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for a sustainable future

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Executive Summary

This first progress report of the Citizen Action Labs (CAL) presents and discusses the preparation of eight Labs foreseen in the DIALOGUES project. It follows the preparatory process from the internal questionnaire in which all partners presented their prior experience as to co-creative participatory events, to the partners' forum for the planning of the implementation of the CALs that met five times and resulted in the guidebook for designing and implementing Citizen Action Labs, to the implementation documents where all partners described in detail their preparatory activities.

The main part of the report describes the single CALs and the present state of the art based on the intentions of the partners along with some early results for those events that have already been organized.

In all exchanges that took place during the first face-to-face project meeting in Città di Castello in April 2022, the online forums, the monthly project meetings and several ad-hoc meetings, two themes permeated the discourses, methodology and gender. They are both being taken up in separate chapters.

The CALs are meant to provide specific knowledge in DIALOGUES for the operationalisation, contextualization, measurement, and support of the framework environments, policies and institutions to favour deep, inclusive energy citizenship. As participatory, co-creative events they are justly under attentive scrutiny as to the validity of their methodological approach. To what extent are these diverse events supporting opportunities for co-creation? To what extent are they building in the collection of robust quantitative and qualitative data, allowing for a comparative analysis? On what basis does the claim for valid qualitative data rest? And in what way will the success of the CALs be understood? This report aims to describe an intermediate point of discussion among the partners.

Gender traverses DIALOGUES in all its research and reflections. It is at the same time an entry point for other properties and traits, for the CALs – such as the socio-economic status, ethnicity, age, or migratory background of participants – to be included in an intersectional approach. The internal workshops and the ongoing debate reflect a process of gender learning among the DIALOGUES partners, the CAL implementation partners, and the participating citizens. Specific attention will be dedicated to how gender concretely played out in the CAL events.

1 DIALOGUES Citizen Action Labs

The Citizen Action Labs will respond to one of the central objectives of DIALOGUES: to “Engage citizens in co-creating the way towards deeper, inclusive energy citizenship”. Citizen Action Labs, established in seven countries as open innovation spaces for citizens, scientists and stakeholders, are working collaboratively on creating environments that will help to understand how to foster deep, inclusive energy citizenship.

It has become common knowledge that the decarbonisation of the energy supply is one of the biggest and most demanding challenges for the first half of this century. With few exceptions this profound transformation of the energy system in the past has been viewed mainly as a technological problem to switch from fossil fuels to renewables. The central question was: can renewables really provide all the energy services modern societies have come to consider indispensable?

During the last years, awareness grew also within the expert community¹ that the energy system is far more than simply a technical infrastructure: the energy transformation will require and produce new forms of organisation, new business models, new lifestyles, and forms of behaviour, from the countryside to urban spaces. Power relations, normative regulations, and understandings of what is the good life will also have to change. This awareness has directed the attention of the research community to the “transformative knowledge” necessary to accompany, facilitate and often render possible such an ongoing process. Social Sciences and Humanities (SSH) have a central role to play in such an effort, including Science and Technology Studies (STS) and Innovation Studies, among others. The majority of research produced, and which continues to be produced in this vein could be called adaptation knowledge, asking the question: how can we induce, nudge, urge, or convince the target groups in question to accept, better still to cooperate with the ongoing transformative processes? Knowledge to be used top-down by illuminated decision makers will be insufficient.

A wide variety of citizen energy initiatives that have come into being since the beginning of this century and have brought in a new dynamic: the energy transformation from below where the production of energy from renewable sources goes hand in hand with creating new and reinforcing traditional social relations in a community. Such efforts are also setting and shifting power relations within the energy system from a small number of big, centralized, hierarchical energy companies to a multitude of small and medium-sized producers or prosumers. New knowledge on energy production and use is empowering local players, who until now were the subjects of rather than the actors in the energy transition.

The Citizen Action Labs intend to produce both policy knowledge for decision making and empowerment knowledge for citizens, allowing them to participate in and co-create the social, economic, aesthetic, and environmental dimension of the energy transition. “Participation” in this perspective is not limited to having one’s voice heard, nor is it limited

¹ Sahakian, Rau, and Wallenborn, ‘Making “Sustainable Consumption” Matter’; Goggins et al., ‘The Role of Culture Advancing Sustainable Energy Policy and Practice’.

to being consulted, it is about co-ownership of social change processes and the active co-creation of a profound and dramatic transformation process.

Whose voice to listen to and in what kind of setting? Recent results of the SOCIALRES (H2020 #837758) project make clear that engagement in the energy system cannot be thought of in a homogenous way across groups, especially in relation to gender. By now co-creative research methods are well-established and have been used by forerunner H2020 projects to study specific silos within the energy sphere including home energy use (ENERGISE), transport (Civitas), energy poverty (Step-In), rural economic growth (LIVERUR), and renewable energy adoption (PROSEU). DIALOGUES Citizen Action Labs build on this past work and emphasize a broad-base, comparative, interdisciplinary approach that builds on these situation and topic-specific analyses, towards generalizable and quantitative as well as qualitative insights that can be relevant to policymakers and actors. The DIALOGUES Citizen Action Labs will take co-creative research methodology to the next level in a transversal approach to energy usage (beyond specific domains) and the shift from consumption to citizenship.

The key objectives of the CALs are to examine the factors inspiring the emergence and effectiveness of energy citizenship and its potential for achieving the decarbonisation of the energy system in a real-world set-up. For participants, we are concentrating on those groups who were until now marginally involved in the energy transition, if at all. This presumably will be vulnerable groups, people suffering from poverty, or people marginalised because of gender, ethnicity, migratory background, geographical location or other factors. Included in our 'hard to reach' groups are also citizens who are sufficiently well off and have ignored the issue of energy, its costs, security of supply and role in climate change.

DIALOGUES was conceived in the first half of 2020, more than a year before the Russian invasion of Ukraine and the intensification of the energy crisis that will presumably stay with us in the coming years. Energy security and affordable energy were, obviously, already a subject then, but by and large people in Europe - citizens, but also actors involved in the economy, and in politics - considered the existing energy systems stable in terms of supply and prices. This has changed: prices have levitated and the possibility of a lack of supply of gas or electricity is no longer a remote possibility. The unforeseen events of the last two years have given DIALOGUES an immediacy and urgency it would gladly have done without. The fragility of the present energy system that came to the fore with the war of aggression of Russia attacking Ukraine heightens the role of citizens as responsible actors and renders the goal of the project all the more urgent. A deeper energy citizenship of European citizens remains an important goal for climate protection and is an immediate necessity in the energy crisis we are facing.

With an operationalised concept of 'energy citizenship' in hand, gaps in energy citizenship research identified, agreement of intervention options, and critical gaps in available experiential data identified, DIALOGUES Citizen Action Labs seek to operationalize the concept of energy citizenship and fill in the identified knowledge gaps with field tests. Citizen Action Labs build on the concept of living labs and real-world laboratories, as creative environments where study participants (citizens) co-create the research space with scientists and implementation partners, to test innovations in a real-world setting. Citizen Action Labs put the citizen in the centre of the energy innovation process and allow for observations under diverse real-world conditions that include data

on the contextual depth driving the outcomes. In a next step, DIALOGUES Citizen Action Labs will focus on uncovering the effects of exposure to certain energy topics on deeper citizenship in other domains, e.g., they attempt to identify the possible spill-over effects from participating in an energy initiative.

The same set of quantitative and qualitative indicators for the impact of the Labs will be used across the case studies to allow for some degree of comparison and generalisability. These indicators will include a before and after assessment, but also a deeper understanding of the steps taken towards energy citizenship. The final aim is two-fold: on the one hand, we will contribute to new knowledge on how energy citizenship can be supported and what pathways are necessary towards such transformative change; on the other hand, new knowledge will also emerge on how to design, implement, and assess such forms of citizen engagement.

2 Methodological consideration

2.1 Introductory note

The Citizen Action Labs are part of a wide variety of approaches that consider the subjects of the scientific study as autonomous actors and aim at providing self-reflexive knowledge in an emancipatory perspective. They are to be seen in the tradition of the enlightenment of “man’s emergence from his self-imposed nonage” or inability to use one’s own understanding, as Kant put it. This critical theory of society has been in debate with a positivistic understanding of social sciences which should aim at analysing what there is without any unscientific affirmations on what should be. In a positivistic approach, the intentionality of actors does not come into the picture; rather, the contribution of social communication and action is understood in functional terms, towards maintaining the social system. These two fundamentally divergent views of the nature of society and the role of social sciences found a high point in the debate between Jürgen Habermas and Niklas Luhmann, in the Theory of Society or Social Technology². For the purpose of putting Citizen Action Labs into context, this discussion needs to concern us only in the sense of being aware of the existence of opposing positions that continue to divide social scientists.

