and disinformation — raising the question of how to train the imagination for appropriate interventions.



www.youtube.com/watch?v=Py8cITfSYXU

- ▲ O Dida: Garbace collection on a seashore near Trieste, Italy.
 Photo: Simona Cerrato
- Arts can be a good way to engage in science. Buenos Aires, Argentina. Photo: Simona Cerrato

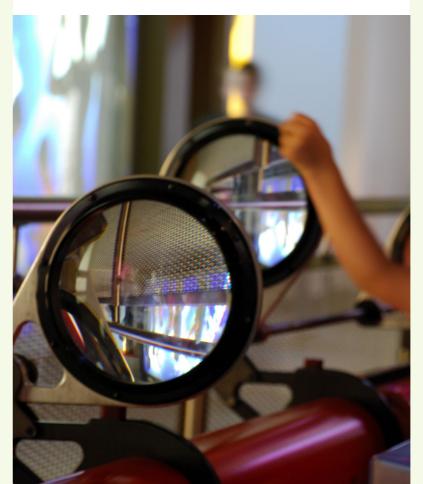
4.7. Storytelling in citizen science

② 16 June 2022

This webinar, organised by ECSA and ECSA's Storytelling and Other Arts working group, aimed to bring our community together through stories. Storytelling is an effective tool to convey content and engage people, involving both the rational and emotional brains.



www.youtube.com/ watch?v=XftKvkmNwcw



4.8. Cos4Cloud and its services for the citizen science community

② 23 June 2022

cos4Cloud is an EU-funded project that is codesigning, prototyping and implementing a number of new tools and services that address the technological challenges shared by citizen observatories. These services can help citizen observatories to improve data and information quality of observations and can be used as modules, so that any existing citizen science observatory will be able to choose and install the technological services they wish. The webinar included a short introduction of the project, presentations on two of the services developed — MOBIS and FASTCAT-Cloud — and looked at the integration between the citizen observatory iSpot and the FASTCAT-Cloud service.



www.youtube.com/watch?v=-sk_TXZG2PA

■ Playing with lenses at the Science Museum, London.
Photo: Simona Cerrato

4.9. Gamers for science: gamification in citizen science

14 September 2022

This webinar presented examples of large scale gamification for citizen science and offered a perspective on the different reasons people have to join citizen science activities.



www.youtube.com/watch?v=b-klSrvzuFo





4.10 Portraying early career researchers in European citizen science projects

② 13 October 2022

Early career researchers from european projects ETHNA. SOCIO-BEE. COMPAIR and ROSIE presented their experiences in citizen science and research. We discussed important topics of citizen science, as well as personal experiences in the field.



www.youtube.com/watch?v=mm4wGwoX20o

- ▲ O The chemistry of colors. Photo: Simona Cerrato
- ◀ O ECSA 2022 Conference. Photo: ECSA

4.11. Learning from mistakes: failures in citizen science

② 16 November 2022

A team of researchers discussed their experiences with failures in citizen science projects and methods to handle such developments.



Florian Westreicher, Marika Cieslinski, Marlene Ernst, Didone Frigerio, Barbara Heinisch, Thomas Hübner, Johannes Rüdisser, Recognizing failures in citizen science projects: Lessons learned, https://pos.sissa.it/393/007/pdf



www.youtube.com/ watch?v=FPXPO7FouG0

All recorded webinars and other events of interest can be found on the **ECSA YouTube** channel. 🣉





Citizen science advocacy

5.1. Citizen science goes Europe

② 25 February 2022

Citizen science projects and initiatives are increasingly enriching the European landscape. What structures and European projects exist that act as a driving force and what do these offer? Dorte Riemenschneider presented the work of ECSA, which works with its members to make science more inclusive and democratic. Claudia Fabó Cartas was invited to report about the E**U-Citizen.Science** project and present the European platform for citizen science, including the many free and practical training courses.

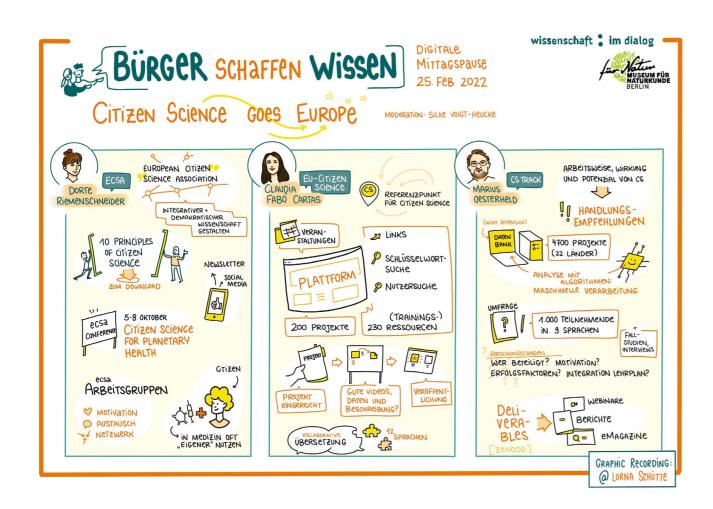


Figure 8. Graphic representation of the event Citizen science goes Europe, (Graphic Recording & Illustration by Lorna Schütte)



5.3. PS-Lifestyle external Advisory Board

The PS-Lifestyle is an Horizon Europe project and aims to bridge the gap between climate awareness and individual action. It seeks to ensure a more sustainable environment by vimproving the daily lifestyles of the community and Dorte Riemenschneider participates as a member of the external Advisory Board.

5.2. IRECS external Advisory Board

ECSA's managing director, Dorte
Riemenschneider, supports the external Advisory
Board of IRECS. The IRECS project is an Horizon
Europe project addressing the ethical challenges
of using new technology in research. IRECS
aims to develop ethical progress alongside the
development of technology in order to prevent
unethical science.

▲ O Deep Space, Ars Electronica, Linz, Austria. Photo: ECSA

Ars Electronica, Linz, Austria. Photo: ECSA





5.4. ISEED external **Advisory Board**

ISEED is a project funded by the European Union's Horizon 2020 Research and Innovation Programme. The project aims to support inclusive, innovative and reflective societies in Europe and seeks to comprehend how to involve citizens in democratic deliberation. Dorte Riemenschneider and Susanne Hecker contribute and are involved on the external Advisory Board of ISEED.

5.5. SMART-ER Advisory Board

② 17 March 2022

The SMART-ER project is an initiative of the European Consortium of Innovative Universities (ECIU) that aims to develop a community of citizen science. More than 160 researchers and support staff from the 13 member universities of the ECIU worked in a co-creation process to define 3 pilot projects. Claire Murray was invited to contribute experience and scientific feedback for the proposed pilots.

5.6. How can citizens play an active role in the advance of groundbreaking research?

② 24 March 2022

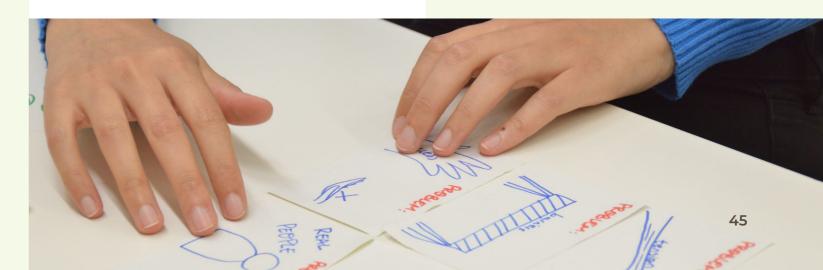
The REINFORCE project is an EU-funded project on research infrastructures for citizens in Europe that organised a high-level roundtable and interactive workshop in March 2022. This highlevel roundtable and interactive workshop on Opening Research Infrastructures highlighted, among others, the importance to rethink policies to make research infrastructures a key player in citizen science. Claudia Fabó Cartas was invited to open the discussion of the online event and gave a talk on Citizen science, its benefits and bottlenecks/challenges for its uptake.

5.7. Leibniz Research **Network** Knowledge for sustainable development conference

② 6 May 2022

ECSA organised a dialogue session at the first biennial international conference on 5th and 6th May 2022. The session covered participatory approaches in the context of mission-oriented research and innovation, with contributions from Dilek Fraisl (International Institute for Applied Systems Analysis, Austria), Meschak Odede (Vio Society, Kenya and Africa4SDGS) and Peter Elias (University of Lagos, Nigeria), chaired by Claire Murray.

▼ O ECSA2022 | DAY1. Photo: Simona Cerrato

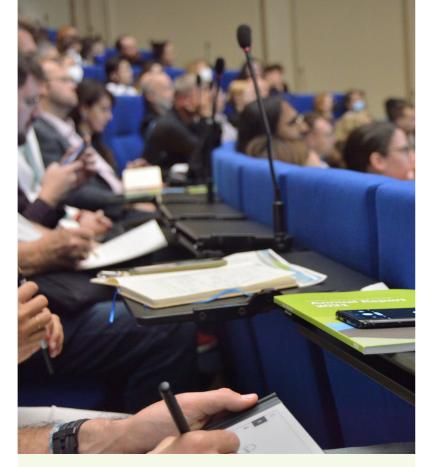


5.8. Karlsruhe KIT digital citizen science **laboratory**

② 17 May 2022

Claire Murray was invited to the monthly meeting to share the work of ECSA. This included reflecting on the 10 principles of citizen science as well as highlighting relevant examples to stimulate discussion with the attendees





5.9. Portuguese **Association of** Researchers and Students 2022

② 4 June 2022

ECSA was invited to speak at the annual meeting of the UK branch of the Portuguese Association of Researchers and Students (LUSO) in London, UK. The audience were from many different research backgrounds, so Claire Murray started the talk with a brief introduction to citizen science and then shared many examples of current citizen science projects ongoing in Portugal.

◀ O ECSA2022 | DAY1. Photo: Simona Cerrato ECSA2022 | DAY2. Photo: Simona Cerrato

5.10. Seminar series at the Centro de Estudios Demográficos **Barcelona**

② 7 June 2022

ECSA was invited to give a talk about Citizen Science in general, the ten principles of Citizen Science and the different projects we are involved in. As an institute of social sciences they are already quite involved in participatory science, but they were interested to hear our perspective, learn from our experiences and possibly foster collaboration. For this event, ECSA was represented by Beatriz Noriega Ortega.



5.11. The European **Commission** Competence **Centre on** modelling

② 29 June 2022

The European Commission Competence Centre on Modelling (CC-MOD) promotes a responsible, coherent and transparent use of modelling to support the evidence base for EU policies in the framework of the Better Regulation policy. Together with other relevant organisations, ECSA (represented by Simona Cerrato) was invited to take part in a workshop on Modelling and Sense about Science EU, with the goal to test their user guide on model-based policy making, and ultimately to influence policymakers at EU Parliament and Commission. As part of the launch event, in 2023 a short video will be developed and released showing the voice of the community, highlighting why it matters that there is a clear guidance on the use and communication of models.

5.12. Lange Nacht der Wissenschaften

② 2 July 2022

Lange Nacht der Wissenschaften (The Long Night of Sciences) is an annual event where research institutions in Berlin throw open their doors to the general public and run a series of interactive engagement activities. ECSA participated by running a stall at the event run by our friends at the Museum für Naturkunde Berlin. We shared the work of the D-Noses project with attendees, who were very interested in citizen science and odour pollution. We also developed and ran a mini citizen science experiment designed to work out what Berlin's favourite smelling citrus fruit was. Over 150 participants got involved, with many reflecting on the power of smell and sharing memories evoked by the different fruits.





5.13. Curso de verano Ciencia ciudadana y universidades

② 11-13 July 2022

The Spanish Ministry of Universities organised the summer course 'Citizen Science and Universities' from July 11 to 13 within the framework of the Menéndez Pelayo International University. This course seeked to reflect on strategies to involve the university system more actively in citizen science projects, on key elements when implementing citizen science methodologies in scientific projects and citizen issues, and what can be learned from internal experiences. The reflections of this course would feed into the citizen science strategy proposed by the Ministry of Universities and the citizen science community. Claudia Fabó Cartas was invited to represent ECSA at the event and participate in the roundtable on what is citizen science, definitions, lines of work, ethical codes, major consensus and disagreements, among others.

- O ECSA2022 | DAY3. Photo: ECSA
- ▲ O ECSA2022 conference venue | Langenbeck-Virchow-Haus, Berlin.

