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College of Europe
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Natolin

THE FUTURE OF ENVIRONMENTAL CITIZENSHIP IN THE EU

TellUs:
EU Environmental Policy Lab

Coordinators
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April 2021

College of Europe
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Preface

The Future of Environmental Citizenship in the EU is the second report submitted by students at the College of Europe under the “TellUs - EU Environmental Policy Lab” programme¹ – a joint initiative between the College of Europe and the Directorate-General for Environment (DG ENV) of the European Commission, which offers students a unique opportunity to contribute to advancing the European agenda towards greater environmental sustainability and to participate in high-level policy making.

The aim of the TellUs programme is to encourage students to produce reflection papers and strategic recommendations for EU officials working at the European Commission on environmental and climate policies. In previous editions of the programme, students at the College of Europe provided policy recommendations on “the future of environmental policies in the EU” ahead of the Commission’s new mandate in 2019. Unfortunately, last year, the COVID-19 outbreak in Europe prevented the group from completing its report - but changes were made this year so that the project could go ahead in spite of the challenges imposed by the restrictions. As reflected in the title, this report discusses the concept of environmental citizenship - a subtle but powerful idea that underpins the actions and motivations of engaged citizens in the green transition, and that can be stimulated to create a sense of membership to a larger European community that shares a series of rights as well as duties with regards to the environment.

The report is structured into four chapters. The first offers a deeper reflection of what environmental citizenship entails, delving into the ecological and political contexts of the current climate crisis as well as the theories and key principles that underpin the concept of environmental citizenship. Chapters 2, 3 and 4 introduce a series of policy proposals that seek to translate these ideas into concrete measures the EU can take to exploit the full potential of environmental citizenship across all EU Member States. The policy proposals vary extensively and offer a wide range of possible directions to be taken: they reflect the complexity of the current socio-environmental challenges, but also the many fields of expertise as well as the rich cultural diversity of the group of students who wrote them. The topic of environmental citizenship was chosen by the organisers of the TellUs activity, both at the College of Europe and at the Directorate-General for Environment, yet it raises issues that are directly relevant to our lives, as young students. The current climate crisis directly concerns us, and this report thus represents a chance to exchange and to voice ideas that can have significant impacts on our own future.

As members of this young generation, we are also building upon the reflection and the efforts that were initiated by numerous youth movements for climate all around the world before us. Here, the question of a common identity and of shared values takes on its full meaning. Indeed, the EU is not only facing a climate crisis, but also a societal one.

¹ The name “TellUs” is derived from the English locution “tell us” as well as the Latin word *tellus*, meaning “Earth”. In Roman mythology, “Tellus” is also the name of the goddess of the earth. This combination of meanings reflects the environmental character of the project and the role of students in advising EU officials on future environmental strategies.

This new social order is characterised by new forms of social dialogue that transcend all geographical boundaries and that increasingly take place online, with the help of new technological tools. In fact, most of us have directly engaged with these tools and constructed our own identity through these digital interactions. Thus, this report also represents an opportunity for policymakers to hear what actors involved in this digital transition have to say. We hope that by putting forward original student inputs, we might bring in new perspectives and complement the reader's understanding of current socio-environmental issues in the EU.

We are facing an unprecedented global crisis, and the “second best time to act is now”. It calls for a collective action and, crucially, for the integration of environmental citizenship in all spheres of society. This is essential to nurture a sense of ownership, of common responsibility, and of accountability. The European Green Deal marks an important step in this direction, but it should not comfort EU policymakers in the idea that it suffices to address this crisis. In fact, scientific evidence tends to show that the situation has been worsening year after year, and it is thus vital that the EU continues to strive for more ambitious initiatives and climate targets. The year 2021 is, of course, a special one: the COVID-19 pandemic turned our society upside down and challenged all our lifestyles. However, it also marks a moment of hope for EU environmental governance, and a unique opportunity to plan for a new European model of society.

European citizens can play, and have already played, a central role in the green transition that will lead to carbon neutrality and greater environmental sustainability. More and more people know about the causes and effects of human-induced climate change, and the number of climate actions, commitments, and pledges continues to rise. Despite all good intentions, this green transition will not be easy: the changes it proposes are drastic, and it is likely to disproportionately affect the most vulnerable population groups. There is also a certain degree of uncertainty that leaves room for unforeseen consequences. However, this is where the European Union has a strategic role to play: it can, and should, encourage environmental citizenship. This extends far beyond the mere concepts of public participation and intergenerational equity. Environmental citizenship must become more than an abstract concept and must find its place at the core of the European policy agenda. Responses to the climate crisis will require founding principles - pillars on which the EU can rely when facing tomorrow's challenges and when devising strategies to implement long-lasting solutions. The concept of environmental citizenship occupies a central place in these debates, and we hope this report will provide useful insights into its many applications.

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Timeline & Acknowledgements

The TellUs activity is organised by the Department of European Political and Governance Studies of the College of Europe. It benefits from the support of the Directorate-General for Environment (DG ENV) of the European Commission, although the final report only reflects the views of the students involved in the activity. This year's programme had to be slightly adapted this academic year to comply with the public health recommendations and rules in the context of the COVID-19 pandemic. The 2020-2021 edition of the programme was entirely conducted through online meetings and conferences.

We would like to thank all the experts - [Céline CHARVERIAT](#), [Kęstutis SADAUSKAS](#), [Elena VISNAR MALINOVSKA](#), [Kim DE RIJCK](#), [Anne BURRILL](#), [Claudia OLAZABAL](#), and [Hans BRUYNINCKX](#) - who took the time to meet us, to answer our questions, and to share their own insights into the various forms of environmental citizenship with us.

We would also like to thank [Joanna DRAKE](#), Deputy Director-General at DG ENV, for her continued and warm support, and without whom this project would not have been possible. Many other people in DG ENV also played an essential role in the coordination of this activity, including: [Emilia ASULTANEI](#), [Nicola NOTARO](#), [Elena MONTANI](#), [Peter KORYTAR](#), [Veronique HYEULLE](#), [Maria HENZE](#), [Rasa CATILLON](#), [Claudia HAHN](#), [Greta RINKEVIČIŪTĖ-MIŠČIKIENĖ](#), and [Irina OLARIU MATOUMBA](#).

Finally, we are extremely grateful to [Pablo VILLATORO HARILLO](#) and [Thijs VANDENBUSSCHE](#), both Academic Assistants at the College of Europe and coordinators of the *TellUs - EU Environmental Policy Lab* activity this year. Their help and guidance throughout this project were truly invaluable, and the TellUs activity could not have taken place without their efforts and full commitment.

October 2020 - Presentation of the TellUs activity by the Department of European Political and Governance Studies of the College of Europe, and call for student applications.

November 2020 - Launch of the 2020-2021 edition of the TellUs activity, followed by the first meetings and brainstorming sessions on the role of environmental citizenship in the green transition in the European Union.

28 January 2021 - Opening ceremony by [Céline CHARVERIAT](#), Executive Director of the Institute for European Environmental Policy (IEEP), based on the theme *"Environmental Citizenship: have we got what it takes for it to take shape?"*.

2 February 2021 - Seminar on Circular Economy and Trade, presented by [Kęstutis SADAUSKAS](#), Director for Circular Economy and Green Growth in DG ENV at the European Commission.

4 February 2021 - Seminar on Citizen Science, presented by [Elena VISNAR MALINOVSKA](#), Head of Unit in DG CLIMA at the European Commission & [Kim DE RIJCK](#), working for DG ENV at the European Commission.

12 February 2021 - Seminar on Agriculture and the Farm to Fork Strategy (part 1), presented by [Anne BURRILL](#), Advisor to the Director for Natural Capital in DG ENVI at the European Commission.

22 February 2021 - Seminar on Agriculture and the Farm to Fork Strategy (part 2), presented by [Claudia OLAZABAL](#), Head of Unit Land Use & Management in DG ENVI at the European Commission.

18 March 2021 - Closing ceremony by [Hans BRUYNINCKX](#), Executive Director of the European Environment Agency (EEA), who reflected on the first draft of this report and gave us some final recommendations.

10 April 2021 - Submission of the final report concluding the 2020-2021 edition of the TellUs activity, *The Future of Environmental Citizenship in the EU*.



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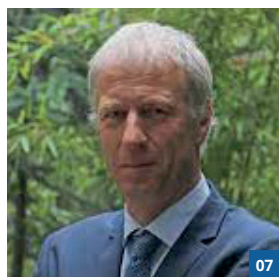
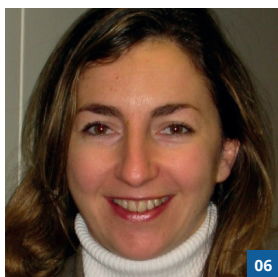
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Executive Summary

The climate crisis represents the single greatest, yet most complex, source of concern for European citizens. This reality is all the more alarming as greenhouse gas emissions continue to rise and the situation is worsening. The climate crisis thus demands that we keep climate and environmental issues at the top of the European political agenda. Addressing this crisis, and meeting the emissions targets under the Paris Agreement will require a systemic and radical transition towards a low-carbon, sustainable societal model. As it concerns everyone, we believe this transition must involve all members of society, including citizens. In addition, we argue that fostering a common 'environmental citizenship' in the EU will greatly contribute to accelerating and facilitating this transition, while ensuring that all voices are heard and that no one is left behind.

The **first chapter** of this report focuses on the concept of environmental citizenship, and situates it in its historical, political, and philosophical contexts. Delving into the historical rise of environmental citizenship in the EU allows us to better appreciate the value of public participation in environmental governance and citizens' environmental actions. For instance, the sudden emergence of environmental movements reflects the speed at which the climate crisis is worsening, but also the consequences of political inaction or inability to implement efficient and long-term solutions. Furthermore, the fact citizens felt the need to voice their concerns and frustrations with regards to human-induced climate change reflects a growing sense of shared ownership and responsibility towards the environment. This self-proclaimed environmental citizenship is neither incompatible with traditional forms of citizenship nor dangerous to a democratic society; quite the contrary. Instead, we argue that the idea of an environmental citizenship has the potential to combine and multiply the potential of individual climate actions, and to bring them together under the aegis of a new European identity.

However, the notion of environmental citizenship remains complex and widely contested across different disciplines and schools of thought. There is thus a risk that attributing a common concept to all kinds of local climate action and allowing citizens to freely adopt an undefined rationale will result in no more than a collection of disparate, unrelated, and uncoordinated results. We thus review the arguments put forward by various academics before proposing to frame the concept of environmental citizenship in such a way that it can be understood the same way by all European citizens. For this, we highlight key principles that underpin the concept of environmental citizenship, namely: (i) the crucial importance of inclusivity and intersectionality, (ii) the rights and duties of environmental citizens at different scales, (iii) the transition to a societal model that moves beyond anthropocentrism and that offers a holistic approach to human interactions with the environment, and (iv) the necessary shift in our understanding of "value". With these principles, we believe the concept of environmental citizenship can reach its full potential and succeed in engaging more citizens in a common effort to protect the environment and achieve climate resilience.

Our **second chapter** highlights aspects of environmental citizenship that are closely connected to the fields of education, civic engagement and democratic participation. This report approaches environmental citizenship as a means of promoting environmental sustainability and of integrating environmental concerns into political action, but also as an end in itself. Whether it stems from an individual act or a collective effort, environmental citizenship needs to be approached seriously in modern political theory and recognised as a new form of political engagement. In this context, we reflect on the potential applications of environmental citizenship at local, regional, national, and international levels.

To truly become an environmental citizen, however, we must consider the institutional framework that governs our citizenship as well as our own responsibilities and duties as environmental citizens. One can demand, and should be entitled to, a high degree of socio-environmental protection together with some freedoms as well as a transparent, fair, and sound jurisdiction. However, as environmental citizens, we must then also be prepared to adapt our own lifestyles and to re-evaluate our interaction with natural ecosystems. As such, the notion of environmental citizenship must also emphasise the notion of responsibility and reflect more than just demands and expectations. To put these ideas into concrete terms, this second chapter is divided into several themes, underpinned, namely, by the field of possibilities opened by the digital sector.

The first is devoted to the education sector, which, we argue, must further include and insist on the current environmental challenges, particularly at university level. As students, we have sometimes experienced these gaps ourselves, and we believe education should be the EU's priority to ensure that both current and future generations are well equipped to address tomorrow's challenges.

The second theme refers to the growing issue of misinformation and the necessity to preserve fact-checked online spaces. The digital transformation must take shape in a coherent, peaceful, and sustainable way, and work in synergy with the green transition to provide forums where our collective resources can be shared and promoted.

The third theme outlines different proposals to better promote and track civic engagement across the EU. From citizen science to smartphone apps, we believe more can be done to engage local communities, while providing them with the right resources and information tools to support this engagement in the long-term.

The fourth theme is devoted to the stories of climate activists, reflecting on their journeys and relative successes to better highlight institutional gaps. We also discuss the value and potential of online activism as a new vector for civic engagement.

The fifth theme deals with representation systems and the (un)availability of adequate tools to voice environmental concerns. We emphasise our rights as well as our duties as environmental citizens, and the importance of democratic representation.

Finally, the sixth theme focuses on potential avenues to access the financial resources required to realise such ambitions - such as participatory budgeting. We also insist on including environmental citizens in the design of financial instruments.

The **third chapter** includes proposals that seek to encourage more sustainable lifestyles. In our current market economy, citizens are not just citizens; they are also consumers. In fact, their experience as consumers defines most of their everyday behaviours and societal dynamics. Yet our modes of production and consumption are rarely sustainable, and significant changes are required in this area. While it is important to revisit individual lifestyles and behaviours, it is perhaps even more important to provide individuals with sufficient and adequate choices. In this sense, we must thus also remain cautious not to over-emphasise the responsibility of individual citizens. We must also address the responsibility of the private and public sectors in driving sustainable consumption. Only then can the entire system change and truly encourage individuals to transition from passive consumers to proactive 'consum-actors'.

Our first set of proposals makes a case for meat reduction. Meat consumption plays an undeniably major role in human-induced global warming, environmental degradation, the deterioration of ecosystems, and rapid depletion of natural resources. We insist on the lack of education regarding the environmental impacts associated with people's diet, and propose various solutions to raise public awareness.