Action Research and Participatory Action Research, Living Labs, Real World Labs, and our Citizen Action Labs all start from the life world of actors, who are engaged in activities, oftentimes routinized and habitual, that reveal the doings and sayings of everyday life. The concept of situating everyday life in such a way shows up in the phenomenology of Edmund Husserl and has been brought into the sociological debate by Alfred Schütz and later by Jürgen Habermas: lifeworld (Lebenswelt) as something that is self-evident, “taken for granted” or as given. The French sociologist Pierre Bourdieu speaks in a very similar vein of the “prelogical logic of practice” or how social practices are embedded in everyday routines and habits.

In the 1960s, Harald Garfinkel started using an anthropological approach to consider everyday situations in his own society, such as people lining up at the cash register, visiting a party, or gathering for a lunch break. Putting at the centre the realities of everyday life, Garfinkel wanted to learn about the knowledge people use to master everyday situations which they typically do not use consciously and for the most part are unaware of. Before Garfinkel in the Fifties, Ervin Goffman had done something similar in “The Presentation of Self in Everyday Life”, but he still considered the subjects of his interest as something “out there”. He created a conceptual framework, using the imagery of theatre, to illuminate everyday social interaction, whereas from ethnomethodology onward subject-oriented social scientists resisted slipping over the heads of their subjects’ theoretical concepts, but rather attempted to connect to them in their own terms and frames of reference.

These short notes on the history of social theory need to concern us only insofar, as most of the knowledge that has been produced for the implementation of the energy transition has followed a positivistic approach. If the process is framed as substituting one energy source with another, then the solutions would solely rely on testing such

² Harste, *The Habermas-Luhmann Debate*.

technologies in pilot projects then rolling them out on a larger scale. The European citizens that are supposed to bring this new energy culture to life receive, in this positivist and techno-centric approach, very little attention. At best, they are seen as ‘users’ who must only uptake more efficient technologies. The shift we might be witnessing towards a more subject-oriented approach is not the result of a science-immanent discourse but is being dictated by the field of practice itself. The solar energy culture will require very different forms of energy usage and, more importantly, less usage. Energy will not be available all the time in any amount³, even though most European citizens presently might not be aware of such a scenario. The IPCC 6th Assessment report⁴ also underlines the importance of the need for energy sufficiency, or total reductions in energy usage, alongside energy efficiency measures and more renewable energy sources.

Nonetheless, the energy transition faces wide-spread ambiguity if not resistance.

The need to engage citizens in the transition is two-fold: First, we are looking at a cultural shift more dramatic than imagined before, which indeed needs guidance, support and financing from above (and all of this has been forthcoming from the EU, national, regional and local governments) but also needs the conscious and willing support of and co-creation by citizens, if it is to work. Solutions coming from above, implemented through directives, laws, incentives and some nudging simply will not do. Second, a subject-oriented approach promises to gain insight into the possibilities, capacities, and perspectives of people to live their lives in relative autonomy and in cooperation with other subjects. It thus fits well our research interest, the question of energy citizenship, which asks for the conditions under which citizens will be motivated to exercise their rights and duties in the field of energy in relative autonomy and in cooperation with others.

The present situation in which citizens relate to energy - and that is particularly true for vulnerable and under-privileged groups - corresponds very little to the ideal type of competent subjects that self-consciously exercise their rights as energy citizens. We suspect that the empirical situation for the vast majority of European citizens is more characterized by structural constraints and limited possibilities to act because of the domination of powerful actors, including fossil fuel lobbyist, an energy system based on hierarchy and central control, and the lack of time, capital, and other resources, necessary for investing in renewables or energy efficiency, for example. A lack of knowledge and information, tied to social and cultural capital, may also be at play. The current sentiment among large portions of the population is no doubt that of helplessness, impotence, quiet desperation, or even rage and resistance.

The Citizen Action Labs in a first step intend to deliver a picture of the state of energy citizenship especially but not only among vulnerable groups in order to then provide first hand material for the analysis and theoretical identification of pathways towards deeper energy citizenship. In this sense the Citizen Action Labs, like the DIALOGUES project in general, are solution-oriented; our primary goal is social change and informing policy. If the project also advances the theoretical thinking on citizen involvement and participation, all the better. And if, in certain contexts, people are able to imagine and act upon the idea of energy citizenship as a result of the CALs, we would also be satisfied,

³ Herrmann, Ulrike, *Das Ende des Kapitalismus*.

⁴ IPCC, ‘Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change’.

even if the CALs will only reach a small portion of the overall population. Learnings from the CALs will allow us to give suggestions on how such results might be amplified and scaled, in other contexts.

The widespread indifference among European citizens towards the energy transformation is a real-world problem which the DIALOGUES partners are confronting in a multi-disciplinary team-based approach. The Citizen Action Labs are one building stone that draws its suitability and relevance in the overall project from its flexibility and subject-orientation. Real-world problems are typically messy and multi-faceted. The temptation to fit them into a Procrustean bed of general concepts is immense. Entering into the field, giving attention to the subjects, listening to their own voices is a demanding enterprise, but if the results should be an actionable device to decision makers, it's an essential and indispensable part of the research.

2.2 The Citizen Action Labs as subject-oriented research

If the methodology used to produce a scientific understanding of a social phenomenon needs to reflect the object it studies, in the study of energy citizenship citizens must have a voice. Common formats of co-creative events to develop new ideas and solutions and empower the participants include: the future workshops of Robert Jungk⁵, Living Labs⁶, or Real World Labs⁷, among others. DIALOGUES chose to call its co-creative participatory events "Citizen Action Labs" in order to be free from any methodological constraints. As will be seen in the following, the CALs are very different among each other, following the specific local and cultural conditions as well as the ideas and assumptions of the organizing partners on how to deepen pathways towards energy citizenship.

What is common to all CALs and unites them with other formats is the attempt to create an open, inclusive, safe and horizontal space for participants⁸ to explore their self-understanding and interpretation of their life world – in our case in relation to energy. Citizen Action Labs are such a space where in a well-designed setting the participants have a voice during the event and where their experiences, critiques, frustrations, desires and visions are at the centre of the process. Obviously, these forms of self-expression are not to be taken at face value, they need to be interpreted. But this needs to happen as much as possible within the mental framework of the persons that participate in the research and with utter care not to slip prematurely into assumptions and biases. The detailed examination of audio-recordings provides the possibility to review short sequences repeatedly to reconstruct the participants' attitude to the situation at hand.

The CAL approach is interdisciplinary, with the participation of economists, sociologists, psychologists, anthropologists, political theorists, and natural scientists involving expertise on energy and more specifically energy transition, and gender. It is meant to become transdisciplinary by integrating the common-sense knowledge of the participants of the CALs into the scientific analyses of the DIALOGUES team, along with

⁵ Jungk, Robert, Norbert. R. Müllert, *Future Workshops: How to Create Desirable Futures*.

⁶ Epp, Julia, 'Living Labs and Diversity'.

⁷ Schneidewind, Uwe, Karoline Augenstein, Franziska Stelzer, Matthias Wanner, 'Structure Matters:Real-World Laboratories as a New Type of Large-Scale Research Infrastructure. A Framework Inspired by Giddens' Structuration Theory'.

⁸ Thomas, Scheller, and Schröder, 'Co-Creation in Citizen Social Science: The Research Forum as a Methodological Foundation for Communication and Participation'.

that of implementation partners. “The development of sociological knowledge”, writes Giddens in this context, “is parasitical upon lay agents’ concepts; on the other hand, notions coined in the meta-languages of the social sciences routinely re-enter the universe of actions they were initially formulated to describe and account for.”⁹ The fruitfulness of the interdisciplinary and eventually transdisciplinary approach will emerge as the CALS, and more generally the DIALOGUES project, evolve. The proof in the pudding – practice-relevant knowledge and theoretical insights – will need to come out of the analyses of the CALs. Presently, we are only delineating the theoretical orientation that will guide the analysis. The categorial system in which this will happen will have to emerge from the material results of the CALs.

⁹ Giddens, *The Consequences of Modernity*, p. 15.

3 Preparing the common ground for the Citizen Action Labs

3.1 A forum for planning the Citizen Action Labs

The five, online events planned in the forum were carried out with the participation of all partners, starting in September 2021 and through the end of June 2022. The first one (Sep. 16, 2021) focused on the internal questionnaire (drafted by the Task Leader-TL) to define the co-design structure of the CALs and collect existing knowledge among the project's partners. During the meeting, contributions from all partners were collected. In the second event (Nov. 11, 2021), the draft of the Guidebook created on the basis of the answers to the internal questionnaire was presented and discussed. In the third event which took place on Feb. 3, 2022, the partners discussed the Guidebook draft after the valuable contributions of partners to the 1st draft version. From the Guidebook, the TL 'extracted' and provided to the partners a template based on which each partner elaborated a specific implementation document (or storyboard) for their CAL. The fourth event (Mar. 17, 2022) focused on the Implementation documents, giving an operational description of realizing the CALs.