5.14. *Ethics of* participation in innovation

② 7 September 2022

The Pro-Ethics team ran an exchange between research integrity bodies and PRO-Ethics partners on integrity aspects that may arise when working with participatory practices. They invited Claire Murray to share inputs on citizen science and how ethics is playing an increasingly important role.

5.15. *E o cien*tista sou eu?

② 17 September 2022

ECSA was invited to introduce the concept of citizen science and the many projects ECSA is working on to the Portuguese citizen science community. Organised by the Expolab, a science centre in the Azores, this meeting gathered citizen science practitioners, teachers, scientists and politicians all eager to create more and better opportunities for participatory science. ECSA was represented by Carolina Doran who delivered a workshop on different definitions of citizen science and the ECSA 10 Principles of citizen science.



http://expolab.centrosciencia.azores.gov. pt/evento/workshop-em-ci%C3%AAnciacidad%C3%A3-e-o-cientista-sou-eu



5.16. WaterTop consortium meeting

② 23 September 2022

The WaterTop consortium is interested in exploring citizen science in future work, so they invited ECSA to join to share perspectives. Claire Murray presented an overview of the work of ECSA at this consortium meeting, focusing particularly on the methodology of establishing a citizen science project. The 10 principles were interwoven into this talk, highlighting opportunities to create meaningful and ethical engagement with citizens.

5.17. Swiss National Science Funders internal conference

8-9 November 2022

Claire Murray represented ECSA at this event, sharing an overview of citizen science with a focus on the potential for fundamental science. The conference aimed to support funders to consider different instruments for scientific research, including citizen science and transdisciplinary science.

5.18. Key Energy 2022

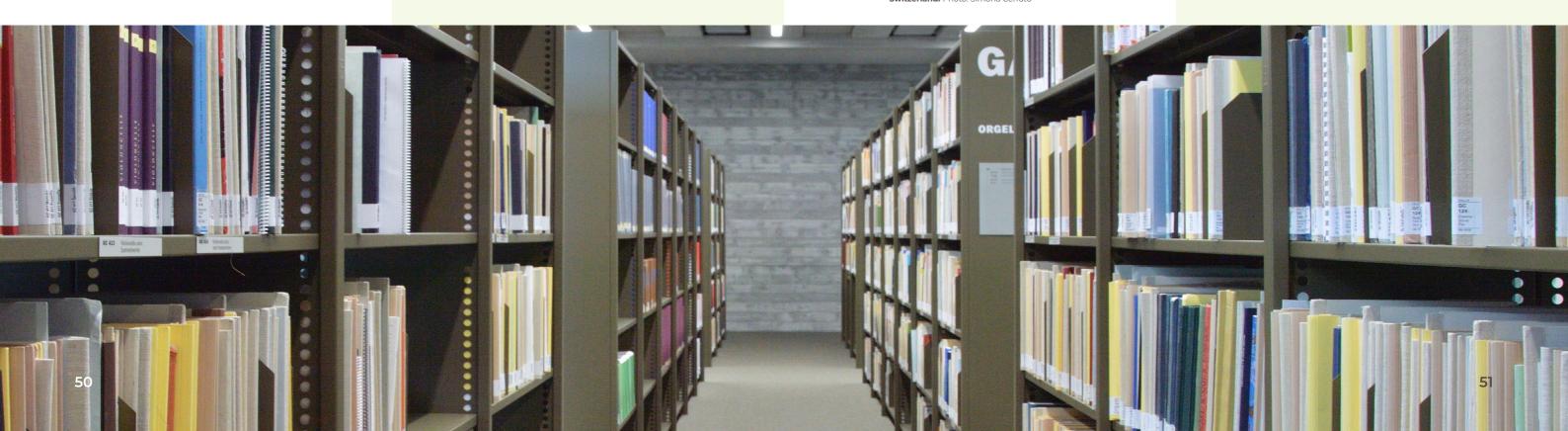
② 9 November 2022

The event is an international exhibition and conference showcasing technologies, services and integrated solutions that promote and accelerate the transition towards a carbon-neutral economy. ECSA was represented by Beatriz Noriega Ortega who gave the keynote speech in a session about citizen science.

5.19. Focus group: From research results to innovative solutions

② 17 November 2022

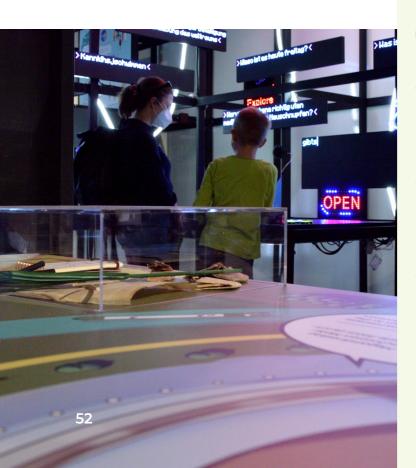
Ecorys, one of the oldest economic research and consulting companies in Europe, invited the ECSA team to share their inputs at their review on R&I valorisation on behalf of the European Commission. Claire Murray represented ECSA at this event, sharing insights on potential areas and opportunities for citizen science to contribute.



5.20. Scientix conference

② 18 November 2022

The Scientix conference provides an overview of the challenges and opportunities in science education in Europe and highlights the potential and possibilities that the Scientix community can bring about. ECSA was present with the experience of extreme citizen science of the project SEEDS, represented by Simona Cerrato. Scientix is the number one community for science education in Europe. It aims to promote and support a Europe-wide collaboration among STEM teachers, education researchers, policymakers and other educational stakeholders to inspire students to pursue careers in the field of Science, Technology, Engineering and Mathematics (STEM).

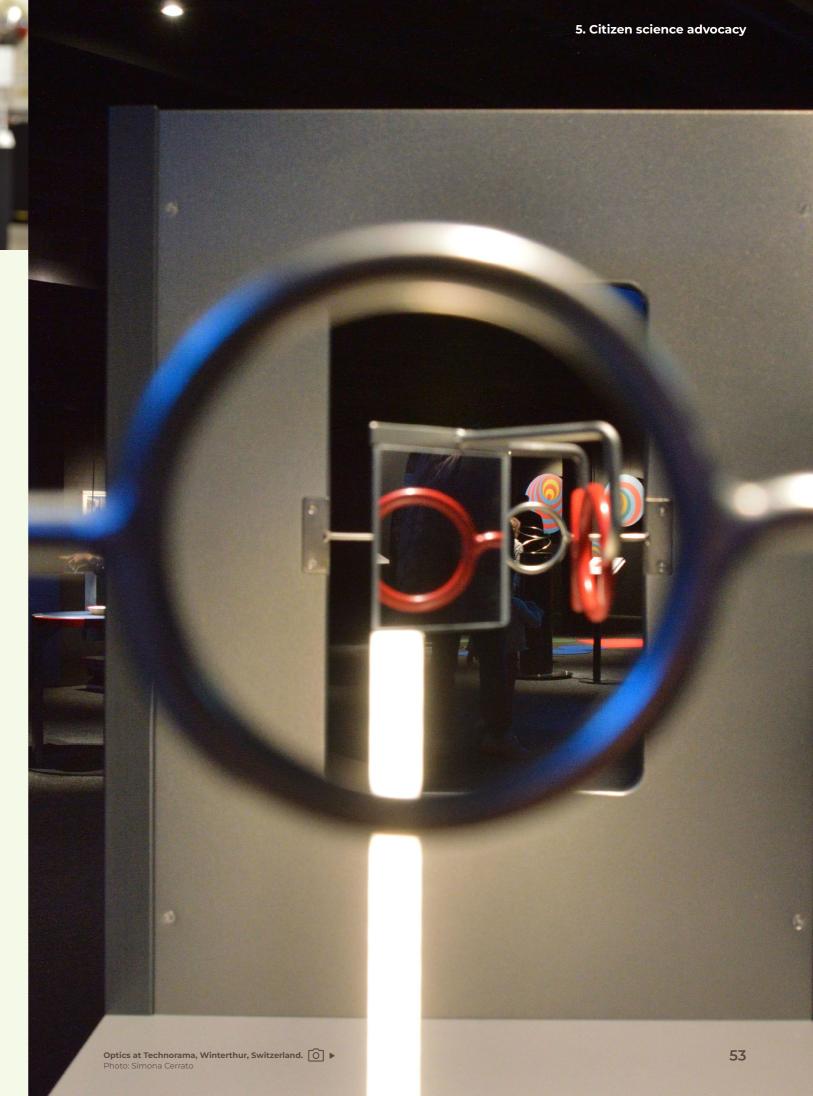




5.21. Exchange on Education and outreach volunteer programme at CERN

25 November 2022

The workshop, organised by the Education,
Communications and Outreach group (ECO) of
CERN in the Globe of Science and Innovation in
Geneva, had the goal to bring together experts
from research organisations, science centres,
informal education settings and industry to
identify best practices, discuss the challenges
and opportunities and provide recommendations
for setting up volunteer programmes. Simona
Cerrato represented ECSA and the citizen science
approach to education.



Working groups

ECSA Annual Report 2022
6. Working groups









The latest information on the active working groups and their contacts are available on the ECSA website.

At the 2022 General Assembly on 13 December, all working groups were confirmed.
Furthermore, one new working group was approved by the General Assembly (Table 3).



European Citizen Science Association

Working Group































https://ecsa.citizen-science.net/working-groups/

ECSA Annual Report 2022
6. Working groups

6.1. Agri-food



Chairs: Marco Barzman, Gerid Hager, Petra Benyei

The Agri-food working group aims to strengthen the community of scientists and citizen science practitioners devoted to learning, promoting and implementing citizen science as an approach in agriculture, and more generally, in food systems. We foster dialogue, exchange of experiences and collaboration in the design and implementation of future citizen science in all aspects of food and agriculture.

The group was formed in 2022 and is still evolving. Our current plan is to map agri-food citizen science initiatives and produce two literature reviews on agri-food citizen science projects in Europe; one with a focus on seed and another on policies relevant to neglected and under-utilised crops. We also plan to explore what the 10 ECSA principles of citizen science mean when applied to citizen science projects in agricultural systems.



Number of members: 46

66

For us, researchers in food and agriculture, citizen science is a way to engage a slew of participants like food chefs, restaurant managers, consumers, people involved in alternative food retail, cottage industry food processors, members of specialised commodity groups, organic and conventional farmers, farm advisors, teachers and students, influencers, local authorities... This is the way we can move food systems toward environmental sustainability, healthy food, cultural diversity, and social equity.

Dominique Desclaux (INRAE),
From national participatory
plant breeding projects to
European multi-actor food
living-labs: how to consider
planetary health? ECSA
Conference 2022, Berlin.

6.2. Air quality



Co-chairs: Núria Castell, Hester Volten

The Air quality working group supports the activities of citizen science communities working on air quality across Europe, and encourages them to learn from each other. Our main activity is to organise monthly meetings with lectures of our members to exchange information and discuss the latest developments on citizen science and air quality.

Main objectives:

- Connecting existing citizen science initiatives, facilitating the sharing of information and documenting the different monitoring and engagement approaches.
- Improving our understanding of citizen science, including aspects of citizen science engagement, communication and sciencepolicy interaction.
- → Becoming a collaborative platform where scientists, technologists, grassroots movements, NGOs, citizens and other interested actors can share knowledge on citizen science for air quality.

The air quality working group aims to be a meeting place for all of those interested in improving the air we

participate, it does not matter if you have or not experience

in citizen science.

Nuria Castell, Senior Scientist,
NILU-Norwegian Institute for



Number of members: 97

https://www.ecsa.ngo/working-groups/agri-food/

https://www.ecsa.ngo/working-groups/air-quality/

6.3. BioBlitz



Chair: Stuart Payton

In 2021, with the support of the ECSA BioBlitz working group, UK-based charity the Natural History Consortium collaborated with the University of St Andrews to include a cross border BioBlitz activity as part of Intersection, an international collaboration for European Researchers Night. The collaborative efforts of the working group and additional support networks generated a 400% increase in recording activity on the iNaturalist recording platform during the BioBlitz. Over 48 hours, 8,270 participants in 43 Countries collected 53,236 wildlife observations of 7,028 different species.

The Natural History Consortium have submitted a bid to European Researchers Night 2022 to repeat EuroBioBlitz and, if successful, are keen to work with the ECSA working group to:

- → build on learnings and resources from the
 2021 EuroBioBlitz pilot activity
- collaborate on additional funding bids to grow local participation and support working group members
- translate resources into more languages to broaden participation across Europe.

