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**T7 Task Force Climate and Environment**

**DRAFT for Discussion**

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**POLICY BRIEF**

# COMMUNITY CLIMATE CLUBS TO MOTIVATE AND CREATE PERSONAL ACTION FOR AN EQUITABLE WORLD

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# Abstract

The health and vitality of our planet should not be in the hands of a select few individuals, organisations or governments. The wellbeing of the planet should be in the hands of each and every individual. In the current landscape, individuals and communities are unaware of the reality of the climate crisis and feel powerless to do anything to create change. Progress to an Equitable World Climate action must be translated into something K-12, rural, poor, urban, vulnerable and all communities can benefit from. To succeed, individuals and communities must be the driver of this transformation. Once aware as an individual, the second part of this proposition is to increase the sense of personal agency by connecting individuals with new common purpose into a group/club/community that becomes the source of more powerful collective agency to address the need and purpose. Through project-based learning and community endeavours, science and engineering challenges and the Emissions Clock, each person can witness their own efforts making a difference and feel incentivized and motivated to make better choices. Future Fridays, CAN - the Climate Action Network in the UK, CBS Climate Club in Denmark, EarthTeam in the US are already underway and represent networks we can connect. It is not enough just to look at the climate data, we have to take the data “in the round” including all economic, climate, human well being data, to actually understand how the impact of climate change is causing harm. But there is also good news: Benefits from mitigation of climate risk could improve well being, reduce waste, help people reconnect to the world they live in.

# Challenge

1. **Carbon emissions data and the potential effect of individual behaviour on present and future emission dynamics are not on the radar of individual consumers.** We have no widely used data visualisation tool that all can easily understand and reference - teachers, journalists, scientists, students, parents, grandparents, aunts and uncles.
2. **Climate care has not been a collaborative endeavour in countries or between countries.**
3. **Individuals are not educated or informed** about the reality of the climate crisis and their individual impact or what they can do to respond to the challenge.
4. **Existing data efforts do not take a holistic view that embeds other phenomena beyond climate information into account.** It is not enough just to look at the climate data, we have to take the data “in the round” including all economic, social, human well being data, to actually understand how the impact of climate change is causing harm.
5. **We have no equivalent of a “Climate Olympics”** where people can choose how they participate and train and work with others at the school level, district level, provincial level and national, then regional and global level - to advance the impact of collective action.
6. **We have no clearing house of knowledge on who is doing what, and what is working where** - the IEEE is offering to develop a Global Climate Blueprints Clearing House
7. **We identify despair and frustration in young people.** This growing discontent could be shifted to a renewed sense of agency and responsibility and offer new avenues for action, skill acquisition and career development.
8. **There is increasing ennui and indifference in consumers** when their combined national, sectoral and global purchasing decisions could require surviving corporations to streamline their supply chains to reduce emissions, eliminate waste and duplication, and improve quality of the final products and services.
9. **A myriad of Climate and Sustainability initiatives in professional, business and technical associations are working in isolation** from each other, when as a network of communities, they could complement, streamline and augment each other's efforts.

# Proposals

- 1. Give individuals an evidence-based framework for evaluating their impact-** Individual connection to climate change comes most effectively not from raw data, but from attention to the locally salient evidence of impact of climate change, as well as other unsustainable patterns, such as biodiversity loss and disease, drought/flood and food access, etc. It is imperative to offer accessible resources that allow each person agency and ownership over their environmental impact. Allowing individuals to understand their contribution to carbon emissions and to evaluate quantitatively how changes in their consumption and mobility behaviour can contribute to climate change mitigation is in the centre of the modelling exercise embedded in the proposal. This effort builds upon and expands existing modelling tools such as the World Data Lab’s World Climate Clock, which is being currently developed by part of the team and provides accessible real time estimates and projections of carbon emissions by sector for practically all countries of the world. It is important that people feel that the information they receive is trustworthy and informative, rather than manipulative or persuasive, particularly in this age of mis-/dis-information, (Blastland et al, 2020) and communication of the evidence base in such a way, is a key element of the proposal.
- 2. Connect the universities' communications, statistics, information and social science departments and create education pathways for future generations** to understand their impact and role in the global climate conversation by focusing on learner-centred, inquiry-based learning and problem-oriented educational practices. This applies to schools and informal learning environments from early childhood to lifelong education. At the high school level through tertiary education, it will require more interdisciplinary learning and communication models such as decision theatre and gamified curricula.
- 3. Safeguards and governance networks for Climate Clubs** wherein local community climate clubs can bolster international alliances of Climate Clubs and provide mechanisms for feedback and gaining popular support and action, which enable safeguards and governance at the local level within the national Climate Club members
- 4. Flexibilizing models of climate change at the local level** - by harnessing gamification, or using techniques from “[decision theatre](#)” adapt global or national models of climate change to the local level within STEM and project-based learning Challenges at the school, district, county, province/state for incentivizing local action with real outcomes and impact. Data created in the context of local models can be employed to validate and inform less granular models and thus