The Guidebook deliverable has been defined and closed at the end of April.

The 5th and last event of the forum (Jun. 20, 2022) focused on the final methodological approach for each Lab (Implementation Document) to guarantee qualitative and quantitative comparisons between the CALs.

The task resulted in the production of the D5.3 Guidebook for designing and implementing the Citizen Action Labs that has been merged with the D6.1 Recruitment to the Citizen Action Labs (co-jointly the work of the UNIGE and CAI teams). D.5.3 + 6.1 has been submitted in M13.

3.2 Internal questionnaire

From September 2021 until March 2022, DIALOGUES project partners involved in the implementation of CALs filled out an internal questionnaire in order to plan and design the CALs along common lines. The questionnaire was divided into three groups of questions: the partners' past experience regarding the organization of workshops with citizens, how the workshops will be set up, and the methodology that will be adopted. This chapter looks at the partners' past experiences.

CAI (Italy)

In 2013, Climate Alliance Italy organized Future Labs to allow citizens to contribute to the Master Plan of the municipality of Città di Castello in the areas culture and tourism, inclusion and social cohesion, innovation, and productivity. The future lab method worked very well in stimulating people to first criticize a given situation, to then let their imagination flow, and finally return to the reality principle. The same method was then used in 2021 for a similar initiative, but in a digital/online format.

In the drafting phase of the DIALOGUES project, Climate Alliance Italy held meetings with the future implementation partners, the Social Services of the city government, Caritas, and the organization of senior citizens, UniTre, to check the feasibility and the type of collaboration to be put in place. The partners signed a letter of support specifying their role in implementing the CAL.

DAFNI (Greece)

DAFNI has organized citizen workshops in the past, involving stakeholders and citizens from the villages of Petriti, Lefkimi, and Agios Matthaïos. This initiative, organized in two phases, included a first phase of participation through a questionnaire and a second phase of consultation to design an Eco museum. The aim was to use the local people's experience and knowledge about their cultural heritage for the creation of this museum.

When designing the CALs in Greece, DAFNI envisioned five implementation partners: the municipalities of the three selected islands, an external geo-spatial expert partner who will design an augmented reality-based application (RAE), and a subcontracted partner to design the RAE application reform. The islands will be recruited after a call for expressions of interest. An email will be sent to the 17 DAFNI members who signed the letter of intent at the project drafting stage. Accordingly, DAFNI will select 3 islands, with different characteristics, in order to ensure replicable results. The selected municipalities will support DAFNI both in the recruitment phase and in stimulating citizen participation. In addition, the island municipalities will provide the locations where CALs will take place.

CSD (Bulgaria)

CSD has not directly organized citizen workshops in the past but, together with its partner ARC Fund, has designed and implemented numerous sessions based on the foresight method, as well as various participatory workshops, focus groups, and in-depth interviews.

The main implementing partner is the Association of Danube Municipalities (ADRM), which has 34 member municipalities and works to formulate and implement a decarbonization agenda for the Danube region of Bulgaria. ADRM provided a letter of intent prior to the presentation of the project. The association was informed of DIALOGUES' successful application and the signing of a Grant Agreement. In September 2021, ADRM representatives met with the SSC team to discuss and plan the CALs. ADRM will assist in recruiting CAL participants and co-designing and co-organizing the CAL sessions to be held in the city of Belene. In addition to the CSD and ADRM experts, a broader group of stakeholders from the Belene municipality will be involved, including representatives of the local government and possibly business associations, the research and innovation community, and educational and religious institutions.

IUE (Turkey)

The Izmir University team has conducted many workshops with citizens in the past, interactive workshops, brainstorming workshops, ideathons and focus groups. Depending on the type of project, different objectives were put forward, where the number of participants and the target audience varied. Examples of topics covered

during the initiatives are the identification of social, cultural and behavioural challenges, potential/feasible actions, establishing action plans, raising awareness, and stimulating behavioural change.

The main implementing partners are the Izmir Metropolitan Municipality (IMM) and the Sustainable Urban Development Network (SUDN). During the proposal phase, meetings were conducted with the partner and implementing partners. The main components of the CAL project and the scheme were determined through a joint decision-making process. Both implementing partners will also contribute to the co-design and recruitment processes.

UNIGE (Switzerland)

The Geneva team has organized over the years multiple workshops with citizen-consumers, community associations, energy service companies, and state representatives. Depending on the type of project, the objectives varied, but all were related to energy consumption. In one case and for a European project ENERGISE, a challenge to reduce household washing cycles and indoor temperatures was experimented with in a Living Lab format; in another, the goal was to imagine futures in an energy transition and link energy sufficiency to human wellbeing. Other goals were to work changes in everyday life patterns and social practices.

In the planning stages of the CALs, there was an intention to involve a community energy association - Terragir - based in Geneva, and ASEC - Association Suisse pour l'énergie citoyenne. Finally, a series of citizen collectives emerged as DIALOGUES became active, and these partners became central in the CAL design and implementation. Four municipalities are also involved, including Vandœuvres, Choulex, Collonge-Bellerive and Meinier. These represent rather privileged communities in the Geneva area.

PIK and GenderCC (Germany)

The PIK team organized workshops within the Klimaneutral leben in Berlin (KIIB) project with citizens, NGOs and local businesses involving 100 families. The project included: (1) Significant voluntary reduction of individual carbon footprints in five sectors (electricity, heat, mobility, food, other consumption) (2) Identification of barriers, (3) Identification of citizen-based climate policy options, and (4) Building business and policy networks. After one year, participating households have reduced their carbon footprints by 11 percent.

In addition to GenderCC, which will organize the CAL together with PIK, the implementing partner is Bürger Energie Berlin. BEB will provide data and participants in the CAL and together the co-creation process will be planned. Broadening different groups of people as BEB members is the explicit goal of the CAL especially to currently underrepresented citizens (especially women, poor people, and migrants). Local organizations will also play a key role, along with intermediaries.

NSR and NTNU (Norway)

The NSR team have organized various workshops with Stakeholders, private companies and public sector actors, residents, and NGOs. Depending on the project, they started from a minimum of 8 to a maximum of 200 participants. Depending on the type of project,

various methods were used, some based-on action-research principles (research-event-changes-research-etc.), others on dialectical workshops, and the smallest on facilitated café-table type events. NTU's team has also organized various events in the past with industry clusters, stakeholders, students. Participants ranged from a minimum of 20 up to 50, but there have also been workshops with 5/6 key participants. The goals were usually innovation, co-creation, or the initial ideation phase. In most cases, local individuals with a burning desire to help the local community were involved, often supported by public funding.

Action labs in Norway are implemented by industry parks and municipalities in collaboration with academic partners. The parks are active in developing the workshops (their purpose), ensuring relevance, recruiting participants, and facilitating communication among stakeholders. Municipalities will have primary responsibility and will do so through public channels. In Overhalla, the development of Barlia is at the center of the discussion on future energy citizenship, while in Oppdal, the phenomenon of second homes is being explored. Implementing partners in Overhalla: Skogmo Industry Park and Overhalla Municipality - Implementation partners in Oppdal: Nasjonalparken business cluster and Municipality of Oppdal.

RomaTre (Italy)

The RomaTre team, on the occasion of the 2014 Solar Decathlon international competition, organized meetings and debates with the residents of the Tor Fiscale neighbourhood (Rome) and the Local Authority. A further initiative was "Spin Time Labs" which included meetings, debates and questionnaires with residents of a neighbourhood in relation to an abandoned building for the definition of a new housing model based on sharing and active participation of the inhabitants.

3.3 The Guidebook

The 'Guidebook for designing and implementing Citizen Action Labs' and 'Recruitment to the Citizen Action Labs' brought together two DIALOGUES deliverables, 5.3 the Citizen Action Lab Guidebook under the lead of Climate Alliance Italy and 6.1 on recruitment under the lead of the University of Geneva.

In the application phase, the DIALOGUES partners had already sketched out the CALs they were planning, and it had become evident that while maintaining some fundamental characteristics that can be grouped around the concepts of "Citizen participation" and "Energy transition" target groups, contents and methods would vary widely. The Guidelines therefore need to fulfil two functions. Firstly, to give guidance to the partners in organizing and implementing their CALs and secondly, to provide a common framework for data collection and analysis to arrive at a meaningful comparative perspective.

In CALs, three groups interact: the DIALOGUES research team, the implementation partners, and the citizens. They are all "participants" albeit with different roles and in an asymmetric relationship. The research team has an agenda – exploring deeper pathways towards energy citizenship – and all the efforts to create a horizontal and safe communicative space starts from the academic researchers, while learning from and

collaborating with implementation partners who often have expertise on creating such spaces.