We then address the issue of food waste and highlight the many benefits of composting. Here again, education has a key role to play. However, we also demonstrate the crucial importance of shortening food value chains in the EU, and strategic pathways to promote and share best practices.

The third section follows a similar logic: it seeks to reduce solid waste and improve recycling systems in the EU. With the ambition to facilitate the transition to a circular economy, our intention here is to encourage the Commission to go one step further in creating a favourable environment for the reduction, re-use, and recycling of waste - and to couple these initiatives with a renewed understanding of environmental citizenship

Our fourth section examines the use of ecolabels. Labels allow citizens to make informed choices thanks to clear, accessible and reliable information. Our proposals aim to make the most of innovative digital technologies to empower environmental citizens.

Next, we analyse the environmental impacts linked to the growing number of new technologies and digital practices. To ensure that the digital transition can also be a green one, we propose different action plans to help citizens become more aware of such impacts and change some of their habits.

Our sixth set of proposals underlines the paramount importance of promoting and providing sustainable modes of transport. The transport sector was considerably hit during the COVID-19 pandemic. However, before governments and the EU engage in a long and costly campaign to fill these gaps, we argue this moment can be used as an opportunity to rethink public transport - both within cities, and between cities.

Lastly, in the seventh section, we focus on the theme of green pensions. The EU Taxonomy for sustainable activities could be used to implement a clear and transparent classification system allowing both investors and citizens to make more informed choices. Significant changes in this sector are not only required, but also full of opportunities.

Our **fourth chapter** discusses the notion of a just transition and its implications for environmental citizenship. The aim of this chapter is to reflect on the socio-economic challenges associated with the green transition, and to ensure that the concept of environmental citizenship is not itself exclusionary or limited to only some European citizens. We thus approach these ideas from a 360° perspective.

For environmental citizenship to truly reach its potential, it must involve all citizens - and it must benefit all citizens. In this context, social justice and equity are key elements. We argue that the green transition must be coupled with more socio-economic protection for the most vulnerable and be accompanied with new forms of social dialogue. The inclusion of a social dimension will allow for the counterbalancing of structural change through the collective efforts of governments, social and economic partners, and citizens themselves. The active and collaborative efforts of all of these actors are essential to guarantee that 'no one is left behind'.

Our first set of proposals addresses the issues of housing and affordable green energy, approaching them from the unexplored dimension of citizen participation therein. We propose the creation of a participatory body, which would decide on the allocation of certain subsidies. Equally, we discuss the possibilities of creating networks of larger households, which could negotiate lower energy rates in exchange for the prolongation of subscription times. By supporting green energy suppliers, prices would be reduced as demand would be ensured. Finally, we link these first two proposals with some reflections regarding the digital transition and what needs to be done to ensure that nobody is excluded from it - for digital tools can host a number of tools that are key to environmental citizenship, but can also deepen socio-economic inequalities.

In the second section, we devote important considerations to the role that gender equality must play in the Just Transition, by emphasising that the green transition should not perpetuate or exacerbate gender disparities. In order to ensure this, we put forward some strategies to promote gender parity in key decision making bodies and transition sectors.

Our third set of proposals underlines a number of issues pointing to the necessary transformation of the Common Agricultural Policy (CAP). The CAP plays an essential role in the EU's green transition, but can be improved to become a transition tool itself. Here, we discuss the prospects of establishing European Agricultural Cooperatives Networks as well as measures to help young farmers become active in this green transition.

Next, we present interesting opportunities involved in the process of rewarding sustainable business models. Financial incentives play a key role in encouraging European citizens to switch towards more environmentally friendly consumption behaviours, and can therefore constitute a useful tool in this context. We propose the revisiting of the EU's state aid policy to bring it in line with green goals, as well as the development of a robust EU taxonomy for sustainable activities that successfully prevents greenwashing, and the promotion of eco-responsible marketing strategies.

Our last set of proposals delves into the field of environmental taxation. While the EU has limited competences in this field and must respect the principle of subsidiarity, we argue that there is scope for further cooperation and coordination. We propose initiatives to harmonise environmental taxation, in particular for high polluting goods. Furthermore, we explore potential reforms of the Emissions Trading System as well as some implications of the possible implementation of a Carbon Border Adjustment Mechanism.

This report **concludes** by emphasising the many great possibilities that come with fostering a sense of European environmental citizenship. Our proposals demonstrate the need for both top-down and bottom-up initiatives, and the added value that each one can bring. It is our hope that this report will contribute to the important debate that surrounds the green transition, and provide some helpful ideas to ensure that all European citizens participate, contribute and benefit from the green transition. This transition is unavoidable; it will deeply transform ecological, social and economic arrangements both within the European Union and everywhere else in the world. The concept of environmental citizenship is key to understanding the social, economic and political dynamics that drive this transition, and the opportunities that emerge from creating synergies between them.



CHAPTER 1

CONCEPTUALISING ENVIRONMENTAL CITIZENSHIP IN THE EU

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Chapter 1: Conceptualising Environmental Citizenship in the EU

I. Context

An Unprecedented Crisis

Climate change represents the single greatest yet most complex source of concern for European citizens. According to the last Special Eurobarometer Report on Climate Change (2019), 93% of Europeans consider climate change a serious problem, while 23% of the respondents think it is the single most serious problem facing the world today.² These numbers have been steadily increasing over the past decade, reflecting both the gravity of the situation and the rise of climate change awareness. The effects of climate change are already being felt across the world, including within the European Union, and across a variety of sectors; and these effects are predicted to become more intense in the coming decades. While a number of inevitable scientific uncertainties remain, there is an overwhelming scientific consensus that climate change is real, that human activities are responsible for the unusual and significant global warming observed.^{3,4}

The Paris Agreement, adopted in 2015, marked a turning point in the global fight against human-induced climate change, after 195 countries agreed to limit global warming to 'well below' 2°C and to pursue efforts to limit it to 1.5°C. Yet, due to past and ongoing emissions, the average global temperature continues to increase at a rate of approximately 0.2°C per decade,⁵ highlighting the need for stronger international action. The European Union has reiterated its commitment to achieve the targets outlined in the Paris Agreement and to being a leader in global climate action. However, this objective not only engages the European institutions and the government of each Member State, but society as a whole. All actors have a role to play, and all must spare no effort to prevent this climate crisis from worsening. This will require a radical transition - not only in economic, industrial, and regulatory terms, but also in the way we think of and interact with the natural environment.

² European Commission, *Special Eurobarometer Report on Climate Change*, 2019, retrieved 11 March 2021, https://ec.europa.eu/clima/sites/clima/files/support/docs/report_2019_en.pdf.

³ John Cook *et al.*, 'Quantifying the consensus on anthropogenic global warming in the scientific literature', *Environmental Research Letters*, vol. 8, no. 024024, 2013.

⁴ John Cook *et al.*, 'Consensus on consensus: a synthesis of consensus estimates on human-caused global warming' *Environmental Research Letters*, vol. 11, no. 048002, 2016.

⁵ Intergovernmental Panel on Climate Change (IPCC), *Global Warming of 1.5°C: An IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*, 2018, p. 4, retrieved 7 April 2021, https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf.

The Rise of Environmental Citizenship

Awareness of the causes and effects of climate change is now increasingly widespread. This has contributed to the rise of many environmental movements around the world. Following the Paris Agreement, a series of new citizens' initiatives called for immediate and global climate action. In 2018, the young Swedish activist Greta Thunberg sparked a global movement for climate, inciting the youth worldwide to strike every Friday to demand climate action from political leaders. The movement gained strong support worldwide and triggered thousands of school strikes, involving an estimated 1.6 million students from over 125 different countries.^{6,7,8}

This movement built upon previous youth movements for climate and citizens' initiatives, and greatly contributed to raising climate change awareness as well as highlighting the urgency of the situation. In addition, it showed the crucial importance and power of collective action to facilitate and accelerate societal changes, as well as the non-negligible influence a single person can have in these debates. This crisis demands that we put climate change - and environmental issues more generally speaking - at the top of the European political agenda, but also that we consider and value the actions of citizens, and that we listen to their concerns. A key message the "*Skolstrejk för klimatet*" ("School strike for climate") movement raised was the importance of intergenerational solidarity and equity: the moral obligation our current society must observe to protect the right of future generations to inherit and benefit from the same natural diversity that previous generations have enjoyed.

Changing society's attitudes towards and relationship with the environment not only requires positive institutional efforts, such as the Paris Agreement and the European Green Deal, but also a change of mentality leading to the adoption of new lifestyles more in line with environmental objectives. The rise of environmental movements reflects a growing sense of ownership and responsibility towards nature that goes hand in hand with this necessary change of mentality, and which has strengthened the idea and notion of *environmental citizenship* - for these people have become citizens of the environment and strive to protect its integrity.

However, for environmental citizenship to truly reach its potential, it must involve all citizens and thus translate in both top-down and bottom-up initiatives. The recently unveiled European Climate Pact constitutes a promising step towards this objective, and should greatly contribute to ensuring a swift but also fair and inclusive green transition by directly involving European citizens, sharing best practices across the European Union,

⁶ Jessica Glenza *et al.*, 'Climate strikes held around the world – as it happened', *The Guardian*, 19 September 2019, retrieved 6 April 2021, <https://www.theguardian.com/environment/live/2019/mar/15/climate-strikes-2019-live-latest-climate-change-global-warming>.

⁷ Damian Carrington, 'School climate strikes: 1.4 million people took part, say campaigners', *The Guardian*, 19 March 2019, retrieved 7 April 2021, <https://www.theguardian.com/environment/2019/mar/19/school-climate-strikes-more-than-1-million-took-part-say-campaigners-greta-thunberg>.

⁸ 'School strike for climate: Protests staged around the world', *BBC*, 24 May 2019, retrieved 7 April 2021, <https://www.bbc.com/news/world-48392551>.

and implementing solutions at all levels of society. As it currently stands, the Pact will prioritise actions in four key areas: green areas, green transport, green buildings, and green skills.⁹ However, the Pact has an open mandate and will continue to expand to other areas in the future, such as sustainable consumption and production, while taking into account ideas and suggestions made by people and organisations involved in the transition to a greener European Union.

EU Environmental Governance, Citizens' Participation, and Climate Litigation

The first major participatory tool of environmental governance in the EU was introduced with the 1985 Environment Impact Assessment (EIA) Directive.^{10,11} The purpose of this Directive was to assess the effects of certain public and private projects on the environment.¹² The Directive was innovative in the sense that it framed public participation as an important feature of environmental impact assessment procedures, and thus set an important precedent for participatory environmental governance in the EU.

The value of citizens' participation in environmental decision-making became also increasingly recognised internationally. For instance, the 10th Principle of the Rio Declaration on Environment and Development, adopted at the 1992 "Earth Summit", stated that:

*Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.*¹³

Within the EU, participatory rights associated with environmental governance were greatly reinforced following the commitments the EU took under the legally binding 1998

⁹ 'European Climate Pact', *European Commission*, n.d., retrieved 12 March 2021, https://ec.europa.eu/clima/policies/eu-climate-action/pact_en.

¹⁰ Council of the European Communities, 'Council Directive (85/337/EEC) of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, *Official Journal of the European Union*, L 175, 5 July 1985, pp. 40-48.

¹¹ 'Environmental Impact Assessment – EIA', *European Commission*, n.d., retrieved 11 March 2021, <https://ec.europa.eu/environment/eia/eia-legalcontext.htm>.

¹² European Commission, *35 years of EU Environmental Impact Assessment*, *European Union*, 2021, retrieved 11 March 2021, https://ec.europa.eu/environment/eia/pdf/EIA_Directive_35_years.pdf.

¹³ United Nations General Assembly, *Report of the United Nations Conference on Environment and Development: Annex 1: Rio Declaration on Environment and Development*, A/CONF.151/26 (Vol. I), 1992, pp. 3-4, retrieved 8 April 2021, https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.151_26_Vol.I_Declaration.pdf

Aarhus Convention.¹⁴ The Aarhus Convention recognised every person's right to a healthy environment - as well as their duty to protect it - and established a set of minimum standards for what was to be described by then UN Secretary-General Kofi Annan as an especially ambitious endeavour in "environmental democracy".¹⁵ The Convention is composed of three "pillars":

- "the right to know", or the right of citizens to access information about the environment;
- "the right to participate" in environmental governance, which consists in minimum standards for public participation when governments make general plans or issue specific licences for projects that could affect the environment;
- and "the right of access to justice" - which ensures that citizens effectively enjoy the two previous rights and are able to challenge the decisions taken by the authorities if the law has been violated or if the procedures were not properly followed.¹⁶

The EU adopted two Directives in 2003 related to the first and second pillars of the Aarhus Convention, which were to be implemented in the national law of the EU Member States by 2005.^{17,18} The EU then passed a Regulation in 2006 on the application of the provisions of the Convention with regards to the three pillars, which entered into application in 2007.¹⁹ However, EU implementation of the Aarhus Convention in the area of access to justice in environmental matters continues to be subject to many critiques. The Aarhus Convention's Compliance Committee issued two sets of finding in 2011 and 2017 respectively, concluding that "the jurisprudence of the European Courts ha[d] blocked all access to justice for individuals and NGOs in environmental matters", namely because it interpreted the "individual concern" criteria²⁰ in such a way that individuals and

¹⁴ United Nations Economic Commission for Europe, *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*, 25 June 1998, retrieved 11 March 2021, <https://unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf>.

¹⁵ United Nations, Economic Commission for Europe and United Nations Environment Programme, *Your Right to a Healthy Environment*, New York, Geneva, United Nations, 2006, p. 3.

¹⁶ *Ibid.*

¹⁷ European Parliament and Council of the European Union, 'Directive (2003/4/EC) of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC', *Official Journal of the European Union*, L 041, 14 February 2003, pp. 26-32.

¹⁸ European Parliament and Council of the European Union, 'Directive (2003/35/EC) of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC', *Official Journal of the European Union*, L 156, 25 June 2003, pp. 17-25.

¹⁹ European Parliament and Council of the European Union, 'Regulation No 1367/2006 of 6 September 2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies', *Official Journal of the European Union*, L 264, 25 September 2006, pp. 13-19.

