A Global Citizen Science Programme on Climate Change Mitigation

Report prepared by the
Citizen Science Climate Change Mitigation (CSCCM) Working Group

EXECUTIVE SUMMARY

Climate change is the defining challenge of our time, and meaningful action depends on the daily choices of billions of individuals. These individual behaviours have the potential to reduce global greenhouse gas emissions by 40-70% by 2050 if supported by technology, policy, and community engagement. However, the slowest movement towards mitigation is observed in the individual actions of ordinary people.

Citizen science represents a powerful tool for engaging individuals around the world in evaluating daily choices that, collectively, can have global impacts on meaningful climate action. By engaging individuals in monitoring their carbon footprint, tracking energy use, and participating in collective challenges at scale, a global citizen science climate change mitigation programme can leverage local action to solve global challenges.

Here we propose a global citizen science initiative that scales the impact of five regional projects (AURORA, PS Lifestyle, Step Change, FULFILL, and Generation Solar) and integrates the data generated by these projects worldwide. Inspired by the successful Global Mosquito Alert programme, this effort leverages €20M in previous investments in regional projects and technology infrastructure to centralise data, engage a global user base, and catalyse behaviour change from the ground up.

The strategic pillars of our approach are:

- **transparent data visualisation**
- **motivational and inspirational messaging**
- **sustained and interactive engagement**
- **ethical data privacy**
- **global inclusivity**

Together, these approaches create a foundation for moving individuals towards collective efficacy and measurable climate action.

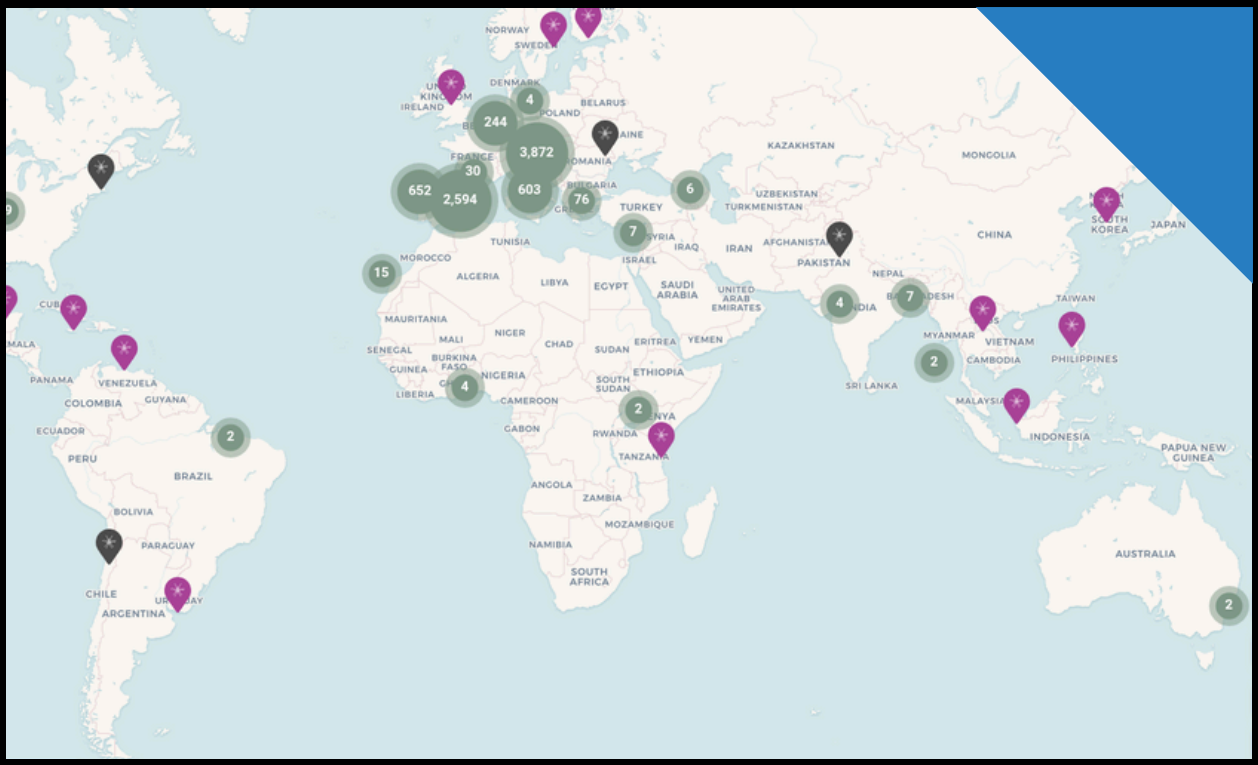
At its core, our vision is that ordinary citizens do not just document change: they become part of it. By linking personal choices to collective impact, this project demonstrates how citizen science empowers participants and unites communities in collective action to accelerate the transition to a sustainable, net-zero world.