The guidelines direct the attention of the research team to the benefits the implementing partners and the participating citizens can draw from the CAL. Recruitment and sampling strategies are a central part of the document. An explicit goal of the CALs is to include in the CALs persons and groups that until now have not been involved in the energy transition or only marginally so. Objectively they are “energy citizens” because they manage heat, electricity, mobility, but that happens largely in the unquestioned givenness of their lifeworld¹⁰. With the present energy crisis this might have become less true, but we still can assume that considering energy, i.e., paying the bills and perhaps also energy security a problem does not by itself open the pathway to energy citizenship. DIALOGUES wants to know more about the barriers for self-determination and agency potency in this presumably majority outside the energy discourse which in itself is very diverse.

The guidebook proposes methods of sampling to guarantee this diversity in the CALs in order to gain knowledge from a wide variety of groups as to their perception of and relation to energy in their everyday lives. We are dealing with hard-to-reach groups because we are most interested in persons and groups that are not all that interested in the subject of the CALs or might consider themselves as lacking the competences to participate in the energy transition. The recruitment and final composition of the CAL groups will be a subject of interest and analysis. What recruitment strategies worked and what was the relationship between the envisioned and the factual composition of the group will be of interest in our final analysis.

Ethical clearance, informed consent and privacy are a central issue in the guidelines and there too the experiences of the partners will be reported and analysed. One question will be what balance was found between guaranteeing anonymity of all research data and giving participants voices in their own community.

The guidebook offers a number of methodologies to be used (Future Lab, Ideathon, Focus Group, Brainstorming, etc.). All partners have experience in organizing co-creative participatory events, to varying degrees. The examples presented are meant to widen the field leaving it to the different teams to choose the most suitable mix of methods and tools. However, emphasis was put in the chapter on “Planning data collection” to define a set of data to be collected by all CALs. This discussion has continued after the publication of the Guidelines and will be ongoing during the whole project.

3.4 Implementation documents of CALs

In the context of the Forum for planning the implementation of the Citizen Action Labs, the partners were asked to write up a specific detailed description of their CAL. These implementation guidelines were thought as a kind of scientific screenplay or storyboard, where they were to visualize and describe as precisely as possible how they imagine their Citizen Action Lab. As we are dealing with a fairly innovative and demanding format, we urged them to plan well in advance, as much as possible. During all phases of

¹⁰ Schutz, Alfred, Thomas Luckmann, *The Structures of the Life World*.

conceptualisation and preparation, unforeseen and perhaps unforeseeable things will happen, leaving enough space for improvisation during the events. We considered it therefore important to have a precise and specific design that will provide a stable framework during the events, as well as for the evaluation and analysis afterwards.

All partners delivered the document describing the type and scale of the CAL, the participants and their roles and responsibilities, the objectives and expected results a description of the sequence of events, the preparation of the setting, gender and other considerations for participation, and what kind of data they will collect.

The main purpose of the eight implementation documents was to induce all partners to make sure that they had planned all aspects and steps of their CAL, i.e., to apply the Guidebook concretely to their events.

4 Vulnerability and Gender

DIALOGUES' work on energy citizenship concentrates on that large group of European citizens that have vague ideas about the energy transition and do not consider themselves to be part of this profound ongoing transformation. In this group we dedicate particular attention to those who are hard-to-reach, with vulnerable and underrepresented groups being an important subset. Here women are of particular interest and gender is the one dimension that we look at transversally in all our work.

How does gender as a set of cultural constructs play out in the energy transformation? How do characteristics that historically are related to femininity, masculinity, women, and men affect the roles, the chances, and barriers for fully developed energy citizenship? Gender is a good starting point to look into further social categories and forms of oppression such as ethnicity, socio-economic status, migratory background or age. As such it is a place-keeper for the various expressions of vulnerability and privilege being distributed unequally in society, and a key category in an intersectional approach.

4.1 Gender and setting up the CAL

In the Citizen Action Labs, we look at the role of gender (and class, race, migratory background) as they show up concretely in the interactions between participants. The partners dedicated therefore, in preparing the CALs, specific attention to creating conditions favourable to making the role of gender emerge in the interactions between the participants, for example, accounting for the expression of different perceptions, attitudes and preferences by men and women; and from there, accounting for the systemic dimension of power relations and the predominance of male norms.

In setting up the Citizen Action Labs, the Guidebook indicated a number of gender-related points to be aware of. Among them were:

- Is there a gender sensitive sampling method in place that foresees an adequate representation of women or men (and gender-diverse people) in view of the thematic orientation of the CAL?

In the Bulgarian CAL only women took part, in Città di Castello (Italy) more than two thirds of participants were women.

- Ensure accessibility of venue be it in physical (no architectural barriers) be it in symbolic terms (not intimidating places that persons might hesitate to enter).

The Città di Castello Lab for example gave preference to the locals of the senior citizens association UniTre, in a modern functional location that, however, also hosts the job centre, and other public services. The alternative was a historical assembly room in the library, very beautiful but somewhat intimidating.

- Are female facilitators involved?

The female facilitator in Città di Castello is a very warm-hearted person that emanates the feeling that one can't say anything wrong. This capacity to make people feel at ease is as important as methodological competencies.

More in general the detailed analysis of the CALs will need to confront the general checklist of the Guidebook with the concrete experiences of the partners.

4.2 Gender in the partners' CALs

In their implementation documents, the partners mentioned the following measures as part of their overall approach to gender:

- During recruitment, special focus will be given to as much as possible equal participation of women and men. Also, during the CALs particular attention will be given to presenting women's positions. (Greece)
- Breaking up in sperate groups in order to assess the possibility of persons self-moderating their contributions, but also “examine whether our own biases making us assume things”. Women and relevant hard-to-reach groups will be encouraged to describe their energy transition related perceptions, needs, future visions, practices, etc in the same manner than the dominant group; yet the implementation process will be flexible to be able to adapt to the observed dynamics of participation. We are considering several options (depending on the observed participation patterns). One of the facilitators (from NTNU-NSR team) will track speaking times and observe participation patterns; and the NTNU-NSR team will assess whether a separate workshop for women and/or immigrants will be convenient. Anonymous feedback as an option in some parts will be also considered. (Norway)
- We are concerned with gender and social justice in at least three ways in our CAL: one, in how access to and engagement in priority energy practices are gendered; second, in how diverse needs are represented or not in the energy transition, including gendered needs; and third, in whose voices are considered or not, regarding decisions on and participation in energy transitions and these priority areas (building on Walker and Day 2012¹¹, Jenkins et al. 2020¹²). Identifying actionable energy transitions pathways and enacting these results from a negotiation between actors with unequal power, each with their own perspectives on why and how transitions should happen (Avelino 2017¹³). Entrenched political and power dynamics mean voices who might otherwise raise or consider gender dynamics of energy transitions are not heard (Lieu et al. 2020¹⁴). Having a gender perspective in our CAL is one way of reducing risks of reinforcing unequal gender and power dynamics in collective decision spaces we aim to create with our CAL and in the wider set of ongoing processes to ground Federal and Cantonal energy and climate policy in local communes (Johnson et al., 2020)¹⁵. (Switzerland)
- The IUE team will moderate Izmir CAL, and the team is gender-aware and responsive to gender issues. In addition to women participants/speakers, there will be two women facilitators/moderators. This approach will avoid a

¹¹ Walker and Day, 'Fuel Poverty as Injustice'.

¹² Jenkins, Sovacool, and McCauley, 'Humanizing Sociotechnical Transitions through Energy Justice'.

¹³ Avelino, 'Power in Sustainability Transitions: Analysing Power and (Dis)Empowerment in Transformative Change towards Sustainability'.

¹⁴ Lieu et al., 'Three Sides to Every Story'.

¹⁵ Johnson et al., 'Intersectionality and Energy Transitions'.

predominance of men in the CAL. The facilitators/moderators will pay extra attention to whether gender differences create societal injustices and discrimination regarding the selected themes to be discussed during the CAL. Moreover, the facilitators/moderators will challenge any gender stereotypes or prejudice that are likely to emerge during the discussions in the CAL. (Turkey)

- In Bulgaria some of the specific topics discussed during the CAL sessions will revolve around gender. These will include aspects of energy consumption which are important to women (e.g., household consumption of energy); energy needs – men and women could have different energy needs, this dynamic can be analysed and we can see how aspects of this dynamic can be addressed through concrete policies (e.g., transportation policies); the issue of who controls household energy consumption could be another way to engage the gender aspect.