²⁰ The "individual concern" criteria can be found in Article 263(4) TFEU (ex Article 230(4) TEC), which states that: "Any natural or legal person may [...] institute proceedings against an act addressed to that person or which is of direct and individual concern to them, and against a regulatory act which is of direct concern to them and does not entail implementing measures.", Consolidated version of the Treaty on the Functioning of the European Union, *Official Journal of the European Union*, C 202, 7 June 2016, p.162.

NGOs were “refused standing to challenge EC institutions’ decisions” *in every case*.²¹ Following the Council’s request,²² the European Commission published in 2019 a study²³ as well as a report²⁴ on the matter - which reiterated the Union’s full support to the objectives of the Aarhus Convention and suggested several discrete policy measures that could be taken to address parts of the identified issues, while also highlighting the fact the Aarhus Regulation is itself governed by, and must therefore respect the limits of, Union primary law.²⁵

Yet, in the face of slow political progress to combat climate change, activists and lawyers are increasingly using national and international judiciary systems to accelerate climate change mitigation efforts. The initial 2015 ruling in *State of the Netherlands v. Urgenda Foundation* and subsequent 2019 ruling by the Supreme Court - which affirmed that the Dutch government was legally bound to protect human rights and thus also bound to reduce the country’s carbon dioxide emissions²⁶ - quickly encouraged activists to take legal action in global courts, resulting in over 1400 cases across 33 countries as of February 2020.²⁷ In 2018, ten families from Portugal, Germany, France, Italy, Romania, Kenya, Fiji, and the Saami Youth Association filed a suit against the European Union, known as the “People’s Climate Case”,²⁸ for failing to protect their livelihoods against the threats caused by the EU’s greenhouse gas emissions - which was dismissed by the European Court of Justice on 25th March 2021 without a hearing on the ground that the plaintiffs were not “individually” affected by the EU’s climate policies.

The People’s Climate Case demonstrated that, despite the EU’s leadership in environmental protection and climate change mitigation as well as its efforts to promote public participation in environmental governance, the rights of European citizens in the face of human-induced climate change are still not guaranteed from a legal perspective. This case contrasted with the EU’s repeated calls for meaningful public participation in

²¹ ClientEarth, *Communication to the Aarhus Convention’s Compliance Committee*, 2008, p. 2, retrieved 8 April 2021, <https://unece.org/DAM/env/pp/compliance/C2008-32/communication/Communication.pdf>.

²² Council of the European Union, ‘Council Decision (2018/881) of 18 June 2018 requesting the Commission to submit a study on the Union’s options for addressing the findings of the Aarhus Convention Compliance Committee in case ACCC/C/2008/32 and, if appropriate in view of the outcomes of the study, a proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 1367/2006’, *Official Journal of the European Union*, L 155, 19 June 2018, pp. 6-7.

²³ Milieu Consulting Sprl., *Study on EU implementation of the Aarhus Convention in the area of access to justice in environmental matters: Final report*, September 2019, retrieved 7 April 2021, https://ec.europa.eu/environment/aarhus/pdf/Final_study_EU_implementation_environmental_matters_2019.pdf.

²⁴ European Commission, *Report on European Union implementation of the Aarhus Convention in the area of access to justice in environmental matters*, SWD(2019) 378 final, 2019, retrieved 7 April 2021, https://ec.europa.eu/environment/aarhus/pdf/Commission_report_2019.pdf.

²⁵ *Ibid.*, p. 27.

²⁶ John Schwartz, ‘In “Strongest” Climate Ruling Yet, Dutch Court Orders Leaders to Take Action’, *New York Times*, 20 December 2019. Retrieved 7 April 2021, <https://www.nytimes.com/2019/12/20/climate/netherlands-climate-lawsuit.html>.

²⁷ Elisa de Wit, Sonali Seneviratne and Huw Calford, ‘Climate change litigation update’, *Norton Rose Fulbright*, 2020, retrieved 7 April 2021, <https://www.nortonrosefulbright.com/en/knowledge/publications/7d58ae66/climate-change-litigation-update>

²⁸ ‘People’s Climate Case’, *People’s Climate Case*, n.d., retrieved 11 March 2021, <https://peoplesclimatecase.caneurope.org/>.

environmental governance and highlighted the lack of an adequate framework to achieve socio-environmental justice. However, it did not put an end to European citizens' legal actions against climate change in courts.

In September 2019, a group of six youth campaigners from Portugal filed a lawsuit at the European Court of Human Rights with the support of British NGO Global Legal Action Network, after which the Court ordered 33 European governments to respond and to explain whether their failure to tackle global warming violates Article 3 of the European Convention on Human Rights.²⁹ In November 2020, the French Council of State gave the French government a three-month deadline to review its climate policies and show it is taking action to meet the commitments it took under the Paris Agreement, following the appeal of a French commune backed by several environmental NGOs and the "L'Affaire du Siècle" campaign.³⁰ In December 2020, three British citizens, supported by the climate litigation charity "Plan B" and the *Stop the Maangamizi: We Charge Genocide/Ecocide!* campaign, took legal action against the UK government for financing the climate and ecological crisis and for failing to develop a plan to tackle it, thereby violating both the Paris Agreement and the UK Climate Change Act of 2008.³¹

The rising tide of climate change litigation reflects the current concerns of European citizens as well as their desire to be further included in environmental governance, and it is becoming increasingly clear that the current regulatory framework will not only require a major overhaul, but also a paradigm shift to better integrate the role citizens will play in this "environmental democracy". To this end, the concept of "environmental citizenship" must be further explored and put into practice at local, national, and global levels.

²⁹ Jonathan Watts, "European states ordered to respond to youth activists" climate lawsuit', *BBC*, 30 November 2020, retrieved 7 April 2021, <https://www.theguardian.com/environment/2020/nov/30/european-states-ordered-respond-youth-activists-climate-lawsuit>.

³⁰ 'Une avancée historique pour la justice climatique!', *L'Affaire du Siècle*, 2020, retrieved 7 April 2021, <https://laffairedusiecle.net/une-avancee-historique-pour-la-justice-climatique/>.

³¹ 'Young People v UK Government: Safeguard our Lives and our Families!', *Plan B*, 2020, retrieved 7 April 2021, <https://planb.earth/plan-b-v-government-bailouts-for-polluters/>.

II. Philosophical Framework of Environmental Citizenship

In order to better understand the term “environmental citizenship”, it is important to first reflect on its origins. Two complementary perspectives, in particular, played an essential role in its emergence: that of “deep ecology” and post-capitalist thinking stemming from the “limits to growth” concept.^{32,33,34}

The “limits to growth” theory is in opposition with the capitalist logic of unlimited economic growth, which portrays the Earth as a cornucopia of infinite resources that must be exploited to drive prosperity and satisfy the needs of free global markets.³⁵ Instead, it argues that such growth could not continue indefinitely given Earth’s finite supply of natural resources and global population growth. Some economists suggest that a steady-state economy would suffice.³⁶ However, proponents of degrowth - that is to say, reduced-production economics - argue that even the current level of economic output is incompatible with environmental limits. Instead, they call for greater “ecocentrism” and a general restructuring of the economy that moves away from our current models of production and consumption and that fosters a different type of “growth” that is more aligned with socio-environmental priorities.³⁷ The latest limits-to-growth debates have focused largely on climate change, built on the assumption that economic growth and emissions are tightly linked³⁸ - thus further questioning the long-term viability of current economic models.

Deep ecology, on the other hand, originated from the reflection of scientists and questions humans’ relationship with nature. More specifically, deep ecology highlights the numerous and complex interactions that shape the natural world, but also its inherent fragility associated with the high degree of interdependence between different ecosystems and living organisms.³⁹ Therefore, deep ecology is best understood as an environmental philosophy that places the ethical dimension of human activities at its core - both valuing humans’ value to natural ecosystems and warning against the threat they pose to them through both non-vital and environmentally damaging activities.⁴⁰ Deep ecology was much criticised for its anthropocentric representation of the natural world, its dogmatic and almost mystical approach to environmental matters, and its portrayal of

³² John S. Dryzek and David Schlosberg (eds.), ‘Part Four: Green Social Critiques’, in: *Debating the Earth: The environmental politics reader*, Oxford, Oxford University Press, 2005, 2nd edn, pp. 339-504.

³³ Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, and William W. Behrens III, *The Limits to Growth; A Report for the Club of Rome's Project on the Predicament of Mankind*, New York, Universe Books, 1972.

³⁴ Donella H. Meadows, Dennis L. Meadows, and Jørgen Randers, *Beyond the limits: Confronting global collapse, envisioning a sustainable future*, Post Mills, VT, Chelsea Green Pub. Co., 1992.

³⁵ Friedrich A. Hayek, *The constitution of liberty*, University of Chicago Press, 2011.

³⁶ Herman E. Daly, ‘Steady-State Economics: A New Paradigm’, *New Literary History*, vol. 24, no. 4, 1993, pp. 811-816.

³⁷ Mark Sagoff, ‘De we consume too much?’, in: David Schmitz and Elizabeth Willott (eds.), *Environmental Ethics: What Really Matters, What Really Works*, Oxford, Oxford University Press, 2012, 2nd edn., pp. 302-323.

³⁸ Michael Grubb, Jean-Charles Hourcade and Karsten Neuhoff, *Planetary Economics: Energy, Climate Change and the Three Domains of Sustainable Development*, New York, Routledge, 2014.

³⁹ George Sessions, ‘Deep Ecology, New Conservation, and the Anthropocene Worldview’, *The Trumpeter*, vol. 30, no. 2, 2014, pp. 106-114.

⁴⁰ Arne Naess and George Sessions, ‘The Basic Principles of Deep Ecology’, *Ecophilosophy VI*, 1984, pp. 3-7.

living species as all being inherently equal. Eco-feminists claim andro-centrism, which puts men at the centre rather than all humans, is the true cause of natural degradation, motivated by a hunger for power and the desire to subordinate both nature and women.⁴¹ In contrast, social ecologists posit that environmental problems can be attributed to the same social structure responsible for societal ills such as poverty, racism, sexism, and classism.⁴²

Despite these differences, these three movements - deep ecology, eco-feminism, and social ecology - have a great deal in common, in the sense that they stem from a will to reflect on people's relationship and interaction with the natural environment, and were unsatisfied with previous social movements that only focused on human living conditions.⁴³ This is perhaps where principles and ideas start overlapping with those from post-capitalism, and precisely what motivates the need to cultivate a sense of "environmental citizenship". In essence, the concept of environmental citizenship is driven by the same school of thought that seeks to put an end to the instrumentalisation and unsustainable use of natural resources to favour more harmonious and responsible lifestyles instead. These theoretical and philosophical frameworks thus form the pillars of our reflection in this report, and the lens through which we formulate our policy proposals.

Towards a Socio-Environmental Pact

Our depiction of the current situation has so far been rather dramatic. Ranging from a systemic failure of our political system to countless devastating social, economic, and environmental consequences, the end of human society as we know it seems almost inevitable. The situation is dramatic. And the environmental degradation caused by human activities will have an undeniable impact on future generations.⁴⁴ This observation leads to a fundamental question: is it not (finally) time to change our way of understanding and interacting with the natural environment? Is it possible to adopt an inclusive approach that truly and fairly valorises natural ecosystems, that acknowledges and respects their limits, and that places environmental concerns not outside but *within* larger societal dilemmas?

Jean-Jacques Rousseau begins *On the Social Contract* with the now-famous quote: "Man is born free, and everywhere he is in chains."⁴⁵ What if we were to replace the word "man" here with "natural environment"? Rousseau's work on the "social contract" provides an interesting analogy to the topic of this report. In his book, Rousseau describes the concept of "social contract" as the result of two simultaneous dynamics: a first one, in

⁴¹ Ynestra King, 'Engendering a Peaceful Planet: Ecology, Economy, and Ecofeminism in Contemporary Context', *Women's Studies Quarterly*, vol. 23, no 3/4, 1995, pp. 15-21.

⁴² Murray Bookchin, 'Social Ecology versus Deep Ecology', *Socialist Review*, vol. 18, 1988, pp. 9-29.

⁴³ Robyn Eckersley, *Environmentalism and political theory: Toward an ecocentric approach*, London, Suny Press, 1992.

⁴⁴ Aurélien Barrau, 'Ecologie et nouveau pacte avec le vivant: Aurelien Barrau', *YouTube*, 2018, retrieved 7 April 2021, <https://www.youtube.com/watch?v=H4wj4FHpNY>.

⁴⁵ Jean-Jacques Rousseau, *Du contrat social*, Paris, Flammarion, 2012.

which the people alienate their own liberties to follow the lead of the sovereign; and a second, in which the people alienate their own liberties for the common good of all, driven by the “general will” to recreate the fundamentals of society themselves.⁴⁶ In this sense, citizens thus become both subjects and rulers at the same time.⁴⁷ Considering that there is little doubt about the fact that nature and the physical environment have been subordinated and exploited in the name of development, progress, and economic growth, the challenge nowadays in terms of environmental matters is to rethink the way we see the world.⁴⁸ For this to occur humanity must shift to a system in which, as a society, we put the interests of the planet to the same level of importance as ours (intended as humanity).⁴⁹ It is in this social pact that environmental citizenship could play a role, by helping to reconsider the role that humans have on this planet and what we want to leave behind for future generations. A first step in this direction in the EU Climate Pact.

The European Commission launched a European Climate Pact in December 2020 which intends to support citizens in their ambitions to fight climate change as part of the objectives laid out in the European Green Deal. By designating Climate Pact Ambassadors who are involved in grassroots networks, the European Commission wants to create public spaces “for everyone to share information, debate and act on the climate crisis, and to be part of an ever-growing European climate movement” on the topics of green areas, green mobility, efficient buildings, and green skills.⁵⁰

The Pact is meant to be accompanied by regular events organised by individuals, businesses, or civil society organisations for further discussions.⁵¹ The EU Climate Pact can, therefore, be considered an important component of mobilising citizens for climate action, provided that the Commission manages to tap into well-connected communities who would be able contribute to a new socio-environmental contract. However, this individualistic approach is not enough to truly empower citizens if it is not complemented by a paradigm shift in terms of policies. The proposal for a European Climate Law has the potential to bring about change in that regard, as it is supposed to enshrine the objectives of reducing greenhouse gas emissions by at least 55% until 2030 and achieving climate neutrality by 2050. This would enforce substantial changes in Europe’s economy and society towards decarbonisation.⁵² However, it must be taken into considerations that this approach still relies on decoupling growth from carbon emissions. Essentially, the underlying economic rationale of continuous growth is not questioned as it is still

⁴⁶ Christopher Bertram, ‘Rousseau's Legacy in Two Conceptions of the General Will: Democratic and Transcendent’, *The Review of Politics*, vol. 74, no. 3, 2012, pp. 403–419.

