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**GreenVETers: Embedding 'citizen deliberation'  
and 'deliberative democracy' for sustainable  
development into the official VET curricula**

# **The GreenVETers Handbook on the Green Deal and Citizen Deliberation**





# Table of Contents

<b>1. Introduction</b>	<b>3</b>
<b>2. The European Green Deal</b>	<b>6</b>
2.1. What is the European Green Deal?	6
2.2. Current policies and what has been implemented	7
2.3. How to achieve the proposed objectives?	11
2.4. Activities	15
<b>3. Citizen Deliberation and Engagement</b>	<b>16</b>
3.1. What is Citizen Deliberation?	16
3.2. Citizen Deliberation for Environmental Issues	20
3.3. Education for Environmental Citizenship	23
3.4. Transition for Deliberative Systems	30
3.5. Activities	37
<b>4. Climate Action through Deliberative Systems</b>	<b>38</b>
4.1. The link between the European Green Deal and Environmental Citizenship	38
4.2. Responding effectively to Climate Issues	43
4.3. Activities	46
<b>5. Conclusion</b>	<b>47</b>
<b>Solutions to all Activities</b>	<b>48</b>
<b>References</b>	<b>50</b>





# 1. Introduction

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The Erasmus+ project “GreenVETers: Embedding ‘citizen deliberation’ and ‘deliberative democracy’ for sustainable development in official VET curricula” aims to familiarise Vocational Education and Training (VET) trainers and trainees with the aforementioned democratic principles. The main objective is to upskill educators by providing training and resources so that they can better guide students, specifically in Agriculture and Engineering courses, into developing their deliberative skills and to better prepare them to use these principles in their future occupations. Thus, the GreenVETers project aims for the long-term green transformation of the Agriculture and Engineering fields and their role in sustainable development by empowering the individuals under training to join this workforce.

This Handbook on the Green Deal and Citizen Deliberation is the first of the four project results of GreenVETers serving as a starting point in educating VET trainers, and interested trainees, on the European Green Deal and the principles of Citizen Deliberation. Moreover, the Handbook explores the role that deliberative democracies can play and are already playing in attaining the European Union's targets towards carbon neutrality. This Handbook consists of three main chapters, each ending with an Activities section. These can be used by the educators to test themselves or to test students after introductory lessons on each of the three topics: (I) the European Green Deal, (II) Citizen Deliberation and Engagement, and (III) Climate Action through Deliberative Systems. The solutions are provided at the end.

For more advice on how to teach VET students about the EU’s Green Deal, citizen deliberation, civic engagement and climate action, educators can use the second project results of GreenVETers; the Pedagogical Guide. Meanwhile, the third project result, the Online Training Course, can be utilised to both educate and test the knowledge gained regarding the relevant topics. Lastly, GreenVETers will produce a Report titled “The Way Ahead: A Collection of Good Practices” after a series of Socratic Seminars and public discussions between VET school educators and environmental policy reformers and actors, which will be carried out during the lifetime of the project in all partner countries.





The five partners comprising the GreenVETers consortium are depicted below with short descriptions of their vision and work.

## The GreenVETers consortium



**Foundation Knowledge Centre PRO WORK** promotes the career development of people with a (significant) distance to the labour market and/or society in general, skilled workers and others who need coaching, training and counselling in a wide variety of sectors and topics, national and international.

**The Polish Farm Advisory and Training Centre Not-For-Profit Sp. z o.o.** is a private, not-for-profit company providing advisory services for Polish agri-businesses and individual farmers. Our aims are: fostering rural development, revitalising rural areas and promoting the entrepreneurial spirit by sharing knowledge and information to the general public in rural areas.



**C.I.P. Citizens In Power** is a non-profit, educational and research organisation in Cyprus, leading in the fields of global education, social innovation, entrepreneurship, STEM and sustainable growth by designing and implementing interdisciplinary approaches.

**Web2Learn (W2L)** is a business partner that offers high-quality digital learning and professional training solutions and services, mainly targeted at the VET and Higher Education sectors. The company is located in Thessaloniki, Greece, and the team comprises six highly qualified people in the areas of expertise described below. The company specialises in two areas of activity, openness and social connectivity.





**CEPROF** is an acronym for Centros Escolares de Ensino Profissional. It was established in 1991, specifically for the creation of the Escola Profissional de Espinho (ESPE), one of the oldest VET schools in Portugal and accredited by the Portuguese Ministry of Education. CEPROF also integrates a “Professional Guidance and Counselling Centre” through its Qualifications Centre.





## 2. The European Green Deal

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### 2.1. What is the Green Deal?

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In 2019, the European Commission introduced the European Green Deal, a policy package developed with the ambitious intention of making the EU's economy environmentally sustainable. The main goal of this new strategy is to decarbonise the economy and reach climate neutrality by 2050, along with creating new economic and industrial opportunities for Europe (European Commission, 2019). The Green Deal is composed of several policy measures and subsidies aimed directly at cutting pollutant emissions and increasing the funds dedicated to research and investment in environmentally friendly technologies that will revolutionise the EU's energy system, profoundly transform the economy and inspire efforts to combat climate change.

The Green Deal is the result of an effort to readjust European consumption and economic patterns. This new economic and environmental plan ranks high on the EU political agenda (Leonard et al., 2021), as it is an integral part of the European Commission's strategy to implement the United Nations 2030 Agenda for the Sustainable Development Goals, as well as the other priorities announced by President von der Leyen's political guidelines.

Its successful implementation requires a complete renewal of the European energy system, which will lead to an inevitable shift in the relationships between the EU and its economical partners (Leonard et al., 2021) and, ultimately, a redefinition of the European policy priorities. The Commission plans to refocus several processes of economic coordination for the integration of the United Nations' Sustainable Development Goals in order to place sustainability and the well-being of citizens at the centre of economic policy and the sustainable development goals at the heart of the EU's policy making and actions.

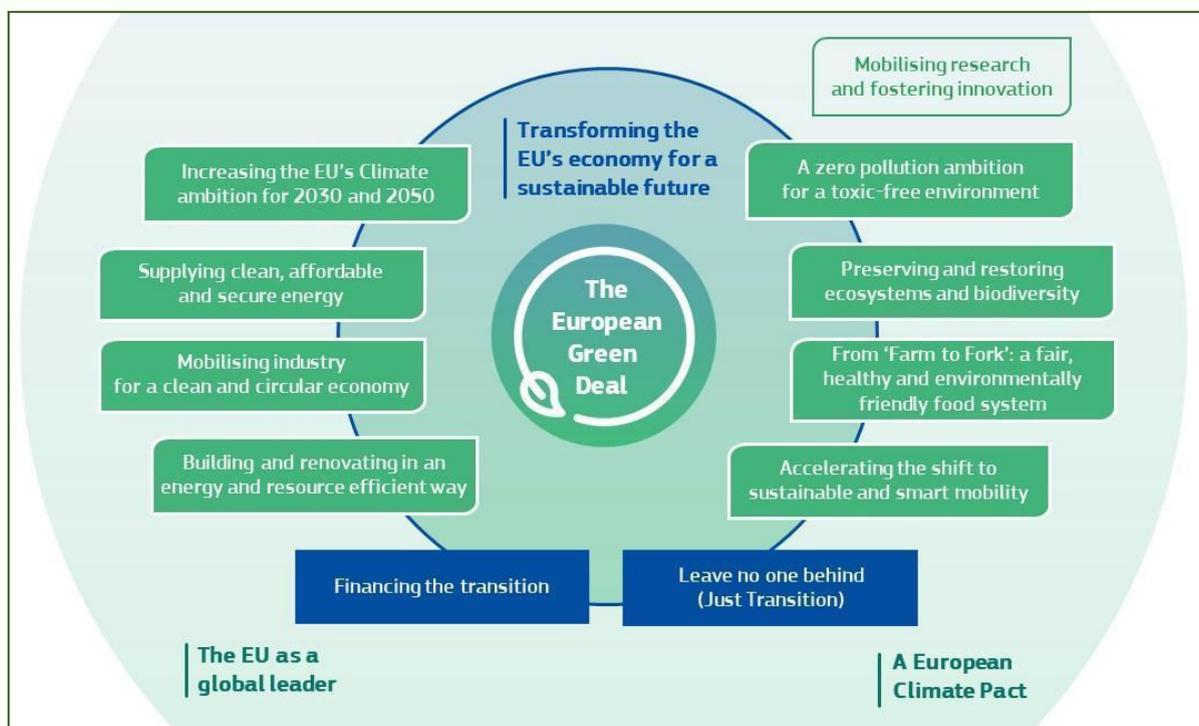




## 2.2. Current policies and what has been implemented

The European Green Deal provides a blueprint for transforming climate and environmental difficulties into opportunities across all policy sectors and ensuring that the transition is fair and inclusive for all so that the EU's economy becomes genuinely sustainable. By transitioning the EU to a clean, circular economy, the European Green Deal seeks to increase resource efficiency, halt climate change, reverse biodiversity loss and reduce pollution. It describes the financial resources that must be invested in, the financing options available and the pathway to ensure a fair and equitable transition.

All economic sectors, including transportation, energy, agriculture, construction, and the industries of steel, cement, ICT, textiles, and chemicals, are covered by the European Green Deal (European Commission, 2019). This plan encompasses several policy aspects, such as the ones depicted in Figure 1.1 and further explained below.