The CAL will involve only women stakeholders, primarily those at risk of energy poverty. Having gender as a common characteristic of the participants will help ensure a relative homogeneity of the group and help tackle some power dynamics associated with a mixed group composition that might negatively affect women’s participation. Nonetheless, we will aim to have a diverse group of women participants – women of different ages, socio-economic status, ethnicity, religion, professional background, education levels, care responsibilities and abilities, etc. Women of diverse backgrounds and intersectional vulnerabilities would be able to provide varied perspectives on the topics which will be discussed in the CAL, such as the factors that encourage/obstruct the involvement of vulnerable groups in the energy transition and how positive factors may be enhanced and negative – minimized. (Bulgaria)

- PIK, GenderCC and BEB have decided together to focus on the aim of engaging more diverse people in an energy cooperative (with focus on gender). Our focus is the engagement of WLINTA in energy cooperatives. As measures we will approach this target group with events that they find interesting and with formats that fit to their social routines (childcare, during the day). One focus group is specifically targeting mothers in so-called ‘district-centres’ and one is particularly aiming to include young (and gender-diverse) climate activists (Germany)
- The implementation partners of the Città di Castello Action Lab, the Social Service Department of the city administration, Caritas and UniTre, the association of elder people guaranteed an adequate representation of women, older people and persons of a low socio-economic position.

The objective in terms of gender is to make the role of women in managing energy in the household emerge. Given the implementation partners, the balance will not be an issue as the persons seeking help with the social department of the city and Caritas and those participating in the activities of UniTre are predominantly women. But that does not guarantee that gender-specific issues in managing energy will emerge. The issues selected for the CALs and the sensibility of the facilitator should help to meet that objective.

The main challenge is to encourage people who are not used to speaking in public and who are not used to have their opinion listened to have a voice. This

in part correlates with gender but presumably more so with socio-economic status. (Italy I)

4.3 Three levels of analysis of gender in the CALs

The Norwegian partners correctly indicate the possibility that the researchers' own biases might make them assume things. This seems particularly indicated in a sensitive subject field like gender. Three levels need to be distinguished when dealing with gender in the DIALOGUES CALs:

1. The understanding of the research team. Researchers and academics presumably have been dealing with the issue for some time and are familiar with gender as a social construct, the need to go beyond the gender of men and women to include gender non-conforming and non-binary identities.
2. The understanding of the implementation partners and the participating citizens. We can assume – awaiting the empirical results of the CAL analyses – a wide spectrum. In some realities partners operate on the assumption that there are two sexes and two gender: men and women. Whatever else there might be is considered marginal if not deviant. In other realities the full spectrum of LGBTQI+ is part of public life and discourse.
3. A third dimension is how energy citizenship presents itself in the LGBTQI+ community empirically. Do same-sex male or lesbian couples manage energy differently in their households than opposite-sex couples? How will their pathways to deeper citizenship look differently? What kind of knowledge can we draw from the CALs of the relationship between gender identity, sexual orientation and everyday energy behaviour and energy citizenship?

A first impression is that the CALs will need an attentive and careful analysis of how gender played out in the communication and interactions of the participants, presumably in a quite unspectacular way, like little asides, or laughs rather than explicit statements. The partners therefore have been asked to do audio registration of parts of the sessions to be transcribed and interpreted qualitatively as to the language regarding gender, or more in general the gender perspective and the many subtle and non-obvious ways in which gender enters the field.

5 The 9 Citizen Action Labs

In this section, the nine CALs are described at a given time, shortly before their implementation. All information will be updated post implementation, in 2023.

5.1 Norway

Research Team: NSR and NTNU

Implementation Partners in Overhalla: Skogmo Industry Park and Overhalla Municipality.

Implementation Partners in Oppdal: Nasjonalparken business cluster and Oppdal Municipality.

Participants in Overhalla: Young Professionals and any hard-to-reach groups identified during the CAL.

Participants in Oppdal: Second homeowners, local homeowners and local companies.

The Norway CAL is split between 2 locations, Overhalla and Oppdal. Both CALs work at the community level and are specifically focused on the rural aspects of energy citizenship as well as the role of first, second and third homes. In Overhalla the CAL will examine the approaches, aspirations and thoughts of young professionals in the area to become energy citizens while living and thriving in the municipality. From there the team will identify areas of change and engage in a design & build workshop to try out new spaces and places that can promote a joint transition in local energy. In Oppdal second home ownership will be examined. In joint gatherings the duality of home ownership and how energy citizenship differs between a primary and secondary home will be at the centre of interest. Help was also sought from two local business clusters who agreed to help recruit participants in the local area based on DIALOGUES recruitment guidelines and Norway CAL implementation guidelines. Local municipalities participate as facilitators and discussion partners.

CALs objectives: to better understand energy citizenship in rural communities, how it differs from the urban context, and how the local community can be supported and empowered to make the transition. Also, to understand the relationship between energy citizenship and the built environment. The regional scope is defined as community, that is, how the participants themselves define their social network. In Overhalla, there are several levels of sub-areas that are distinguished or combined depending on the subject matter, which in most cases also include neighbouring rural centres.

Results: In addition to joint data collection, provide examples of rural engagement in energy citizenship and describe the relationship between energy citizenship and the built environment that enables energy transitions to be supported through democratic planning processes at the local level. In Overhalla, provide a good framework to support the municipality's development of new housing for the Barlia project, while in Oppdal make a good contribution to the ongoing improvement for second-home planning.

Timeline for CALs: Fall of 2022, spring of 2023. Each group would be approximately 15-20 persons with varying backgrounds and a snowball approach will be used as sampling method to reach more diverse participants

Gender and participation: the group of participants is gender balanced (about 50/50). The gender balance is likely to change with Overhalla's hard-to-reach group of migrant workers, as they are predominantly men working in the machinery and construction industry.

Data collection: before CALs, data will be collected on housing, transportation, first, second and third homes, work participation and contextual aspects of energy citizenship. During the CALs, participants' reflections as to their ambitions for future life at the local level will be stimulated. After the CALs there will be an understanding of the change in perception that will occur by inhabiting the microhouse and participating in both the social space intervention in Overhalla and the sensor workshop in Oppdal. In the follow-up period, previously collected data will be updated to see if attitudes have changed.

The first of the 7 scheduled events took place from October 31 to November 2, 2022

5.2 Greece

Research Team: DAFNI Network

Implementation partners are the island municipalities where the CALs will take place, yet to be defined. Target groups are the citizens of the islands and local stakeholders.

The CAL will be carried out in cooperation with the respective island municipalities with the aim to involve citizens, local stakeholders and local authorities in the co-development of Clean Energy Transition Agendas (CETAs) from the early stages of planning and location of RES projects. Participants, through the use of augmented reality and GIS tools, will be able to understand the RES siting procedure and express their views on RES development in their islands. The possibility of creating an energy community will also be explored. The DAFNI Network will be responsible for designing and organizing the CAL. It will also conduct the tender for the development of augmented reality and GIS tools that will be used during the CALs. Municipalities will be responsible for providing the venue for the CALs and recruiting participants, as well as co-designing the CALs.

The goal of the Greek CALs is to take the first step in engaging local people in the development of CETAs for the islands. The participatory process will raise awareness as to the concept of energy citizenship and identify barriers and opportunities towards citizen participation in the energy transition. The regional scope of the Greek CALs will be the implementing islands. There will be three events, one for each island.

Outcomes: The concept of energy citizenship, how local island communities perceive it and possible actions to strengthen it will be the main outcomes of the Greek CALs and citizen participation in local energy planning. After the CALs, local people will have developed a better understanding of energy-related concepts and procedures, such as the location of RES, and will be more motivated to participate in the energy transition.

The CALs will begin with a project presentation and a question-and-answer session to engage participants. Basic principles related to RES development and deployment and

ways to increase citizen participation in the energy transition will then be explored. Afterwards, participants will have the opportunity to co-design solutions for RES in their area using augmented reality and GIS tools that will be developed. In the final session of each CAL, participants will have the opportunity to discuss the issues analysed. The municipality, in collaboration with DAFNI, will be responsible for recruiting participants, selecting the venue, and communicating the CALs to the local population. Local authorities will also be informed about the possibility of developing energy communities. They will also communicate the specific projects to the local community, allowing them to participate and consider their opinions on the design of the CETAs, creating a group of citizens to actively participate in energy issues. The groups will consist of 15-30 people.

Timeline: The CALs will take place in the first quarter of 2023

Recruitment, sampling and gender: The goal of the CALs is to achieve the participation of women and men in the most equitable way possible. Therefore, a "diversity sample" will be used in the sampling for the CALs. CALs will be dynamic and participating citizens will be able to provide feedback that will be taken into consideration during events. The design of the CALs and facilitators will focus on promoting participation and inclusion. Island communities are considered difficult groups to reach because they usually have neither the opportunity nor the means to participate in such informational and participatory activities. The recruitment process will be based on community outreach. In addition, the CAL will be publicized online and at local events.

Data: prior to the CAL, the survey will be submitted to participants collecting information and ways of engaging in energy citizenship and perceived challenges. *During the CAL,* a context analysis will be conducted to see if the goal of diversification has been achieved. *After the CAL,* participant interventions and challenges and solutions that will be highlighted during the design of the CETA process will be analysed. During the *follow-up period,* data on the participation of the energy group created by the CETA development process will be analysed.

5.3 Switzerland

Research Team: University of Geneva

Implementation partners: municipalities of and Citizen collectives of Collonge-Bellerive, Vandoeuvres, Meinier and Choulex.