6.4. Citizen science and open science



Chair: Kyle Copas

The adoption of open science approaches and policies can benefit citizen science by increasing its visibility and creating opportunities for collaboration, ensuring data persistence, and securing its legacies and impacts in scientific research and policy. At the same time, citizen science is an approach to make research in its many facets more participatory. This working group seeks to:

- explore interrelations between citizen science and open science
- foster the exchange of experiences and

gather good practices at the intersections between citizen science and open science

- science community towards engaging in regional policy processes on how citizen science is addressed as part of open science
- help to reduce the technical, legal and other barriers that prevent ECSA members and their partners from adopting open science policies and approaches that could maximise the long-term impact of their programmes.

https://www.ecsa.ngo/working-groups/citizen-science-and-open-science/

https://www.ecsa.ngo/working-groups/bioblitz/



ECSA Annual Report 2022 **6. Working groups**

6.5. Citizen science for health



Chairs: Lea den Broeder, Martijn de Groot, Rhoda Schuling, Sabine Wildevuur

The purpose of the working group is to increase the social and scientific impact of citizen science for health.

Its main objectives are:

- Fostering the dialogue and collaboration between citizens, communities, researchers, professionals and policy makers in the health domain.
- Developing and disseminating tools, methods, ethical frameworks and training materials for citizen science for health.
- Enhancing the visibility and potential of citizen science projects in the health domain.
- Networking and lobbying to uphold and strengthen the relevance of citizen science for health.
- Creating a community of stakeholders dedicated to promoting and developing citizen science for health.
- Developing any other activities that contribute to the meaningful impact of citizen science for health.



Number of members: 65

This working group has organised 10 bimonthly online meetings to discuss specific topics (e.g. monitoring, ethics, data platforms), exchange knowledge and experiences and plan next steps. A highlight is the implementation of a global, multilingual survey about citizen science for health, translated in several languages and yielding interesting insights. The working group has been very active at the ECSA conference in Berlin. Several working group members have presented papers or posters at that conference. Preliminary results of the survey were presented in a poster session. The working group organised a special workshop at ECSA 2022 to jointly develop plans for the upcoming years. These plans include publication of the survey results (2023), a dedicated conference on citizen science for health (2023, Enschede, Netherlands) and a special issue of a scientific journal on CSforHealth as an output of the conference. The working group has adopted a unique selforganising way of working, in which members share leadership and take up joint responsibilities to address and share topics of interest.



Health is a topic that deserves special attention within citizen science. This working group ensures that it happens!

Lea den Broeder, co-chair

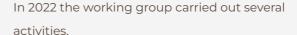
https://www.ecsa.ngo/working-groups/citizen-science-for-health/

6.6. Citizen science networks



Chair: Daniel Dörler

In the Citizen science networks working group, representatives from established and emerging citizen science networks are collaborating to tackle challenges such networks typically face (e.g. funding, framing of citizen science).



The group's first goal was to frame transparent criteria that help networks to decide, in a transparent and impartial way, if a project should be listed as citizen science on online platforms or not. This will facilitate the exchange of projects between networks and make projects more comparable.

In October 2022, the process of co-creating these criteria together with citizen science researchers, practitioners, project coordinators and citizen scientists was successfully finished. The criteria, the accompanying preamble, guidelines and an overview of the development process can be downloaded on Zenodo (https://zenodo.org/record/7249085#.Y7_YUUzkREa)



Number of members: 34



Meetings in 2022: 5





6.7. Citizen science and universities



Chairs: Maria Aristeidou, Roberto Buccione

The Citizen Science and Universities working group aims to advocate and support the embedding of citizen science activities at the university level for research and education purposes. The group currently has 33 members, and held three meetings and a webinar in 2022.

Main objectives:

- Supporting university curricula involving citizen science activities.
- Sharing practices, templates, policies & training programmes.
- > Expanding the role of libraries.
- Building/aiding consortia for research publications.

In the last year, our group achieved a partnership with the European Association of Research Libraries (LIBER). We successfully held a joint webinar discussing citizen science at libraries and universities, highlighting some citizen science activities, and sharing best practices. We hope that in 2023 we will expand on our partnerships and achieve hands-on activities for funding and collaboration opportunities.

Maria Aristeidou, The Open University UK

https://www.ecsa.ngo/working-groups/citizen-science-and-universities/

6.8. Empowerment, inclusiveness and equity



Co-chairs: Petra Benyei, Alexandra Czegledi, Claudia Göbel, Michael Søgaard Jørgensen

The working group was set up at the General Assembly in ECSA in Geneva June 2018 in cooperation with the Living Knowledge Network for science shops and community-based research. The background for the group is a joint interest from the field of citizen science and community-based research for increased cooperation, exchange of experiences and development of methods - which is one of the three strategic

pillars in the ECSA strategy. This, we hope, will contribute to strengthening the focus on empowerment of civil society as focus and impact of citizen science activities.

The monthly meetings have continued throughout 2022, exploring a variety of topics and themes.

https://www.ecsa.ngo/working-groups/empowerment-inclusiveness-equity/

ECSA Annual Report 2022 **6. Working groups**

6.9. European citizen science platform



Co-chairs: Claudia Fabó Cartas, Francisco Sanz

The working group aims to be the central place of exchange for those interested in sustaining the European Citizen Science platform (eu-citizen. science), building it further and expanding it (e.g. adopting and making use of the platform source code, freely available, to set up a national and regional platform). By continuing to develop the European Citizen Science platform we aim to contribute to the goal of establishing citizen science as a recognized, promoted and funded approach, one that fosters scientific literacy and the democratisation of science.

Main objectives:

- Sustain and continue to develop the platform and the elements it contains, both in terms of content and technically.
- Establish connections to other citizen science platforms.
- Involve the broader citizen science community to continue to build and grow the platform and support it actively by using it.
- Integrate the platform into the work of ECSA.
- Perform research on the bottlenecks and benefits of having interconnected platforms on citizen science.

https://www.ecsa.ngo/working-groups/european-citizen-science-platform/

We aim to establish technical connections between citizen science platforms to contribute to an improved infrastructure for citizen

Francisco Sanz, executive director at Ibercivis, and Claudia Fabó Cartas, projec

6.10. Green spaces and citizen science



Chair: Baiba Pruse

The main objective of the working group is to keep a growing network which regularly exchanges practices on citizen science



We are eager to discuss the potential of green spaces and particularly botanical gardens when it comes to citizen science including but not limited to local ecological knowledge!

Baiba Pruse, Athena Institute Vrije Universiteit, the Netherlands initiatives. Our current members are from numerous botanical gardens as well as academic institutions.

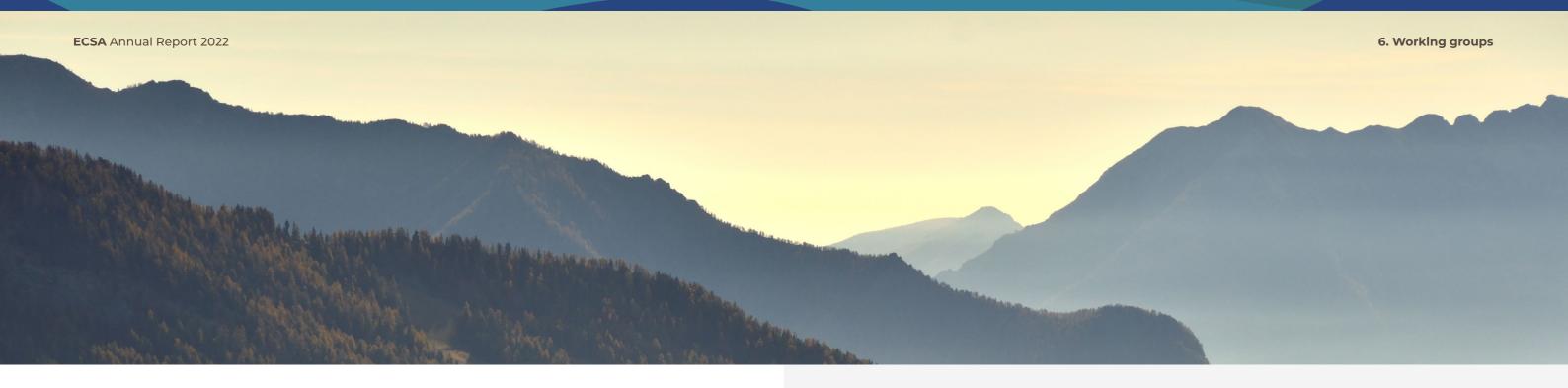


We would like to promote the connection of people with scientific research by moving forward the citizen science activities in the green spaces and botanic gardens of our cities

Vito Emanuele Cambria, Sapienza University of Rome, Italy







6.11. Learning and education in citizen science

Chair: Laure Kloetzer

This working group aims to:

- support, research and evaluate learning and education in citizen science
- undertake research into learning in citizen science
- develop educational opportunities in citizen science
- assist schools in using citizen science in the classroom
- develop tools to evaluate outcomes.

The specific goals are to:

- describe opportunities for volunteer learning, including in institutional settings such as schools and museums
- support teachers and project teams in providing educational opportunities using citizen science
- build a network of teachers using citizen science in classrooms
- develop an evaluation strategy and tools for learning in citizen science.

6.12. Policy, strategy, governance and partnerships

Chair: Richard Grünwald

This working group has the aim of informing on and advocating for the value of citizen science for achieving policy goals such as understanding and enriching the environment, dealing with the effects of climate change, and enhancing the public's relationships with research and with the natural world.

https://www.ecsa.ngo/working-groups/policy-strategy-governance-and-partnerships/

6.13. Project, data, tools and technology



Co-chairs: Luigi Ceccaroni, Suvodeep Mazumdar

This working group aims to formalise a common understanding of interests in the citizen science data space, analysing problems that citizen science projects face regarding data (e.g. interoperability, reliability, privacy, intellectual property rights) and the application of emerging technologies.

Main objectives:

- spearheading the sharing of resources (projects, data, tools and technologies) for citizen science by providing examples and developing best practices
- intensifying collaborations with the USA Citizen Science Association working group and other citizen science communities, especially to promote international standards for citizen science data and metadata
- contributing to new initiatives around interoperability and standardisation in citizen science.

The working group is a multidisciplinary community of practitioners, encouraging the sharing of experiences from a variety of perspectives. Our working group explores the broader issues around data practices in citizen science rapidly changing landscape of new and emerging technology use in projects.

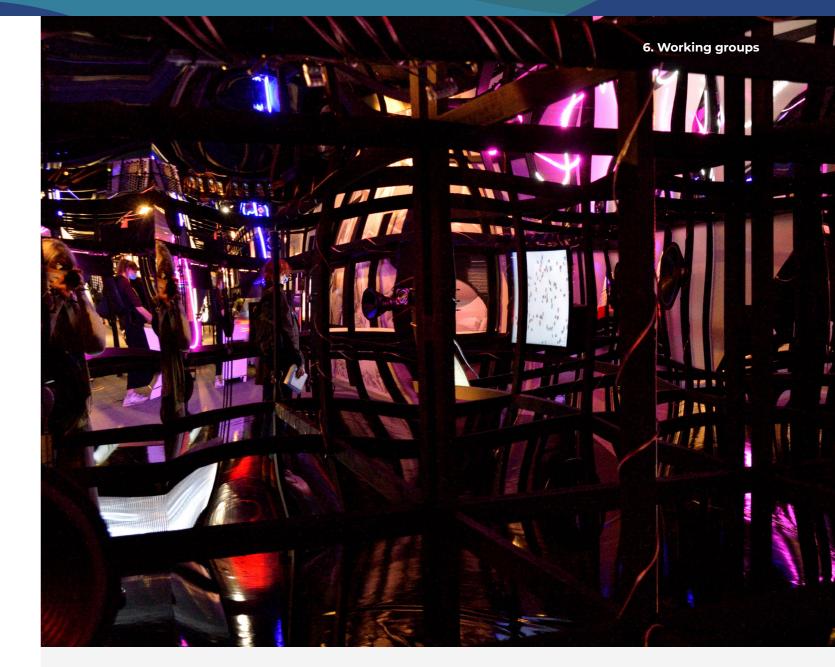
Suvodeep Mazumdar, Senior





Number of members: 40





6.14. Sharing best practices and building capacity



Chair: Janice Ansine

This working group aims to promote high-quality citizen science by: sharing existing examples of good practice; developing practitioner guides and other documents to support the citizen science

practitioner community; and bringing together all parties involved in citizen science to develop partnerships, share resources and experiences, and build capacity within the sector.

https://www.ecsa.ngo/working-groups/sharing-best-practice-and-building-capacity/

MS Wissenschaft Tour 2022. Photo: ECSA 👩 🛕 71

6.15. Storytelling and other arts



Chair: Andrea Troncoso

We want to explore, and gain knowledge and confidence in, the way stories are an ally in science communication, specifically in citizen science.