**Figure 1.1.** The European Green Deal (Source: Communication from the Commission on the European Green Deal, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2019:640:FIN>)





Regulations, Plans, and Strategies under the umbrella of the European Green Deal:

- The **EU Circular Economy Action Plan (CEAP)** was created to answer the needs to (i) increase global competitiveness, (ii) promote sustainable economic growth, and (iii) create new jobs. The CEAP focuses on resource-intensive industries with strong circularity potential, building on previous work done to achieve a circular economy since 2015. The Plan addresses crucial product value chains, including those for electronics and ICT, batteries and cars, packaging, plastics, textiles and food, with the goal of keeping resources in economic cycles for as long as feasible (European Commission, 2020a).
- Product design, which accounts for up to 80% of a product's environmental effect over its lifetime, is addressed in the proposal for a **Regulation on Eco-design for Sustainable Products**. The impact of product design ranges from the materials that are used, to the manufacture processes and their reliability of the final products. This Regulation establishes new standards for product durability, dependability, reusability, reparability, ease of maintenance, refurbishment, recycling, and energy efficiency. The main goal is to promote the use of sustainably-produced or recycled materials, adopt more energy-efficient processes and build longer-lasting products (European Commission, 2022b).
- To ensure that agriculture, fisheries, aquaculture and the food value chain correctly contribute to the goal of a climate-neutral Union by 2050, a new strategy called the **"Farm to Fork Strategy"** has been established. The primary objectives of the "Farm to Fork Strategy" are to (i) ensure sufficient, affordable and nutritious food within planetary limits, (ii) halve the use of pesticides and fertilisers, and (iii) increase the amount of land devoted to organic farming, (iv) promote more sustainable food consumption, (v) reduce food loss and waste; combat food fraud in the supply chain, and (vi) improve animal welfare (European Commission, 2020b).





- The new **2030 Biodiversity Strategy** is a thorough, systemic, and ambitious long-term plan for preserving the environment and stopping the depletion of ecosystems. The Strategy outlines new approaches to more effectively implement existing laws, as well as new pledges, benchmarks, targets, and governance systems, with the goal of restoring Europe's biodiversity by 2030 (European Commission, 2020c).
- The **Zero Pollution Action Plan** serves as a guide for integrating pollution prevention into all pertinent EU programs, accelerating the application of pertinent EU legislation, and locating any gaps. It contains goals for waste production, biodiversity, and pollution of the air, water, soil, and noise (European Commission, 2021b).

The main challenge in successfully implementing these measures is maintaining the priority of policy planning throughout the extended implementation period in both the European and the national contexts (Siddi M., 2020). The health emergency caused by the COVID-19 pandemic, which has brought an immense global economic slowdown, is currently the main reason for a shift in the Green Deal policy priority. Before the health emergency caused by COVID-19, the Green Deal was among the top priorities in the European Commission's policy agenda (Fetting, 2020).

Furthering these measures, the European Commission unveiled and adopted the “**Fit for 55**” package in 2021, aiming to strengthen the EU's position as a global climate leader. This package is a set of legislative proposals intended to modernise existing legislation, adapt it to the EU's 2030 climate target, and introduce new policies that will help bring much-needed transformative changes in the economy, society, and industry (European commission, 2021a). This not only aims at achieving climate neutrality by 2050 but also to reduce net emissions by at least 55% by 2030 compared to 1990.

The package includes the following measures:

- **The Effort Sharing Regulation**

This aims at setting stricter emission reduction targets for all Member States across all industrial sectors. Considering the diverse contexts of each Member





State, the targets will be based on their GDP per capita and adjusted according to cost-effectiveness.

- **Amendment to the Renewable Energy Directive to implement the ambition of the new 2030 climate target (RED II)**

In the original Renewable Energy Directive, the target level for renewable energy was set to 32%. The new amendment (RED II) determines a target level of 40% of energy coming from renewable sources, by 2030. All Member States are set to contribute to this target.

- **Directive on energy efficiency**

This directive covers, among others, Member States' commitment to reducing the overall energy consumption.

- **Regulation on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry into the 2030 climate and energy framework**

The regulation sets an EU target for carbon dioxide removal of 310 million tonnes of CO<sub>2</sub>. By 2035, the EU should aim to achieve climate neutrality in the land use, forestry and agriculture sectors, including other agricultural emissions.

- **Revision of the Energy Tax Directive**

The revision of the Energy Tax Directive proposes the alignment of the taxation of energy products with EU energy and climate policies, promoting clean technologies and removing the outdated exemptions and reduced rates that now encourage the use of fossil fuels.





## 2.3. How to achieve the proposed objectives?

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To combat climate change and other human acts hurting the environment on land and at sea, citizens' active roles and direct involvement are crucial. That direct involvement should be through civic engagement, education, raising public awareness, citizen science, observation and self-monitoring of their individual environmental impacts (Hadjichambis, 2022), along with changing consumer and citizen behaviour towards more sustainable patterns. It is crucial to directly involve citizens and communities in tackling climate change and conserving the environment. This will motivate them to alter their personal behaviours, lessen their carbon footprint, and take individual and group action. By supporting biodiversity protection, naturally based solutions for climate resilience, sustainable energy consumption and waste management (Hainsch et al., 2022), a more sustainable lifestyle and interaction with the environment would be achieved.

Young people's environmental consciousness should also be strengthened through education and other forms of youth participation. By sharing their knowledge, experience, and involvement with their families and local communities, students and teachers have the potential to become ambassadors for climate action and environmental conservation. Thus, schools, training facilities and universities are in an excellent position to communicate with students, parents, and the general public about the reforms required for a smooth transition to a green economy.





**Figure 1.2.** OECD Learning Compass 2030 (Source: OECD, 2019 [https://www.oecd.org/education/2030/learning\\_compass](https://www.oecd.org/education/2030/learning_compass))

To develop and evaluate knowledge, skills, and attitudes about climate change and sustainable development, Europe needs a competence framework. This framework should encompass two main areas enabling citizens to act against climate change and towards sustainable development through different methods. Those two main areas are education, and building a more profound understanding of the environment and environmental impacts. Under the context of education, a multidisciplinary European competence guide for lifelong learning would be developed and put into practice through educational initiatives to help citizens, especially young people, enhance their knowledge, skills, and attitudes about climate change and sustainable





development. In particular, natural science, technology, and mathematics, as well as social, entrepreneurial, and citizenship skills, should be emphasised in this framework. The development of the framework would require the involvement of natural scientists, technology experts, citizen science professionals, social scientists and humanities scholars. Contributions and practical knowledge offered by non-academic stakeholders, as well as global best practices, will be crucial considering people's innate reluctance to behavioural changes and the gender gap observed in views toward ecological and sustainable practices.

A guide such as this one would serve as a reference tool for the Member States, stakeholders, and NGOs as they assist citizens in taking an active role in society's transition to a greener economy. Creating specific educational programs, curricula, training, networking activities, and sharing best practices would be the basis of the framework. Teachers, trainers, students, pupils, parents, and the broader community could engage and realise the behavioural changes required for a successful transition by undertaking a process of consultation and implementation of this framework by schools, universities, municipalities, and public authorities in collaboration with the private sector.

Under the context of developing a deeper understanding of the environment and environmental impacts within communities, actions should emphasise citizen engagement through environmental monitoring, citizen science, and civic coalitions (Willis, 2022). Citizen engagement in climatic and environmental concerns, such as biodiversity, marine and freshwater pollution, and sustainable food, should be the focus of these actions. To ensure that these initiatives would serve as models for involving the wider community in the effective behavioural changes required for a successful and just transition, projects should be carried out on a large scale in collaboration with businesses, civil society organisations, academic institutions, and public authorities.

The primary goals of these initiatives should be raising awareness, involving, and empowering citizens and consumers with practical methods to track their environmental impacts, gather data that will allow them to alter their behaviour, and lessen their individual carbon and environmental footprint as users and consumers.





Moreover, through civic engagement, citizen science is a potent instrument for tackling climate change and protecting the environment. The term "citizen science" should be used broadly to refer to a range of different levels of participation, from increasing public understanding of science to motivating citizens to participate in the research process by collecting, analysing, and reporting data, all the way up to setting the direction of science and working with others to co-design and implement science-related policies. Activities involving citizen science should be supported by a sound scientific process that ensures the accuracy of the data gathered and a fair representation of all parties engaged.





## 2.4. ACTIVITIES

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- 1) The goal of the European Green Deal is to achieve:
  - (A) End all industries that contribute negatively to the environment.
  - (B) Reach climate neutrality by 2050.
  - (C) Replace every combustion vehicle with an electric one.
  - (D) Raise awareness of the environmental crisis.
  
- 2) In 2021, the European Commission unveiled a package of legislative proposals intended to modernise existing legislation and adapt it to the EU's 2030 climate target. What name was given to that package?
  - (A) Fit for 55
  - (B) Farm to Fork Strategy
  - (C) Agenda 2030
  - (D) CEAP
  
- 3) In order to achieve a more efficient climate action, which one of these is viewed as crucial?
  - (A) Active participation of citizens in social gatherings.
  - (B) Promoting the disorderly actions of citizens.
  - (C) The individual and collective actions of citizens designed to identify, address and solve issues of public concern.
  - (D) Enabling citizens to advocate their individual concerns and best interests.





# 3. Citizen Deliberation and Engagement

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## 3.1. What is Citizen Deliberation?

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Deliberation was defined by Fishkin (2009) as the process in which individuals genuinely weigh the merits of competing arguments and engage in balanced discussions. While this may sound very similar to ordinary conversation, the two are distinguished by five conditions. These conditions may also be used to assess the quality of a deliberative process and are the following:

1. The extent to which participants are given access to accurate **information** which they consider relevant to the topic.
2. The extent to which **substantive balance** is given to the arguments offered by one side to be answered by considerations offered by those on the opposing side.
3. The extent to which the **diversity** of major public positions is represented by the participants in the discussion.
4. The extent of the participants' **conscientiousness** to sincerely weigh the merits of the arguments.
5. The extent to which arguments by all sides are given **equal consideration** according to their merits and not the side of the participants offering them.