⁴⁷ *Ibid.*

⁴⁸ Karen O'Brien, Bronwyn Hayward and Fikret Berkes, ‘Rethinking Social Contracts: Building Resilience in a Changing Climate’, *Ecology and Society*, vol. 14, no. 2, 2009.

⁴⁹ Barrau, *op. cit.*

⁵⁰ ‘The European Climate Pact: empowering citizens to shape a greener Europe’, *European Commission*, 2020, retrieved 6 April 2021, https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2323.

⁵¹ ‘European Climate Pact’, *European Union*, n.d., retrieved 6 April 2021, https://europa.eu/climate-pact/index_en.

⁵² ‘European Climate Law’, *European Commission*, n.d., retrieved 6 April 2021, https://ec.europa.eu/clima/policies/eu-climate-action/law_en.

based on an anthropocentric approach towards making use of the environment. It runs the risk of climate objectives taking priority over other environmental considerations instead of creating synergies between humans and all aspects of the environment. It will require wider and deeper structural change to make environmental citizenship a reality.

European Citizenship without a European Identity?

European identity is a famously nebulous concept to define. Some claim that it invokes a set of shared *European* values, in which case we must ask ourselves, what values? Others claim that it refers to a geographic space, to which we must ask, which stump of the Euro-Asian continent are they referring to? Indeed, in the case of most European countries, national identity is indexed by a corresponding nation, yet in the case of Europe this appears conspicuously absent. Of course, we should be careful to strike a balance between not overly naturalising the link between the nation and the state, on the one hand, and on the other, not dismissing the depth of feeling and allegiance people harbour toward national identities. The creation of nation-states is not only linked to the invention of the printing press,⁵³ and moments of patriotic solidarity in the face of adversity, it has also required what was, until then, unheard of state-sanctioned violence to enforce and police such identities.⁵⁴ Indeed, in many parts of the world and among many marginal communities, the state is synonymous with violence.⁵⁵ The real challenge, and to a large extent the achievement, of the EU until now, is the gradual encouragement of people to identify with a new - European - identity, without recourse to state-based violence, or conquest.

Personal and individual notions of identity are often based on historical and cultural experiences. Yet a crucial part of environmental citizenship is forward looking. Not only were ideas of identity more fixed in the past or at least constructed to be so. Now more pan-European identities have emerged with weaker notions of identity and citizenship which are much less linked to religion, occupation, nationality, gender, etc. Whilst the origins of citizenship originate from Greek cities called "*poleis*", where citizens were very active in politics and their involvement was correlated with strong feelings of identity towards their cities, identity has now shifted away from geographical areas. Before nationalism, loyalty towards a leader or sovereign defined one's identity much more, otherwise religion was an important factor. With certain religions losing in importance while secularism was gaining in importance, for younger generations religion is no longer a main factor of identification. The nature of occupations has also changed, and with more and more people breaking away from labour models where children followed in their parents' footsteps and were constrained by their socio-economic background, occupations do not determine people's identities in the same way anymore. The decrease in importance of guilds and labour unions has also meant less unification of people in a

⁵³ Benedict Anderson, *Imagined Communities: Reflections on the Origins and Spread of Nationalism*, London and New York, Verso Press, 2006.

⁵⁴ James Scott, *Seeing like the State: How certain schemes to improve the human condition have failed*, Veritas Paperback Edition, New Haven and London, Yale University Press, 2020.

⁵⁵ Pierre Clastres, *Society Against the State*, Oxford, Basil Blackwell, 1977.

certain job which also lowered feelings of belonging and identification. Gender was also a factor that determined massively people's lives, and their identities were very much restricted to gender norms. Whilst gender continues to have an impact on people's identity it is to a much lesser extent and society continues to strive to dismantle the constraints imposed by antiquated social norms. Identity has become much more fluid, especially considering how interconnected the world has become and how easy it is to access other cultures. The expansion of the internet and social media and networks as well as the ease of travel has exacerbated these tendencies. Identities now are gravitating around lifestyles and other pan-cultural factors.

European identity is in this sense an incomplete and ongoing project in the making. All national identities, but especially a European identity, is reimagined and re-discussed with every passing generation. The significance that it comes to hold is forged through practice and the actions of individuals. Hence, if identity is indeed forged through practice as this report implies, Environmental citizenship is the answer to what a *European identity* could mean for a young generation already militating for the planet and for climate justice. In the absence of an army and other traditional 'markers of state', the EU has always had to lead by example. Environmental citizenship is a crucial part of the ongoing European Project of constructing a European identity that is accessible to everyone, and not just a cosmopolitan vanguard. This report suggests that European Environmental Citizenship could provide a resonant, inclusive, and democratic answer to a European Project that is struggling to find a common voice.

Defining Environmental Citizenship

In an extensive field of research, the concept of citizenship itself has been approached from various angles, though, for example, economic, social, or cultural citizenship. This diversity attests to the complexity of the matter and asserts that citizenship goes beyond the mere status individuals hold in a state, including "political and social recognition and economic redistribution".⁵⁶ A modern understanding of the term would derive citizenship from a nation-state that ensures political, civil, and social rights,⁵⁷ which environmental citizenship would consequently extend.

More precisely, environmental citizenship is a fluid concept whose definition has changed over the decades together with the role of citizens in political systems. Particularly, the wave of environmentalist protest of the 1960s accelerated the conceptual inclusion of citizens in environmental politics. The 1987 Brundtland Commission report and the proliferation of sustainable development sparked additional interest among scholars to analyse the human impact on the environment from an individualistic angle. With the growing interest of citizens in environmental politics, the policy-making process also moved progressively from a technocratic to democratic, which helped to build the

⁵⁶ Engin F. Isin and Bryan S. Turner, 'Citizenship Studies: An introduction', in: Engin F. Isin and Bryan S. Turner (eds.), *Handbook of Citizenship Studies*, London, SAGE Publications, 2002, p. 2.

⁵⁷ *Ibid.*, p. 3.

foundations for environmental citizenship.⁵⁸ Debates among academics, but also among policymakers, revolve around the question of what kind of change is necessary to address the environmental issues at hand and how to bring it about. In this context, the framework of Environmental Citizenship offers significant benefits, although the individual and structural approaches to policy-making should be seen as complementary.

Our understanding of environmental citizenship will combine both liberalist and communitarian approaches by speaking to both the individual and collective dimensions of citizenship.⁵⁹ In the context of this report, and as an initial 'point of departure', we define environmental citizenship as "means of promoting goals of sustainability and environmental protection and integrating environmental concerns into political theory and modes of political engagement."⁶⁰ Following this rather simple definition, we suggest complementing it through the addition of multiple dimensions. Firstly, the dimension of democracy is inextricably linked to environmental citizenship, notably through democratic rights and obligations. Every form of citizenship entails certain privileges that are a result of responsibilities. The right to clean air, clean water, sustainable and healthy food systems, for instance, could be included here. Individuals derive these individual rights by respecting them as universal rights. Everyone has varying impacts on the environment, depending on a range of factors like their socioeconomic situation or geographical location. In a context, where the capacities of the planet are limited, it creates moral obligations for every individual towards an 'other'.⁶¹

Therefore, the concept of citizenship requires a definition of its boundaries in terms of geographical scope and of community to determine the 'other'. Environmental citizenship is insofar different from other forms of state-bound citizenship as resource use takes place across borders and environmental concerns create externalities with global impacts. However, this 'cosmopolitan citizenship'⁶² can lack social cohesion which impedes the sense of common responsibility. Nevertheless, a sense of identification is a substantial aspect of citizenship. Hence, environmental citizenship could constitute an important opportunity and could add a new dimension of identification and participation to European citizenship. Given how the collective imagination of individuals has its limits, and EU citizenship is already an established concept based on a narrative of a shared culture and history, environmental citizenship could be relatable to individuals while allowing for a significant scope of action to remedy and prevent environmental degradation. The relation between the individual and nature, as a non-human subject, is also to be considered. Although it may be difficult to create moral obligations to a non-citizen within this, Hailwood makes the case for environmental citizenship as a "matter of seeing 'respect of nature's otherness' [...] as continuous with the exercise of

⁵⁸ Hellen Pallett, 'Environmental citizenship', in: Douglas Richardson, Noel Castree, Michael F. Goodchild, Audrey Kobayashi, Weidong Liu, and Richard A. Marston (eds.), *The International Encyclopedia of Geography: People, the Earth, Environment and Technology*, John Wiley & Sons Ltd, 2017.

⁵⁹ Mirja Vihersalo, 'Climate citizenship in the European union: Environmental citizenship as an analytical concept', *Environmental Politics*, vol. 26, no. 2, 2017, p. 344.

⁶⁰ Pallett, *op. cit.*, p. 1.

⁶¹ Andrew Dobson, 'Environmental Citizenship: Towards Sustainable Development', *Sustainable Development*, vol. 15, 2007, p. 281. DOI: 10.1002/sd.344.

⁶² Pallett, *op. cit.*, p. 5.

virtuous citizenship in accordance with the 'spirit of reasonableness' animating political liberalism."⁶³ This notion does not equate citizens and nature, yet it reconciles the two in the framework of liberal democracies. Self-interest is restrained in the name of the common good.⁶⁴

This responsibility to care for the environmental impact of our ways of life is, thus, also related to the question of justice, which Emilio Luque considers the core virtue of environmental citizenship. It plays out in terms of the division between the Global South and Global North, poor and rich, those immediately affected by the consequences of environmental degradation and those who are not.⁶⁵ In order to remedy any forms of injustice, it is important to set up governance structures to demand the respect of environmental rights and the enforcement of environmental obligations. It will also require redistribution of resources and dismantling the institutionalised forms of inequity. Therefore, creating environmental citizenship also ties in with accountability and civic participation.⁶⁶ Given that private actions of individuals have an impact in the public sphere, their citizenship should allow them to actively participate in the public sphere, too, by providing them with the possibility to take part in the decision-making processes, voice their opinions, and protest. Top-down policies need to be supplemented with the bottom-up approaches by citizens that tailor solutions to local issues. Not only does involving the grass-root level increase the effectiveness of environmental action, but it can also legitimise the entire policy-making process. The challenge lies in providing citizens with agency without burdening them to an extent that would undermine the principles of representative democracy.⁶⁷ However, it is not only public authorities who need to be held accountable. Since governance structures are becoming increasingly complex, with non-state actors like multinational companies playing an important role not only in causing environmental degradation but also in shaping policies, citizens' engagement should aim at creating structures where every actor is held accountable.

⁶³ Simon Hailwood, 'Environmental Citizenship as Reasonable Citizenship', *Environmental Politics*, vol. 14, no. 2, 2005, p. 196.

⁶⁴ Dobson, *op. cit.*, p. 280.

⁶⁵ Emilio Luque, 'Researching Environmental Citizenship and its Publics', *Environmental Politics*, vol. 14, no. 22, 2005, p. 214.

⁶⁶ Pallett, *op. cit.*, p. 6.

⁶⁷ Pallett, *op. cit.*, p. 7.

III. Key Principles for Environmental Citizenship

Inclusivity & Intersectionality

The notion of “environmental citizenship” calls for an inclusive and intersectional approach that acknowledges the different needs and concerns of different societal groups as well as the different constraints and challenges they face. For instance, women, and especially poor women, are disproportionately affected by climate change. As such, it is important to include a gender perspective within the notion of environmental citizenship. In this sense, environmental citizenship must follow egalitarian principles, whilst appreciating the fact that different problems require different solutions. Many issues linked to climate change occur irrespectively of geographical borders or social (dis)advantages. However, many other environmental issues also result from the direct impact of local practices. Here, the intersubjectivity of people-in-place, or what Dryzek calls ‘ecological intersubjectivity’,⁶⁸ must be emphasised. Hence, the role of environmental citizens and their capacity to act must be understood at different scales.

In order to create inclusive, but also well thought through solutions that take into account the various problems affecting different population groups, it is important that the decision-making process makes a point of including these diverging perspectives during the input and throughput stages of policy-making. This imperative is highlighted in the European strategies to facilitate a “just transition” towards an environmentally sustainable society, which are discussed in Chapter 4. Moreover, the implications of environmental citizenship must be implementable and accessible for people of varying backgrounds. It is thus important to consider the ramifications and limitations of different socio-economic groups, in order to be the most effective possible. Finally, the concept of environmental citizenship relies on the principles of intergenerational equity and solidarity - and therefore also requires an inclusive and intersectional approach towards future generations.

Scales for Exercising Environmental Citizenship

Environmental citizenship is a scalable concept that is articulated locally, nationally, and globally. It implies reciprocal duties to engage with the local environment be it through environmental activism, or by participating in local debates about the environment. It equally implies continued engagement with national conversations about greenhouse gas emission reduction and environmental policy. Similarly, it presumes the right to make claims upon the government to act pro-environmentally and for the voice of citizens to be heard in national conversations. Finally, it also requires education, awareness, and engagement with how local and national levels of environmental rights and duties – those that may be most immediately tangible to us as citizens – articulate with the global scale of the challenge posed by the climate breakdown. Hence, while environmental citizenship

⁶⁸ John S. Dryzek, ‘Foundations for Environmental Political Economy: The Search for Homo-Ecologicus’, *New Political Economy*, vol. 1, no. 1, 1996, p. 33.

demands that we act locally and nationally in pro-environmental ways, it also recognises that this will never be enough. Indeed, an understanding of our mutual vulnerability in the face of climate breakdown is required, alongside continued engagement with how the actions of European citizens necessarily impact people on the other side of the planet in complex ways. In this sense, while environmental citizenship may be operationalised at the level of the EU, it necessarily has global aspirations in so far as it insists that actions taken at a European level are accountable beyond the borders of the EU.