Main objectives:

- Explore the power of storytelling and use it for the benefit of communicating citizen science.
- Learn how to craft stories that matter and communicate effectively.
- Gain confidence to be the ones sharing these new learnings.
- Provide a safe and open space for interaction between researchers, explorers and storytellers, where they can learn from each other and interact.

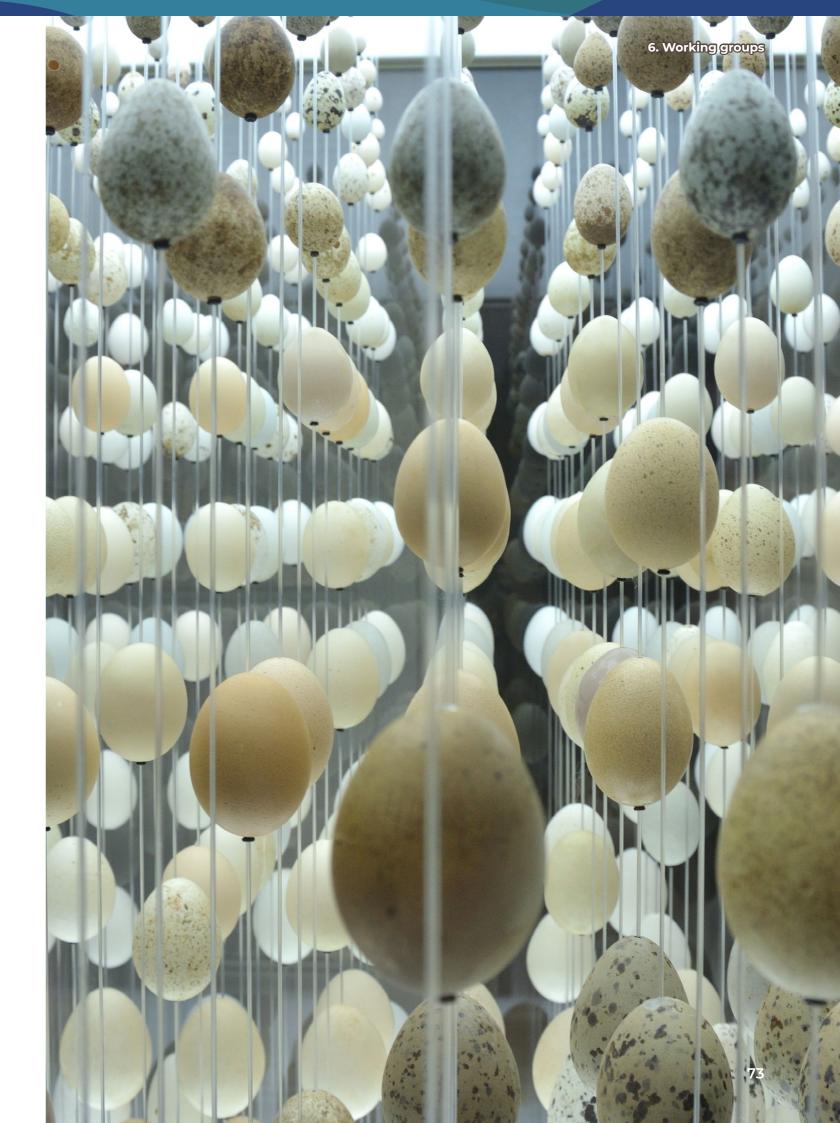
creativity that the group creating a training, a tool or something to share. We love

Andrea Troncoso, Chair





Number of members: 9



https://www.ecsa.ngo/working-groups/storytelling-and-other-arts/

Projects

7. Projects

ECSA is part of many international networks to explore, reflect, experiment, and study how citizen science can be applied to ever wider fields. Over the years, the number (Figure 9) of projects as well

as the variety of topics covered (Figure 10) have steadily increased, reflecting the organisation's commitment to innovation and contribution to the evolution of citizen science.

Figure 9. Number of projects per year, 2016-2022

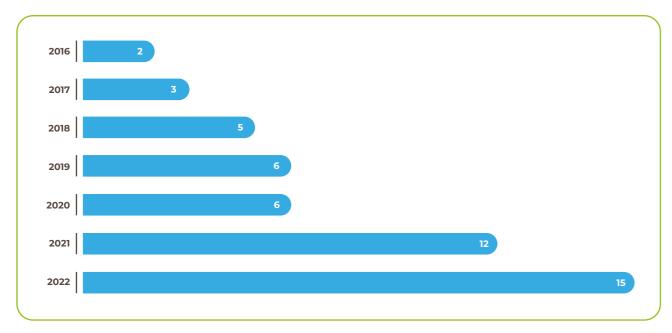
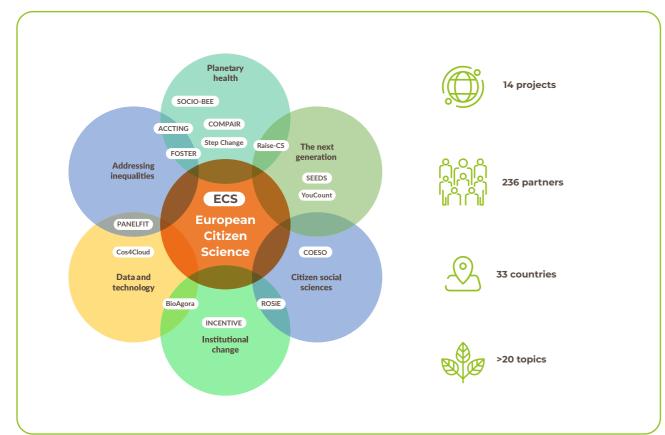
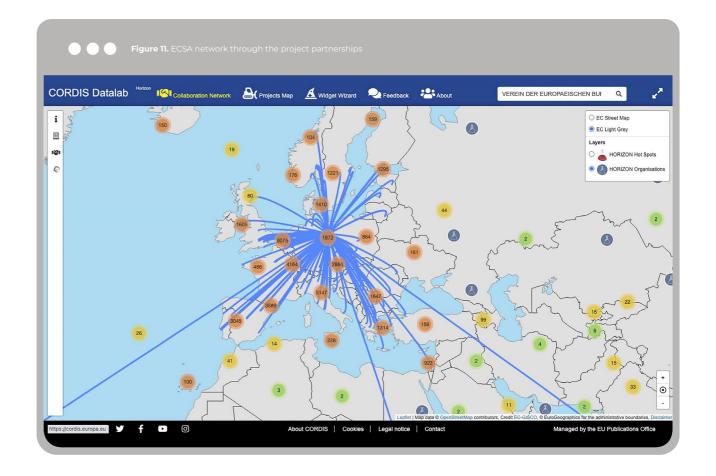


Figure 10. Distribution of topics of the ECSA project in 2022



In 2022, ECSA was involved in 15 EU-funded projects that conduct research on citizen science, build infrastructure, produce framework documents, test the citizen science approach and develop guidelines for citizen science. ECSA can

thus support and develop citizen science, widen the international citizen science network, organise exchanges, stimulate mutual learning, find and promote synergies, test new approaches and cocreate.



In 2022, ECSA contributed to the preparation of a number of proposals submitted under the Horizon Europe funding scheme. Some of the submitted proposals have been approved and

will be launched in 2023. In 2022, ECSA worked on 15 projects with 236 partners distributed in 33 countries on more than 20 different topics.



Tags: inclusion, social justice, vulnerable groups

ACCTING aims to understand the impact of Green Deal policies on vulnerable groups, prevent inequalities, produce knowledge, advance behavioural change for an equal and inclusive European Green Deal.

ACCTING is focused on mobilising experimentation and innovation to attain a socially just Green Deal in Europe. The project is aimed at understanding the impact of Green Deal policy initiatives on individual and collective behaviour with a special focus on vulnerable groups. The consortium is composed of 12 partners from France, Sweden, Belgium, Italy, Austria. Norway, Germany, Turkey, Portugal, Greece and Romania. The project proposes an interdisciplinary conceptual and methodological framework to collect data on Green Deal policy interventions at all levels. Commencing with an extensive mapping and comparative analysis of bottom-up environmental initiatives in 34 countries, including the collection of 410 narratives followed by 41 experimental studies from eight research lines, results are fed into open studios to co-create innovative solutions. Results are used for further experimentation, including through pilot actions with mass implementation and high impact potential.

ECSA activities and milestones

ECSA's work in **ACCTING** started with designing and mapping bottom-up initiatives in order to investigate sustainable innovations in partner countries together with a few more participating states. Further ECSA continues to support the organisation of open studios consisting of internal and external experts in two cycles. Moreover, ECSA will develop operational guidelines and recommendations based on knowledge created through the project for the decision makers, civil society associations and other concerned stakeholders (public and private) that will support in tackling inequalities and vulnerabilities that arise while achieving the Green Deal goals.



Duration



2022 ▶ 2026

Contact



Nikita Sharma, project officer (from August 2022)



Claudia Fabó Cartas, project officer (from February to August 2022)



@ACCTING_EU



accting



accting.eu



ACCTING has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 101036504.

78 Accting consortium meeting. Photo: ACCTING



Tags: science policy interface, science service

BioAgora will develop a Science Service to respond to the present gaps and future needs in science policy interfaces and provides the science pillar of the EU's Knowledge Centre for Biodiversity (KCBD)

BioAgora will develop a Science Service, which responds to the present gaps and future needs in SPIs and provides the science pillar of the EU's Knowledge Centre for Biodiversity (KCBD). It will channel the entire landscape of EU biodiversity science from monitoring to meta-analyses and communicate this knowledge through two-way platforms to EU institutions and the broader community. BioAgora will go beyond the state of the art by co-creating new ways of bridging the gap between science, practice and policy and use this as a basis for the science service's development for future needs. A consortium of 20 partners are involved in the project.

consultation with the EU's Knowledge Centre for Biodiversity. Also the focus will be on forecasting exercise that informs the policymakers on general trends of biodiversity change. Moreover, ECSA will contribute towards mapping the current citizen science projects and infrastructure for monitoring biodiversity. Also identification of citizen science initiatives to identify barriers (including social, economic and technological) and opportunities for improved policy uptake and cross-scale integration. Eventually ECSA will develop recommendations validated by experts of the field on how to better integrate citizen science into policy at all scales.

ECSA activities and milestones

ECSA's work in **BioAgora** has started with identifying typology of challenges for implementing biodiversity strategy 2030.

Furthermore, ECSA will support the selection and development of demonstration cases in



Duration

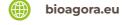


Contact











BioAgora has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 101059438

80 Consortium meeting BioAgora. Photo: BioAgora 81

ECSA Annual Report 2022 7. Projects



Tags: funding, social sciences, humanities

COESO aims to develop and sustain citizen science research in the social sciences and humanities and to support participatory research through a service-first approach.

COESO aims to develop and sustain citizen science research in the social sciences and humanities. The consortium is a collection of 15 partners from Belgium, France, Germany, Italy, Portugal, and Spain. The project is an endeavour to bridge collaboration between the European social sciences and humanities community, the citizen science community, as well as the open scholarly communication community.

COESO addresses specific challenges that hinder the development of citizen science in the social sciences and humanities by building a comprehensive framework that:

- hosts citizen science pilots reflecting the variety of citizen science practices and challenges in the social sciences and humanities
- supports pilots with collaborative tools through a specific virtual ecosystem (VERA)

- targets funding streams needed to expand citizen science in the social sciences and humanities
- provides support and training to achieve public engagement in the social sciences and humanities by mutual learning
- produces knowledge on citizen science co-creation practices in the social sciences and humanities through a rigorous assessment protocol on collaboration challenges in the pilots.

ECSA activities and milestones

ECSA's work in **COESO** centres mainly in funding advocacy, and in 2022 we co-developed the national funding workshops with funders in Germany, Spain, Italy and France. We also continued funding advocacy work and prepared for upcoming engagement activities in 2023 with international funders and fundees.