Deliberation events aim to create inclusive environments for citizens to debate policies that would overcome elite-centred influences (Boulianne, 2018). Citizen or public deliberation occurs, specifically, when the participants are members of the public and the forum is structured so that the titles, status or positions of certain participants are not prioritised (Ebuona et al., 2022).

Citizen deliberation is considered necessary for citizens to consent to a decision and not just have it be imposed on them. When citizens are involved in the policy-making process, they view laws as their own, as more legitimate and are more likely to follow





them (Bohman, 2000). Moreover, Solomon and Abelson (2012) have argued that there are specific reasons and occasions where citizen deliberations should be used.

A policy issue should be scrutinised by the public when one or more of the following characteristics is met:

- There exist conflicting public values.
- The topic is controversial or divisive, or both.
- The topic combines expert (technical) and real-world knowledge.
- The public has low trust in the government. (Solomon & Abelson, 2012)

Therefore, citizen deliberations are used to arrive at decisions about the common good and to address social challenges in health, education, science, and the environment (Blacksher et al., 2012). Nevertheless, more superficial topics may be up for discussion and vote, for example, where a new road will be built in a neighbourhood (Ebuona et al., 2022).



**Figure 3.1.** Members of the Citizens' Assembly vote on the wording of the ballots that were to be subsequently voted on, in the Grand Hotel, Malahide, Co Dublin. (Source:

<https://www.irishtimes.com/news/social-affairs/citizens-assembly-votes-to-end-mandatory-retirement-age-1.3148549>)



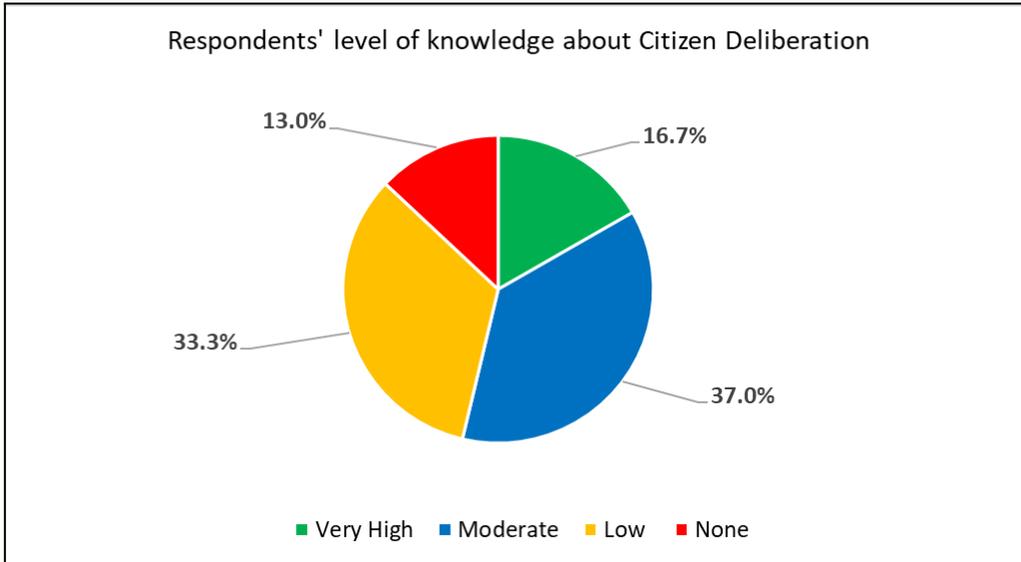


Public deliberative processes must, by definition, occur in public spheres since the active involvement of sections of the population which are otherwise excluded is a prerequisite. The setting is irrelevant as long as the participants of the deliberative method operate under the same shared principles. For example, practical examples of deliberative processes include citizens' juries, consensus conferences, negotiated rulemaking, deliberative polling, and town hall meetings that involve voting (Smith & Rowe, 2016). However, traditional town hall meetings or public hearings do not constitute public deliberation events as they either involve one-way communication or a discussion between citizens and decision-makers, but not a dialogue among citizens.

Having defined Citizen Deliberation, we now need to describe one of the democratic systems incorporating it, deliberative democracy. This system is one where the recommendations arising from deliberative events or processes are sincerely considered by politicians and stakeholders in policy making. It combines deliberation with political equality and, therefore, mass participation. Nevertheless, deliberative democracy does not exist without limitations, and we must indeed work to minimise these (Fishkin, 2009). The implications of transitioning to a deliberative system are discussed in Section 3.4. There, we will also return to the conditions for Deliberation from this section (page 13) to discuss the public's opinions on the viability and successful implementation of Deliberative Democracy.

The GreenVETers consortium conducted surveys to find out how well aware non-experts in the EU are of Citizen Deliberation. The survey was answered by a total of 54 individuals residing in 8 EU and EEA countries, including Cyprus (13), the Netherlands (11), Portugal (10), Poland (10), Greece (5), France (3), Germany (1), and Norway (1). The pie chart in Figure 3.2 displays the distribution of their level of knowledge about Citizen Deliberation. Most respondents reported the expected middle levels of knowledge, Moderate and Low. Looking at the percentage of the 'low' knowledge level, it becomes evident that significant education is required on the concepts of Citizen Deliberation and Deliberative Democracy.





**Figure 3.2.** Pie chart on the level of knowledge of the GreenVETers survey respondents about Citizen Deliberation.





## 3.2. Citizen Deliberation for Environmental Issues

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In Section 3.1, we discussed that citizen deliberation topics often concern social challenges, including environmental issues such as climate change. Climate change is also a topic on which people have conflicting views, and the adaptation and mitigation ways of dealing with climate change require input from experts. Therefore, according to Solomon and Abelson (2012), there are good reasons to put environmental issues up for discussion.

There exist several ways in which citizens can become involved in climate action, including deliberative events, constructive dialogue, participatory budgeting, citizen science and social innovation and local action. However, it is suggested that these methods are used in combination (Andersson & Kambli, 2020) and with caution due to the counterproductive impact they may have. Depending on the environmental issue, the appropriate method of citizen participation can be chosen.

Furthermore, in the last two decades, the adaptation to climate change has become central in the political debate on local, national and global scales (Mourato & Iannuzzi, 2021). During the same period, citizen deliberation on environmental issues, such as policymaking on climate action, has also been examined globally (Karkkainen et al., 2005). There also exist examples of the implementation of citizen deliberation in the European Union. Thus, we will first discuss the critical role of Citizen Deliberation in the decision-making process on environmental issues and, in Chapter 4, we will present the examples of environmental topics which have been and are currently deliberated in the national contexts of the partners and around the globe.

### How do the EU and the UN view citizens' role in the fight against climate change?

In the case of environmental sustainability and climate action, citizen participation is encouraged by the Climate Pact of the EU's Green Deal. The Climate Pact is an





initiative aiming to unite people in the endeavour of creating a sustainable, climate-neutral Europe. The Pact plans to achieve this by encouraging individuals, organisations and communities to share their knowledge with and learn from each other and come up with solutions (European Commission, 2022a).

As part of the Green Deal's Climate Pact, the EU recruited Ambassadors who wished to reach out to people in their communities and networks and encourage them to become involved in climate action. At the beginning of the programme, individuals would apply to take on the Ambassador role; however, since the beginning of 2022, the European Commission started to recruit individuals on an invite-only basis (European Commission, 2022a).

Moreover, the European Commission organised Peer Parliament events under the Climate Pact until March 2022. These were citizen-led initiatives where an individual would register to host an event with a small circle of friends, family, neighbours or colleagues. Discussion topics included 'How we move and get around', 'How we make energy green and fair' and 'How we eat and consume' (European Commission, 2022a). The votes and results from each event were uploaded to the Climate Pact Secretariat for the drafting of a report. This report was in the spring of 2022 and was submitted for discussion to the European Commission (European Commission, 2022c).

Simultaneously, the UN's Sustainable Development Goals also include targets under Goal 12 "Ensure sustainable consumption and production patterns", and Goal 13 "Take urgent action to combat climate change and its impacts" which aim to raise people's awareness of sustainable development. Target 12.8 seeks to "ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature" by 2030. Similarly, target 13.3 seeks to "[improve] education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning" (United Nations, 2015).

Both the EU and the UN give an essential role to the citizens. Unlike the UN, however, the citizen is given a role that is more connected to the concepts of citizen deliberation in the European context, as it involves an exchange of knowledge and





ideas for solutions that extend from the traditional goals for the UN to educate. We can justify this as the UN targets a global, much more diverse audience. Yet, the EU has more tangible goals for carbon neutrality and sustainability as per the Green Deal, and European citizens cannot afford not to collaborate and agree on how we move forward.