Beyond Anthropocentrism

Anthropocentrism is a way of relating to the world that presumes the centrality of human beings. This way of relating to the world is characterised by a foundational opposition between human society on the one hand, and nature, on the other. With anthropocentrism comes the idea of a pristine 'nature' that exists independently and outside of human history - an idea otherwise known as 'naturalism'.⁶⁹ It is to this modern concept of naturalism that we owe the existence of the conservation movement based on the idea of protecting and conserving an independently existing 'nature' from the ecological pressures of humans. However, naturalism - with its implicitly anthropocentrism - can only get us so far. Anthropologists, historians, and science and technology studies scholars have pointed out that this way of relating to the world is not given, rather it is culturally and historically particular to much of Euro-America.⁷⁰

By conceptualising nature as external to humans, we pave the way for the commodification of nature as a site of value extraction and capital accumulation. Modern farming, for example, relies on rendering nature scalable, manageable, and, ultimately, harvestable. Such ways of relating to the world, are a product of a capitalist modernity that has led to an unsustainable relationship between humans and nature, and unprecedented human destruction of the planet. Therefore, environmental citizenship implies a rejection of the anthropocentric nature/society binary and a paradigmatic shift in favour of an environmentalism that sees humans as *part of*, rather than apart from, nature. Not only should this principle be built into environmental activism, but it also relates back to the democratic accountability of environmental citizenship. Preserving nature is about living *with*, not *without*, nature in our lives. Hence, environmental citizenship implies peoples' rights to access common land and our shared natural environment, as well as governments' corresponding responsibility to facilitate such access for all. Likewise, nature has the right to exist and flourish, just as citizens have the duty to promote such natural flourishing for the benefit of all.

⁶⁹ Arturo Escobar, 'After Nature: Steps to an Antiessentialist Political Ecology', *Current Anthropology*, vol. 40, no. 1, 1999, p.1.

⁷⁰ *Ibid.*, p. 20.

Expanding our Notion of “Value”

The principle of expanding the notion of what constitutes ‘value’ beyond narrow and ultimately unsustainable indicators of economic value is intimately linked to the principle of moving beyond anthropocentrism. Rather than seeing nature as a site of economic value extraction and capital accumulation we need broader and more realistic indicators of human and natural flourishing that include wellbeing and social value indicators. These cannot remain secondary goals to be attained once GDP targets have been met; instead, they ought to be central to the goals we set for ourselves as a society and how we evaluate our achievements. One example of this is the Happy Planet Index,⁷¹ which combines life satisfaction, life expectancy, and average ecological footprints.⁷² While the notion of expanding how we estimate value may ostensibly seem good, it may be difficult to imagine how this can be put into practice. Hence, one example of this are agri-environmental schemes, that recognise the value added by farmers beyond their work in producing food, by noting the important services they provide to society through environmental stewardship. This is what environmental citizenship looks like in practice. If we are to move to an ecologically sustainable economy of wellbeing, then we need to create a policy framework that recognises the value added by citizens in other domains than the economic.

⁷¹ ‘The Happy Planet Index’, *Happy Planet Index*, n.d., retrieved on 11 March 2021, <http://happyplanetindex.org/>.

⁷² Nic Marks, Friends of the Earth, and New Economics Foundation, *The (Un)Happy Planet Index: An Index of Human Well-being and Environmental Impact*, New Economics Foundation, 2006, retrieved 15 March 2021, https://neweconomics.org/uploads/files/54928c89090c07a78f_ywm6y59da.pdf.

CHAPTER 2

EDUCATION, CIVIC ENGAGEMENT AND DEMOCRATIC PARTICIPATION

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Chapter 2: Education, Civic Engagement, and Democratic Participation

Introduction

The notion of environmental citizenship begs us to consider the institutional framework that governs this citizenship as well as our own responsibility as citizens. After all, that is what it is all about: citizenship means living as a citizen in a wider community and benefiting from a series of rights as a citizen as well as abiding by some duties towards the community. It is thus both about accessing recognition within a collective and demonstrating a civic attitude. The same principles apply to environmental citizenship. As environmental citizens, we are demanding the right to live in and to benefit from a high degree of socio-environmental cohesion, protection, freedoms, and jurisdiction. The environmental aspect, in particular, calls for more ambition, action, and regulation - a horizon, in short. However, there is another side to this coin: we, as citizens, must also be prepared to accompany this societal upheaval by rethinking our lifestyles, our modes of production and consumption, our place and relationship in natural ecosystems.

From this perspective, the notion of environmental citizenship must therefore also emphasise the notion of responsibility and reflect more than just demands and expectations. Responsibility for the European environment requires both vertical and horizontal governance, and the fair participation of all citizens. Thus, the idea underlying this chapter is that our civic communities must accompany, commit to, and participate at their level in the adaptation of our societies to environmental upheaval and the fight against it. This requires certain changes, outlined in several of the themes covered in this chapter, regarding pre-existing social structures and their conversion, as well as the introduction of more innovative and novel ideas. The key words remain those of responsibility, commitment, and fair participation: it is a question of giving ourselves the means to be actors on our own scale, not this time by enjoying what we have, but by giving of ourselves to create a new one, also desirable.

I. Education & Environmental Citizenship

Education and awareness of the responsibilities of environmental citizenship and duties are indisputably linked. Promoting awareness and educating young generations and students about the situation of the planet will incentivise them to protect it, all by creating a feeling of belonging and identity. Education on such topics could help tackle several problems, such as climate denial and lack of awareness, but would also provide future generations with the choices to decide on their lifestyle. Potential programmes could educate not only consumers but also future voters and policymakers, thereby addressing and tackling a broad scope of people, individuals, consumers, and participants in politics.

Furthermore, pupils and students have the potential to play an essential, ambassadorial role by sharing their understanding, experience, and commitment with their own social circle, including their families, local communities, as well as political actors, such as public and private decision makers. At times, translating abstract global goals into concrete locally implementable action will be challenging. However, connecting local and regional players working on similar issues and topics can prove to be very beneficial in enforcing environmental citizenship, particularly from a young age.

I.1 An Online Database & Educational Platform

Following the COVID-19 shift of increasing online presence in education and the growing importance of online resources, we suggest the creation of an online educational platform where teachers can exchange and share educational resources about climate change.

The EU could sponsor the creation of an online platform where teachers can exchange and share educational resources about climate change and environmental citizenship. This platform would be accessible to the public, thereby allowing students, parents, and other concerned citizens to directly access the resources if they wish to do so. Concretely, this proposal would entail:

- A. An online platform which includes 1) different sections - for e.g., science, consumer choices, pollution, etc.; 2) catered to different educational skill levels, but specifically for primary and secondary school students; 3) different types of resources – audio, video, text, games, quizzes; 4) Content uploaded (and updated) by the Commission and its partners; 5) Procedures to verify the relevance and accuracy of new additions to the database;
- B. The platform should be easily accessible and free for students and educational institutions to use. It should be available in different languages, with an additional option to view the content in a simplified language, making it accessible for those students with disabilities - for e.g., audio compatibility, negative colours, etc.;
- C. Other partners working on the platform could be universities, independent research centres and/ or think tanks, environmental organisations, and NGOs as

well as European Climate Pact Ambassadors (contact details allowing school to organise potential visits).

I.2 A new Erasmus Environmental Programme

Since its creation, the Erasmus programme has established itself as one of Europe's most successful programmes. We propose creating a new Erasmus Environmental Programme, combining different partnerships and opportunities across Europe. Upon completion of the programme, Erasmus students would obtain a special diploma, certifying their knowledge and experience of environmental affairs, proclaiming them 'European Climate Citizens'. The certificate could, more ambitiously, become a central and defining feature of all Erasmus programmes – one that all Erasmus students would have to complete.

The certificate could be subject to a final examination in the form of an oral presentation, demonstrating what they have learned and outlining some recommendations. Some of these presentations could be filmed, if students give their consent, in order to share their experiences with other students across the EU and promote interdisciplinary research. The certificate could also be made available to other students on a voluntary basis. In such a case, students would probably have to follow an additional online course on climate change and environmental citizenship, and to pass a test on these topics before sharing their experience and presenting their take-aways like other European Climate Citizens. This would encourage more university students to take part in the initiative and to engage with these issues. In addition, the EU shall strive to accept and include a wide variety of student profiles (i.e., from various disciplines and backgrounds) to reflect the complex and diverse implications of this debate as well as our common responsibility, regardless of our occupation.

Using the ERASMUS+ scheme to provide specific environmental, biodiversity or climate training for youth would provide further education and a sense of belonging for European citizens. The scheme could also be used, on a voluntary basis, to provide technical tools and materials for exchange students to increase cross-border measures and analysis. This could also improve local integration by joining an already existing local network of citizens involved in European, national, or local analysis communities.

- Alternatively, the EU could make Erasmus+ participation conditional to following a training programme on environmental and climate-related issues. This would enable to ensure Erasmus+ students a certain degree of environment and climate-related knowledge while informing the youth on European environmental and climate action.

I.3 Agriculture & the European Solidarity Corps

The European Solidarity Corps (ESC) aims at promoting solidarity, mainly through voluntary activities, for people aged 17-30. It has a particular focus on promoting social inclusion by the provision of voluntary activities and internships, jobs, or support to

individual-initiative solidarity projects. Even though agriculture is part of our everyday life, many citizens do not necessarily share an interest in agriculture, and most live far away from farms. Initiatives enabling people to be more in touch with the realities of the field, its ways of life and production, agricultural 'savoir-faire', are crucial. We thus propose to include a stronger agricultural dimension in the European Solidarity Corps.

- A. The ESC could be awarded an agricultural dimension following the model of the 'wwoofing programmes'. This would enable young European citizens to volunteer in farms and work on environmentally friendly projects.
- B. Using the current existing platform, the ESC could serve as a database to centralise opportunities in this direction and serve and improve the visibility of organisations offering them (for instance, wwoofing, national associations as well as WWOOF Independents Europe).
- C. Thanks to the ESC online platforms, young people could find farms to visit or find financing information boards along agricultural fields and fishing sites. It is conceivable that these volunteering could take place in places already enjoying a privileged link with the European Union, such as Natura 2000 zones, or ones benefiting from LIFE instruments.

II. Preserving Fact-Checked Online Spaces

Disinformation regarding climate change is not a new phenomenon, many energy companies have been accused of knowingly misleading the public on the impacts of climate change for decades. However, with the rise of social media technology, we are witnessing “information pollution on a global scale”.⁷³ A declining trust in evidence and scientific fact is one of the most concerning impacts of dis/mis-information. Disinformation regarding climate change can take many forms including doubt about the reality of climate change, doubt about the urgency of addressing climate change and doubt about the credentials of climate scientists. The result of such climate related disinformation is public confusion, political inaction, and polarisation.⁷⁴

Addressing the societal risks posed by disinformation has gained increasing prevalence on the EU’s agenda. The latest such measures laid out in the *European Democracy Action Plan* and the *Action Plan on Disinformation* will contribute to countering disinformation in general, including climate change related disinformation. Furthermore, the openness of populations to disinformation has been linked with a declining public trust in institutions and governments.⁷⁵ As susceptibility to dis/mis-information is rooted in a perceived lack of legitimacy of institutions, all actions set out in this chapter that contribute to enhancing public knowledge and understanding of environmental issues, will provide citizens with a strong defence against climate-related dis/mis-information. In addition to ensuring the implementation of these various initiatives, five additional measures are proposed to address climate related disinformation.

II.1 Combating Climate Change Misinformation

Once climate misinformation has been produced, responding to it can be done through both a corrective and a collaborative approach.⁷⁶ Responding to misinformation with facts and corrective information is an approach which the EU is already experienced, taking for example the EEAS’ East StratCom Task Force’s work on fact-checking and debunking kremlin disinformation in the EU and European Neighbourhood.

Whilst the EU can draw on experience to scale up activity in this area, fact-checking and debunking also raises ethical questions over freedom of speech and censorship. The Commission must monitor closely the extent to which any fact checking/ debunking activities infringe on democratic freedoms. For this reason, rather than relying on large social media companies to carry out fact-checking activities through self-regulation, a

⁷³ ‘Information Disorder’, *Council of Europe*, n.d., retrieved 8 April 2021, <https://www.coe.int/en/web/freedom-expression/information-disorder>.

⁷⁴ John Cook, ‘Understanding and countering misinformation about climate change’, in: Innocent E. Chiluba and Sergei A. Samoilenko (eds.), *Handbook of research on deception, fake news, and misinformation online*, Hershey, PA, IGI Global, 2019, pp. 281-306.

⁷⁵ W. Lance Bennet and Steve Livingston, ‘The disinformation order: Disruptive communication and the decline of democratic institutions’, *European Journal of Communication*, vol. 33, no. 2, 2018, pp. 122-139.

⁷⁶ Kathie M. d’I. Treen, Hywel T. P. Williams, and Saffron J. O’Neil, ‘Online misinformation about climate change’, *Wires Climate Change*, 2020, vol. 11, no. 5, pp. 1-20.

collaborative approach could be adopted. The Commission should open a call for national and local level projects that focus on fact checking and debunking, particularly those focusing on climate misinformation, and allocate specific funding for these activities under the Horizon 2020 project. By engaging with local and national actors, the responsibility for assessing the quality of information is spread amongst a wide variety of actors rather than concentrated with a small number of companies.

An innovative way to ensure transparency in the fact-checking process is to crowdsource the initiative, working with online platforms to develop a mechanism whereby social media users could rate the quality of news content and then have these ratings incorporated into the ranking algorithms has been proposed as an “effective intervention” against misinformation.⁷⁷ If such a quality ranking for news was developed in the form of an educational programme, taking part in the crowdsourced rankings could also support the development of media literacy, as discussed further below.

