



Proceeding Paper

# European Green Deal and Environmental Citizenship: Two Interrelated Concepts <sup>†</sup>

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**Abstract:** The world is facing an unprecedented global environmental crisis as environmental problems have been exacerbated in recent decades. Climate crisis, plastic pollution, and the loss of biodiversity are just some of the many environmental issues we are facing every day. Actions by citizens are central to EU plans to tackle the recent environmental crisis, to achieve the European Green Deal, and the EU 2050 strategy for a low (neutral) carbon Europe. Perhaps, more than any other previous environmental policy, the European Green Deal (EGD) has set participation and citizen engagement as one of its main priorities. Empowering citizens for transition towards a climate neutral, sustainable Europe is one of the horizontal priority areas of the EGD (Thematic area 10: Empowering citizens for transition towards a climate neutral, sustainable Europe Call). According to the EGD, the green transition must be just and inclusive and requires ambitious actions to engage people, communities, and organizations to bring about a fair and inclusive transition, leaving no-one behind. Such actions must promote change at the collective level through deliberation, as well as through research to foster behavioral and social change, and at an individual level by empowering citizens as “agents of change”. This is a fundamental aim of the recent conceptualization of Environmental Citizenship.

**Keywords:** European Green Deal; environmental citizenship; citizen engagement; green transformation; Education for Environmental Citizenship (EEC)



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## 1. Introduction

The recent conceptualization of Environmental Citizenship by the European Network for Environmental Citizenship [1] is a very important research development. Based on the EEC Model (see Figure 1), ENEC developed a consensus on what Environmental Citizenship is, on how Environmental Citizenship can be effective for Environmental Policy, and what Environmental Citizenship should include for the adequate empowerment of citizens for transition towards a climate neutral, sustainable Europe.

Due to the very important relationship between Environmental Citizenship and the EGD, the EU Directorate for Research and Innovation together with the COST Association organized a special workshop to determine the research priorities in future research calls.



Figure 1. The EEC Model [Source: Hadjichambis & Paraskeva-Hadjichambi, (2020)] [2].

## 2. Methodology

This study theoretically examines the relationships between two very important concepts in the recent environmental sciences area: the European Green Deal (EGD) and Environmental Citizenship (EC).

## 3. Findings

One of the most critical issues that encroaches on future citizens is the current fragmentation of knowledge production and training systems [3]. Particularly, in the last two decades, the separation of knowledge and expertise has been identified as a problem in environmental science, policy-making, and education in general [4]. Environmental education remains highly specialized and predominantly focused on natural sciences, while citizenship, economic and social issues, environmental justice aspects, and structural causes of environmental problems are only marginally included in environmental education programs, if not at all [5]. It remains entirely unclear how environmental citizenship matures in universities and schools, in ways that promote innovation, sustainability and green entrepreneurship, and growth. It is unknown how future citizens will acquire the needed knowledge, competencies, skills, values, and behaviors to contribute meaningfully to a positive green future. This means that these aspects are central in stimulating environmental citizenship in future environmental citizens, who will then be equipped with the ways of thinking and acting that promote and generate a green sustainable future.

For Europe, becoming the world’s first climate-neutral continent by 2050 is a once in a lifetime opportunity to modernize the EU’s economy and society and re-orient them towards a just and sustainable future. Research and innovation will play a central role in (a) accelerating and navigating the necessary transitions; (b) deploying, demonstrating, and de-risking solutions; and (c) engaging citizens in social innovation [6]. Horizontal area 10 is dedicated to empowering citizens and has three sub-topics: (a) European research infrastructures’ capacities and services to address EGD challenges; (b) Behavioral, social, and cultural change for EGD; and (c) Enabling citizens to act on climate change and environmental protection through education, citizen science, observation initiatives, and civic involvement. Environmental Citizenship (EC) has a central role in behavioral, social, and cultural change as EC aims to achieve critical and active engagement and civic participation of the citizens, as well as in practicing environmental rights and duties, and promoting inter- and intra-generational justice [1]. Education for environmental citizenship (EEC) is a channel through which citizens can be enabled to act on climate change and environmental protection.

Five green mission areas in Horizon Europe directly support the European Green Deal: (1) Restore our ocean and waters, (2) Climate-neutral and smart cities, (3) A soil deal for Europe, (4) Adaptation to climate change and societal transformation.

As more people on the planet live in cities, it is necessary for Environmental Citizenship to be practiced in cities in order to address urban environmental problems and promote urban sustainability. Therefore, green and climate-resilient cities can be a case study to examine the relationships between EGD and EC.

Environmental Citizenship in Green and Sustainable cities focuses on citizens as social change agents. Such citizens not only engage in sustainable household practices but respect the importance of raising awareness, discussion, and debates on sustainability policies for the common good and maintenance of the Earth's ecosystems [7]. Decision Support Systems for citizens' active participation and engagement for improved management of cities and society is a very important issue. Social aspects, impacts and resilience of cities, citizen behavior monitoring, analysis and change within urban communities, environmental governance, and environmental justice can be proved to be crucial dimensions for green and sustainable cities. Furthermore, Citizen Science—which relies on citizen participation for continuous knowledge generation (e.g., [8], knowledge transfers over time [9], and practical environmental management—is of outstanding importance in achieving climate resilience in contemporary cities. Finally, Nature-based Solutions (NbS), by using ecosystem services, are innovative solutions that use natural elements to achieve environmental and societal goals in sustainable cities [10], with the effective participation of environmental citizens as an internal prerequisite.

The active and catalytic role of citizens and their direct civic participation is essential to address climate change and other environmental problems [11]. Changes in citizens' and consumers' behaviors towards more sustainable patterns can happen through education [12], especially Education for Environmental Citizenship as it is defined by ENEC [1]. This novel type of education can provide citizens with the knowledge, values, attitudes, skills, competencies, and behaviors required for monitoring their environmental impacts, and for deep civic participation in individual and collective spheres and in private and public spheres. According to the European Green Deal Call, "It is crucial to directly involve citizens and communities in contributing to climate action and protecting the environment, thereby encouraging them to change their personal behaviour, reducing their carbon and environmental footprint and taking action at the individual and collective level. This would lead to a more sustainable lifestyle and relationship to the environment, by promoting biodiversity protection, nature-based solutions for climate resilience, sustainable energy consumption, waste management, etc." [13] (p. 1). These integral parameters could play a role in the Circular Economy and Cities with Climate Resilience.

#### 4. Conclusions

This study helps to determine how current and prospective dimensions of the concept of "environmental citizenship" are related to the "European Green Deal" initiative. Citizens play a critical role in climate action and protecting the environment, thereby encouraging them to change their personal behavior, reducing their carbon and environmental footprint, and taking action at the individual and collective level; thus, the concepts of Environmental Citizenship and the European Green Deal are inseparable. This connection would lead to a more sustainable lifestyle and relationship of citizens to nature and the environment.

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