Target groups of citizens: the group designated as "hard to reach" consists of upper-class households in privileged areas of Geneva Canton. To reach this group, the focus will be on residents of 4 major and 6 adjacent municipalities in the Left Bank, one of the most affluent neighbourhoods in the Canton of Geneva.

The main objective is to co-produce a citizen-driven energy transition action plan for residents of the target municipalities in the Geneva suburbs, working with existing collective citizen groups and various local residents. The CAL began active recruitment in May 2022 and co-designed a program of 5 events starting in September 2022 with citizen collectives in the target areas and input from key players in Geneva's energy transition. The Geneva CAL will create conditions to strengthen the capacity and confidence of participants to contemplate energy issues in their homes and communities,

analysing together which actions are possible, and which are too challenging for now. The Geneva CAL will improve understanding of the community context that influences energy citizenship, in the community and in the household, including barriers and strategies for deeper energy citizenship. Several areas of social practices relevant to citizen participation in the energy transition were identified: mobility, food and nutrition, household energy use, sharing, repairing, and renewable energies.

The co-designed CAL program proposes a series of four events between fall 2022 and winter 2023, with a final event planned for January 2023 that will explore these practices with representatives of CAL participants. The final event will provide space for a select number of participants to reflect on the process and co-produce a citizen-formulated action plan for the energy transition.

The CAL enables residents to exchange, imagine and identify different ways to engage in energy practices, noting barriers and opportunities to deepen energy practices at the collective level. The CAL produces a concrete outcome in the form of a citizen-led and citizen-owned action plan that addresses participation in the energy transition in the context of cantonal and municipal leadership, energy, climate and biodiversity plans.

Results: Data on citizens' energy practices, preferences and barriers, disaggregated by gender. After the CAL, a citizen action plan will be produced, to inspire the actions of local residents, independent of interventions by state or private actors.

The composition of the group includes 30 people at each event, composed of residents of the 4 target municipalities. The second goal is to identify a core group of 10-12 people to participate in most of the activities and devote one day of their time in January to prepare the action plans.

Incentives for participants: childcare or children's activities during events. Access to counselling for better energy management. The most active participants will be offered the opportunity to be co-authors of any outputs. Public recognition and praise of participants' efforts by the media. Food and drink at each event.

Gender and participation: in the CAL, the focus on gender and social justice will be on three aspects: first, how access and engagement in priority energy practices are gendered; second, how different needs are represented or not represented in the energy transition, including gender needs; and third, how voices are considered or not considered, regarding decisions and participation in energy transitions and these priority areas.

Implementation partners will play an active role in co-designing the goals, events and outcomes at each stage. Participating local residents will have the opportunity to co-design the events, starting with event 2. The final group of consistently involved citizens will lead the co-production of the final outcome of a citizen action plan.

Data - prior to CAL: literature review on 1) Living Labs and other forms of co-design and production in participatory action research to be supported and 2) citizen energy practices to be supported. *During the CAL:* Post-event reflection exercises to capture the most meaningful observations on participants' contributions related to the 3 research questions of the implementing partners present. *After the CAL:* responses to a survey on energy practices and perspectives to be distributed at the end of the public events. In

the *follow-up period*, 3 months after the CAL, the following will be assessed: how citizen actions continued; what aspects of the action plan were implemented; with whom citizens worked most actively, as partners in implementing the plans, etc.

Two of the 5 scheduled CALs have already been held: the first on September 20, the second on October 19. The third is scheduled for November 22, the fourth will be held on December 14, and the final event will be on January 27, 2023.

5.4 Turkey

Research Team: Izmir University of Economics (IUE)

Implementation Partners: Izmir Metropolitan Municipality (IMM), Sustainable Urban Development Network (SUDN).

Target Groups: Citizens (Individuals), Non-governmental organizations (NGOs), and Policy makers.

Izmir University of Economics was responsible for the design, organization, and recruitment of the CAL while Izmir Metropolitan City and the Sustainable Urban Development Network for co-designing the CAL and recruiting participants from various Municipalities in Izmir, Sustainable Urban Development Network, universities, various non-governmental organizations, and local administrators (mukhtars).

The objectives of the Izmir Citizen Action Lab were identifying indications of viable pathways to energy citizenship, ranking motivators and barriers toward energy citizenship, co-creating solutions to alleviate barriers toward energy citizenship, and identifying policy suggestions to improve energy citizenship.

Results of the first session of the Izmir CAL were utilized in order to identify three focal areas related to energy transition and energy citizenship. Based on the inputs from participants, these themes were sustainable mobility, implementation of smart energy for individuals, and household energy behaviours and decisions.

Izmir Citizen Action Lab was organized as a workshop. The participants conveyed opinions, performed individual work, contributed to group work, joined in discussions, generated ideas, and documented their perceptions in different stages of the workshop. The participants also shared their experiences pertaining to the selected themes, within the framework of motivating factors, barriers, inter and intra-social processes, internal (individual) factors, and external (social and community-oriented) factors.

There were three different target groups, citizens (individuals), non-governmental organizations and policymakers. The number of participants was 30 including the moderators, and each group consisted of approximately equal numbers of representatives from three different target groups in order to ensure fair representation. The participants were the representatives of municipalities, local governance bodies (mukhtars), universities, and non-governmental organizations engaging in environmental actions, social services, youth rights, fair representation of different ethnic origins, gender and religions, and urban and social development.

For the selection of the participants, two different sampling methods were carried out: stratified purposeful sampling for recruiting policymakers and representatives from

NGOs and snowball sampling for recruiting citizens. The sampling, recruitment and randomization processes were carried out to ensure gender representativeness.

Before the CAL, the participants filled in the recruitment survey designed by the DIALOGUES team.

Main topics of discussion: Izmir Citizen Action Lab was organized in two sessions and provided insights on energy citizenship and associated themes. In the first session (morning session), each CAL participant introduced themselves, which shed a light on their socio-demographic characteristics. Thereafter, the participants were asked to provide their perspectives on four main topics, within a moderated discussion format.

The main topics were: perspectives on energy citizenship, participants' current engagement and attitudes towards the energy transition, their understanding of their own roles and other citizens' roles about energy transition, and motivations and barriers for them to become energy citizens.

The second session of the Izmir CAL was structured around three focal areas that were determined based on the inputs from participants during the first session. These focal areas (themes) were identified as: 1) sustainable mobility (transportation), 2) smart energy implementations for individuals, and 3) household energy behaviours and decisions.

The second session was carried out following the "6 Thinking Hats" methodology, where three discussion groups were formed. For each of the three themes, each discussion group worked on the following topics based on the structure of 6 Thinking Hats:

- **White hat** referred to the participants' existing knowledge of energy citizenship and the particular theme. Accordingly, community and social dynamics, inter and intra social processes, common benefits, and shared goals were elaborated.
- **Red hat** focused on individual pathways, self-identity, actions, and habit change in order to become energy citizens.
- **Yellow hat** identified motivating factors for the participants to become energy citizens.
- **Black hat** identified risk and barriers that hindered participants to take an active role in the energy transition (e.g., energy poverty, underrepresented groups in the energy transition and participants' negative views on the themes)
- **Green hat** focused on solutions to barriers where potentials for lifestyle adoption, civic participation, political participation, and social participation were discussed.
- **Blue hat** referred to prospective process where the participants discussed policy suggestions or lifestyle suggestions (e.g., energy efficiency, technology uptake, innovation, digitalisation, renewable generation, social innovation)

Gender and participation: The Izmir CAL was representative in terms of gender. The number of female and male participants was equal. Moreover, gender and participation perspectives were realised through both quantitative and qualitative aspects. In this sense, the brainstorming sessions also considered female perspectives on the selected topics and female participation in energy citizenship.

In selecting CAL topics, special attention was paid to identifying topics that promoted and motivated the inclusion and participation of "hard-to-reach" groups. Specifically, the local administrators from hard-to-reach groups were selected as participants to represent these groups.

Data - before the CAL: Level of information and mode of engagement in energy citizenship, perceived challenges. *During CAL:* Challenges, motivations, solutions to energy citizenship problems. *After CAL:* New perspectives on challenges, motivations, solutions to energy citizenship problems. *Follow-up:* Strengths of the CAL, what changed, whether ideas generated were implemented.

Date of Izmir CAL: 26 October 2022

5.5 Canada

Research Team: UQAM

UQAM will build on the current process of its partner, the Common Front for Energy Transition, whose local branches (the "Zero Net Emissions" projects) coordinate numerous workshops with citizens on the theme of the energy transition.

The "Zero Net Emissions" project in Saguenay Lac Saint Jean is currently the most active, it has carried out a series of workshops in 2021 bringing together 316 citizens into a sociocratic and horizontal process. Citizens are led to develop their vision of the transition through a process of ideation. This approach has been chosen to recreate social ties, after a liquefied natural gas project led to major disagreements between job creation advocates and environmentalists in the region.