II.2 “Climate Science” Verified Stickers on Social Media Platforms

Social media is particularly interesting in that it constitutes “an emancipatory tool for learning in a context of physical distancing, but also a real threat for the inexperienced user. While the internet opens up a new world of easily accessible scientific information to lay audiences, it can also narrow our informational choices by the way search engines present results and direct traffic. The effect of social media on individuals needs to be further examined”.⁷⁸ When referring to the potential of social media platforms, can we thus really talk about open forums, or are they merely echo chambers? To what extent does an individual come across diverging views?⁷⁹ It becomes evident that, in many cases, social media would only provide users with “opportunities to propagate customised information about an issue that is in line with their motivations, perspectives and identities”.⁸⁰

In the context of the COVID-19 pandemic, social media sites such as Twitter and Instagram adopted a policy of labelling tweets that included misleading information about COVID-19 vaccines. The Commission should encourage social media companies that have signed the Code of Practice on Disinformation to adopt similar practices with climate change misinformation.

⁷⁷ Gordon Pennycook and David G. Rand, ‘Fighting misinformation on social media using crowdsourced judgments of news source quality’, *Proceedings of the National Academy of Sciences*, vol. 116, no. 7, 2019, pp. 2521–2526.

⁷⁸ Williams Hywel T.P., *et al.*, ‘Network analysis reveals open forums and echo chambers in social media discussions of climate change’, *Global Environmental Change*, vol. 32, 2015, pp. 126-138.

⁷⁹ Cass R. Sunstein, *Going to extremes: How like minds unite and divide*, Oxford, Oxford University Press, 2009.

⁸⁰ John Fellenor *et al.*, ‘The social amplification of risk on Twitter: The case of ash dieback disease in the United Kingdom’, *Journal of Risk Research*, 2018, pp. 1163-1183.

II.3 Integrating Media Literacy Exercises into Science Curricula

Suggestions for how to address climate misinformation once it has been spread have been outlined above. However, researchers emphasise that ‘inoculation’, i.e., “pre-emptively warning people about politically motivated attempts to spread misinformation helps to “promote and protect” public attitudes about the scientific consensus on climate change,”⁸¹ Thus, ensuring that people have a meaningful understanding of climate science is essential.

Significant literature on countering climate misinformation in particular focuses on educational approaches. One such tactic is to enhance people’s ability to think critically and identify misinformation. Several proposals for achieving this have been put forward. One method involves the use of flowcharts to evaluate the cogency of arguments by logically tracing the argument, the types of fallacies of reasoning that may be expected are highlighted to students.⁸² A second method for enhancing media literacy is teaching the “PARCS” technique. The Purpose, Author, Relevance, Currency, and Sources of information (PARCS) are critically examined to judge the veracity of information.⁸³ A final approach is a “fake news game”. Such an initiative would prompt players to “think proactively about how people might be misled on a given topic, improving their ability to recognize fake news in other contexts”.⁸⁴ Some EU Member States, for example Finland, are more experienced with the teaching of media literacy than others. Thus, establishing a network that would allow educators to share best practices on how to teach students to recognise climate change disinformation should be sponsored by the Commission.

⁸¹ Kathie M. d'I. Treen, Hywel T. P. Williams and Saffron J. O'Neil, *op. cit.*

⁸² John Cook, Peter Ellerton and David Kinkead, ‘Deconstructing climate misinformation to identify reasoning errors’, *Environmental Research Letters*, vol. 13, no. 024018, 2018, pp. 3-4.

⁸³ Andrew Zucker, ‘Using Critical Thinking to Counter Misinformation’, *Science Scope*, 2019, vol. 42, no. 8, pp. 6–9.

⁸⁴ Jon Roozenbeek and Sander van der Linden, ‘The fake news game: Actively inoculating against the risk of misinformation’, *Journal of Risk Research*, vol. 22, no. 5, 2019, pp. 570–580.

III. Actors of Change: Promoting and Tracking Civic Engagement

In December 2020, the European Commission launched the European Climate Pact with the aim of developing “a lively space to share information, debate and act on the climate crisis, and offer support for a European climate movement to grow and consolidate”.⁸⁵ This Pact plays a central role in the success of the EU Green Deal, since changing our societies not only requires significant changes of regulations, but the involvement of every citizen. Action and awareness at the local level are crucial.

The Pact relies on 6 different values, notably diversity and inclusiveness with gender, age and disabilities being put forward.⁸⁶ We believe this Pact is also a unique opportunity to build resilient communities and solidarity among people at local, which will be much needed. Indeed, the growing use of social media creates distance among neighbours and the pandemics has highlighted the need for strengthened communities. The proposals below aim to facilitate collaboration between local and regional actors and across different sectors.

The proposals follow the logic that involving citizens, providing more integration of educational and local actors, and creating more effective channels for communication and cooperation on issues relating to the circular economy and climate change, constitute a step in the right direction and will greatly contribute to nurturing a sense of European environmental citizenship.

III.1 European Climate Pact Ambassadors

To make this European Climate Pact a reality, Climate Pact Ambassadors have been and are still currently being recruited. These European citizens commit “to informing, inspiring and supporting climate action in their communities and networks in contribution to the European Climate Pact”.⁸⁷ They do this as volunteers, without organisational or financial support from the Commission.

The involvement of European citizens in the European Climate Pact is one of the best ways forward, and we strongly commend the Commission’s initiatives in this regard. We list three suggestions to further strengthen the programme: (A) the launch of a wider campaign about the European Climate Pact through national media, (B) specific measures targeting the youth, and (C) recommendations to develop narratives about local climate action.

- A. It is very likely that people who will volunteer for this initiative are already aware of the challenges associated with climate change, and their networks too. To reach a wider public, it would be important to try to recruit people who are not already

⁸⁵ ‘European Climate Pact: About’, *European Union*, n.d., retrieved 5 April 2021, https://europa.eu/climate-pact/about_en.

⁸⁶ *Ibid.*

⁸⁷ ‘European Climate Pact: Meet our ambassadors’, *European Union*, n.d., retrieved 5 April 2021, https://europa.eu/climate-pact/ambassadors/meet-our-ambassadors_en.

engaged with the climate and could discover more about it. This would also help for guaranteeing social diversity.

- B. Even though the Pact is for every citizen, a special emphasis should be put on the youth since our generations will be the most affected by climate change. Even though many students are going in the streets to demand radical changes, there is room of improvement for the knowledge about climate change and what can be done at the local level. In environmental NGOs, many members are retired people, because they have more time to dedicate to such projects. The Pact should think of a particular strategy to target the youth, notably the ones under 18 years old.
- C. On a longer-term perspective, it might be interesting to develop videos or testimonies about the local networks and what is being developed on the ground (local common composting for instance). This will help get more people on board and expand the Pact to more citizens.

III.2 Citizen Science & the Reconversion of Public Spaces

Citizen science represents a formidable example of grassroots-driven initiatives that can help provide additional precious data on the green transition and contribute to environmental risk governance. The quality and accuracy of that data remains a source of concern, especially when used for risk assessments and decision-making at national level, yet citizen science projects constitute a unique opportunity to bring citizens and decision-makers closer under the scope of environmental citizenship.

As an answer to such concerns, we propose the creation of “Citizen Science Units”, composed of scientists and experts within national environment agencies, to check the quality and means of collection of such data, and to promote its further integration in environmental governance in the EU. The role of those units would be to establish a clear bridge between citizens, researchers, NGOs, and local as well as national authorities. They could, for instance, help citizen projects “apply and document data management and QA/QC methodologies and procedures” or provide training.⁸⁸ They would be able to help citizens compile their findings and make them accessible to decision-makers. In turn, this would foster a closer relationship between citizens and decision-makers, and lead to further mutual trust. Finally, these units would also help elevate perceptions of citizen science in political spheres, as they would act as a guarantee for the data collection process.

One specific field of action concerns the role of citizen science in the adaptation, transformation, and reconversion of public spaces. The development and expansion of urban areas in the EU has had numerous consequences on the European environment. Artificial surfaces have replaced many agricultural, forest and natural spaces to support human activities, often leading to the destruction of natural habitats and biodiversity loss.

⁸⁸ European Commission, *Commission Staff Working document: Best Practices in Citizen Science for Environmental Monitoring*, SWD(2020) 149 final, European Commission, 27 July 2020, p. 34.

This is a major worry for citizens in the EU, which they have sometimes been documenting and reporting on through citizen science projects. We thus propose dedicating the first efforts of European Citizen Science Units to the monitoring and restoration of ecosystems across Europe. Efforts can be made *within* urban areas, too - and are essential, for it is where most citizens live and thus exercise their rights as citizens. Like the *R-URBAN* pilot project in Colombes, France, supported by the LIFE Programme, we suggest contributing to the reconversion of public spaces so as to create sustainable living areas that foster new forms of social networks.⁸⁹

III.3 Smartphone App to Raise Awareness & Highlight Local Initiatives

Educating citizens and equipping them with all the tools needed to engage meaningfully with environmentalism is crucial. New electronic and digital technologies can be used to this end. Online technologies provide policymakers with a unique level of access to citizens in their daily lives. EU policy makers should take advantage of this opportunity to directly provide citizens with tools, such as smartphone applications, that will facilitate civic engagement on environmental issues.

We suggest that the Commission work with online platforms to develop a smartphone app that would serve as a platform for local environmental initiatives. Organisers would upload their activities onto the Platform, they participants could rate and verify the quality of such programmes. Such a platform would raise awareness of environmental initiatives in citizens' local areas.

Inspired by the StreetComplete model, where each announced or ongoing initiative can be monitored and confirmed by citizens, this centralised tool could increase involvement, popularity, and monitoring of measures. It could also improve awareness of existing initiatives and nudge citizens to participate in specific programmes.

This platform could also be used as a tool for mobility and citizen information. Activities such as recycling often depend on local authorities. The platform could be a useful tool for Europeans on the move, as they would quickly be able to access information on local environmental activities and policies.

⁸⁹ Emmanuelle Chaudieu, 'Avec "R-Urban", l'écologie citoyenne prend du galon en Europe', *Telerama*, 2017, retrieved 6 April 2021, <https://www.telerama.fr/sortir/avec-r-urban,-lecologie-citoyenne-prend-du-galon-en-europe,n5417759.php>.

IV. Voices of Change: Stories of Climate Activism

As written previously, a citizen is an individual with rights and a link in a chain of duties. Among their rights, citizens have the right to express themselves and to demonstrate freely. Indeed, it does not come out as a surprise that people's involvement can make a difference. From revolutions to peaceful sit-ins, History has demonstrated that citizens' activism has always enabled change, whether small or big.

During the past few years, activism has again shown that it could bring change. The 'yellow vests' demonstrations have highlighted the need to take into consideration social aspects when designing green legislation, while at the same, 'youth for climate' demonstrations highlighted the emergency of taking decisions as soon as possible. Both movements, that occurred before the European elections 2019, undoubtedly influenced the outcome whether with the rise of the Green party at the European Parliament or the greening of the agenda setting by the European Commission.

The development and the use of social media has marked a turn in the way activism works. It is indeed easier nowadays to first be informed of the different challenges we are facing and secondly to get involved. For instance, social media can help you to find people who share the same interests and are ready to be involved. The COVID-19 pandemic has demonstrated the strength of social media. The following measures are meant to enhance activism, whether online or in the streets, and to make sure that it leads to the objective.

IV.1 Climate Strikes & Young Europeans in the Streets

As affirmed by the European Commission, "Europe's youth is becoming increasingly committed to the fight against global warming".⁹⁰ Yet not only do the young generations and millions of students who protested in the streets demand actions from the European Institutions and national decision-makers, they want to participate in the design of the solutions. This should occur not only through online conferences where young people are heard, but through them being recruited and in position to offer concrete propositions, follow their development and implementation. Their participation should not be temporary but permanent.

The main reason is that they will be the one either suffering or benefiting from the decisions that are being taken at the moment. One could also add that their creativity is much needed: how to completely rethink a system you have been part of for decades, without the benefits from a fresh look at it? The youth is ambitious and willing to collaborate with other generations. Therefore, the EU should not only listen to their concerns but stretch out its hands to have them on board in the design of policies and solutions and around the table as equal partners. The pandemic is a pivotal moment for the EU, but also a chance for the youth to translate their voices into climate action.

⁹⁰ 'Environment for Europeans: European youth 'agents of change' on climate action', *Directorate-General for Environment of the European Commission*, 26 August 2019, retrieved 5 April 2021, https://ec.europa.eu/environment/efe/news/european-youth-agents-change-climate-action-2019-08-26_en.

IV.2 Online Activism & How to Make the Most of Online Civic Engagement

Online activism has significant potential for mobilising support for environmental policies. The use of social media and technologies allow social movements to surpass boundaries, reach a greater global audience, and foster wide networks of activists across countries and cultures. Studies have highlighted other benefits of online activism, such as the fact that online campaigns empower participants, by fostering the feeling that their statements are considered important enough to be broadcasted, contributing to the creation of collective identities and solidarity against members of the movement. Finally, COVID-19 has demonstrated the necessity of harnessing technologies for social activism, as the online public sphere has become the safest platform on which to mobilise.

However, online activism entails the risk of “clicktivism”. The low level of commitment required from participation in online campaigns can lead individuals to be extremely vocal regarding political issues online yet failing to adopt these practices in their day to day lives or engage with activism offline. This proposal therefore wishes to establish a tangible link between genuine action and online activism. Online activism often takes the form of signed petitions, collecting signatures that can be presented to a legislator as proof that there is public support or opposition for a measure or policy. Any individual or organisation based in the EU is already able to submit a petition to the EU on an issue related to EU policy or law. However, this proposal wishes to establish a specific procedure for climate matters. The proposal suggests the capability for EU citizens to propose a climate petition that asks for a change to EU law or EU Member States’ policy. A guideline for action following the climate petition could be a threshold of 10,000 signatures, after which petitions must be granted a response from the EU. After 100,000 signatures, petitions should be considered for debate in Parliament - mimicking the UK system.⁹¹

IV.3 Artists, Filmmakers, Online Influencers, YouTubers, Game Developers, ... an Untapped Potential?