improve their predictive ability in the time and spatial dimension. This will take time, but can be added to iteratively, rather than only being achievable at the end of a long process.

## Implementation

Short term:

1. **Year 1: Euro 45 million in total.**
  - a. **Adopt Community Climate Clubs** as a global network open to all groups, communities and chapters of existing organisations
  - b. **Create a Registry of Community Climate Clubs** open first to G7 countries then all countries: Members to be found by a directory by geography, topic, discipline, and more Euro 25 million.
  - c. **Fund a Communication and Outreach plan** Euro 10 million.
  - d. **Fund a global open source dictionary and model library** Euro 10 million

Mid Term:

1. **Year 2-3: Euro 55 million in total.**
  - a. **Expand the Registry of Community Climate Clubs to include a marketplace Exchange; Create Clearinghouse(s)** for Technical Expertise, Blueprints, Discussion Forums which include "how to communicate" and "telling stories for changing things", Collaborations by Geography and Topic.
  - b. **Fund initiatives in the most promising groups already conducting activities**, ideally as joint initiatives where they collaborate for greater impact, in groups of two or more. Allocate 20% of the budget for governance and conflict resolution.

Long Term:

**Year 4-10: Euro 25-100 million a year.**

1. **CCC's are standard curricula** in all schools, science centres, museums, colleges, research institutions and join with community associations to develop local projects that make a difference. G7 funding is primarily for the purpose for initiating new projects and making awards to innovative programs to encourage scaling.

2. **Establish a MOOC platform<sup>1</sup> for the movement enabling sharing and learning between Community Climate Clubs**, spreading breakthroughs in 3-month cycles of “Plan-Do-Study-Act” within networks of communities working on pivoting communities towards action with real present or future impact on climate change : *“Any moment we can declare: This is a new time. So, let’s start again [...] the world ahead of us is not the one we left behind, so the version of yourself you return to can be different, too. What we can each ask ourselves is who and how we want to be in that world.”*
3. **Extend the [EuroStat - recovery](#) dashboard to include more on the climate impact** and build on what has already begun at [Our World in Data](#). Clear and balanced communication, particularly through carefully crafted and empirically tested visualisation tools will ensure that information is as accessible as possible.
4. **Go further in working with the private sector to develop “personal” information signals** that are shown immediately in our appliances, smart metres, social media interactions and more. This information is now routinely collected, and the ability to build individual understanding of actual climate impact now starts to be evermore possible. This will require everyone to buy into the ideal that understanding is key, akin to food-labelling to allow consumers to make informed choices.
5. **Enhance the capability of existing modelling efforts (the World Climate Clock) to obtain more granular information about the effect of individual behaviour on emissions.** This implies the development of a statistical/econometric tool that allows hands-on adaptive modelling of local community projections of CO2 emissions from today to 2050 to examine the impact of local present action options over time and to examine their relative efficacy to garner local support, action and behaviour change that mitigates carbon emission. This modelling exercise will provide a toolkit that offers feedback information to global models such as the World Climate Clock and serves as a data visualisation and evaluation device for individuals and as a validation tool for emissions prediction models. The set of models used to estimate the contribution of individual behaviour on emissions will be based on state-of-the-art econometric specifications in order to obtain quantitative measurements of current emission intensity and future projections for disaggregated sectors (see for instance the contributions by Raftery et al. 2017 for global emission projection modelling). Using these estimates and projections, individual users of the envisaged tool will be able to assess the consequences of their consumption and mobility behaviour (and of changes thereof) on the emissions path at different levels of disaggregation (global, country, subnational and personal). Such a visualisation tool builds upon other online tools that members of the team have successfully helped develop, such as the [World Poverty Clock](#), that employs modern econometric methods to create nowcasts and forecasts of poverty worldwide (see Crespo Cuaresma et al., 2018) or the [World Hunger](#)