OUR VISION

Transformative reductions in global greenhouse gas emissions will require both systemic reform and widespread shifts in individual behaviour. Comprehensive lifestyle changes could mitigate up to 70% of global carbon emissions by 2050 (IPCC 2023), yet only a fraction of this potential can be realised without supportive infrastructure, policies, and incentives (Hernandez 2025). To unlock this potential, **we propose a global citizen science platform that empowers individuals to understand, monitor, and reduce their carbon footprints** while contributing valuable data to climate research and policy.

Our global project leverages the power of citizen science to gather data at global scales and link personal behaviour and community energy installations with collective climate outcomes. Participants will track their own emissions, visualise the impacts of their choices, and contribute research-grade data that helps scientists, policymakers, and local leaders identify effective mitigation strategies. By providing accessible and inclusive tools, available in multiple languages and adaptable across cultural and regional contexts, this initiative will enable meaningful participation from all parts of the world, including communities in the Global South that contribute the least to the problem but face disproportionate climate risks (Ngcamu 2023).

The basic infrastructure for this project already exists. Building on lessons from five successful citizen science and climate mitigation initiatives at regional scales, our strategy integrates proven design principles with global scalability. The next step is to create and scale a user-focused platform that not only integrates meaningful data from existing projects but also inspires and sustains behavioural change.



The **Global Mosquito Alert** public map provides an interactive view of data collected by citizen scientists. Our project will leverage this infrastructure to integrate data across projects, providing similar visualisations for citizen science carbon footprint data.

OUR APPROACH RESTS ON FIVE, INTERCONNECTED, STRATEGIC PILLARS:

- **A clear, responsive, and accessible data dashboard** that allows participants and researchers to visualise project results and meaningfully interpret the data. Users will be able to explore their personal carbon footprint data, impacts of renewable energy installations, changes over time, and progress towards net-zero. Participants will also be able to examine personal and community-level cost-savings that come from emissions reductions, reinforcing the tangible rewards of sustainable choices.

- **Inspiring and empowering messaging**. The platform's communications will be carefully designed to inspire engagement, sustain motivation, and foster collective efficacy. Positive, solution-oriented messaging is particularly important to help participants feel connected, capable, and part of a global community. In this way, we avoid making participants feel guilty, helpless, or ashamed by their carbon footprint: feelings that undermine positive change (Said & Wölfl 2025). Equally important, the platform will provide emotionally sustainable ways to engage with climate change mitigation, helping citizen scientists channel concern into constructive action rather than anxiety or fatigue.

- **Interactive, responsive, and user-focused interface** that motivates sustained participation and individual action. Many existing initiatives successfully recruit volunteers but struggle to maintain long-term engagement or drive meaningful behavioural change. Automated data collection, interactivity, feedback, and gamification are evidence-based strategies to sustain participation over time. For example, recognition systems and community challenges will reward individual and group achievements, encouraging healthy competition and collective progress toward emissions reductions.

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- **Data privacy**. Data protection and ethical, anonymous data sharing will be central in the platform design, ensuring that personal data remain secure and comparisons across regions are presented in ways that respect privacy, equity, and emotional well-being.

- **Global inclusivity and equity**. From its inception, this platform will be planned for accessibility across diverse cultures, languages, and technological contexts. By removing barriers to participation, our project will engage not only those already committed to personal climate change mitigation action, but also ordinary people who may not yet understand their role in climate action. This inclusivity is critical for ensuring that all communities, from those contributing the most to climate change to those most affected by its impacts, can contribute meaningfully to solutions.

Through this global effort, citizen science becomes a mechanism for measurable, bottom-up climate action: one that not only changes individual habits but also builds collective agency, accelerates innovation, and drives progress toward a just, sustainable, and net-zero future.

WHAT IS CITIZEN SCIENCE?

Citizen Science is a form of research that directly includes members of the public in the scientific process. Also known as participatory science or community science, it goes beyond science outreach by producing genuine scientific outcomes through public participation.

Citizen science can take many forms. The most common is the *contributory* model where volunteers collect or analyse data (e.g., uploading photos of organisms for identification or "ground truthing" satellite imagery). *Collaborative* projects engage communities more deeply in developing research questions, selecting methods, or sharing results and outcomes. *Co-created* projects go further still, with participants co-designing and co-directing the research itself.

Citizen science operates around the world at every scale: from small, local efforts run by individual researchers to global networks involving hundreds of thousands of participants. Some projects focus on a single species or region, while others span continents, hemispheres (e.g., Great Southern Bioblitz), or collect data worldwide (e.g., NASA GLOBE Observer or Globe at Night; Mast 2025).

Across topics and contexts, successful, global initiatives share some key traits: they are built on intuitive and accessible digital platforms for data collection and visualisation, they build a sense of community among participants, and they coordinate collective participation. These features make it possible for everyone everywhere to contribute to robust, policy-relevant datasets.