Artists, creatives, and content creators help shape the world we live and the view we attribute to it. Art does not just imitate life. Their influence and following amongst young people and their respective industries at large, e.g., the entertainment and gaming industry, opens a world of untapped potential for environment issues and climate change awareness-raising. This proposal, therefore, suggests an increased (digital) cooperation with artists, creatives, and content creators, which will allow the EU to attract and reach an audience that can be difficult to connect with. Several European governments worked with social media influencers during the initial stages of the COVID-19 lockdown

⁹¹ ‘Petition Parliament and the government’, *Government of the United Kingdom*, n.d., retrieved 7 April 2021, <https://www.gov.uk/petition-government>.

restrictions to encourage their followers to comply with restrictions. The EU could engage in similar strategies to promote awareness of environmental and climate change policies. This would be particularly useful on platforms on which the EU's presence is minimal - for e.g., TikTok, or Instagram.

This proposal encourages the EU to reach out to artists, creatives, and content creators to establish partnerships with the aim of raising awareness on environmental and climate issues, connecting with the European public, and setting up projects supporting positive transformation. The endorsement and support of influential social media channels on these online platforms could create broader awareness for both the efforts of the EU as well as the environmental topics at hand. The added value and modes in which the EU could cooperate becomes especially clear when reviewing what has already been achieved by this group. Some examples are the French YouTubers, McFly & Carlito, who have been very adept at quickly raising awareness (e.g. video on COVID-19 do's and don'ts following the request of French President Emmanuel Macron),⁹² creating movements (e.g. large-scale cleaning initiative in the streets of Paris),⁹³ and raising substantial funding for hospitals during the COVID-19 pandemic.⁹⁴ Similar examples exist for the gaming community (charity streams to raise money).⁹⁵ Likewise, game developers have used their mobile games for awareness-raising efforts, known as 'gamification': the use of game-design elements to encourage participation in public policy processes. The Commission has engaged in gamification projects before. For example, Futurium, a foresight project run by DG CONNECT which was transformed into a participatory platform. DG ENV could work with DG CONNECT to create a similar platform that would allow those interested in environmental issues to engage online in the policymaking process.⁹⁶ Furthermore, the importance of films and documentaries in creating awareness - such as *The Blue Planet* (2001), *An Inconvenient Truth* (2006), *Home* (2009), *Chasing the Ice* (2012), *Demain* (2015), and *Blue Planet II* (2017) - cannot be overstated.

⁹² 'Le clip de McFly & Carlito sur les gestes barrières dépasse l'objectif des 10 millions de vues fixé par Emmanuel Macron', *France Info*, 23 February 2021, retrieved 6 April 2021, https://www.francetvinfo.fr/culture/spectacles/humour/covid-19-le-clip-de-mcfly-carlito-sur-les-gestes-barrieres-depasse-l-objectif-des-10-millions-de-vues-fixe-par-emmanuel-macron_4308697.html.

⁹³ Mcfly et Carlito, 'ON NETTOIE PARIS AVEC DES ABONNÉS (CleanWalk)', *YouTube*, 2018, retrieved 6 April 2021, <https://www.youtube.com/watch?v=rD7SIIYVXj8>.

⁹⁴ Le Parisien, 'Coronavirus : McFly et Carlito récoltent 404 000€ pour les hôpitaux', *YouTube*, 2020, retrieved 6 April 2021, <https://www.youtube.com/watch?v=pKPAmHVy21s>.

⁹⁵ Brut, 'Dans les coulisses du Z Event 2020', *YouTube*, 2020, retrieved 6 April 2021, https://www.youtube.com/watch?v=s_Be1mRwhBU&list=PLki6lhXyNKUMhNrKOkpdlW0g0P01phZt&index=62.

⁹⁶ Steffan Powell, 'How developers are using mobile games to help save the planet', *BBC*, 18 August 2020, retrieved 6 April 2021, <https://www.bbc.co.uk/news/newsbeat-53808488>.

V. Democratic Representation of Environmental Citizens

The European Union has decided to move with ambition towards the achievement of carbon neutrality and high environmental standards from now until 2050. The position of the Von der Leyen Commission is clear: the EU shall lead the fight against climate change. The institutional structure is entirely turned towards those objectives with the emergence of the Green Deal and the gradual greening of all EU policies. However, this only tackles one part of the problem without committing the citizens - i.e., those who consume, vote, and apply the rules voted in the institutions. Environmental citizenship aims to highlight people's lifestyle and to encourage them to adopt a more environmentally-friendly way of life — and this should bypass the partisan framework of policy-making. Indeed, a new set of rules based on the protection of the environment and ecosystems and defended by an independent Ombudsman would be a possibility to enhance the voice of people willing to protect the environment.

V.1 The European Ombudsman & A New European Pillar of Environmental Rights

The current European Ombudsman is instrumental in keeping European institutions accountable to EU citizens and in ensuring the respect of the principle of 'good administration'. However, the current Ombudsman's mission relies only on the enforcement of the 'good administration' principle. Our time asks for more than that with regards to climate ambitions. To carry out properly the protection of environment, ecosystems, and ensure the due respect of their environmental commitments by EU Member States, the scope of the Ombudsman's mandate should be expanded to include environmental matters.

Another possibility would be to appoint an "environmental" ombudsman, who would ensure the accountability of European institutions with regards to environmental principles only. However, this second option would require the prior determination of such environmental principles, or "European Pillar of Environmental Rights". While such principles already exist, they need to be elevated at the same rank of guiding principle as "good administration" is.⁹⁷

Furthermore, we shall underline that the "environmental" Ombudsman should not have the capacity to impose penalties or sanctions on institutions or bodies, but only investigate and eventually long for a mediation between parties. In this sense, it is truly an intermediary between European citizens and the institutions.

A European institutional tendency is gradually being drawn in favour of such independent personality able to raise publicly breaches in fundamental principles — whether it is in Scotland with the Children and Young People's Commissioner charged of protecting

⁹⁷ Article 37 of the Charter of Fundamental Rights of the European Union states that "a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development". 'Charter of Fundamental Rights of the European Union', *Official Journal of the European Union*, C 202, 7 June 2016, p. 401.

young generations and their future, or in France with the Défenseur des droits, who regularly appeared in the press to voice its concerns over basic human rights issues. The responsibility and missions of a European Environmental Ombudsman would thus follow the same logic: defend the rights of present and future generations, promote environmentally sustainable solutions, and act as an independent authority that verifies the pertinence, the coherence, and the ambition of both EU and national policies in the context of the climate emergency.

Appointing a European Environmental Ombudsman would help enforce the concept of accountability for the protection of the European environment and would be instrumental in both reinforcing democratic legitimacy and bolstering environmental citizenship. Such a figure would help legitimise the green transition by guaranteeing the respect of the environmental rights that were discussed above, and by making this process more transparent for current and future generations.

V.2 European Citizens' Assembly for Climate

The EU should focus on engaging citizens in the European environmental political debate to strengthen their sense of belonging to a European community of environmental citizens. To this end, the EU could set up a European Citizens' Assembly for Climate composed of randomly chosen European citizens, representing together the EU's rich cultural diversity. The assembly's mandate would be to issue a set of policy proposals to the European Parliament outlining strategic pathways to achieve the objectives set in the European Green Deal.

Such an initiative would greatly reinforce the democratic dimension of European environmental policy. In addition, experience has shown with the French *Convention Citoyenne pour le Climat* experience that randomly chosen citizens can quickly assimilate the issues at stake and deliver more ambitious policy recommendations than those put forward by governments. Other experiences in Ireland, Iceland and the UK have also proved the attractiveness of such initiatives, and both Spain and Germany have stated their interest in establishing similar assemblies.

V.3 European Platform of Public Debate on Climate Change and the Environment

To promote direct "environmental" democracy at EU level, we suggest two different proposals. First, following the implementation of the EU Citizens Assembly on Environment and Climate change described in this section, we also consider that a European Platform of Public Debate should be set up for the environmental and climate reforms for the coming decades. It would allow the consultation of actors concerned by a specific Regulation in a more representative way than the current public consultation system.

This Platform would complement the above Assembly and allow citizens to be involved in the processes on a longer-term perspective. Following the French model of the National Commission of Public Debate but limiting its scope to Environment and Climate, the organisation would oversee public debates on any new environmental and climate-related regulation. It would have a dedicated secretariat, coordinating the different debates, promoting them in the national press, and managing the budget.

Before the launch of the debate, the main issues related to it should be discussed among the key actors (NGOs and business companies for instance) and described in a nuanced way for the public from a scientific, economic, and sociological perspective. During the debate, everyone should be able to provide inputs on the topic, in the form of a 4-page long document, in their own language, which would be published online and accessible to everyone. Citizens would finally be invited to attend meetings at local level and interact with all the stakeholders. A report of the main findings and recommendations will be realised by the Specific Sub-Platform in charge of the debate and transmitted to all the institutions.

Concrete application of the European Platform of Public Debate: The Farm to Fork Strategy and the voices of farmers

In the framework of this Platform, workshops could be organised at local level in the EU on the Farm to Fork Strategy. Within those workshops, farmers could both raise their concerns, propose solutions, and get information on the current propositions made by the European Commission. By going to the local level, the farmers could be consulted directly without having the need for a representative and their voices could be heard. Their proposals could complement the current strategies and help with its implementation. As illustrated by the numerous Nitrates Directives case laws,⁹⁸ there is a real need to anticipate the implementation of legislation by going directly on the field.

⁹⁸ 'The Nitrates Directive: Case-law relevant to the Nitrates Directive', *European Commission*, n.d., retrieved 6 April 2021, <https://ec.europa.eu/environment/water/water-nitrates/case-law.html>.

VI. Participatory Budgeting: Giving Environmental Citizens Access to the EU Budget

The idea of participatory budgeting is to foster inclusive democracy, promote active citizenship and public engagement with the policymaking process. It serves as a tool of democratic education, as participants are encouraged to consider trade-offs and are involved in one of the most important elements of public administration – the budget. Additionally, participatory budgeting has a record of leading to environmentally beneficial outcomes, fostering behavioural change more effectively than top-down communication.⁹⁹ Thus, participatory budgeting could answer some of the challenges faced by the EU such as the democratic deficit, the lack of proximity with citizens, and it would also fit into the objective of the Green Deal and the Climate Pact.

The functioning of the EU budget is one of the biggest challenges regarding the implementation of PB at EU level. Indeed, the regulations of the different European financial programs and structural funds, including their amount and their scope, have already been decided in the framework of the MFF 2021-2027. Moreover, cohesion policy and structural funds are based on partnership contracts between the European Commission and the Member State, supplemented by another contract agreed between the Member State and its various regions. This gives significant room for manoeuvre to the Member state but does not enable innovation and flexibility.

VI.1 Incentive for Regions and Local Administrations

Despite its challenges, cohesion policy remains the most interesting instrument to implement participatory budgeting at EU level, as it represents one third of the EU budget. To circumvent the challenges, we propose amending the regulation (probably for the next MFF after 2027) to add an incentive for regions and local administrations to dedicate a certain amount of their structural funds to participatory budgeting. This will enable citizens to choose what a part of ERDF or ESF could finance.

VI.2 Including Citizens in the Allocation of European Funds

Another solution to launch EU-level participatory budgeting would be to use European financial programmes for which the European Commission or its agencies are responsible, such as LIFE or Horizon Europe. This would allow the EU to act independently from partnership contracts and the influence of EU Member States. This could take the form of dedicating a certain amount of the programme's money to participatory budgeting or creating a participatory body on the allocation of certain key subsidies being part of EU key programmes (for e.g., the Renovation Wave). This could increase the consideration of these programmes, lead to increased information, analysis

⁹⁹ Tom Cohen, 'Can participatory emissions budgeting help local authorities to tackle climate change?', *Environmental Development*, vol. 2, 2012, p. 24.

and expertise of citizens and it could also show the concrete use of EU Funds on citizens' daily lives.

VI.3 Creating a European Citizens' Budget

We propose launching a European Citizens' Budget on the same model as the European Citizens' Initiative. The objective would be to give citizens/project promoters the opportunity to propose projects for which they would like financing and ask citizens to support them with a system of signatures. To give a European dimension to the European Citizens' Budget, the projects should be duplicable in other European regions/cities and/or should focus on joint projects between different regions/cities.

Case Study - Participatory budgeting in Paris, France

The City of Paris has engaged in participatory budgeting since 2014. Parisians were given the opportunity to decide how to use 500 million euros, i.e., 5% of the municipality's budget for 2014-2020. In 2021, more than 2300 projects were submitted, an increase of 13% compared to 2019, and more than half of them concern public space (mobility, cleanliness, etc.). Part of the Parisian participatory budget is also dedicated to working-class neighbourhoods.¹⁰⁰

How does it work?

- Parisians decide on the submission of a project for their 'arrondissement' (district) or for the whole city.
- The City's administrative services ensure that the projects meet the eligibility criteria, such as being in the general interest, falling within the City of Paris' competences or representing an investment expense, not an operating expense.
- The City's services check the technical feasibility of the project.
- Finally, all Parisians can then vote online or in the arrondissement town halls, regardless of age or nationality.¹⁰¹

¹⁰⁰ 'Plus de 2300 projets déposés au budget participatif 2021', *Ville de Paris*, n.d., retrieved 12 March 2021, <https://www.paris.fr/pages/plus-de-2300-projets-deposes-au-budget-participatif-2021-16916>.

¹⁰¹ 'Comment ça marche ? Le mode d'emploi du budget participatif', *Ville de Paris*, 2021, retrieved 12 March 2021, <https://budgetparticipatif.paris.fr/bp/la-demarche-sommaire.html>.



CHAPTER 3

ENCOURAGING SUSTAINABLE LIFESTYLES

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Chapter 3: Encouraging Sustainable Lifestyles

Introduction

In a neoliberal society that is driven by a 'market ideology', citizens are not only citizens: they become consumers, since 'consuming' defines most of our everyday behaviours and societal dynamics. Ranging from food to clothes, or from cars to home heating, our current way of consuming is too often unsustainable. Therefore, a change is needed, albeit we must be cautious towards the individualisation of responsibility of citizens as consumers. Taking inspiration from Protagoras' idea that "man is the measure of all things" and the symbolism of the 'Vitruvian Man' by Leonardo da Vinci, this chapter covers various contemporary environmental challenges by questioning the prominent role of consumers in the green transition. While it is crucial to question the behaviours and lifestyles of individuals, it also and perhaps more important to ensure that society provides these individuals with sufficient and adequate choices. Only then can the system encourage individuals to transition from passive consumers to more proactive 'consum-actors'.