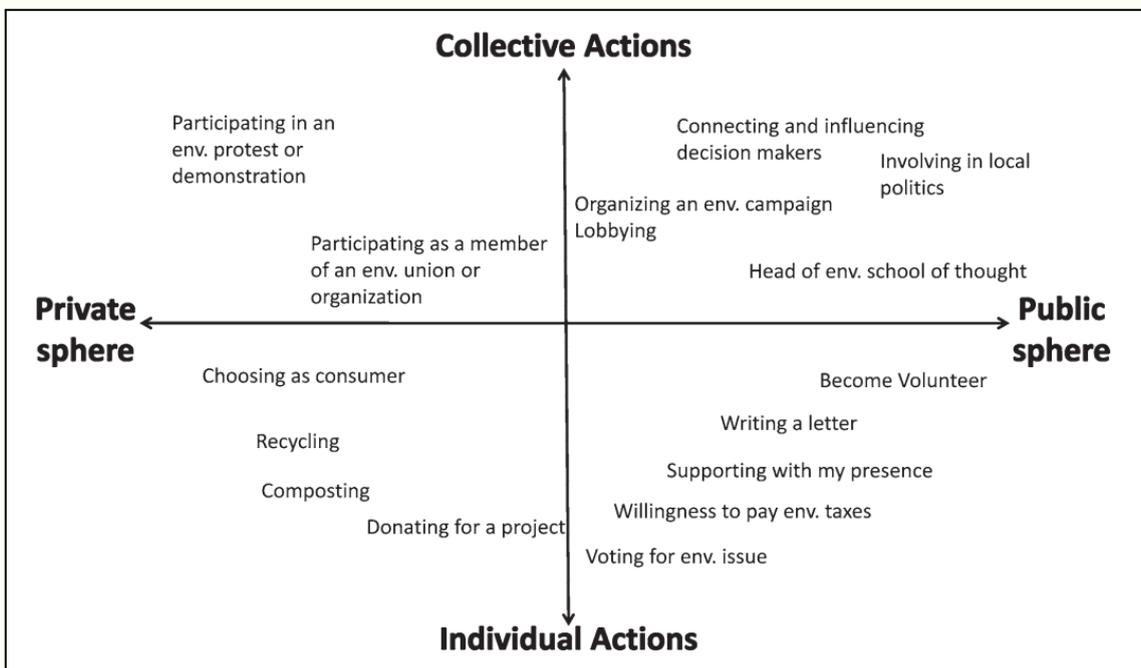
Consequently, the significance of deliberative events is apparent as these empower society to make decisions on tackling climate change where scientific evidence can only describe this issue (Willis et al., 2022). Studies suggest that the belief that citizen assemblies could potentially offer forums for democratic innovation on climate change is also shared by stakeholders (Sandover et al., 2021). It should be understood that citizen deliberation cannot guarantee solutions to the climate crisis. However, the population can, and should, still be represented proportionately, and arguments should be considered fairly (Willis et al., 2022).





### 3.3. Education for Environmental Citizenship

The European Network for Environmental Citizenship (ENEC) defines Environmental Citizenship (EC) as a broad concept combining the principles of active citizenship with the attempts to solve environmental issues. Therefore, EC includes ‘green’ citizenship, ecological citizenship and sustainability citizenship. Examples of EC action are depicted in Figure 3.3 on a four-quadrant chart according to whether they involve individual or collective action and are applied in a public or private sphere.



**Figure 3.3.** Examples of Environmental Citizenship action on a four-quadrant chart (Source: Hadjichambis et al. (2020) Conceptualizing Environmental Citizenship for 21st Century Education. Springer International Publishing.)

Defining Environmental Citizenship also leads to a complete definition of an environmental citizen. Such an individual should:

- have significant education, skills, democratic values, attitudes and competences which allow him/her to participate in society on a local, national and global scale,





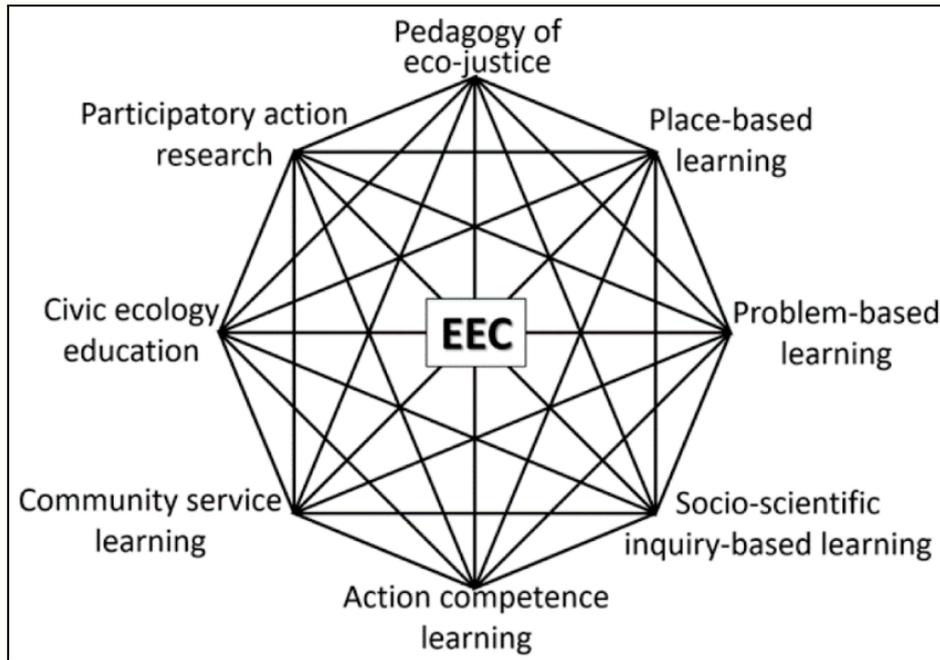
- be able to propose methods of solving, mitigating and preventing environmental problems and to follow through with these proposals with actions,
- be able to exercise both his/her environmental rights and duties in order to achieve sustainability and have a healthy, respectful relationship with nature,
- be able to engage actively and critically, to participate in their communities in a democratic manner either as individuals or collectively with others (ENEC, 2018).

Thus, we define Education for Environmental Citizenship (EEC) as the type of education which promotes Environmental Citizenship (ENEC, 2018). The paramount goal of EEC is to provide students with a consistent body of knowledge, skills, values, attitudes and active behaviours so that they become proactive agents of change. The most relevant pedagogical approaches for effective EEC have long been researched and are depicted in Figure 3.4. These are:

- a. pedagogy of eco-justice (Bowers et al., 2001),
- b. place-based learning (Smith, 2007),
- c. problem-based learning (Rachman et al., 2020),
- d. socio-scientific inquiry-based learning (Levinson et al., 2017),
- e. action competence learning, (Revans, 2011)
- f. community service learning (Van Styvendale et al., 2018),
- g. civic ecology education (Tidball & Krasny, 2010), and
- h. participatory action research (Moore, 2005).

All these approaches can promote the creation of Environmental Citizenship among communities when applied altogether or at least in some combination. Otherwise, when applied individually these approaches cannot lead to the thorough, universal attainment of the outputs of the EEC as these are defined by ENEC (Hadjichambis et al., 2020).





**Figure 3.4.** The most relevant pedagogical approaches which form the pedagogical landscape of EEC (Source: Hadjichambis et al. (2020) *Conceptualizing Environmental Citizenship for 21st Century Education*. Springer International Publishing.)

### How the lack of EEC hinders sustainable development

There exist diverse official curricula across European Union VET schools, especially considering that VET is implemented at the secondary, post-secondary and tertiary levels. In the national contexts of the GreenVETers consortium, Education for Environmental Citizenship (EEC) in VET schools usually builds knowledge around natural sciences and provides the technical knowledge and skills necessary in occupations related to the environment, and sustainability or lack thereof. However, citizenship education on the economic, social, legal, and systemic aspects of environmental issues and on the democratic aspects of climate action is neglected (Hadjichambis et al., 2020), particularly in courses such as Agriculture and Engineering.

It is evident that current forms of EEC cannot stimulate sustainable innovation and development and green entrepreneurship (Hadjichambis, 2022). Most projects concerned with Environmental Education or Education for Sustainable Development have an extra-curricular origin, often starting from initiatives of either governmental





(local and central) organisations, civil society organisations or the business sector. Therefore, there are two areas that should be examined and changed for VET students and trainees to receive a complete education for environmental citizenship. The official VET curricula need to be modernised to reflect the targets of the European Green Deal and the UN's SDGs, and the knowledge and role of the educators need to be enhanced.

The research findings presented above are also shared by the European public. The surveys conducted by the GreenVETers consortium revealed that citizens view the lack of environmental awareness and environmentally friendly consciousness as results of problems in education and a challenge against successful sustainable development. The survey respondents recognised that social responsibility is not cultivated in environmental education.

The respondents shared the sentiment that education should engage the youth and create citizens who are active in the design stage of environmental development. They focused on the need for EEC to be inclusive, as 'lower social classes' are usually excluded from ecological instruction. Nuanced comments even referred to educating students about 'greenwashing' which is a practice of deceptive marketing and a false display of environmental consciousness exercised by corporations.