The Citizen Science Global Partnership (CSGP) exemplifies this collaborative spirit. This partnership brings together leading regional citizen science associations and their members from around the world to advance global sustainability by promoting open data standards, interoperability frameworks, and cross-sector partnerships. Building on the foundations of our existing partnerships, this proposed global project will monitor carbon footprints and accelerate climate change mitigation efforts by scaling proven approaches and connecting existing efforts into a cohesive, global network.

THE POWER OF CITIZEN SCIENCE TO CATALYSE LARGE-SCALE CHANGE

Citizen science's true strength lies in its capacity to translate awareness into action. Climate mitigation depends not only on technology or policy but on human behaviour. Changes in everyday individual practices, such as travel, diet, household energy use, or waste, could reduce global greenhouse gas emissions by up to 70% by 2050. Yet, these personal behaviours are the slowest to move towards net-zero. Achieving this potential is complicated because behaviour is shaped by convenience, financial costs, social norms, and routine. **In short, lasting change requires more than information: it demands engagement, trust, and a sense of agency**.

Citizen science provides a pathway to these conditions. By collecting and interpreting personal data, participants connect global climate issues to their own experiences, seeing firsthand how their actions affect the environment and their communities. This process personalises abstract challenges and lowers barriers to behavioural change. Examples from around the world show how this model leads to tangible outcomes:

INDIA

Residents co-designed a citizen science air-quality monitoring project, identified pollution hotspots, and persuaded local authorities to expand green spaces and redesign streets.

UNITED KINGDOM

Annual citizen science bird counts inspired participants to plant native species and reduce pesticide use, supporting local biodiversity and lowering emissions.

AUSTRALIA AND NEW ZEALAND

Employees involved in "blue carbon" restoration citizen science projects reported sustained behaviour changes: 64% adopted new sustainability practices compared to 45% of those who only attended workshops.

COLOMBIA

Adolescents in Barú used citizen-science mapping to identify school environmental barriers, leading to infrastructure improvements and sustained student engagement in community well-being initiatives.

Global institutions also increasingly recognise the strategic and operational value of citizen science approaches. The UN Environment Assembly encourages the integration of citizen-generated data into sustainability monitoring systems (Rae 2019). Likewise, the Organisation for Economic Co-operation and Development (OECD) recently highlighted the need for strong validation, training, and institutional support to ensure credibility, reproducibility, and policy relevance of citizen science. Together, these frameworks affirm that citizen science has a key role to play in achieving systemic, evidence-based climate solutions (Motion 126).

HARNESSING CITIZEN SCIENCE FOR CARBON FOOTPRINT MONITORING

Among the many ways citizen science can accelerate climate action, carbon footprint monitoring offers one of the clearest paths from awareness to measurable impact.

A carbon footprint translates complex climate processes into tangible indicators of personal and collective impact. It accounts for the greenhouse gases emitted across the entire life cycle of human activities and products, from production and transport to use and disposal, standardised as carbon dioxide equivalents (CO2e).

Citizen science provides a scalable and inclusive way to track carbon footprints, while empowering participants to understand and reduce environmental impacts. Through shared data collection and reflection, citizen scientists connect their daily choices and experience to global climate change through a hands-on process, linking abstract concepts to lived experience. The act of measuring personal impact fosters awareness, builds agency, and creates a feedback loop between knowledge and action. In addition, by equipping participants with both data and agency, citizen science helps overcome bureaucratic barriers, accelerating climate solutions from the bottom up.

In these ways, citizen science catalyses awareness into action. It transforms climate concern into measurable local impacts and global climate change mitigation. Over time, individual behaviours propagate through communities and align with broader goals like the SDGs.

WHY NOW? TECHNOLOGY MEETS GLOBAL OPPORTUNITY

The convergence of technological innovations, global connectivity, and social awareness has created an unprecedented opportunity to mobilise citizen science for climate change mitigation. Today, individuals around the world can collect, share, and visualise carbon footprint data in near real time, clearly connecting personal behaviours with collective impacts and visualising how their everyday choices add up to meaningful changes at-scale. Mobile applications, online dashboards, and the "internet of things" now make it possible to automate the collection of most data, empowering anyone with a mobile device to monitor their carbon footprint, understand the impact of behavioural changes, and contribute data that advances scientific and policy goals.

Several successful regional initiatives demonstrate the potential of this approach. For example, the AURORA Energy Tracker allows users to log and visualise household and transport energy data, while the European Union's I-CHANGE project engages participants through interactive "living labs" that pair environmental monitoring with behavioural feedback. These projects also feed anonymised data into research-grade databases, expanding their scientific utility and strengthening their relevance to policymakers at local, regional, and global scales.

Scaling such efforts can transform the role of individuals in climate action, from passive consumers of information to active participants in emissions reduction. Citizen-generated data at a global scale can finally allow us to identify where emissions occur, how habits change over time, and which interventions work best in specific cultural and geographic contexts.