Next steps

COESO is due to end in 2023, but ECSA and Ibercivis are running workshops for international funding stakeholders to advocate for more funding opportunities in citizen science for social sciences and the humanities as well as engaging them in the co-creation of the VERA platform. ECSA is also supporting the ongoing pilot projects through dissemination activities and will participate in the mutual learning activities in early 2023.

Duration



2021 ▶ 2023

Contact



Claire Murray, project officer



@COESOEU



coeso.hypotheses.org/



COESO has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 101006325.







Tags: clean air, technology, inclusion

People all over Europe are collecting and analysing data on air quality. Then they will cocreate climate friendly behaviours and policies that address sustainability.

COMPAIR supports citizens across Europe, including those with no science background, to use digital sensors to collect local climate data, focusing on air quality. Citizen science participants will be invited to analyse the data and use it to co-create new climate friendly behaviours and policies that address sustainability both at home and across the continent to improve the quality of the air for all.

Launched in November 2021 **COMPAIR** is working with local authorities and citizens to run citizen science experiments to supplement gaps in official air quality data to (a) co-create more effective social actions and (b) influence city policy. Together these actions will contribute towards healthier and greener cities for all. The citizen science initiatives are located in Athens, Berlin, Flanders, Sofia and Plovdiv. The **COMPAIR** community will share its results, data and methodologies so other groups from across the world can learn from our work and develop their own local air quality experiments. Consisting of 15 organisations from 6 different

European countries (Belgium, Bulgaria, Germany, Greece, United Kingdom, and The Netherlands), the initiative is led by Digital Vlaanderen.

ECSA activities and milestones

ECSA leads the stakeholder engagement and framework design. Our aim is to engage different stakeholders in the pilots through a co-creation process, including the design of impactful communication and gamification approaches. ECSA will be leading the pilot operation plans where we will outline the key stages of the pilot deployment, drawing a road map and action plan. We will use this opportunity to apply ECSA's experience in running successful citizen science initiatives and put in place a robust co-creative and inclusive methodology.

Together with **SOCIO-BEE**, ECSA has led workshops in several conferences such as Living Knowledge Conference and European week of regions, ECSA conference, etc where we explore different strategies of engaging vulnerable people to participate in citizen science projects.

Next steps

The next step for this project is the pilot activities, starting with the open round then and public round ECSA supports pilot activities in all locations, but particularly in Berlin where ECSA's HQ are located. In this project we aim at wide participation of citizens from all socioeconomic status.

Duration



2021 > 2024

Contact



Carolina Doran, project officer



Beatriz Noriega Ortega,

communications and community officer (until October 2022) and project officer (since October 2022)





@WeCOMPAIR



wecompair



wecompair.eu



COMPAIR has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101036563

7. Projects 85

7. Projects



Tags: citizen observatories, technology, services

Cos4Cloud implements 13 services to improve the quantity and quality of observations in citizen observatories. It will integrate citizen science in the European Open Science Cloud (EOSC).

Cos4Cloud integrates citizen science into the European Open Science Cloud (EOSC) ecosystem. Based on the experiences of various biodiversity platforms (including Artportalen, Natusfera, iSpot) and environmental monitoring platforms (including FreshWater Watch, KdUINO, OdourCollect, iSpex and CanAir.io), Cos4Cloud is co-designing, prototyping and implementing 13 new tools and services for improving data and information quality of observations in citizen observatories.

ECSA activities and milestones

During 2022, ECSA focused predominantly on networking, capacity building, communication, outreach, and stakeholder engagement. ECSA has been active in the CoNNect group, which was set up to ensure smooth collaboration among the project partners, and in the co-design team to plan co-design activities within the project's co-design task force. Part of the activities within

the co-design team was the organisation of an interactive workshop at the ECSA2022 conference on "Co-designing solutions for the sustainability and governance of citizen observatories" where the co-design methodology developed in the project was applied. The results of the workshop are summarised here.

ECSA also supported **Cos4Cloud**'s communications efforts and shared important news items and updates through the ECSA channels. ECSA has continued to carry out interviews with different stakeholders potentially interested in **Cos4Cloud** services and tools and to document use cases of **Cos4Cloud** services. These interviews were written up as blog posts on the project website. Work on the policy briefs to be delivered for the project continued.

In June, ECSA co-organised a webinar together with the project at which attendees could learn about **Cos4Cloud**, two of its services (MOBIS and

FASTCAT-Cloud) and about the integration between the citizen observatory iSpot and the FASTCAT-Cloud service.

Next steps

Cos4Cloud is ending on 28th February 2023.

During the final months of the project, one of ECSA's main focus will be on promoting the project results with its members and the wider citizen science community through the EU-Citizen. Science platform. The project's policy briefs and an interactive infographic to present project results and development will be finished and published. ECSA will also contribute content to the Cos4Cloud Toolbox and Evidence Hub and organise an open online event to share project results with the citizen science community and celebrate the community that has actively participated in Cos4Cloud events and meaningfully contributed to the project.

Duration



2019 ▶ 2023

Contact



Claudia Fabó Cartas, project officer



@Cos4Cloud



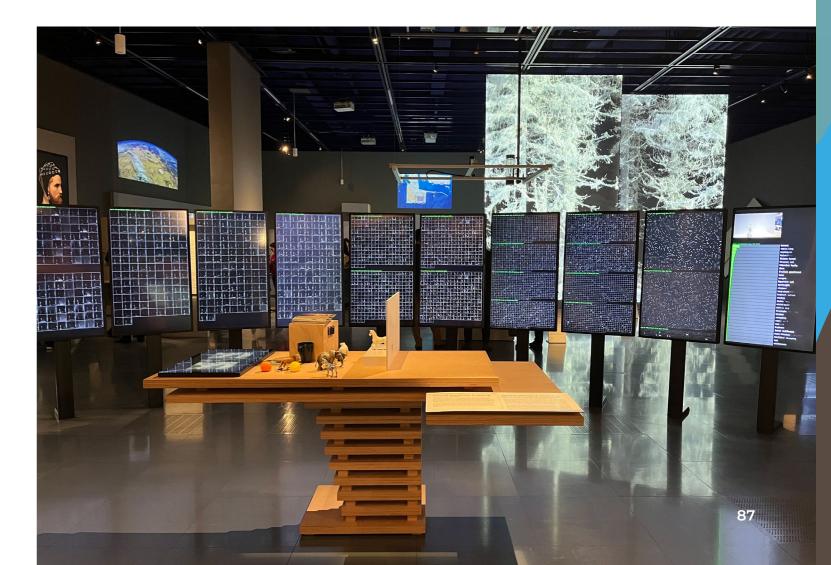
cos4cloud



cos4cloud-eosc.eu



Cos4Cloud has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 863463.



ECSA Annual Report 2022



Tags: capacity building, community, academy, platform

European Citizen Science aims to create a globally connected, inclusive and strong citizen science community for societal change in Europe.

The **European Citizen Science** project has the overall objective to widen and strengthen the citizen science community in Europe. It builds upon the previous European funded actions such as the **EU-Citizen.Science** platform and **Cos4Cloud** and on the enormous achievements in citizen science over the past decade. **European Citizen Science** is coordinated by ECSA and involves the participation of 12 partners and 9 affiliated entities (all of them ECSA members) from across 15 countries.

The project is committed to push modern science towards open science as a modus operandi. It will lead to a number of key scientific, societal and policy impacts which will contribute to make Europe positioned as a leader in citizen science throughout the entire research and innovation system. **European Citizen Science** aims to widen the European citizen science community through capacity building and awareness raising activities such as the creation of a **European Citizen**

Science Academy and the establishment of a network of citizen science ambassadors.

Maximum attention will be paid to expanding and engaging the citizen science community in Europe and those involved and interested in citizen science. Diverse stakeholders will be involved in the co-design and co-creation of a large variety of services, strategic priorities, training opportunities and policy recommendations. A key focus is on inclusivity, which will be achieved through dedicated actions such as engaging libraries affiliated to the Public Libraries 2030 network to attract underrepresented and underserved publics, as well as ad-hoc support to countries and regions lacking citizen science networks, platforms and policy recognition.

European Citizen Science will create extensive capacity building opportunities by engaging in particular excellent researchers in a variety of

disciplines, for example through the involvement of the Marie Curie Alumni Association, and emerging Horizon Europe Missions, Clusters, and wider European Research Area (ERA) activities, to allow easy access for newcomers in citizen science activities. The engagement of the Citizen Science Global Partnership will guarantee wide international cooperation.

European Citizen Science will provide open collaborative spaces where citizen scientists can familiarise with the concept of "open and FAIR (findable, accessible, interoperable, and reusable) data with open and FAIR tools" and get actively engaged, while connecting with existing e-infrastructures such as the European Open Science Cloud (EOSC) through the collaborative development of data and metadata services.

ECSA activities and milestones

As **ECS** coordinator, during the first months of the project ECSA organised the kick-off meeting and started setting up processes and ways of working to ensure an efficient and effective workflow in the project. Besides leading a work package on 'Project management and coordination', ECSA also leads the work package 'Communication and outreach for the global citizen science community' and a task on co-creating the European Citizen Science of the future. A 'Project Handbook' and a 'Communication and Dissemination Plan' have resulted from these first tasks and will guide the work in the project. Moreover, in 2022 ECSA has communicated about and disseminated project activities and liaised with the European Commission and with other projects of interest to find synergies. Collaborations with other projects have already been established.

Next steps

Priorities in 2023 will be to kick-start the work on community building to strengthen and widen the citizen science community through an array of participatory activities and events as well as support project partner Ibercivis in continuing to develop the **EU-Citizen.Science platform** with new features and services thanks to the meaningful contributions from the community and interested stakeholders. Furthermore, ECSA will contribute to setting up the European Citizen Science Academy and to mapping experiences for the co-design and co-development of data infrastructures, among others.

Duration

(L)

2022 ▶ 2026

Contact

Claudia Fabó Cartas, project officer

Simona Cerrato, communications and community manager

(7)

@eucitsciproject

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EUCitSciProject



eucitsciproject



eu-citizen.science



European Citizen Science has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101058509.

7. Projects



Tags: food system, innovation, research

FOSTER is contributing to address the emerging challenges of nourishing people in a healthy and sustainable way, and create an inclusive and better organised Knowledge and Innovation System for Europe's food system.

FOSTER will build food system capabilities, knowledge and new governance mechanisms for scientists, citizens and policymakers. The two pillars of the project are the FOSTER (Food) Platform and the FOSTER Academy. These will underpin the exploration of novel knowledge and innovation approaches integrating food systems research with citizen science activities in a range of case studies (citizen driven initiatives) representing European diversity. These citizen driven initiatives will be closely linked to discussions at local- and EU-level on enhanced research and innovation governance. Innovation is therefore in both the 'what' and the 'how'.

FOSTER shall help to transform Europe's food system outcomes and will achieve this by:

building a FOSTER Platform including food system-state of the art knowledge, trend and threats-analysis and new multidimensional scenarios of EU food systems to 2040

- → implementing the FOSTER Academy — including 4 Summer Schools — for integrating food system-related disciplines and citizen science to enhance food system understanding across the ERA
- initiating and assessing a co-creation and co-learning process within six national regional citizen driven initiatives, in which new knowledge, strategies and action research agendas are gained
- scaling out and deep citizen driven
 initiatives solutions and approaches to other
 territorial contexts
- studying different mechanisms of policy support for mission-oriented research

and innovation policy for food systems transformation, and analysing and groundproofing them in each citizen driven initiatives

- strengthening science-policy interfaces by co-learning processes with external experts and developing recommendations for food systems research and innovation policies tailored to different geographies and sectors
- identifying the trigger points to help unlock system lock-ins and support further dynamics towards system transformation
- and applying reflective monitoring on all
 FOSTER's co-learning activities to develop insights into how the knowledge and innovation system can be broadened from an agricultural to a food system.

ECSA activities and milestones

ECSA will implement citizen science strategies, and engage in knowledge co-creation in 6 citizen driven initiatives as case studies.

The goal is to foster new linkages between food system innovators in 6 selected citizen driven initiatives and academically trained food system experts by co-creating good practices on the role of citizen science in food system research in the European Research Area.

The focus therein will be on citizen science, connecting young people, women, underrepresented communities with research and scientific problem-solving possibilities, and vice versa, following the principles of responsible research and innovation (RRI).