## What should improve in current forms of EEC?

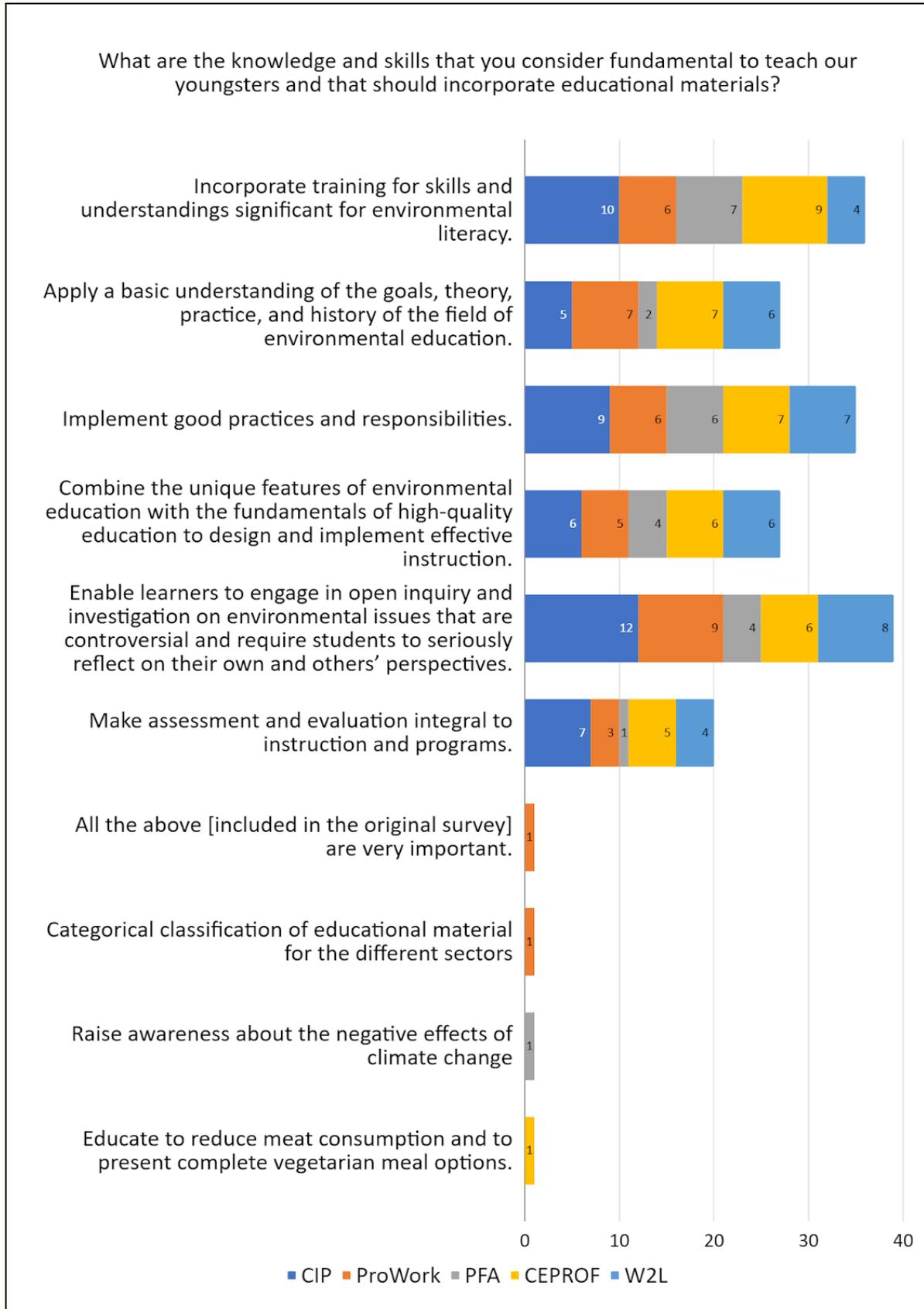
After discussing what is Education for Environmental Citizenship and why it is necessary for building awareness and combating the effects of climate change, we arrive at the issues of its current forms in the European Union. The GreenVETers partners have discovered that while the importance of EEC and climate action is recognised by the European Union, this rarely translates to EEC being implemented in the school systems across Europe. The knowledge and skills that the GreenVETers survey respondents believe to be essential and should be integrated into school curricula are depicted in Figure 3.4. The three most popular answers, in order of decreasing overall frequency, were:





1. Enable learners to engage in open inquiry and investigation on environmental issues that are controversial and require students to seriously reflect on their own and others' perspectives.
2. Incorporate training for skills and understandings significant for environmental literacy.
3. Implement good practices and responsibilities.





**Figure 3.4.** Stacked bar chart on the knowledge and skills considered fundamental to the youth and that should be incorporated into educational material according to the respondents of the GreenVETers survey.





Another significant caveat in EEC is that teachers should be deeply aware of what environmental citizenship entails and be able to successfully apply the relevant pedagogical approaches for effective EEC. Thus, a unique responsibility lies on teachers to develop student skills and knowledge of environmental citizenship and sustainable environmental behaviour in their classrooms. It is, thus, essential to ensure that current and prospective teachers' conceptions of environmental citizenship are accurate and well-informed.

In addition, the basis for quality citizenship education is a positive school climate: a safe, respectful school environment in which students and teachers talk openly with each other and differences are allowed to be. Connecting to the world of pupils is essential: this makes citizenship concrete for pupils. In this way, an important citizenship theme such as learning to act democratically can be practised and given meaning. Events that occur in the lives of students and questions arising from current social events are also good starting points for the transfer of citizenship contents. By using dialogic teaching methods, students learn to express their own point of view, ask questions of others and enter into dialogue with each other.





## 3.4. Transition to Deliberative Systems

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Citizen deliberation allows an opportunity for citizens to better understand the benefits of the European Green Deal, helping them analyse and comprehend its goals. The achievement of those goals in a multitude of contexts and communities should be done through a deliberative system that provides appropriate methods and allows for a pluralism of opinions to emerge. Consequently, citizens' recommendations and concerns can form the basis of meaningful and effective action, while helping create a sense of “ownership” among citizens over the policies and practices implemented. Moreover, the inclusion of people from diverse social backgrounds in the discussion and implementation of the Green Deal will also increase the reach of those policies and practices.

The goals of the Green Deal regarding sustainability are representative of the political ignorance regarding the results presented by the natural and social sciences since the mid-20th century. The climate clock and a thousand and one surveys show us the need for immediate action that the green deal seems to fail to achieve. It is believed by experts that the deliberative democratic system could drive social change towards sustainability, but there are many obstacles in this process, such as (i) the challenges posed by structuralists and systems theory (Luhmann) in relation to the optimism of the deliberative system, (ii) the need to review the concept of sustainability, (iii) changing western European lifestyles, and (iv) the inability of people to articulate the universe of beliefs (religious, ideological and philosophical) on politics and the environment.

The deliberative system can be functional and doable in small-scale projects, but as those projects enlarge and the population increases it becomes harder to guarantee inclusiveness and design unbiased forms of engagement. Transparency, fighting fake news and accountability are important factors in solidifying deliberative democracy as a viable system. Furthermore, it is crucial to guarantee that all individuals are included in the process and are given the necessary prerequisites that will ensure active and constant participation, such as time and knowledge. The viability of the deliberative system is only possible if there is an ability to adapt, if a





continuous modernisation occurs and if there exists flexibility of the governmental bodies in implementing policies and procedures.

Deliberative democracy is possible if there is rational communication and deliberative citizenship, if it is inclusive and emancipatory, is feasible to implement. However, both must consider the inequalities in the different levels of social systems, namely power. There are examples at the local level that demonstrate the success of this model, such as ecovillages. The viability of the deliberative system will always depend on how able citizens are to discuss with knowledge and valid argumentation. Therefore, in order to implement this type of system in an effective way, it would be essential that, throughout compulsory school education, a deliberative mindset is cultivated in students, and relevant social problems and how they relate to different political doctrines are presented to them. If education on Citizen Deliberation and Deliberative Democracy is included in official school curricula, the next generation of citizens will be more aware and used to these democratic practices.

In order to ensure the successful implementation of a deliberative system, it is necessary to make sure that political decisions address the needs of the people. One way of doing that would be through local associations that would provide feedback to governmental offices concerning those needs and how to address them. The assessment of those needs would require interaction and collective discourse, as a way for citizens to come together and discuss what concerns their communities. The decisions made in those collective and deliberative processes should be implemented and the politicians and representatives with that responsibility should be people of integrity and with advanced knowledge of the sector they represent. Also, the system must be continuously implemented in all contexts and have the aim of upgrading policies and practices in all sectors. The system should not be a bubble of closed bureaucracy, it must include minorities and vulnerable groups.

One thought on this issue is how the current trends in the digitization of everything can help increase civic participation. For example, a percentage of votes can originate from citizen deliberation through Facebook or any other platform. So, the public would make a real contribution and would know that their vote counts, that there is institutionally a percentage of the votes that represents their own vote, and that these decisions are considered institutionally. Voting could occur on a daily basis

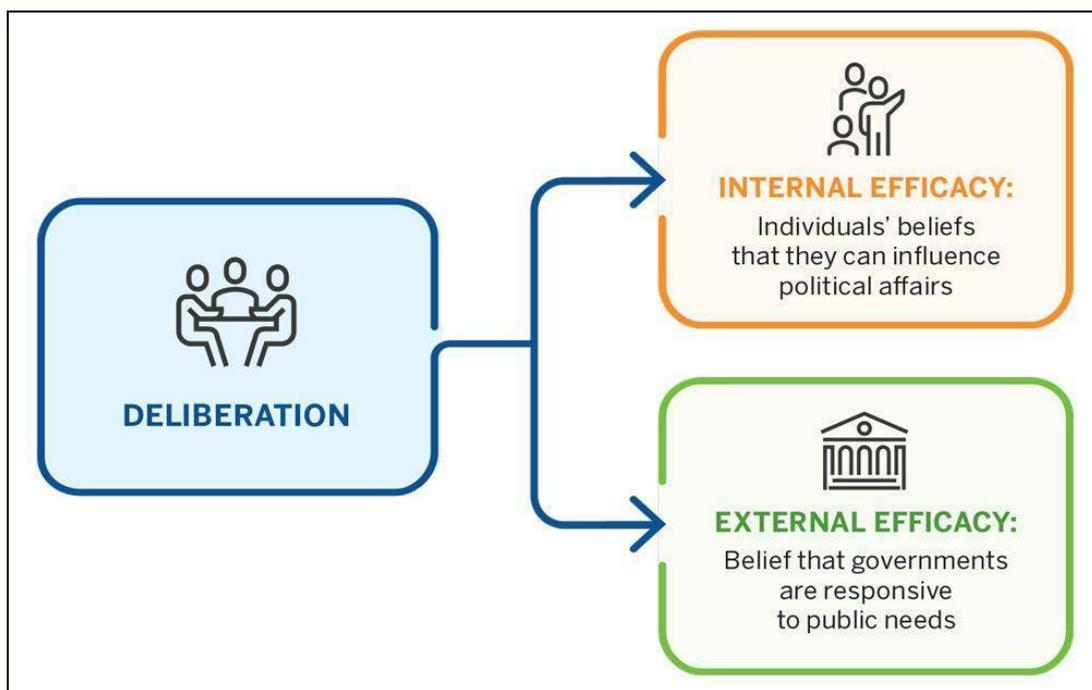




on digital platforms, since people have been given all the relevant correct information on the specific topic and then they could give their opinion accordingly.