Importantly, the technological foundation for this approach exists now. Cloud-based data infrastructure, open-source analytics, internet-enabled home utility monitors, and near-universal smartphone access enable transparent citizen science on carbon footprints at a planetary scale. What once required expert tools and institutional resources is now within reach of ordinary citizens nearly anywhere in the world. By turning data collection into a shared civic act, we can link millions of small actions into measurable global progress, making climate mitigation both personal and collective.

Dwight Burdette
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BUILDING ON EXISTING CITIZEN SCIENCE CLIMATE CHANGE MITIGATION PROJECTS

Our proposal involves maintaining existing projects, scaling projects beyond Europe, and developing the global data integration infrastructure to aggregate data collected by member projects. The feasibility of this approach has already been demonstrated by Global Mosquito Alert, which integrates data from several regional projects into an interactive data platform.

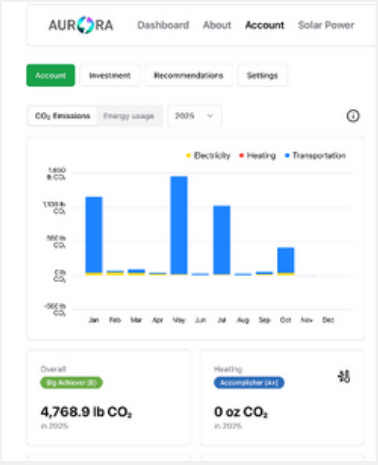
The CSGP Citizen Science & Climate Change Mitigation Working Group has identified five existing citizen science projects that directly monitor carbon footprints. Our vision is to scale each project and integrate their data into a long-term, global data visualisation platform like Global Mosquito Alert. Each project involves participants in data collection to visualise energy consumption and the cultural aspects of energy choices.

AURORA

Location: Local / National / Global (UK, Denmark, Slovenia, Portugal, Spain, others)

Project description: AURORA empowers citizens to reduce energy use, cut emissions, and save money through the AURORA Energy Tracker app. The app allows participants to log residential energy and transport choices, receive personalised advice, compare their use across EU countries, track progress toward net-zero, and share results via social media. AURORA is also connected to local energy communities: participants can purchase low cost shares in community solar installations, generating financial returns while offsetting their emissions. The dashboard also displays real-time outputs of these investments.

Impact on the community: Over 2,000 citizens across 25 European countries have contributed nearly 200,000 data points on energy use. Over half have reached an A/A+ energy rating, with many others progressing toward near-zero. More than 11,000 people have participated in educational activities, supported by a widely shared guide for citizen energy workshops. Community investments of €½M have also funded renewable installations at schools and universities in Spain, Denmark, Slovenia, and the UK, creating models for broader replication. These successes have inspired a new Challenge Group within the EU Education for Climate Programme.



Scientific impact: Following UNESCO Open Science principles, AURORA provides open access to its full citizen-generated dataset, app algorithms, and code. Six peer-reviewed papers have been published, including the most-read article in Solar RRP. The project has received multiple awards, including an Honourable Mention in the EU Prize for Citizen Science. AURORA has also produced two policy papers, helping inform the regulatory landscape for citizen-led energy transitions.

PS LIFESTYLE

Co-creating Positive and Sustainable Lifestyle Tool with and for European Citizens


PS Lifestyle group photo - credit: Jannus Jaska

Location: Local / National / Global

Project description: The Lifestyle Test is a digital tool that helps people understand their environmental impact and discover personalised, practical actions to reduce it. Based on each user's answers, the platform recommends lifestyle changes, allows users to build their own sustainability plan, and track progress toward their goals. Users can also indicate which changes they find challenging and what support they might need. All responses are stored anonymously in the Lifestyledata dataset (the largest user-generated dataset on sustainable consumption in Europe), offering unprecedented insight into real-world lifestyle behaviours and the potential for change.

Impact on the community:
1) *Widespread individual engagement*: Over half a million Lifestyle Tests have been completed, with users planning changes that could collectively save 81 million kg CO_2e (equivalent to 100,000 2-hour flights).

2) *Co-creation and community building*: Citizen science labs brought together more than 1,700 participants across eight countries to co-create the Lifestyle Test. These workshops fostered collaboration and motivated participants to continue making sustainable lifestyle changes. Although most participants were already highly engaged in sustainability , the process strengthened their commitment and created a sense of shared purpose.

3) *Data-driven insights*: Anonymous data from the Lifestyle Test provides actionable insights that can guide the development of solutions, policies, and recommendations for governments, businesses, academia, and civil society. The dataset illustrates both the pace and direction of the shift toward net zero, helping stakeholders pinpoint opportunities to accelerate this transition.