To inspire adoption of **FOSTER** learnings, over 20 workshops and a final conference will be conducted; scientific position papers and policy briefs will be widely communicated.

Duration

2022 ▶ 2026

Contact

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Tags: co-creating citizen science hubs, Responsible Research and Innovation, sustainable institutional change

Four citizen science hubs at four universities aim to accelerate their transition to more inclusive, open and democratic innovation and scientific governance, under the principles of Responsible Research and Innovation.

INCENTIVE aims to demonstrate the potential of citizen science through the co-creation, establishment and assessment of citizen science hubs in four European Universities. The project aims to accelerate the transition of these institutions to more inclusive, open and democratic innovation and scientific governance. Furthermore, delivering a legacy to European and international research institutes on how to democratically and collaboratively create and operate their own citizen science hubs. To this end, we have started by establishing such citizen science hubs in 4 world-class European Research Performing and Funding Organisations (RPFOs). Covering all 4 MoRRI country clusters, including University of Twente, Autonomous University of Barcelona, Aristotle University of Thessaloniki, and Vilnius Gediminas Technical University.

ECSA tailors the governance and operating models of the hubs to their unique institutional specificities and regional ecosystems of R&I stakeholders. They

will then be put to the test to drive institutional change through a series of RRI-grounding actions. The citizen science hubs, besides being a sustainable institutional change themselves, will serve as a vehicle for introducing substantial institutional changes in the RPFOs and their communities. ECSA will closely monitor, evaluate and report the performance and outcomes of the citizen science hubs and their actions, providing evidence of societal, democratic, economic and scientific impacts. Along the way, we will foster mutual learning and networking opportunities among RPFOs across Europe to share experiences and develop practical tools to enable RPFOs to drive similar institutional changes in other contexts.

ECSA activities and milestones

The success of **INCENTIVE** relies on the formative relationships with stakeholders and synergies beyond the 4 core RPFOs. ECSA's main task in INCENTIVE

aims to address this through synergies and the network of interest, and through connecting the cross Citizen science SwafS working group and other projects. In 2022 ECSA identified further synergies and initiated projects with these synergy partners to support mutual learning and engagement. ECSA also established the structure and plan for the network of interest, as well as supporting hub partners in the hub development process.

Next steps

The hubs will become fully operational in 2023 and ECSA will be supporting various parts of this process. We will contribute to the webinar series and to the ongoing mutual learning exercises for the hubs, sharing expertise and supporting their growth. ECSA will also continue to develop synergies and the network of interest to open up the hub methodology and experiences to the broader citizen science community. This will include continuing our work on institutional barriers with Time4CS and Pro-Ethics.

Duration



2021 ▶ 2024

Contact



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www.incentive-project.eu



INCENTIVE has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101005330.

7. Projects 93

7. Projects



Tags: information technology, ethics

PANELFIT produces guidelines, analysis of the information and communication technology data protection regulatory framework, and a report on the ethical and legal issues.

PANELFIT (Participatory Approaches to a New Ethical and Legal Framework for ICTs) is an H2020-funded project that facilitates adaptation to the new EU regulations on data protection, data commercialization, security and cybersecurity issues. Its outcomes will include an open-access guidelines document, a critical analysis of the information and communication technology (ICT) data protection regulatory framework, and a report on the governance of information and communication technology data protection ethical and legal issues.

leading the organisation of the webinar Data protection, citizen science and vulnerable groups held in February 2022 with the participation of data protection experts. Citizen science practitioners, NGO's representing different vulnerable groups and a diverse set of participants shared their concerns and ideas regarding data privacy regulations and how to encourage participation in citizen science projects.

ECSA activities and milestones and final steps

The project was extended until April 2022, and during the final months of the project, ECSA promoted the citizens' information pack to its members and the wider citizen science community as a useful resource for citizen science practitioners to rely on and design their data protection policies. ECSA was also

Duration



2018 ▶ 2022

Contact





@Panelfit



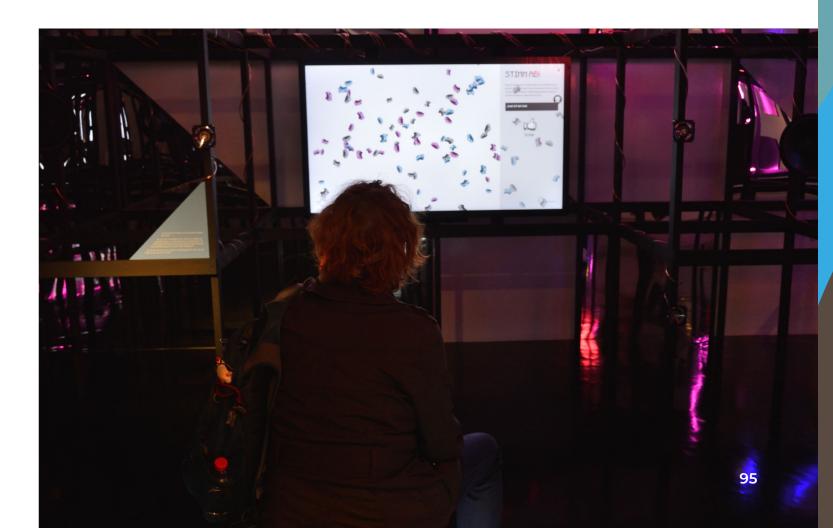
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PANELFIT has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 788039.





Tags: education, microplastic, young adults

RAISE-CS seeks to overcome barriers for the implementation of citizen science projects in schools involving teachers and their pupils in the field of microplastic pollution.

RAISE-CS aims to lay the groundwork for implementing an EU-wide citizen science programme — in this case in the topic of microplastic pollution — run in a robust and harmonised manner by secondary schools. The overarching goal is to root citizen science in the European reference framework of key competences for lifelong learning with the view to integrating this practice in secondary schools curricula.

RAISE-CS is an Erasmus+ project funded by the European Union, which aims to demonstrate that secondary schools can generate reliable and useful data and knowledge within the research field of microplastic pollution. For this robust methods for assessing microplastic pollution in aquatic environments that can be implemented in upper secondary schools will be developed. ESCA supports the elaboration of a stand-alone training course for teachers and pupils for inclusive citizen science campaigns to take place

using the validated methods, where microplastic pollution will be assessed. Finally, ECSA will support in developing a strategic roadmap and a catalogue of guidelines for implementing an EU-wide monitoring of microplastic pollution in aquatic environments, co-created by secondary

ECSA activities and milestones

During 2022, the first year of the project, ECSA elaborated the project's dissemination plan, including the dissemination tools and events, the stakeholder identification and engagement plan as well as the dissemination and communication objectives and key performance indicators. Following this, ECSA designed and created the project's website portraying the partners involvement, goals, activities and news of the project. In addition, during our project meeting in the Joint Research Center in Geel, we conducted a collaborative session on stakeholder identification



and analysis. Later in the year, ECSA organised and hosted a project meeting in Berlin. Moreover, during the meeting, we arranged a working session with project partners, where we defined the stakeholder engagement strategy.

Next steps

During 2023 ECSA will support the development of a stand-alone training course, consisting of video tutorials for teachers and pupils, with additional explanations and background information using the validated methods, where microplastic pollution will be assessed. Finally, ECSA will continue to engage with relevant stakeholders to support in developing a strategic roadmap for implementing an EU-wide monitoring of microplastic pollution in aquatic environments, cocreated by secondary schools.



RAISE-CS has received funding from the European Union's Erasmus+ KA220-SCH Action

Duration



(L) 2022 ▶ 2023

Contact

François Jost, project officer



Carolina Doran, project officer (until August 2022)



Beatriz Noriega Ortega, project officer (since October 2022)



@RaiseCS



raiseCS



www.erasmusmaris.eu/raise-csproject.html

96 ▲ O Raise-CS consortium meeting. Photo: Raise-CS ECSA Annual Report 2022 7. Projects

RESIE

Tags: research ethics, integrity, open science

ROSiE develops practical tools to support research ethics and research integrity in favour of an open research ecosystem in Europe.

ROSiE (Responsible Open Science in Europe) aims to identify emerging ethical, social and legal challenges related to open science and citizen science. Over three years, a multidisciplinary project team will identify such challenges and develop practical tools to support research ethics and research integrity in and for an open research ecosystem in Europe.

ROSiE is a three-year project funded by Horizon 2020. Its mission is to co-create with all related stakeholders novel practical tools to foster responsible open science and citizen science. The project will provide customised solutions through an interdisciplinary knowledge hub bound to actively pursuing open approaches in science and research, while complying with relevant legal frameworks and ethical standards.

ECSA activities and milestones

During 2022, ECSA continued coordinating the ross-SwafS stakeholder forum for responsible open science. As a space for horizontal communication of SwafS (Science with and for Society) projects working on citizen science, open science and Responsible Research and Innovation (RRI) to share knowledge and experience. Taking place on a bi-monthly basis these sessions offered a space to discuss challenges and opportunities and strengthen the knowledge base about research ethics and research integrity in open science and beyond. With the involvement of new interested projects, at the end of 2022, representatives of 17 SwafS projects are participating regularly in the Forum sessions.

In addition, ECSA mapped and investigated the aspects of citizen science that are synergistic with and relate to open science and Responsible Research and Innovation. This mapping and analysis of the overlaps was thereafter used to inform the development of the ROSiE conceptual and normative framework. ECSA also participated in a workshop in Noresund to provide feedback and cocreate a strategic policy paper on responsible open

science. Finally we also co-authored the report on a strategy to engage stakeholders, mainly elucidating the commonalities between open science and citizen science regarding research ethics and integrity.

Next steps

During 2023 ECSA will continue to lead and facilitate the cross-SwafS stakeholder forum for responsible open science. Moreover, in 2023 ECSA will organise two online workshops, the first one to gather inputs for the normative framework development and the second one (at the end of 2023 or beginning of 2024) to showcase the outcomes of the normative framework development and discuss putting those into practice.



ROSiE has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006430.

Duration



2021 ▶ 2024

Contact

















Tags: teenagers, empowerment, health

Through extreme citizen science, SEEDS aims to empower teenagers to live healthy lifestyles. It focuses on nutrition, physical activity and sedentary behaviour.



SEEDS (Science Engagement to Empower aDoleScents) is a science project by teenagers for teenagers. It aims to empower them to live healthy lifestyles and to help them explore how important and exciting science can be. They used citizen science to create new experiments for healthy lifestyles.

These run for six months in schools in Spain, the Netherlands, Greece and the UK.

seeds consortium aims to engage adolescents from underserved communities in designing interventions that seed an interest in scientific methodologies, promote STEM careers and empower them by enhancing their critical thinking capabilities. All seeds partners share a core belief that more can be done to create a better (and healthier) future for adolescents from low-income neighbourhoods.

ECSA activities and milestones

In 2022 ECSA led the organisation of the final conference event, where more than 50 teenagers, researchers and teachers gathered with the **SEEDS** team in Leuven to share their perspectives on the **SEEDS** project. Building from this, we also led the creation of a video to reflect the teenager's experiences of SEEDS, which will be widely shared. ECSA also led the dissemination and communication work and have shared the process and practicalities of **SEEDS** within the citizen science community through various workshops and talks. This includes running a workshop together with YouCount at the Engaging Citizen Science Denmark Conference in April 2022, and the outputs from this workshop on youth empowerment have been written up for the conference proceedings. We promote the work of the teenage scientists and the possibilities for citizen science in public health via the **SEEDS** Twitter and website.

Final steps

The **SEEDS** project ended in December 2022 with a final video that wraps the two years of the project. The press release and the link to the video are available on the **SEEDS** website.

Duration



2021 ▶ 2022

Contact













SEEDS has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006251.



Tags: creating citizen science hubs

Through citizen science activities with wearable sensors and intuitive platforms, empowers citizens to make decisions in favour of their environment and their health.

SOCIO-BEE aims to reduce air pollution in urban areas through citizen science. Through an example from nature, SOCIO-BEE builds on the metaphor of bee colonies to develop effective behavioural and engagement strategies with a wide range of stakeholders (i.e., queen bees, drone bees, working bees, and bears) and to co-create in hives long-lasting solutions against urban air pollution supported by emerging new technologies such as drones or wearables.