Online citizen deliberations could allow for the discussion of topics from the municipal to the national, perhaps even global scale. This form of participation would give space to more active citizens. Any topic can be put to a vote, from building a new road in a neighbourhood to whether a new law will be voted on and enacted. The latter, enactment is critical. The recommendations and decisions of participants in citizen deliberation events should be honestly considered by the government.

There are three crucial elements that contribute to the success of citizen deliberation and a deliberative democratic system. These are the effectiveness of the deliberative event in concrete recommendations and decisions made, the motivation of the participants, and the electiveness. The latter refers to the need for the positions in this institution of deliberative democracy to be elective. The individuals in the position responsible for enacting and realising the deliberated decisions should be completely replaceable. They should not be someone in a chair or position, because that creates a pre-established system.



**Figure 3.4. Internal and External Efficacy of Deliberation** (Source: Matasick, 2020, <https://www.cima.ned.org/publication/wisdom-of-the-crowd-deliberative-democracy/>)





Moreover, the integrity and quality of the deliberative democracy, as clear from ancient times, are guaranteed by transparency. It is important that thorough information is given on all topics, along with all the possible solutions presented in a substantial way. Making sure that all opinions are informed and knowledgeable is vital. For this, education and training are the best tools to shape a collective thought for the good of society as a whole. Transparency is also a vital part of citizen deliberation when it comes to decision-making. There should be public records of the recommendations and decisions of any deliberation event. So that the public can see that the decisions subsequently made by the higher institution, for example, a municipality or a ministry, are consistent.

## **Challenges in adopting a deliberative system and the ways to overcome them**

The scope of a deliberative event and the scale of the population concerned with the decisions made during the event are significant matters to be considered. Making citizen deliberation happen in a small town or city is not difficult, as the diversity of the population can be more easily represented. In larger cities, however, the challenges include the more hectic schedule of participants and finding the time and place to accommodate the larger audience. Citizen deliberations simply cannot always take place during working hours as no one would be interested in attending.

Other issues include the language and method used for communication. Many times, deliberation takes place on legislation using sophisticated language that even experts can find incomprehensible. It is crucial to use layman's terms instead so that every citizen can understand. Moreover, the media used to announce the deliberation event or to share information that should be studied prior is also essential. Using the website of an organisation which does not receive enough visits might make the material available but not necessarily accessible. Similarly, while technology offers the possibility of online deliberative events, if these were to only take place on the internet where an older person or a person without a connection cannot locate the deliberation and participate.





Among the conditions used to assess the quality of deliberative events (see Section 3.1) is the representation of the diversity of opinions within the concerned population. The participants need to be knowledgeable about the social injustices and problems of the region, and also represent the migrant community and the socio-economic issues of a specific region. For this to occur successfully, communication must take place between decision-makers and the community. This is a two-sided issue; the citizens need to learn to participate and decision-makers must listen while also being open to explaining why certain recommendations cannot be realised.

The main challenges are ensuring that the process is systemic and does not include the same few people over and over again, ensuring that the people involved come from several different backgrounds and, lastly, ensuring that the participation is continuous and consistent throughout the process, especially for topics where the deliberations can last for years. There are several processes that can help overcome these challenges, but the former need to be better established. There needs to be a neutral facilitator, a person or board that can manage the participants and the flow of the conversation in a neutral way, and encourage all or at least most participants to express their views and arguments. The neutral facilitator would also be responsible for inviting and ensuring a participating sample that represents the diversity of the community, as well as maintaining the same continuous participation if deliberations on the same topic take place over an extended timeframe.

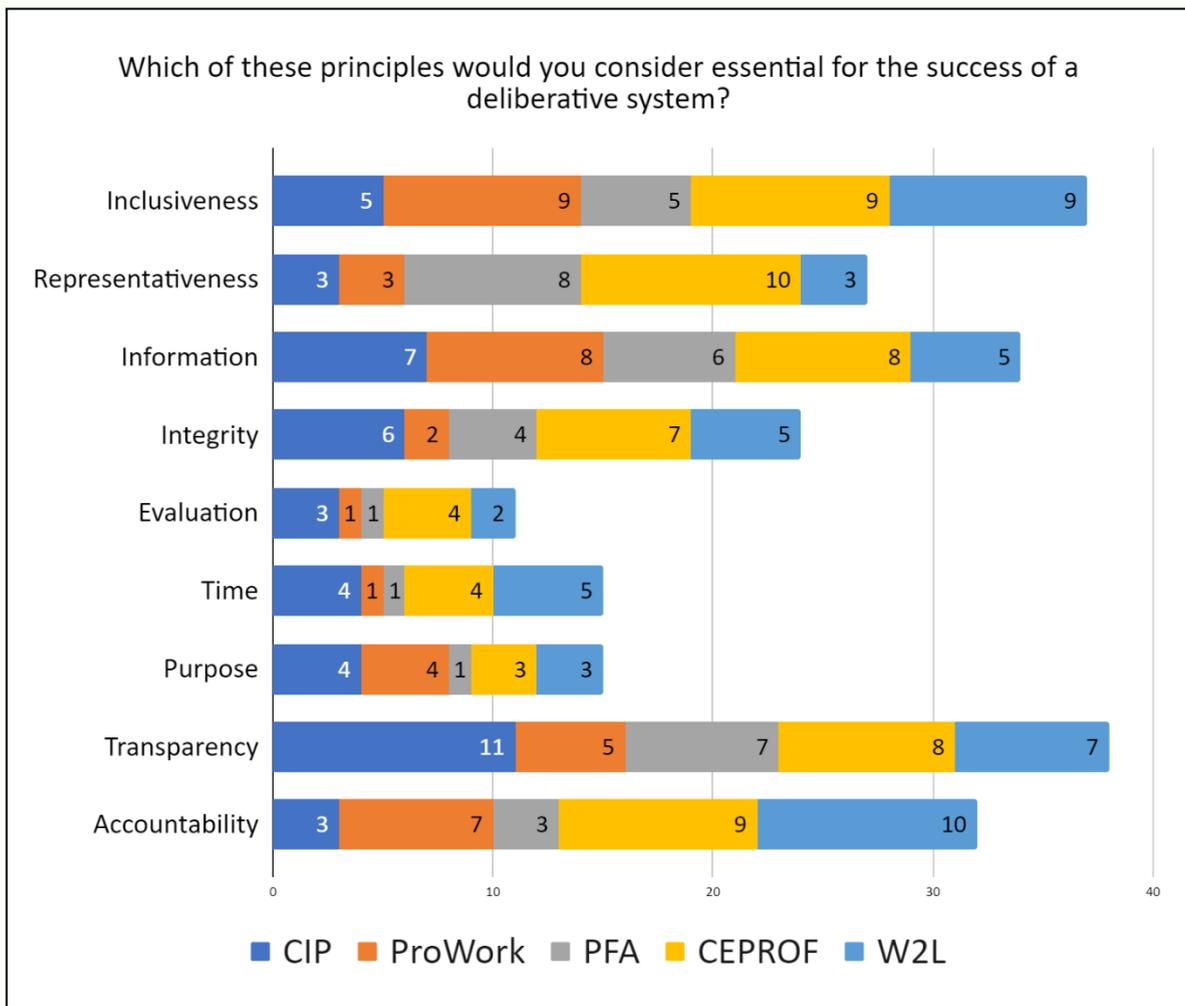
The equal consideration of arguments mentioned as a factor of successful deliberation, mentioned in Section 3.1, should cover a multitude of processes in a deliberation. A welcoming environment could give confidence to participants to ask any questions they consider important. Moreover, while speaking up would identify participants and their views, especially in a small-scale event, voting processes should remain anonymous. Lastly, the timeframe of an event is critical as this is a factor affecting participation levels, the provision of thorough information for the comprehension of the given issue, and the decision-making processes.





## GreenVETers survey responses on the deliberative system

The respondents of the survey created by the GreenVETers consortium were prompted to answer two extremely important questions regarding the successful implementation of a viable, sustainable deliberative system. The first question on principles considered essential for the success of a deliberative system offered multiple choices, and each respondent could pick as many principles as they liked. The bar chart in Figure 3.5 depicts the responses.



**Figure 3.5.** Stacked bar chart of the principles considered essential for the success of a deliberative system by the respondents of the GreenVETers survey.

The second relevant question was ‘According to your knowledge of citizen deliberation, what is your opinion on the viability of the deliberative system and how would you ensure its successful implementation?’ This question was open-ended





and responses reflected the opinions and recommendations of experts already discussed above. People focussed on the importance of having a local authority facilitate deliberation events, the correct management of an event's scale to maintain an inclusive representation of the growing, diverse population, the involvement of marginalised groups in the process, and equal access to information.

Furthermore, respondents' answers to the first question were also reflected in their answers to the second question. They again stressed their hopes to see transparency and accountability prevail over the effects of fake news and the ignoring of the recommendations by decision-makers. To ensure that a deliberative system works, political decisions must address the needs expressed by the people. If a deliberative event is used superficially and only for authorities to "justify" current practices without aiming to change them, then deliberative democracy loses its relevance to the people. Finally, some expressed doubts on whether a system of representative democracy can be practically applied to large groups of people. The last, however, can be overcome with careful consideration by the facilitators and organisers as seen by very large events such as the UK's Citizen Assemblies.