Scientific impact: The Lifestyledata dataset is currently the largest publicly available user-based European dataset focused on sustainable consumption, with over 500,000 individual lifestyle test responses and over 55,000 personalised lifestyle plans collected across ten European countries.

Challenges: User acquisition was a key challenge for PSLifestyle. Because the Lifestyle Test was launched in Finland in 2017, it had more time to gain recognition and therefore has stronger uptake. Although engaging new audiences was challenging, the project delivered valuable Go-to-Market insights that were successfully applied during Norway's pilot phase in 2025. As a result, Norway recorded over 40,000 tests in the first 3 months.

STEP CHANGE

Energy Communities / Tenant Electricity (Step Change-Tenants)

Location: Germany

Project description: Step Change aims to identify barriers to energy sharing mechanisms and their potential; the project takes an "energy citizenship" perspective to understand energy usage patterns, behaviours, and how people view and use energy. Citizen scientists allowed energy data to be continuously collected for one year and received real-time access to their data and a monthly report about their consumption.

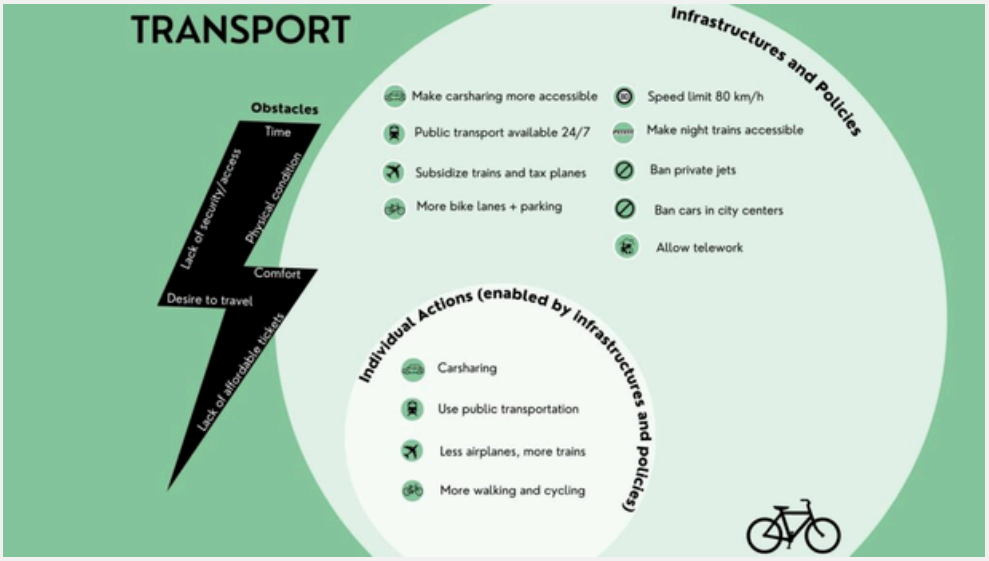
Impact on the community: Overall, participation led to a stronger exchange among neighbours about further sustainability options in the building and increased interest in sustainability or engagement in society.

Scientific impact: By involving citizens in data collection, researchers assessed how individuals view and use energy and make choices. The project provided an empirical basis for recommendations and highlights the importance of citizen science in research and innovation institutions. Policy recommendations and concrete actions of this project were adapted to the current political development of the tenant electricity model, and a list of actions, responsible parties, and impacts was recently published (Baumann & Reichmann 2023).

Further observations: Residents of apartment complexes and neighborhoods also received regular information about how their own energy consumption compared to others, leading to behaviour change.

FULFILL

Location: Local / National / Global—13 city hubs, but open to everyone



Project description: FULFILL engages citizens in the process of formulating high-quality policy recommendations that are influenced by their own, real life experiences. It promotes lifestyle change through decarbonisation, with data collected through energy supply/use devices. Social engagement is supported by the app.

Impact on the community: The research project supports communities in moving toward low-resource, high-well-being lifestyles by involving citizens directly in discussions, workshops and local initiatives. It helps citizens, local municipalities and networks shape practical solutions that improve everyday life, such as more accessible mobility options, shared resources and healthier, more connected neighbourhoods.

Scientific impact: The project strengthens evidence on how sufficiency is understood and applied in climate research. It provides new empirical data from citizens on lifestyle choices across countries, clarifying the concept of sufficiency as a systemic shift rather than a purely individual responsibility, and developing indicators and modelling tools that show how reduction in lifestyle-based demands can contribute to significantly lower emissions.

Challenges: Aside from the broad range of interventions promoted by the initiative, which make it difficult for comparison and impact evaluation, the changes promoted often rely on broader structural conditions (such as improving public transport, housing, or accessibility to local services) that communities cannot control on their own, requiring broader engagement with stakeholders that is not applicable across all contexts.