The project launched in October 2021 and harnesses the power of community engagement to raise other citizens' awareness of climate change and their own responses to it, through experimentation, better monitoring, and observation of the environment. This idea is beautifully emphasised in this project through the metaphor of bee's behaviour with citizen scientists with different levels of engagement (queens, workers, larvae and drones), interested stakeholders (honey bears), citizen science practitioners (bee keepers) and citizen science hives

that will be tested in three different pilot sites and with different target populations: young adults, elderly people and everyday commuters.

ECSA activities and milestones

ECSA is the leader of the dissemination and communication activities of SOCIO-BEE. Within this role we have represented **SOCIO-BEE** in different conferences across Europe (Engaging citizen science conference, living knowledge conference, Key Energy) and online events such as the European Week of Regions and Cities 2022. Additionally ECSA has been responsible for organising online events like webinars and crash courses for air quality, "low cost" sensors, early career scientists in Citizen Science, where the project has also been represented. SOCIO-BEE's website now hosts the Knowledge Powerhouse of Law and Ethics, as well as a blog. In Summer 2022 ECSA led the validation of the **SOCIO-BEE** methodology by contacting several experts in the fields of social engagement and



citizen science to evaluate SOCIO-BEE's toolkit for citizen engagement.

Next steps

ECSA is now supporting pilot activities in Ancona, Maroussi and Zaragoza with materials for dissemination, training materials and in general with engagement of citizens during pilot rounds.

Duration



2021 ▶ 2024

Contact



Carolina Doran, project officer (until September 2022)



Beatriz Noriega Ortega, communications and community

officer (until October 2022) and project officer (since October 2022)



Paul Sorrell, communications and community officer since November 2022



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SOCIO-BEE



socio-bee.eu

SOCIO-BEE has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101037648.

102 103 ▲ O SOCIO-BEE consortium meeting. Photo: SOCIO-BEE

ECSA Annual Report 2022 7. Projects



Tags: research and innovation, citizen science initiatives

It explores and boosts the potential of citizen science for advancing knowledge and innovation in five fields.

Step Change (Science Transformation in Europe through Citizen involvement in Health, conservation and energy research) explores and boosts the potential of citizen science for advancing knowledge and innovation in critical research fields. Five handson citizen science initiatives in the energy, health and environment sectors will be developed and analysed to generate recommendations for a better anchorage of citizen science in scientific institutions, and a better alignment between science and society.

Step Change implements five citizen science Initiatives in the fields of health, energy and environment. The citizen science Initiatives tackle the issues of wildlife conservation in Slovenia, non-alcoholic fatty liver disease in the UK, energy communities in Germany, infectious disease outbreak preparedness in Italy, and offgrid renewable energy in agriculture in Uganda. The EU-funded project, launched in March 2021, will draw on the expertise of 11 partners from 7 European countries and Uganda, to increase

the mutual responsiveness of science and society while boosting the capacity of scientific investigation over phenomena that cannot be completely seized within conventional disciplinary boundaries.

ECSA activities and milestones

ECSA leads the stocktaking exercise and recommendations. This is one the major project deliverables, as it will collect theoretical and practical insights about different citizen science applications. Even though all activities under ECSA's lead are planned to start in February 2023, ECSA already participated in activities related to communication and dissemination, scoping processes, mutual learning exercises and participatory evaluation.

Additionally, ECSA organised a meeting with partners to start with the co-design of the citizen science navigator. Thereafter, during the steering committee meeting in Koper (17-18 May 2022), we organised a brainstorming workshop with all partners intended to further develop the structure and desired content of the citizen science navigator.

Next steps

During 2023 ECSA will organise multilateral online sessions to foster a dialogue within the consortium on the stocktaking exercise. ECSA will also organise a set of on-site internal meetings in each of the five citizen science initiatives' organisations to assess their activities and conduct an institutional stocktaking exercise. Finally, under the leadership of ECSA and with the support of all the partners, we will start with the development of the Citizen science navigator based on all the input of the project.



Step Change has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006386.

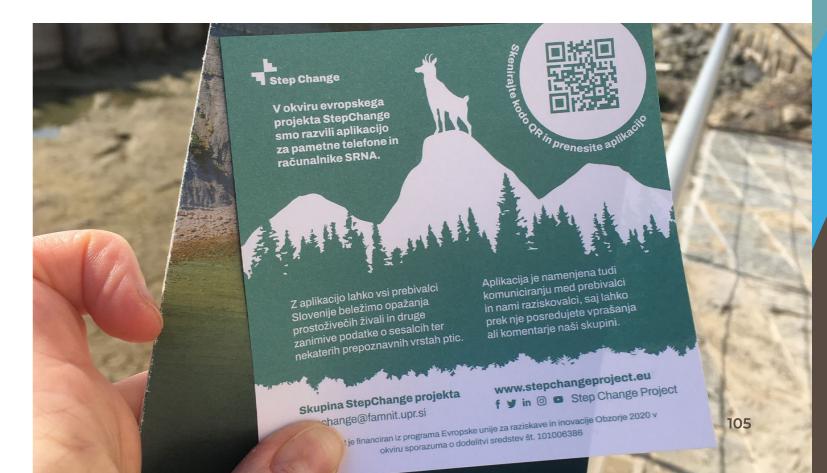
Duration



2021 > 2024

Contact

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- @StepChangeEU
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- @stepchangeproject1925
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- stepchangeproject.eu









Tags: taxonomy, biodiversity, research

It envisions a transformative change in the field of taxonomy to build and sustain taxonomic research capacity through increasing knowledge and developing systems

Accurate taxonomic knowledge and tools are needed to understand the drivers and impact of biodiversity decline. However, the field of taxonomy is severely hampered by a continuous decrease in capacity.

With **TETTRIs**, we envision a transformative change in the field of taxonomy to build and sustain taxonomic research capacity through increasing knowledge and developing systems.

TETTRIs will achieve this aim by creating joint knowledge in reference collections, training frameworks, and with innovative tools as well as by developing centralised resources providing access to an expertise marketplace, the taxonomic knowledge platform, and career paths. The core methodology for reaching these objectives includes co-creation with citizen scientists, and professionals in biodiversity hotspots.

The open-access knowledge and systems built into and developed through **TETTRIs**, together with

citizen scientists, will accelerate the integration and expansion of taxonomy in education, governance, and multidisciplinary research. This will ensure the long-term relevance of taxonomy as an instrumental science, necessary to halt European and global biodiversity loss, and ensuring ecosystems and their services are preserved and sustainably restored on land, inland water and at sea.

TETTRIs builds taxonomic research capacity near biodiversity hotspots by networking natural history museums and other taxonomic facilities through bottom-up co-creation between 17 partners.

The consortium includes the European Citizen
Science Association and several of Europe's leading
natural history museums, botanic gardens and
universities unified under CETAF, the leading
European voice for taxonomy and systematic biology.

Impact throughout the EU and beyond is secured through involvement of associated research

infrastructures and initiatives such as DiSSCo and DEST, and key **TETTRIs** dissemination activities towards a new generation of taxonomists, citizen scientists, users in need of taxonomic knowledge, and decision makers.



TETTRIS has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101081903.

Contact

Franziska Stressmann, project officer







 ▲ (i) TETTRIs consortium meeting. Photo: TETTRIs



Tags: young people, inclusion, diversity

It brings together young people and relevant stakeholders to co-create new knowledge and innovations to address social inclusion for young people in Europe.

YouCount aims to generate new knowledge and innovations to increase the social inclusion of youth at risk of exclusion across Europe through co-creative youth citizen social science. The multiple case studies – consisting of nine co-creative Y-CSS projects across Europe – will provide increased knowledge of the positive drivers for social inclusion in general and specific knowledge and innovation relating to participation, belonging, and citizenship.

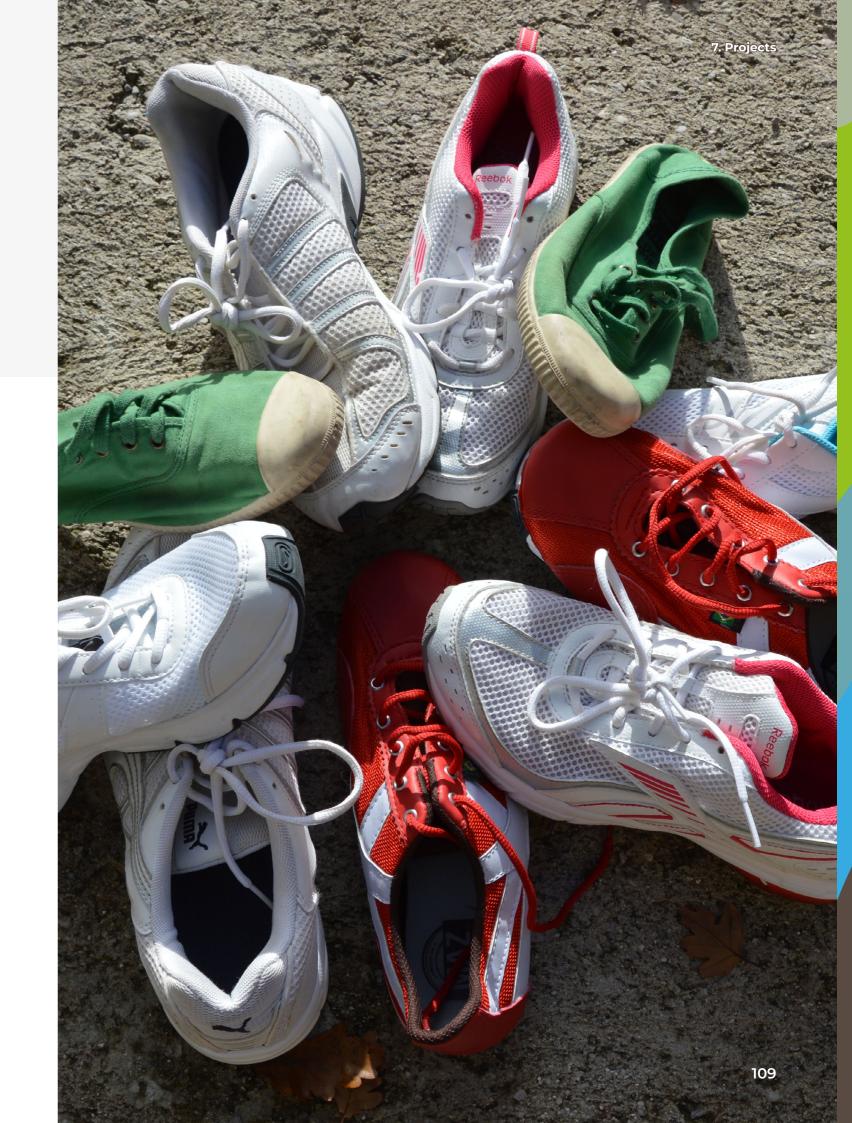
ECSA has only a supporting role in this project.



www.youcountproject.eu



YouCount has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101005931.