[Clock](#), which does the same for food (in)security (see Cooper et al., 2021). The new tool will establish a platform that enables users to evaluate their contribution to climate change trends via their effect on emissions and thus is expected to act as an education device as a catalyst of behavioural change towards a more sustainable future.

**6. Music, Performance Art, Humanities join with Science & Statistics, Engineering and Economics:**

Art and humanities stimulate and express imagined futures to which individuals and groups can aspire and act. Art and humanities should be more than instrumentalized domains. to inspire, support, motivate and build networks of friendships that fuel a better future through exercises and actions that build Physical and Mental Resilience

# Endnotes

<sup>1</sup>Open online course platform <https://www.mooc.org/>



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Sir John Aston is Harding Professor of Statistics in Public Life at the University of Cambridge and between 2017 and 2020 served as Chief Scientific Adviser at the Home Office. John is Co-Director of the EPSRC Centre for Mathematical and Statistical Analysis of Multimodal Clinical Imaging Data and on the management board of the Cantab Capital Institute for the Mathematics of Information. He also has an active collaboration with the Office for National Statistics and served on the board of directors of the Alan Turing Institute 2015-2017. He was

knighted in the 2021 Birthday Honours for services to statistics and public policy making.

**Ilan Chabay** - Adjunct Faculty, School of Sustainability, College of Global Futures



Ilan Chabay is an adjunct professor in the School for Sustainability of Arizona State University and Head of Strategic Science Initiatives and Programs at the Institute for Advanced Sustainability Studies (IASS) in Potsdam Germany. At IASS, he is also Scientific Project Leader of the Global Sustainability Strategy Forum (GSSF) conducted in collaboration with ASU and head of the KLASICA (Knowledge, Learning, and Societal Change) international research alliance. The KLASICA alliance, which Ilan founded and has led since 2008, conducts transdisciplinary research into collective behaviour change and seeks to expand

and strengthen commitment of communities and individuals to fostering change to just and equitable sustainable futures in their respective cultures and contexts. A particular focus of KLASICA is understanding the sources and contexts of digital and analog narrative expressions of future visions and social identities and their influence on collective behaviour change on pathways to sustainable futures. His current career (his third, so far) in social science began in 2006 as Hasselblad Professor in the sociology and applied IT departments at Univ. of Gothenburg and Chalmers Univ. in Sweden, before coming to IASS in 2012. In addition to his research and more than 80 publications in both natural and social sciences, he continues to design games to engage and inspire people with authentic processes of scientific inquiry that enhance understanding, agency and commitment for moving to just and equitable sustainable futures.

**Jesus Crespo Cuaresma** - Vienna University of Economics and Business, International Institute of Applied Systems Analysis



Jesus Crespo Cuaresma is a professor of economics at the Vienna University of Economics and Business and a research scholar at the International Institute of Applied Systems Analysis, as well as a consultant to the World Data Lab. He works on issues related to the statistical and econometric modelling of socioeconomic and climatic phenomena. His work has been published in top scientific journals such as Science, Proceedings of the National Academy of Sciences, Nature Communications or Nature Climate Change.

**Mei Lin Fung** - Co-Founder and Chair of the People Centered Internet



Mei Lin is Chair of the People Centered Internet which she co-founded in 2015 with Vint Cerf. She is one of the early pioneers of CRM at Oracle, building on her earlier work at Intel, and studies at MIT under future Nobel Economics winners, Modigliani and Merton. Socio-Technical lead (2011-13) for the US Government Future of Health initiative she began as subject matter expert for Networked Improvement Communities (2009-10) She is the convenor of the Digital Cooperation and Diplomacy network working closely with the UN agencies, ITU and UNDP, and advisor to Design for Change, a global educational innovation network, and the venture fund, VentureRock.



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