Despite all the warnings and doubts about the implementation of a deliberative system, respondents usually maintained their optimism for the system as it is one that encourages active citizen engagement, and the empowerment of those not in a position to make decisions. Citizen deliberation is a valuable tool in citizen engagement as it provides the necessary space and opportunities for citizens to come together, discuss and make decisions on their community's concerns. The burden of accountability would then lie on policymakers and whether or not they consider citizens' recommendations which would further encourage participation.





## 3.5. Activities

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- 1) Citizen Deliberation is the process in which participants who are members of the public, engage in balanced argumentative discussions. Which of the following types of topics should be put through citizen deliberation?
  - (A) Topics combining expert and real-world knowledge.
  - (B) Topics on which conflicting public values exist.
  - (C) Topics on which the public has low trust in the government.
  - (D) Controversial and divisive topics.
  - (E) All the above.
  
- 2) Which of the following hinders the goals of Education for Environmental Citizenship?
  - (A) The assignment of homework to students to do research on a socio-scientific issue.
  - (B) The use of problem-based learning in pedagogy.
  - (C) The combination of education on natural sciences and the democratic aspects of climate action.
  - (D) The lack of knowledge and training among teachers and educators on the topic.
  
- 3) Which of the following poses a challenge for the successful implementation of a deliberative democratic system?
  - (A) The inclusion of marginalised groups in citizen deliberations.
  - (B) The lack of follow-up by authorities in enacting the recommendations and decisions provided by citizens during deliberations.
  - (C) The careful planning of a deliberative event to allow time for the thorough information of participants prior to and during the event.
  - (D) The anonymity of participants during voting processes.





# 4. Climate Action through Deliberative Systems

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## 4.1 The link between the European Green Deal and Environmental Citizenship

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The challenges faced by democracies when dealing with climate change have been explored and underlined. These challenges include democracies' inability to respond to long-term dangers, how scientific or technological information is employed in decision-making, the influence of vested interests and the insufficient consideration of citizens' thoughtful opinions. Deliberative democracy proposals argue that in order to meet the challenge of climate change, democracies must establish more effective democratic procedures and practices (Silva, 2010).

Deliberation creates a space for participants to think about the interests of future generations and to define shared aims and objectives by orienting them toward the common good (Silva, 2010). In order to balance politics' propensity to focus on the short term, a deliberative approach allows for the examination of climate change as an ongoing catastrophe with significance in the short, medium, and long terms (Flor, 2022).

When thinking of a deliberative approach to tackle the climate issues, we must always have in mind the conditions that guarantee the quality of the deliberative process, which have been presented in section 3.1. A deliberate approach to resolving climate challenges acknowledges the critical contribution of technical and scientific data to the decision-making process. Deliberative democracy is fact-based; it necessitates taking the evidence into account. The different types and sources of evidence are acknowledged in a democratic deliberation process. It highlights the importance of understanding actors in various situations, especially those who are most vulnerable to the effects of climate change and makes explicit the consideration of moral and ethical stances.





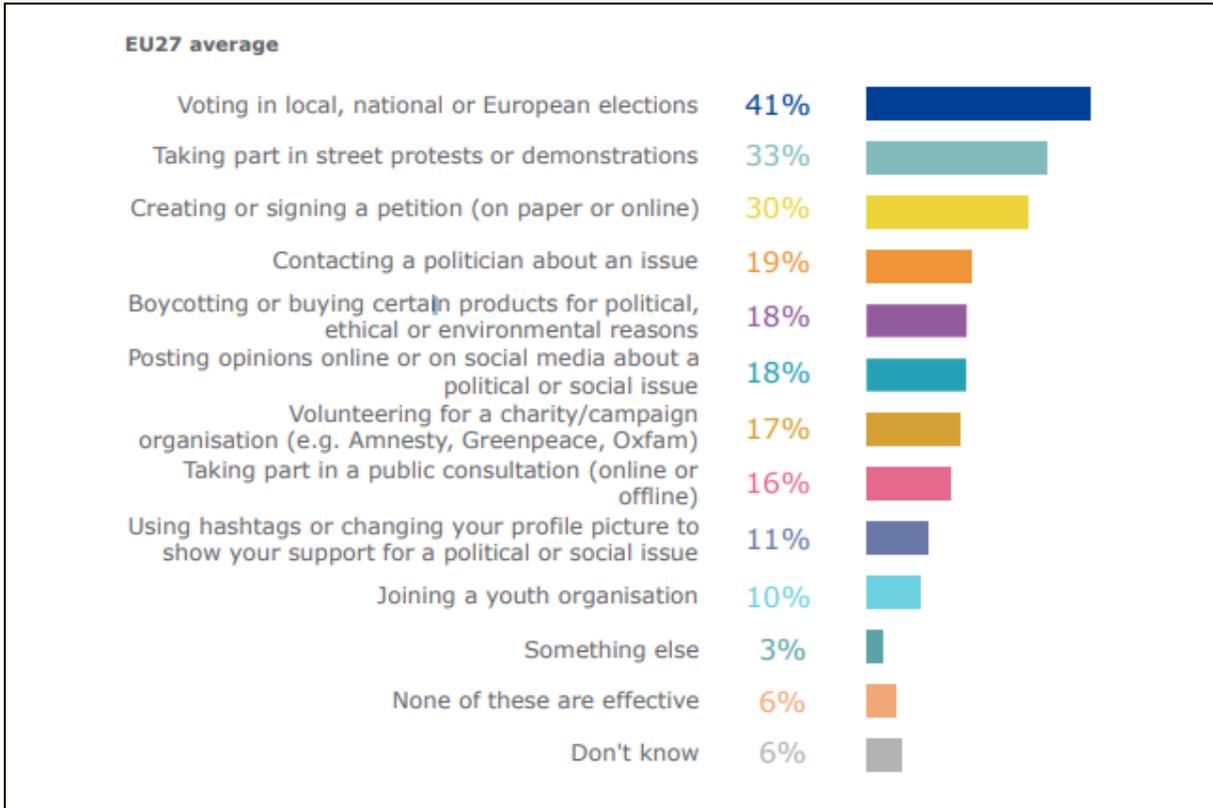
Deliberative democracy also seeks to restrain the exercise of power and vested interests by strong nations and corporations. The strength of an argument and reciprocal defence between participants who are free and equal are important concepts in democratic deliberation. Vested interests find it more difficult to publicly defend their own selfish, short-term preferences in such circumstances.

So many deliberative democrats have focused on issues of institutional design out of a desire to construct or safeguard spaces from the strategic influence of their own interests.

One of the factors contributing to the well-documented fall of public trust in governments is the gap between citizens and their elected officials. Given the crucial role played by governments in guiding economies and society away from dependency on greenhouse gas emissions, this presents clear issues for climate action. In contrast to a focus on elections and voting intentions, deliberative democracy views the interaction between citizens and their political representatives as an ongoing process built on informed discourse. Through ongoing communication, a deliberative strategy seeks to improve the bond between voters and their elected representatives.

The graph below shows young citizens' opinions on effective strategies to make their voices heard by decision makers. Despite recent studies pointing in the direction of a lack of interest in general elections, the Flash Eurobarometer data reveals that young Europeans believe that voting is still the most effective strategy.





**Figure 4.1.** What are the three most effective actions for making one's voice heard by decision-makers? (% - EU27) (Source: Youth Survey 2021 - <https://europa.eu/eurobarometer/surveys/detail/2574>)

Besides revealing voting as the preferred way of political interaction by youngsters, the survey also shows that direct contact with a political representative ranks lower in comparison to other options, such as petitions and public demonstrations. This shows that youngsters do not see politicians as approachable and reliable figures who will take their opinions into account. Interactions between politicians and the general public should not take place only through voting and polling but also through deliberative processes and two-way conversations that take place in civil society. This enables politicians to engage with citizens more deeply and learn from the latter's expertise, opinions, and beliefs rather than just seeking votes strategically.





## Environmental Issues that have been or are currently being deliberated in the European Union

In a special 2008 Eurobarometer, 50% of Europeans considered climate change to be one of the most serious problems facing the world. In fact, the more informed citizens felt about the causes, consequences and ways of fighting climate change, the more likely they were to consider it a “very serious problem (European Commission & European Parliament, 2009). More recently, the July 2021 Eurobarometer survey revealed that 93% of European citizens consider climate change a serious problem and 78% consider it very serious (Mastantuono, 2022). This concern can be translated to positive action pushing for policies that would begin to remedy current trends in environmental emergencies.

Examples of policies that have been or are being scrutinised in citizen deliberations or public discussions include the following.

- The design of sustainable cities (Apostolou, 2018),
- The transition to sustainable mobility,
- The transition to sustainable energy,
- The transition to sustainable food consumption (European Commission, 2022c)
- The transition to a circular economy,
- The establishment of Green Points in a community,
- The shortening of the supply chain of produce from the field to the table,
- The strengthening of the agriculture sector to make it more sustainable and resilient to climate change,
- The recycling of wastewater to make it drinkable and safe for use again,
- The subsidisation of greener transportation such as electric cars,
- The higher taxation for factories or power plants with significant pollutant emissions,
- The creation of laws to encourage the use of renewable energy resources such as solar energy using photovoltaic cells (Ministry of Energy, Trade and Industry, n.d.),
- The co-creation of a National Action Plan on Biodiversity (Department of Environment, 2015)





- The co-configuration of a National Climate Law (World Wildlife Fund, 2020),
- The adaptation of any existing national law with new articles or guidelines on
  - single-use plastics,
  - energy efficiency,
  - the modernisation of the electricity generation process,
  - the use of sustainable biofuels,
  - fire-protected buildings,
  - waste management,
  - regulations in construction,
  - the protection of waters from pollution of agricultural origin (Ministry of Administrative Reform and E-Governance, 2009)

In addition to the taxation and regulation of non-sustainable practices and the subsidisation of 'greener' alternatives, the adaptation of educational curricula could become a topic of discussion.