GENERATION SOLAR (GRECO)

Location: Local / National / Global

Project Description: Generation Solar was a citizen science project under the EuropeanGRECO research initiative that aimed to build a collaborative, open database of solar photovoltaic (PV) installations to support solar energy research and promote expansion. Participants registered their PV systems and technical details through a custom mobile app and web platform, contributing data to develop better energy models.

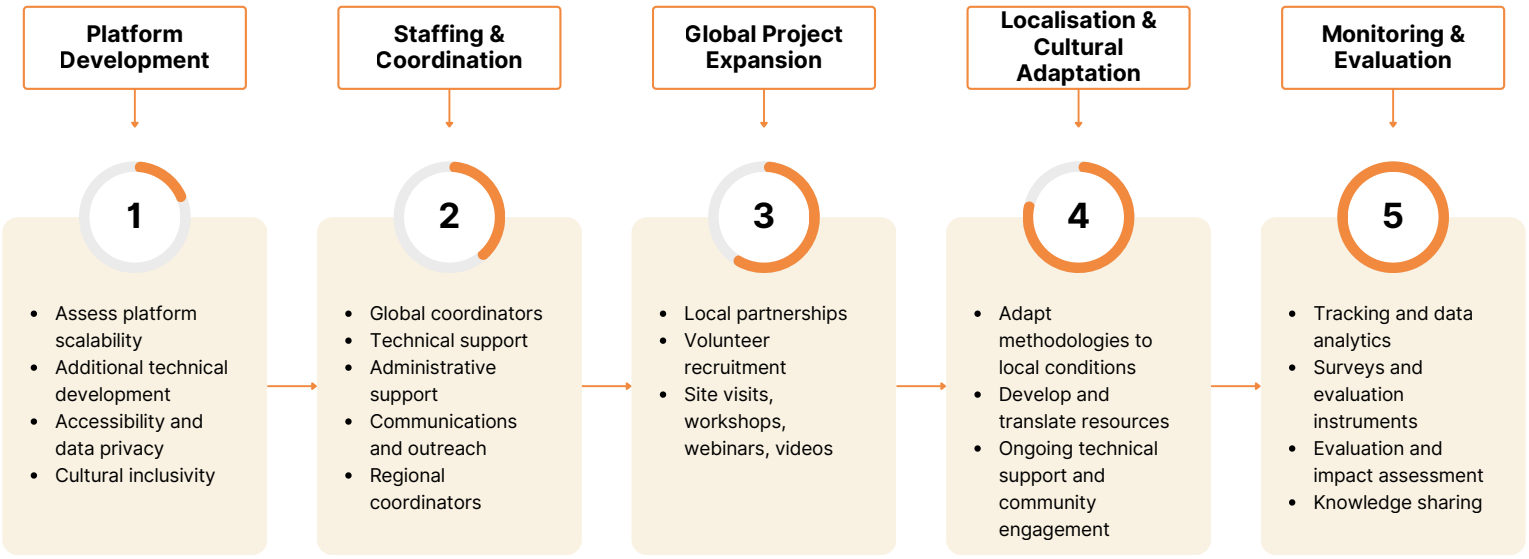
The Generation Solar project became inactive in December 2022, meaning the website and app are no longer updated or interactive. A report on the project has been published in the Journal of Science Communication.

Impact on the community: The initiative, which involved citizens, researchers, and IT support, also sought to foster a community around solar energy and raise societal awareness.

Scientific impact: Generation Solar explored a participatory and innovative strategy for the creation of a citizen science initiative in the solar energy field, identifying the main opportunities and barriers involved, and serving as a practical case study to encourage further actions in the field.

Challenges: The biggest challenge to this initiative was the transfer of knowledge into tangible actions. For the data to have a impactful use in energy modelling, researchers needed several thousands more users than they attracted.

EXPANSION ROADMAP



The global expansion of these projects will progress through five coordinated steps.

CONSOLIDATING & STANDARDISING DATA PLATFORMS:

The first priority is to bring carbon-footprint and community-energy data from participating projects onto a single, interoperable platform. This unified, highly visual dashboard will allow citizen scientists to view their personal carbon footprints, compare progress across regions, and explore community energy investments while retaining full anonymity. The platform will follow a user-centred design process to ensure it is accessible, responsive, and engaging for both citizens and researchers.

Each project will be clearly profiled within the dashboard, with direct links for participants to join the programme best suited to their needs. Information on methodological readiness, country-level applicability, and plans for roll-out beyond Europe will be transparently provided, along with details of local partners.

To strengthen cultural inclusivity and sustained engagement (key challenges identified by all five candidate projects), we will draw on behavioural scientists, communications specialists, and marketing experts. Evidence-based gamification and iterative, agile development are key strategies that will support global uptake and long-term participation.

STAFFING & COORDINATION

Scaling to a global level will require new personnel, including global and regional coordinators, technical and administrative staff, and dedicated communications and outreach professionals. Recruitment will be undertaken in partnership with academic and research institutions that can contribute scientific, technical, and administrative capacity.