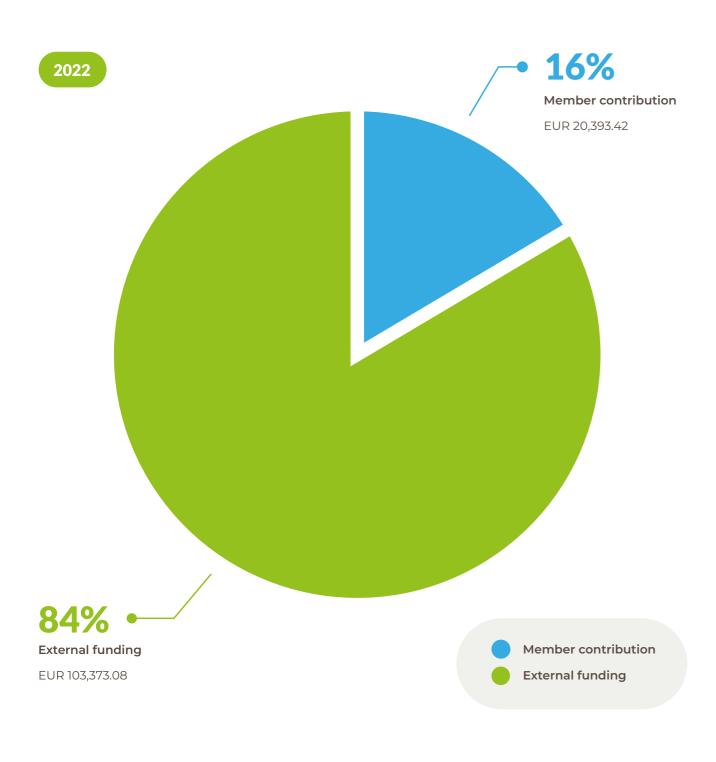


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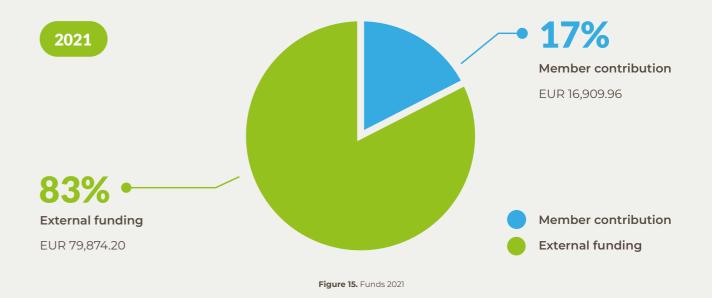
ECSA Annual Report 2022

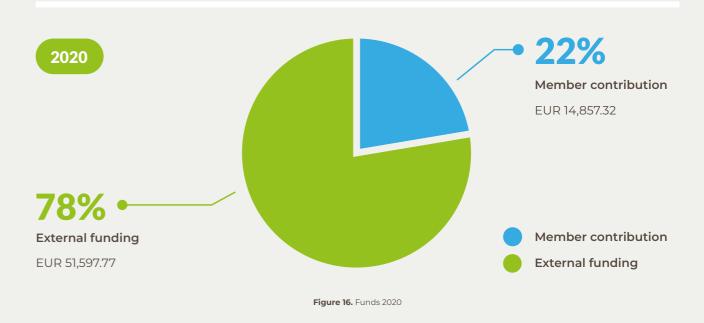
8.1. Funds

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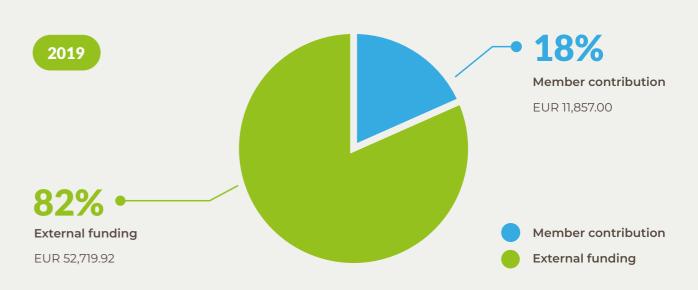


Figure 17. Funds 2019

ECSA Annual Report 2022

8.2. Spending

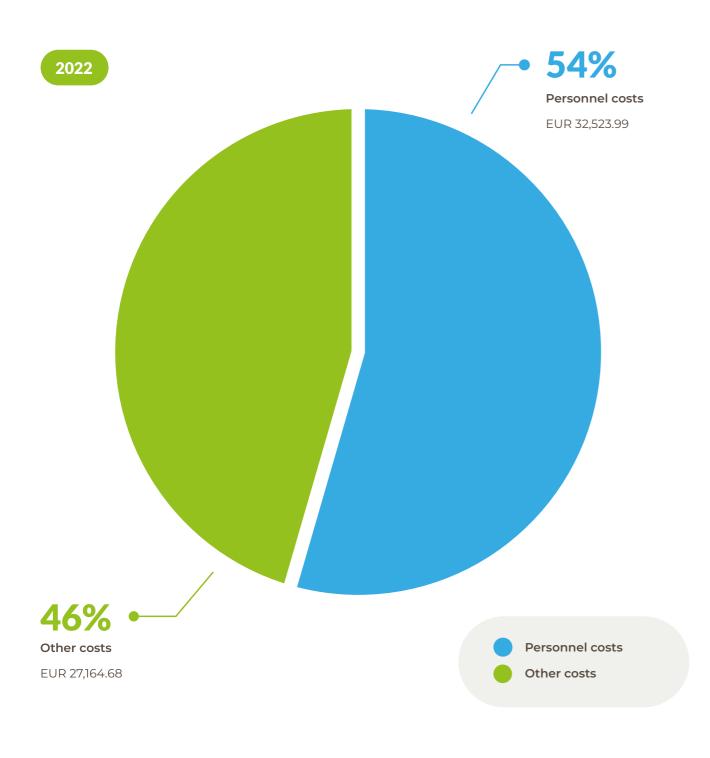
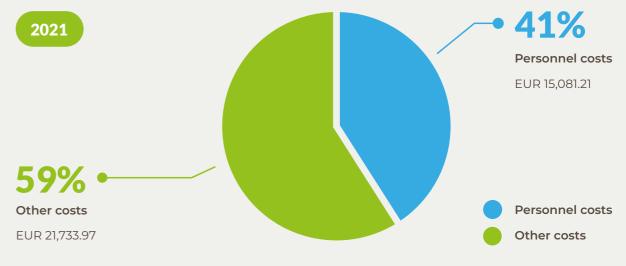
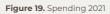
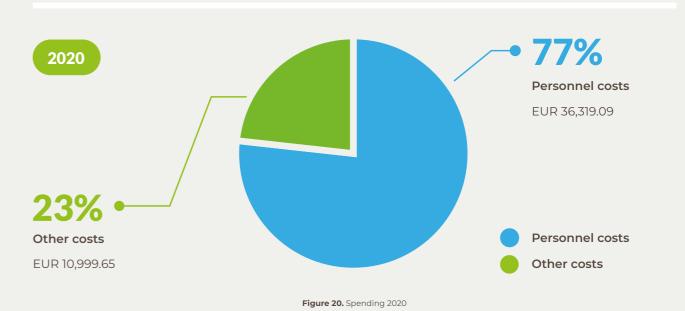


Figure 18. Spending 2022







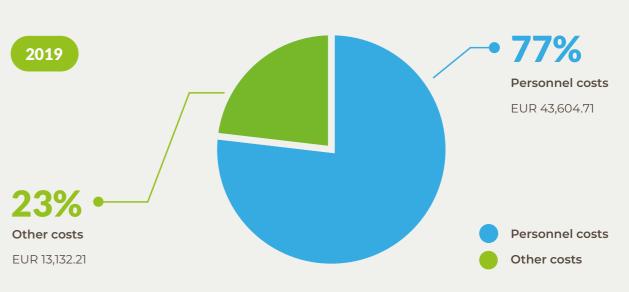


Figure 21. Spending 2019

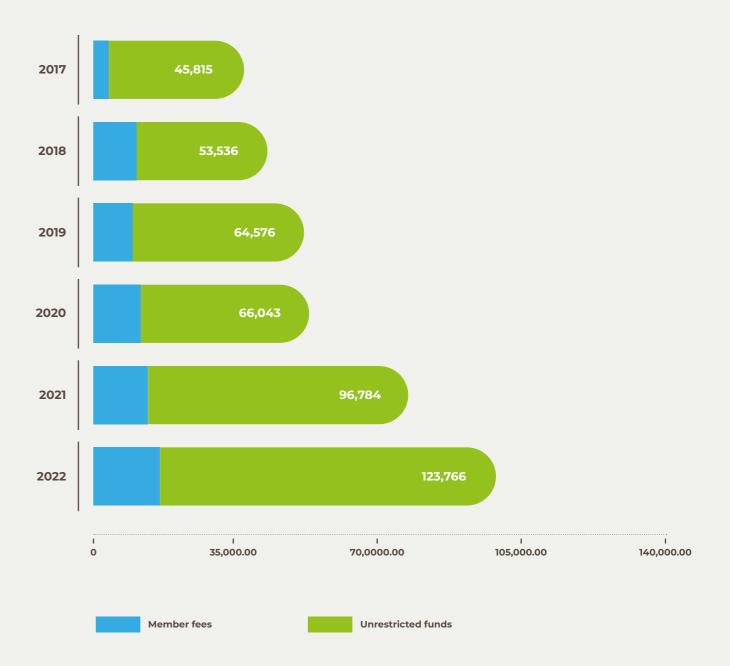
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8. Budget

8.3. Total Revenues



Figure 12. Total revenues 2017-2022



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8. Budget

8.4. Total spending

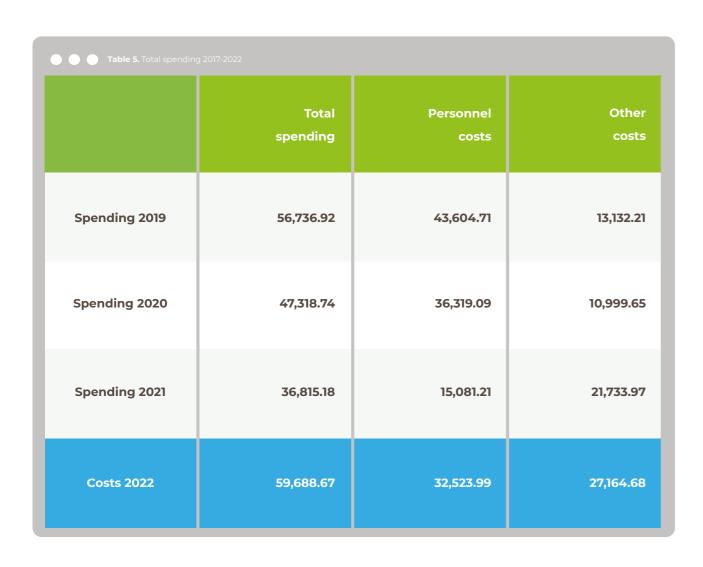
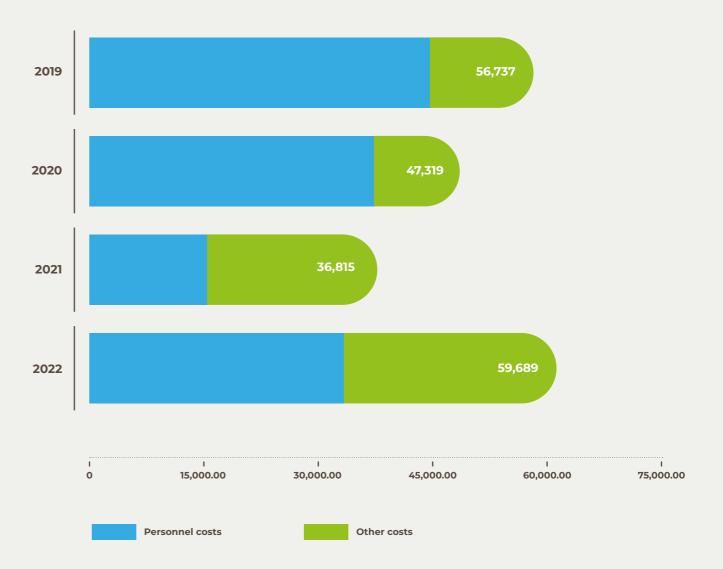


Figure 13. Total spending 2017-2022





ECSA sincerely expresses its gratitude to the Museum für Naturkunde Berlin for their continuous support, which includes office space and administrative guidance.



ECSA also thanks the Chairpersons and the Board of Directors, the Chairs and Members of the working groups, the Advisory Board and, last but not least, the ECSA members for their support and commitment.

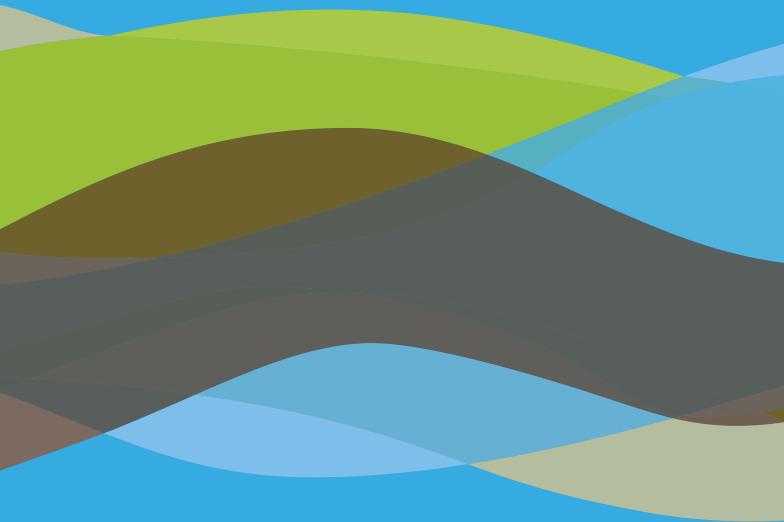




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