According to the sociocratic method used, each circle has specific objectives (animation, inclusion of First Nations, inclusion of young people, etc.) and a circle of circles has the role of ensuring the links between the circles.

Implementation partners: Two to four local branches of the Common Front for Energy Transition. They will be active in recruiting citizens, elected municipal officials, representatives of local development center and SMEs. Furthermore, two specific objectives are identified:

- assist in the design of sustainable compass tools to meet the needs of citizens and
- support the involvement of citizens and other stakeholders to reduce their energy footprint and participate in the energy transition.

The participatory process will raise awareness about the concept of energy citizenship and identify barriers and opportunities towards citizen participation in the energy transition.

Expected participation: 30 to 50 people per workshop, one workshop per participating local branch.

Timeline: The CAL will take place in the second and third quarters of 2023

Procedure: UQAM and the Common Front will be responsible for co-designing and organizing the CAL.

The following outline will be specified in co-creation with the actors of each Front site, according to their specificities and the local context:

- Participation of citizens in groups of 8 to 10 according to their interests on 3 distinct topics:
 - Energy expenditure of buildings
 - Transportation
 - Digital tools.
- Specifically, the coworking on each topic will be around the questions:
 - Current situation: issues, challenges, and solutions?
 - Which tools for orienting the choices of citizens and other stakeholders?
 - How these tools will be able to support individual behavior change or collective reorganization?
- Feedback in large group on perceived issues and cross-cutting aspects

Recruitment, sampling and inclusiveness:

The goal of the CALs is to achieve equal representation for gender, age and social status.

- A balanced gender mix is usually observed in the groups of citizens participating in workshops, but the effective participation and speaking time must be measured.
- The workshops will be developed to overcome the usual over-representation of older and more educated people, in favor of the participation of young people, marginalized people and people of remote regions thanks to the support of community organizations.

The design of the CALs and facilitators will focus on promoting participation and inclusion.

The recruitment process will be based on community outreach. In addition, CAL will be publicized with networking online, on local bulletin boards and at other possible local events.

5.6 Bulgaria

Research Team: CSD

Implementation partner: Association of Danube River Municipalities 'Danube' (ADRM)

Target: citizens with a particular focus on women from the Belene region. ADRM is a local authorities/municipalities association and currently has 34 municipality members.

Citizen participation in the energy sector, particularly through involvement in energy communities, is very recent in Bulgaria. Energy poverty has remained a persistent challenge for Bulgaria. The (CAL) in Bulgaria has taken the opportunity to engage citizens-with a particular focus on women participants-and key local stakeholders in a broader social dialogue on the opportunities and benefits of transitioning to a consumer society, as well as raising awareness of the tools and opportunities to engage in the transition process.

The CAL in Bulgaria primarily targeted female stakeholders with different characteristics and social backgrounds. Participants were invited to share their views in three specific areas:

1. Engagement in energy issues/ Participation in energy discussions.
2. Social acceptance of low-carbon technologies.
3. Public attitudes toward creating an energy community to address energy poverty.

During the CAL, participants were first asked to share their experience and patterns of engagement in energy issues, as well as their views on the energy transition process and perceptions of different low-carbon technologies. In a second phase, they participated in co-creating a concept and roadmap for starting an energy community and developing guidelines for its implementation. Lessons learned from the CAL could potentially feed into specific recommendations for the development of a strategy on energy poverty, envisaged as a separate reform in the National Recovery and Resilience Plan (NRRP), and in the transposition and implementation of the RED II Directive in Bulgaria, particularly with regard to the definition and provisions on prosumers and energy communities. The expected outcome is to enrich the concept of energy citizenship, including through region-specific mapping of factors and barriers that are particular to the Southeast European (SEE) context, outlining incentives that might enable consumers to become prosumers, and increasing awareness of the significance of their agency. The direct recipients of the CAL were women of diverse backgrounds from Belene, Svishtov, and Tsenovo. CAL in Bulgaria had the following objectives: Increase public awareness of the concept of "energy citizenship" and its practical components and manifestations, stimulate public participation and community engagement, and promote dialogue among citizens residing in a generally economically vulnerable context.

The CAL in Bulgaria on October 20, 2022 involved female subjects, particularly women at risk of fuel poverty. The entire target group can be described as difficult to reach because women are generally more reluctant than men to participate in events that require active participation. Regarding the sampling strategy, a combination of convenience sampling, purposive sampling, and chain referral methods were used. CAL sessions were conducted by a facilitator whose role was to ensure that participants felt comfortable and did not experience fear or shame. Gender and participation: During the recruitment process, gender was one of the main selection criteria. Cross-sectoral vulnerabilities, stemming from the local context, were also considered a selection criterion.

Data - before the CAL: Demographic data, information on participants' views on the main components of energy citizenship and factors associated with its development. *During*

the CAL: Data on participants' perceptions of energy citizenship and the level and extent of their involvement in initiatives related to energy citizenship. *After the CAL:* Data on participants' satisfaction with the CAL and whether their understanding of the concept of energy citizenship has changed; information on their attitudes. *Follow-up:* Information on whether CAL participants are applying some of what they learned during the CAL in their daily lives, both individually and in the community; data on any changes in their daily lives after the CAL and, if such changes are present, how they can be explained.

5.7 Germany

Research Team: PIK and GenderCC

Implementation partner: BürgerEnergie Berlin

The CAL will focus on the community level (energy citizenship in Berlin). Several measures will be developed to improve gender diversity in a Berlin energy cooperative (BürgerEnergie Berlin).

Goal: BEB aims to diversify its members and volunteers in terms of greater gender balance and age variety.

Roles and responsibilities

GenderCC: expertise on gender issues, support in CAL design and management, support in implementing formats with citizens.

PIK: co-management and design of the CAL. Planning of CAL goals, objectives, phases and implementation. Summarizing and publishing CAL results.

BürgerEnergie Berlin: as implementation partner, will provide information and access to their members and energy cooperative activities. They will also connect us with other actors in the field of energy cooperatives and citizen action for energy.

The CAL is aimed at gaining knowledge about the structures and gender balance of energy cooperatives, particularly in Berlin in order to better understand the obstacles women face in participating in energy cooperatives. Various measures to improve gender balance in energy cooperatives will be tested.

Regional scope: Berlin and surrounding area

Outcomes: practical knowledge will be gained about how citizens perceive energy citizenship in Berlin, why they participate in energy cooperatives, and why they do not. Tools and methods for energy cooperatives to communicate and approach citizens more effectively will be probed. In addition, information will be gained about barriers that prevent women, gender diverse, and young people from participating in energy cooperatives or being energy citizens in general.

Sequence of events: The Berlin CAL is divided into several phases with different events.

Phase 1): Preparation Phase. In this phase the CAL core team (GenderCC, PIK, and BEB) worked on the purpose and design of the CAL. A first step was the analysis of the BEB and its structure to understand who and who is not part of it. An analysis of their membership base was conducted, examining criteria such as age and gender. In

In addition, we developed a survey to obtain more information about the motivations and barriers to BEB membership. Moreover, a survey was developed to obtain more information on motivations and barriers to BEB membership. BEB has provided their data and access to their members, while PIK is responsible for the data analysis. Gender CC was asked to provide feedback on the results of the analysis. In addition, all three partners have worked together on the membership survey. BEB will send it to its members in December (currently we are running the pre-test) and PIK will then analyse the survey results for the core team. In parallel, three focus groups have been organized with three target groups of the BEB. These target groups are young people with an environmental-friendly mindset, women in their thirties and people with migrant background. The goal of the focus group is to first learn how to communicate about energy citizenship more efficiently and co-creatively develop formats that are more interesting to women/diverse people. PIK will prepare the focus groups methodologically, while BEB and GenderCC will support this process. Recruitment will be done together with the cooperation partners from the respective target community. Each focus group will consist of about 10-12 people. As a sampling method, the target group will be reached with the help of cooperation partners from the respective community. Each focus group participant will be asked questions about their socio-demographic situation to better understand their social status. The participants of the focus group receive a monetary incentive. The focus groups will start in December.

Phase 2): Implementation Phase. During this period, we will intensify our work with Berlin's citizens. With the information gained from the focus groups on effective communication and formats, a range of formats designed to targets groups will be implemented.

Phase 3): Reporting and dissemination phase. In the final phase, findings on diversity in energy citizenship in Berlin over the long term will be analysed and disseminated to enable gender diversity in energy citizenship in Berlin in a long run to allow for sustainable change.

5.8 Italy - Città di Castello

Research Team: CAI and University of Roma Tre

Implementation partners: Social service of the municipality of Città di Castello, UniTre, University of the Three Ages, Caritas

Over the course of four meetings, participants are encouraged to think about energy as part of their daily lives and how they relate to it. The CAL explores visions of a positive energy future, first by suspending and then invoking the reality principle. The CAL will conclude with an open session in City Hall, where participants will meet with institutional.