GLOBAL PROJECT EXPANSION:

Expansion into new regions will be grounded in local partnerships. The CSGP will leverage its existing relationships with regional citizen science associations in Europe, Africa, Asia, Australia, and the United States, as well as its connections with grassroots organisations and universities. Engagement with the Global Covenant of Mayors for Climate & Energy will further support localisation and community involvement. Site visits, workshops, webinars, and digital resources will guide communities as they adopt and adapt the programme.

LOCALISATION & CULTURAL ADAPTATION

We will adapt our methodologies to reflect local cultural practices, household decision-making structures, and prevailing understandings of energy and resource use. Regional associations, local experts, and community members will play a central role in selecting the most appropriate project for their context. Additional guidance, tools, and educational materials will be co-developed and translated for integration into the global platform.

MONITORING & EVALUATION:

A coherent global monitoring and evaluation framework will underpin the expansion. We will adapt survey instruments for diverse regional contexts and deploy them internationally to track behavioural change, programme efficacy, and the long-term sustainability of citizen participation.

BUSINESS PLAN & SUPPORT NEEDS

The aim of this programme is to scale five established regional projects to a truly global level and to develop an integrated data dashboard that brings together outputs from each initiative, building on an asset base representing nearly €20 million of prior investment. Proven tools, techniques, and database systems already exist, and the code underpinning the Global Mosquito Alert platform can be adapted to support new global citizen science programmes.

In line with UNESCO's open science principles, we seek to extend the reach and impact of these projects far beyond their European origins. New resources will enable us to refine, adapt, and enhance existing infrastructure for use in diverse cultural and geographic contexts. The pace of global roll-out will depend on the technical and financial commitments we secure from long-term partners who share this vision.

The costings outlined below focus on:

- maintenance and support for existing projects;
- a small management team to coordinate global integration;
- a development budget to strengthen automated data entry and improve user experience as projects expand to new regions; and
- the creation of a global data visualisation platform, modelled on Global Mosquito Alert.

PROGRAMME STRUCTURE

The programme structure will comprise:

- **A global management board**, including representatives from each participating project, the Citizen Science Global Partnership, the Next Generation Global Collaboratory, and the Regional Citizen Science Associations. Partners contributing funding or technical support will be invited to join the management board.

- **Project teams** for each participating project.

The global management board will set overall policy and strategic direction, secure international funding, and promote the programme to global partners.

Each project team will remain autonomous within the broader structure, retaining responsiblity for its own development, delivery, and finance.

All parties will work towards the shared objectives of the programme and coordinate the global roll-out. The pace and scale of expansion will depend on the financial and technical resources contributed by participating partners.

PROJECT DEVELOPMENT COSTS

Each participating project within the consortium will retain its own development budget alongside the shared programme costs outlined here. Where clear synergies exist, joint development efforts will be undertaken to avoid duplication and maximise collective impact.

PLATFORM DEVELOPMENT

This proposal draws on multiple existing infrastructures, including platforms and technology developed for AURORA, GRECO, PS Lifestyle, Step Change, and FULFILL, as well as the Global Mosquito Alert platform that already demonstrates cost-effective and interoperable design. To meet the needs of a global audience, these platforms will require ongoing maintenance, expansion, and selective redesign.

Priority areas include:

- Multi-language access
- Improved mobile responsiveness
- Enhanced user accessibility
- Interactive, customisable dashboards
- Scaling databases for global participation
- Regular maintenance and updates, including greater automation of data entry
- Compliance with international data privacy standards
- Adoption of best-practice data and metadata interoperability frameworks

Estimated range:
€100,000–€300,000 in Year 1; €50,000–€100,000 in subsequent years.

STAFFING & COORDINATION COSTS

A small, agile management team will be needed to coordinate global delivery, provide technical support, manage community participation, and maintain consistent communication across regions.

Staffing may include:

- Global programme manager(s) (full-time)
- Technical staff (e.g., platform developer, data analyst)
- Communications and outreach lead
- Administrative support
- 5–10 regional coordinators (part- or full-time, depending on need)
- Community-level volunteers

Estimated range: €300,000–€600,000 annually, depending on staffing levels.

EXPANSION & LOCALISATION

As the programme expands into new territories, additional resources will be required to ensure methodologies, materials, and engagement approaches are locally appropriate. Many of these activities may receive partial or full in-kind support from regional partners, including citizen science associations.

Activities include:

- Translation and adaptation of resources
- Local adaptation of climate footprint monitoring methodologies
- Travel for site visits, workshops, and in-person meetings
- Partnership development with local institutions

Estimated range: €50,000–€75,000 per territory.