## 4.2. Responding effectively to Climate Issues

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Citizens as agents of social change are the emphasis of environmental citizenship in green and sustainable cities. Informed citizens understand the value of promoting discussion, debate and awareness of sustainability policies for the common benefit and preservation of the Earth's ecosystems in addition to engaging in sustainable family activities. A very important topic is the use of decision support systems to encourage citizen involvement and active participation for better management of cities and society. It can be demonstrated that social factors, urban impacts and resilience, citizen behaviour analysis and change within urban communities, environmental governance and environmental justice are essential components of green and sustainable cities.

On the topic of sustainable cities and environmental justice, we must look at the rural areas as well. Climate change mitigation efforts have not been evenly spread or applied to all sectors. The agricultural sector and rural areas were not included in the zero emissions efforts until now. Rural areas struggle with their specific limitations in reducing greenhouse gas emissions and the environmental footprint, as dispersed housing is often not modernised to efficiently use natural resources and reduce pollution. Rural areas have not been seen as a place in need of public support in introducing green solutions, even more profound than in big and industrialised cities. This is even more important to tackle when we realise that the rural areas are key to preserving biodiversity. It is not only the agricultural activity that can support protecting biodiversity, but also rural communities through reducing the scale of pollution to the air, water, and soil that they generate.

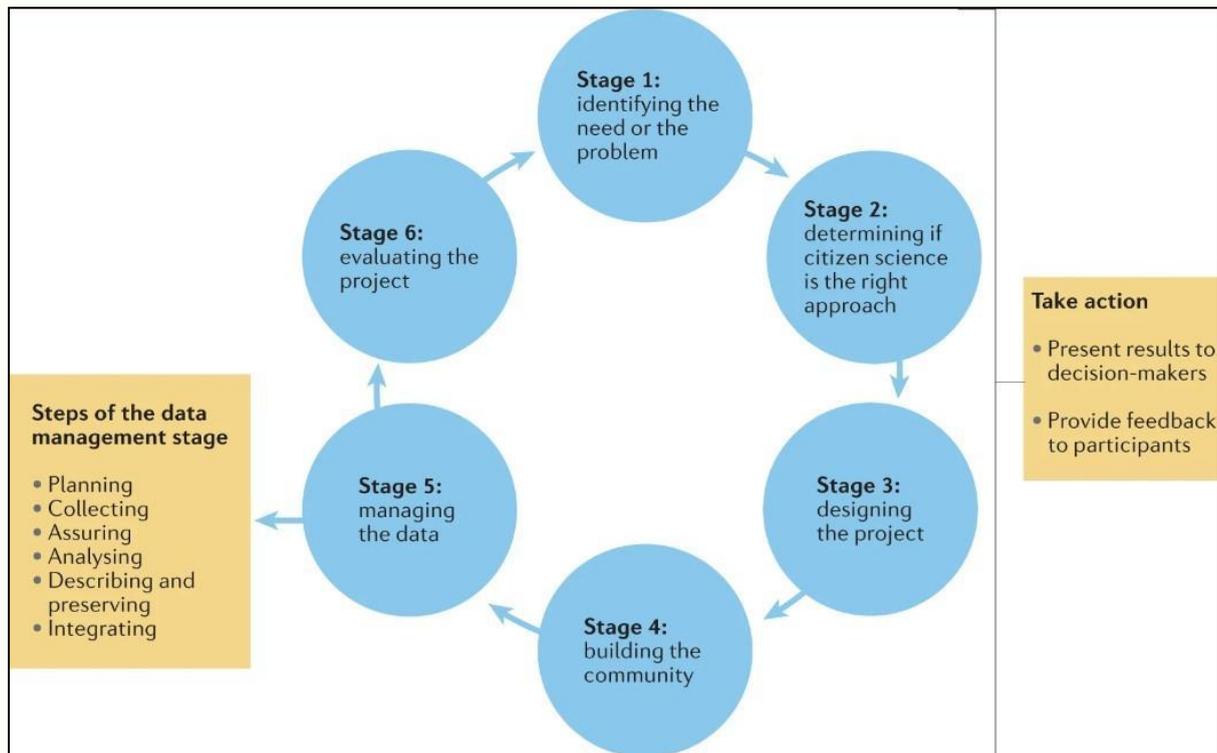
### Citizen Science

When dealing with an issue of this magnitude, it is important to have an all inclusive approach that is considerate of all the different contexts in which it will need to be implemented. Citizen science, which depends on citizen involvement for ongoing knowledge development, can be used as the main tool for the creation of such an approach. Through citizen science, everyone can participate in the various stages of





the scientific process, from research question design, to data collection and voluntary mapping, data interpretation and analysis, and publication and dissemination of results. This makes citizen science a tool of utmost significance in developing a strategy of climate resilience and innovation in all contexts, due to its ability of providing multiple sources.



**Figure 4.2.** Stages of designing and implementing a citizen science project in ecology and environmental sciences (Source: *Nature Reviews Methods Primers*, 2022), <https://www.nature.com/articles/s43586-022-00144-4>

The knowledge, values, attitudes, skills, competencies, and behaviours necessary for monitoring one's environmental impact as well as for active civic participation in both the individual and collective spheres as well as the private and public spheres can be developed in citizens through this novel type of education. The European Green Deal Call asserts that it is essential to directly involve citizens and communities in contributing to climate action and protecting the environment, thereby encouraging them to change their personal behaviours, reduce their carbon and environmental footprints, and take action at the individual and collective level (European Commission, 2019).





By supporting biodiversity protection, naturally based solutions for climate resilience, sustainable energy consumption and waste management, a more sustainable lifestyle and interaction with the environment would be attained. Sustainability must be ingrained in all facets of society in order to balance the demands of the ecological, cultural, social and economic systems. Most measures created thus far have frequently just addressed the environmental issues connected to the overall impacts.

Social, cultural, and economic indicators are essential because they will offer a continuous flow of much-needed information for the ongoing process of sustainable development (Barry et al., 2021). Social, cultural, and economic knowledge would enable a more comprehensive understanding of climate impacts based on the individuals who are directly impacted by changes in the global climate system.





## 4.3. Activities

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- 1) Deliberative democracy points out several problems in current democratic systems. Which of these is not pointed out?
  - (A) The inability to respond to long-term dangers.
  - (B) The lack of consideration for citizens' thoughtful opinions.
  - (C) The exercise of power and conflict of interests by strong corporations.
  - (D) The lack of political options provided to citizens.
  
- 2) In your own words, briefly explain the importance of environmental citizenship.





## 5. Conclusion

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The European Green Deal introduced in 2019 has set up concrete goals for the Union and its Member States toward carbon neutrality and a circular economy. The Deal has opened up new avenues in tackling climate change through initiatives, funding programmes, policies and regulations that have been received mostly well considering people's concerns regarding the severity of the issue. Along with the journey toward the global implementation of the UN's Sustainable Development Goals, the process of mitigating, solving and adapting to the unfolding environmental crisis has gained momentum.

Nevertheless, the responsibility for meaningful action falls on the shoulders of both governments and citizens alike. Citizens owe it to themselves, the future generations and the environment to take on active roles by participating civically. Likewise, governments should be held accountable for the environmental policies and laws they implement, amend or discard. Through the adoption of Education for Environmental Citizenship, citizens' awareness as well as their sense of empowerment has been raised. It is extremely crucial to solidify and perfect this type of education in the educational systems, traditional and VET, of all EU Member States.

Along with EEC, students must also become educated about the benefits of using citizen deliberation and transitioning to a deliberative democratic system in climate action. Transparency, availability of information, inclusive representation, and accountability of authorities and stakeholders lie at the heart of deliberative democracy. These principles could help in addressing the controversial topic of climate change, which some citizens may not even believe exists despite scientific proof. Moreover, conflicting views exist among populations regarding the ways of solving and mitigating the issue. Citizen deliberation, a highly suitable tool for scrutinising such topics, would increase the sense of ownership of citizens over the decisions they were involved in making and, thus, their sense of responsibility in acting towards the goals they helped set.





# Solutions to all Activities

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## Solutions to Chapter 2 Activities:

- 1) The goal of the European Green Deal is to achieve:  
- **(B) Reach climate neutrality by 2050.**
- 2) In 2021, the European Commission unveiled a package of legislative proposals intended to modernise existing legislation and adapt it to the EU's 2030 climate target. What name was given to that package?  
- **(A) Fit for 55**
- 3) In order to achieve a more efficient climate action, which one of these is viewed as crucial?  
- **(C) The individual and collective actions of citizens designed to identify, address and solve issues of public concern.**

## Solutions to Chapter 3 Activities:

- 1) Citizen Deliberation is the process in which participants who are members of the public, engage in balanced argumentative discussions. Which of the following types of topics should be put through citizen deliberation?  
- **(E) All of the above.**
- 2) Which of the following hinders the goals of Education for Environmental Citizenship?  
- **(D) The lack of knowledge and training among teachers and educators on the topic.**
- 3) Which of the following poses a challenge for the successful implementation of a deliberative democratic system?  
- **(B) The lack of follow-up by authorities in enacting the**



recommendations and decisions provided by citizens during deliberations.



### Solutions to Chapter 4 Activities:

- 1) Deliberative democracy points out several problems in current democratic systems. Which of these is not pointed out?  
- **(D) The lack of political options provided to citizens.**
  
- 2) In your own words, briefly explain the importance of environmental citizenship.  
- **Sample Answer:**

**Environmental attitudes and behaviour characterises and influence our production and consumption choices and therefore affect largely our environmental impact. Environmental Citizenship requires new ways of thinking and acting. Being an active environmental citizen includes recognising the value of liveable environments for humans and nature, promoting conservation and restoration of resources, and supporting nature protection and biodiversity.**





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