Target audience: citizens in contact with the Municipality's Social Services, Caritas (especially women, citizens with migrant backgrounds, seniors who experience energy poverty as a threat) and UniTre (seniors, middle class).

Based on past experience, the research team has adopted a methodological mix (Future Lab method and Mind Map construction) that put participants' opinions at the centre of LABs. Starting from the concept of energy, an attempt is made to explore how it is coded by participants in their daily lives. This process involves an initial phase (first and second

meetings) of individual/family reflection of the concept of energy and then reflection on the collective dimension and the development of energy citizenship (third meeting and final public town hall meeting open to all citizenship).

Goals, purpose and outcomes of the CAL: Citizens' views on energy. The CAL takes place in a small Umbrian town over the course of four meetings over six to eight weeks.

Results: The CAL will provide insights into citizens' perceptions of energy use in daily life. Energy costs, energy security and one's role in the "energy community", digital competence for energy management: the ability and willingness to use digital devices to receive and send information on the topic and communicate with others. After the CAL, participants should have become more competent in managing energy in their daily lives. The city government will have improved its ability to deal with individuals and families struggling to make ends meet with energy bills and may consider promoting an energy community.

Before the first meeting: All interested people have completed the recruitment questionnaire and thus have a general idea of CAL. Event 1: Warm-up phase; getting to know each other production of a mind map related to energy perception. CAI and Roma3 present the project. Topics: Electricity - washing machine, dishwasher, refrigerator, TV; heat/air conditioning - keeping the house warm/cold. In the second part of the event, participants present selected testimonies of their daily energy practices. Event 2: Discussion on "What do I think about energy efficiency and renewable energy?" (audio recording) Digital skills - in this meeting the energy consumption of appliances in a workshop participant's home will be shown in real time via an app. Event 3: division of participants into three working groups. Each group will be asked to reflect on the concept "energy and sharing" and write down what their requests were to propose to the local government. Event 4: Town hall meeting, open to all. Participants present their findings to attendees, citizens and local government representatives. Debate on how to improve energy services, the environment, and combating climate change. Perspectives on an energy community.

Implementing partners: all implementing partners have helped to recruit participants. The Department of Social Services of the Città of Castello Municipality is in contact with people suffering from energy poverty. Caritas assists families at risk of electricity or gas interruption. UniTre organizes educational events for the elderly. These are middle-class citizens and the rapid increase in energy costs is a problem for some of them. the group will consist of 20-30 people. Gender balance will be ensured (50% women), people with an immigration background (at least four people).

Recruitment: Direct contact of implementing partners with potential participants, asking them to fill out the recruitment questionnaire. Completion will be an indication of willingness to participate in the CAL and will form the basis for sampling. A press release for local newspapers and television stations.

Incentives: an electrical outlet with a switch, a canvas bag with the DIALOGUES logo.

Gender and participation: Based on the recruitment survey, a gender-balanced group of participants will be selected. Implementing partners will be involved in all aspects of event design, recruitment survey and sampling. At the end of each session, participating citizens will be asked what they think and what they would like to see changed. The

facilitator is an expert in adult education and communication. She is well qualified to encourage participation and discourage overexposure during all phases of the workshop.

Data: Before the CAL: Background analysis of participants, i.e., how the selected group relates to the general population of Umbria. *During the CAL:* Event 2 will be audio-recorded for qualitative interpretation. What data will you collect after the intervention? The post-intervention survey will be largely identical to the recruitment survey. A follow-up meeting six months after the last event.

The first CAL was Oct. 24, the others are scheduled for Nov. 7, Nov. 21. The final event is scheduled for December 1.

5.9 Italy - Rome

Research team: CAI and University of Roma3

The implementation partner for the Lab is the Metropolitan City of Rome and it will be directed at municipal and regional public servants to explore pathways to a deeper energy citizenship “from the other side”, i.e. the target group for the policy advice DIALOGUES will be elaborating. What are the barriers and what the favourable conditions for public servants to promote and facilitate energy citizenship in their communities? The CAL is foreseen as a one-day workshop in January / February 2023

6 Conclusions

The present report draws mainly on the preparatory work for the CALs by the partners, the documents they produced, the discussions we had in the five forums and other online meetings, the project meeting in Città di Castello, and to a small extent on the reports coming in from the first CAL meetings realized at the time of this writing. At this point many questions are open, that will be taken up by the Geneva University partners and their work on deepening energy citizenship pathways, to then be further explored in the final report on the CALs led by Climate Alliance.

The report “Pathways to deepening energy citizenship” will concentrate on a central question of the project, how can energy citizenship be understood and promoted. The final report on DIALOGUES' Citizen Action Labs will reconstruct the work of the partners in a methodological perspective, giving insights into the design of the CALs. DIALOGUES rests on the conviction that the energy transition needs to be co-created by citizens in their roles as citizens, consumers and producers. It is becoming increasingly evident that a society based on renewable energies, increased efficiency measures, and some degree of energy sufficiency will look quite different from the present one. This will be true on the supply side, with more producers in decentralized systems. But it will be incisively true on the demand side, as there are strong indications that there will be less energy available and thus the need to change habits and routines that use energy.

Until now the argument of sufficiency, or to make do with less, continues to be unpopular. Wolfgang Sachs¹⁶ has been arguing since the 1990s that the energy transitions will advance on two legs: efficiency and sufficiency. Serge Latouche has been talking about post-development and advocating degrowth for as long¹⁷. And more recently Tim Jackson has put forward the idea of sustainable prosperity¹⁸, or that the good life can be achieved and sustained with less. Outside of a small community of believers, these voices have found very little resonance in a discourse that is dominated by concepts like “green growth” in a circular economy with decoupling between the consumption of resources and the production of wealth.

But as the energy transition progresses and given the current ‘energy crisis’ gripping many countries in Europe this winter, the hopes to maintain in the global north the present level of energy consumption with renewables rest on an ever-shakier empirical basis. Ulrike Herrmann has drawn the radical conclusion that the only way out is to ration CO₂ emission and attribute every person 1 ton per year. This would finish the dream of “green growth”, “but a large part of the present economic performance could be maintained. Germans could continue to go on vacation, use their smartphones, read books and go to restaurants. There would, however, be no more flights, hardly any automobiles would be driving around, and real estate would have to be rationed.”¹⁹ Herrmann insists that this dramatic change will have to come from below and that at the

¹⁶ Sachs, ‘The Age of Development: An Obituary’.

¹⁷ Latouche, Serge, ‘Degrowth and the Paradoxes of Happiness’.

¹⁸ Jackson, Tim, *Prosperity without Growth. Foundations for the Economy of Tomorrow*.

¹⁹ Herrmann, Ulrike, *Das Ende des Kapitalismus*, 250.

same time such a broad change of culture and consciousness is presently nowhere in sight.

One doesn't need to arrive at such radical conclusions to understand that any realistic vision of a sustainable energy future, including very optimistic assumptions on the increase of technological efficiency, will need to include important changes in everyday energy culture and behaviour. Changes that will only become evident as the process unfolds. The roles in a deep, elaborated energy citizenship are not ready-made to be taken over but are themselves in evolution and require a reflexive acquisition. With the growing importance of citizen engagement, the knowledge the Citizen Action Labs are producing will have an increasingly important role in the energy transition. DIALOGUES will have to take a close look at to what extent the project is succeeding in allowing participants not only to speak up but also to speak back, "that is, to disrupt preconceived test designs and implementations pathways, and to inject their own visions of a desirable future into the innovation process."²⁰.

The CALs are part of an interdisciplinary effort to produce knowledge in a variety of approaches, expert interviews, netnography, literature, and theoretical reflections. To arrive at actionable advice for administrators and empowering knowledge for citizens the concept of energy citizenship itself will have to be widened and deepened to take into account its dynamic and evolutionary character. Energy citizens in the coming years will have to respond to a changing system of which some things are known, many not. What is certain is that the engagement and commitment to this transformation will need to be a vital part of the process if it is to succeed. This engagement and commitment in turn hinge on the founded feeling to have a voice in the exchange between citizens about their energy future in a process where all participants have the same rights to affirm, to question, to doubt and where only the unforced force (Zwangloser Zwang) of rational argument carries the day (Habermas). The de-colonisation of the energy lifeworld, to remain with the great German philosopher, is not only a moral imperative, as such it would stand little chance in a context permeated by economic interests and power relations, it is a necessary condition for a sustainable energy system to function.

The CALs will demonstrate their validity to the extent to which they uncover the conditions under which citizens are ready to become active and deepen their energy citizenship because they have the founded feeling of improving their own lives and that of their community. The energy transition will only work if it is socially desirable and planned for collectively for a majority of citizens.

²⁰ Engels, Franziska, Alexander Wentland, Sebastian M. Pfothner, 'Testing Future Societies? Developing a Framework for Test Beds and Living Labs as Instruments of Innovation Governance'.

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