IN-KIND SUPPORT

A substantial proportion of volunteer coordination, local engagement, and outreach will be provided in-kind by partner organisations. Indicative costs are included to reflect the scope of these contributions:

- Community forum moderation and user support
- Media materials, infographics, and instructional videos
- Webinars and training events
- Local outreach activities and event organisation
- Promotion through networks and communications channels
- Knowledge-exchange activities

Estimated range (primarily in-kind): Up to €100,000 annually

MONITORING & EVALUATION

Research partners will lead the ongoing evaluation of the programme, supported in part by research funding secured by those institutions.

Indicative costs include:

- Tracking tools and analytics
- User feedback collection
- Evaluation reports
- Local impact assessments
- Knowledge-sharing events and publications

Estimated range: €50,000–€75,000 annually.

SUMMARY OF ESTIMATED COSTS FOR THE FIRST YEAR

CATEGORY	ESTIMATED COST (EUR)
Platform Development	€100,000–€300,000
Staffing & Coordination Costs	€300,000–€600,000
Expansion & Localisation (5 Territories)	€250,000–€375,000
In-Kind Support	€100,000
Monitoring & Evaluation	€50,000–€75,000
Totals	**€650,000 - €1,275,000 cash** **€150,000 - €175,000 in-kind**

CALL TO ACTION

The Citizen Science Climate Change Mitigation Working Group (CSCCM) calls on partners across sectors to help bring this global programme to life. The essential components already exist: proven citizen science models, robust international networks, and a world increasingly ready for climate action. What is needed now is a coalition capable of scaling these efforts into a unified, global initiative.

We are seeking 4–5 early partners, including businesses, philanthropic organizations, NGOs, UN Member States, and other institutions, willing to collaborate with a Management Board to be established in 2026. These partners will help shape programme governance, support pilot deployments, and build the long-term infrastructure needed for global implementation.

We invite partners who can contribute through:

- **Technical leadership** for digital tools that enable global carbon-footprint tracking and behavioural insights.
- **Financial or in-kind support** to scale existing projects or develop multilingual engagement and secure data systems.
- **Policy alignment and institutional commitment** to embed citizen-generated data in climate planning and action.
- **Networks and communities** that broaden participation, elevate diverse voices, and ensure cultural sensitivity in all materials.

Invitation to grassroots contributors: Individuals, local groups, and citizen scientists worldwide are also welcome to signal early interest in contributing time, skills, financial support, or perspectives as the programme develops. Your experience and insights can help ensure that this project is truly global, inclusive, and grounded in the realities of everyday climate action.

To explore collaboration, register interest, or open confidential discussions please contact:

- **Martin Brocklehurst, Chair, CSCCM Working Group –** martin.brocklehurst@icloud.com
- **Ram Dayal Vaishnav, Honorary Secretary, CSCCM Working Group –** ram@citizenscience.asia

Together, we can build a global citizen-powered engine for climate mitigation.

ACKNOWLEDGEMENTS

This report was prepared by the **Citizen Science Climate Change Mitigation (CSCCM) Working Group**, established by the **Citizen Science Global Partnership (CSGP)**, and led by the EU-funded **AURORA** programme. The CSGP brings together the world's leading regional and national citizen science associations to advance global sustainability efforts by supporting citizen science partnerships at all scales, with particular attention to regions where capacity is most needed.

The CSCCM Working Group is chaired by **Martin Brocklehurst**, who also serves as Chair of the CSGP and is a project partner in the EU-funded AURORA Citizen Science Programme. The group's work has been strengthened by contributions from citizen scientists around the world, EU Climate Pact Ambassadors, the EU Climate Pact Secretariat, the EU Green Deal Support Team, and the US-based Next Generation Global Collaboratory.

Martin was joined by Co-Chairs **Russanne Low** (GLOBE Programme) and **Ana Belén Cristóbel López** (AURORA) and Honorary Secretary **Ram Dayal Vaishnav** (CitizenScienceAsia).

Kindly note, some AI tools were also used for basic summarising, shortening text, and other limited applications while creating this report.

WORKING GROUP MEMBERS

Report Drafting Sub-Group
- **Lisa Evans (Lead)**
- **Johanna Varner**
- José Chen
- Anukriti Sharma
- Karthik Iyengar
- Shraddha Motmal
- G. Jayanti Reddy
- Rania Assariotaki

Communication Sub-Group
- **Frouke Wiarda (Co-Lead)**
- **Anukriti Sharma (Co-Lead)**
- Russanne Low
- Ram Dayal Vaishnav
- Shraddha Motmal
- Karthik Iyengar
- Rania Assariotaki
- Agnese Macaluso

Research Sub-Group
- **Vânia Serrão Sousa (Lead)**
- Russanne Low
- Anukriti Sharma

We extend our appreciation to all members for their time, insights, and commitment. Their collective expertise and collaborative spirit have ensured that this report reflects the ambition, diversity, and global reach of the citizen science community.

CSCCM Led By

CSCCM Supported By

Citizen Science Asosciation Members and Founding Institutes

Other Supporting Organisations