I. Greening Europeans' Plate: Reducing Meat Consumption

The food system is a major driver of climate change, drastic changes in land use, depletion of freshwater resources, and pollution of our ecosystems. In order to temper the impact of European citizens' diet on the planet, we propose to substantially reduce meat consumption.

A 2018 study published in the magazine *Nature* concludes that a shift to a 'flexitarian' diet (eating less meat and fish) is necessary to reduce the significant greenhouse gas (GHG) emissions associated with meat production.¹⁰² According to the review, GHG emissions from the agricultural sector exceed 5.5 billion tones worldwide and around 75% of them are due to the production of animal products.

Consumers should hence reduce their consumption of meat and dairy products and prefer a plant-based diet (e.g. vegetables, herbs, and nuts) that limits their use of natural resources. Indeed, everything we consume is produced using energy and natural resources. Animal products monopolise large areas of arable land, obtained through deforestation. The agricultural industry is therefore involved in the process of biodiversity loss. Moreover, there is a risk that agricultural land in the EU will soon be lost or even become uncultivable due to climate change.

At the EU level, the Farm to Fork Strategy,¹⁰³ published in May 2020, recognises that overproduction and overconsumption of meat and dairy is a problem, and calls for a fair, healthy and environmentally friendly food system. The 'F2F' Strategy aims to accelerate Europe's transition to a sustainable food system that:

- has a neutral environmental impact;
- helps to mitigate climate change;
- reverses the loss of biodiversity;
- ensures food security and affordability, so that everyone has access to sufficient, safe, and sustainable food.¹⁰⁴

Currently, the policies dealing with the impact of food production on the environment "are mostly focused on the production side, for e.g., reducing inputs. On the consumption side, the policy focus is largely limited to labelling schemes and reducing food waste."¹⁰⁵ The F2F Strategy puts an emphasis on strengthening the consumer's responsibility in the transition to sustainable food systems. Yet everyone has their role to play, whether consumers, producers, or policymakers. Changes on every actor's part will significantly help alleviate the impact of this industry on the climate.

¹⁰² Marco Springmann *et al.*, 'Options for keeping the food system within environmental limits', *Nature*, vol. 562, no. 7728, 2018, pp. 519–525.

¹⁰³ European Commission, *Communication from the Commission to the European Parliament, the European Economic and Social Committee and the Committee of the Regions: a Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system*, COM(2020) 381 final, 20 May 2020.

¹⁰⁴ *Ibid.*, p.4.

¹⁰⁵ 'Food consumption - animal based protein', *European Environment Agency*, 2019, retrieved 6 April 2021, <https://www.eea.europa.eu/airs/2018/resource-efficiency-and-low-carbon-economy/food-consumption-animal-based>.

I.1 Responsible Consumers

Reliable and genuine information about the impact of the agriculture and meat sector on our planet must be made available for everyone. Consumers should be encouraged to better balance their plates by decreasing their consumption of meat, trying out vegetarian menus, and varying the sources of protein. When a consumer does buy meat, she/he should be encouraged to buy quality meat from local farmers, in an effort to prioritise passive pastoralism over intensive livestock farming and reduce carbon emissions associated with transport. A similar argument should be made for local (and seasonal) fruits, vegetables, cereals, and nuts. Such practices are not only good for the environment, but also for the health and wallet of the European consumers. In this context, we encourage the European Commission to undertake actions that support and encourage citizens to engage in responsible consumption.

Food is a very personal matter, embodying our current state of mind but also our ethics. In order to make consumption balanced and sustainable, it can be useful to think in terms of the maxim “you are what you eat”. Thus, we must consume local, healthy, eco-friendly food, in a smart manner. For that, we need to increase public awareness about the alternatives to meat consumption and their benefits.

Change can also come from below. We are already seeing a movement of people deciding to reduce, or even completely stop their meat consumption, in order to adopt a healthier and modern lifestyle. These people need to slowly convert their families and circle of friends to a healthier consumption, for example by giving them daily or weekly challenges to reduce their meat consumption. What could be more motivating than gamifying our diet change together? The benefits for reducing meat consumption need to have an impact on the consumers’ dietary habits. More responsible behaviours are adopted in a sustainable way when they have a more direct impact on a consumer's life: saving money, improved well-being and health, better social relations, and so forth. Therefore, a more playful and positive approach should be encouraged to reduce meat consumption, so that the reduction is not seen as a renunciation, but rather as an improvement in our daily lives, undertaken with our friends and family.

I.2 Responsible Producers & Public Authorities

However, all the changes cannot be left in the hands of the consumer. Producers and suppliers also share the responsibility to provide consumers with adequate options. Producers must be encouraged to convert to a system that has less impact on the climate, such as agroecological farming, or using local products to feed the livestock. This section is further detailed in the proposals listed under Section III of Chapter 3.

Changes in consumption and production must be accompanied by the parallel action of public authorities, through health promotion and an ambitious climate policy. Here, it is worth mentioning the role of the Common Agriculture Policy (CAP), which has been

subsidising the agriculture sector since the 1970s. With the Green Deal as the new growth strategy and the Farm to Farm strategy, public authorities should use these funds to transform agriculture into a more sustainable model. Public authorities also have a responsibility to ensure that campaigns promoting plant-based diets are as visible as the ones promoting meat.

Therefore, the EU should propose policies to truly inform all consumers and producers about the environmental impact of the meat industry, and to educate European citizens about the benefits of meat alternatives.

I.3 The Creation of a European Week of Taste

Since 1990, the French 'Semaine du Goût' takes place every October and impacts more than 400,000 citizens per year. This week, organised by private foundations and the French Ministry of Agriculture, aims at teaching consumers and especially children to taste. Indeed, during the week, school canteens offer different meals to children to make them discover the variety of food regimes, such as the vegetarian regime or foods from all around the world. The event also impacts adults who are made aware of the various health issues caused by poor diet such as diabetes and cholesterol. Thus, we propose the addition of a European 'Week of Taste'. This European 'Week of Taste' would contribute to the discovery of the variety of European foods by all European citizens. At the same time, it would also serve to advocate for greater food sustainability within the EU Member States.

II. Food Waste and Composting

In its Farm to Fork Strategy, the European Commission committed to “halving per capita food waste at retail and consumer levels by 2030”¹⁰⁶ This is in line with the Commission Circular Economy Action Plan¹⁰⁷. Within EU Member States, many local and private initiatives to reduce food waste are already implemented, such as the app ‘Too Good To Go’ originally originating in Denmark and totalling 32.6 million users globally.¹⁰⁸

Reducing food waste can go hand in hand with closing the phosphorus cycle and ensuring food security at the EU level by being less dependent on critical raw materials such as the phosphate rock. Thanks to composting, a new sustainable cycle can be created: food waste reduction allows to reduce the use of fertilisers, and, in turn, food waste can become a new source of fertilisers. As asserted by scientists in an article from 2018, “conversion of food waste [...] into biofertiliser would reduce its environmental impact, improve nutrition levels of the soil, decrease requirements for synthetic chemical fertilisers and have a direct benefit on food production”.¹⁰⁹ According to the European Compost Network, at EU level, only about 40% of bio-waste “is effectively recycled into high-quality compost and digested”.¹¹⁰ We believe there is a role for EU citizens in this context, notably at local level, and we therefore propose three solutions:

- A. Devote efforts to the shortening of food value chains in order to reduce their environmental footprint as well as matching consumers’ expectations for more local and transparent products. This process could be supported by citizen consultation processes.
- B. Promote composting at school and university levels by linking school administrations with local farmers and municipalities. A label could be awarded to schools which promote composting. The earlier citizens are sensitised to this issue, the more likely they are to adopt good practices afterwards.
- C. Create a European Food Waste Network with the purpose of sharing best practices related to food waste use for agriculture, encompassing both municipalities, school administrations and citizen initiatives.

¹⁰⁶ European Commission, *Farm to Fork Strategy: For a fair, healthy and environmentally friendly food-system*, 2020, retrieved 6 April 2020,

https://ec.europa.eu/food/sites/food/files/safety/docs/f2f_action-plan_2020_strategy-info_en.pdf.

¹⁰⁷ European Commission, *Circular Economy Action Plan: For a cleaner and more competitive Europe*, 2020, retrieved 20 February 2021,

https://ec.europa.eu/environment/circular-economy/pdf/new_circular_economy_action_plan.pdf.

¹⁰⁸ ‘Press room: about us, our imagery, and what we’re doing to fight food waste’, *Too Good To Go International*, 2020, retrieved 18 February 2021, <https://toogoodtogo.org/en/press>.

¹⁰⁹ Chenyu Du *et al.*, ‘Valorization of food waste into bio-fertiliser and its field application’, *Journal of Cleaner Production*, vol. 187, 2018, pp. 273-284.

¹¹⁰ ‘Bio-Waste in Europe’, *European Compost Network*, 2021, retrieved 18 February 2021, <https://www.compostnetwork.info/policy/biowaste-in-europe/>.

II.1 Shortening the Food Value Chain

An important step in the process of food waste reduction is the shortening of the food value chain, especially parts of it located in non-EU States. Shortening the food value chain would allow the EU to better control and monitor the implementation of its health, as well as both environmental and social standards and rules by the EU. Thus, this would increase the quality of the food and its impact on the environment, climate and health and would also meet the European consumers expectations on transparency and short supply chains. In order to ensure active environmental citizenship with regards to the Farm to Fork Strategy, a Europe-wide citizens consultation should be created, in which the relocation and shortening of some parts of the value chain would be discussed. This would be the opportunity to involve citizens, take their insights into account while making pedagogy on the implication of the food system on health, climate, and environment, as well as the importance of conscious consumers behaviour.

The goal of the European Union should be to truly develop environmental citizenship at the local level, and to encourage the grouping of initiatives in a coherent network. The Green Deal promises Europeans food safety and traceability, and the transition to a form of agriculture that gives priority to proximity and quality circuits must be a priority.

A multitude of local initiatives have already been put in place across the EU. An example is the short food circuits (AMAP in France, Solidarische Landwirtschaft in Germany, etc.). The International Network for Community Supported Agriculture (URGENCE) brings these initiatives together, without intervening directly within the Union in the framework of interest representation. The Union, with the aim of creating a more credible environmental citizenship, should better involve these organisations in decision-making. The Europe-Asia Food Safety Network is already part of the Transparency Register; a European network could also be created - at the initiative of DG REGIO, AGRI, and ENV — and organisations such as URGENCE should be invited to enter it to share their expertise and experience in this field.

II.2 Educating Citizens on the Benefits of Composting

Given the fact that citizens are more likely to adopt good practices if they are exposed and sensitised to the notion of a circular economy at an early age, educational institutions could play a significant role in addressing important circular economy topics. We suggest the creation of a platform for educational institutions to connect with local farmers and municipalities to promote composting.

The best way to save resources is to not use them – or re-use them. This simple principle should be central to the Union's future strategies, be it directly or indirectly tied to environmental matters. Citizens are increasingly informed about the extent to which products are derived from primary and/or secondary materials. However, they are rarely informed about the *real* recyclability of their purchased products other than guidance on its proper disposal. Composting, therefore, provides a very practical and insightful way to

teach students about the benefits and the ease with which one can contribute to the environment. The proposed platform could include the following:

- A. A database of schools, local governments, and agricultural producers that work on projects related to composting;
- B. Composting can be promoted by linking educational institutions with local farmers and municipalities, thereby providing tangible added value to students;
- C. A label could be awarded to educational institutions, such as schools and universities, with the aim of highlighting those institutions that promote composting.

II.3 A European Food Waste Network

“All actors in the food chain have a role to play in preventing and reducing food waste, from those who produce and process foods (farmers, food manufacturers and processors) to those who make foods available for consumption (hospitality sector, retailers), and ultimately consumers themselves.”¹¹¹

Bridging the gap between producers on one end and consumers of agricultural products on the other, can be essential in raising awareness on the issue of food waste and contributing to a circular economy. We, therefore, propose the establishment of a European Food Waste Network for sharing best practices related to food waste use for agriculture:

- A. The network should encompass a myriad of actors, including local and regional governments, school administrations and citizen initiatives;
- B. Trips could be organised to discover how other actors are organising themselves in this regard;
- C. The platform could support the development of new initiatives on food waste - for e.g., a media campaign highlighting various approaches through citizens' initiatives in different EU Member States.

¹¹¹ 'Food Waste', *European Commission*, retrieved 22 April 2021, https://ec.europa.eu/food/safety/food_waste_en#:~:text=All%20actors%20in%20the%20food,retailers

III. Waste Reduction and Recycling in a Circular Economy

*“If it can't be reduced, reused, repaired,
Rebuilt, refurbished, refinished, resold,
Recycled or composted,
Then it should be restricted, redesigned,
Or removed from production”¹¹²*

A more sustainable EU comes hand in hand with waste reduction. According to the European Commission, the average European citizen throws away 6 tons of material waste per year.¹¹³ From the 2.5 billion tons of waste produced in 2010, only 36% was recycled.¹¹⁴ This represents a significant loss of potential secondary raw material. There is thus a need to improve the efficiency of the recycling sector, especially considering the circularity targets established within the European Green Deal.¹¹⁵

In the context of the European Green Deal, the Commission has adopted the Circular Economy Action Plan. It includes initiatives that will address the entire life cycle of products, working towards keeping resources within the EU's economy for as long as possible. Specific focus will be dedicated to sectors where “potential for circularity is high”, such as the digital sector, the mobility sector, textiles, and construction, as well as the food production sector.¹¹⁶ Despite these areas of focus, a circular economy requires a complete transformation of the linear configuration of all our production systems.

This chapter will thus address the question of the place of Plastics in a circular economy and how the EU should regulate more misleading communication. Thereafter, this paper will present the importance of looking beyond the borders when it comes to recycling. The final part of this chapter will address the question of incentives to waste management.

III.1 Plastics in a Circular Economy

The Commission should propose legislative texts that target the issue of recyclable plastics and greenwashing advertisements that impede effective recycling. Indeed, some brands pride themselves on using recycled plastic in their products with the sole aim of improving their public image to make more sales. The counter-side is that not all those plastics can be recycled. Worse, some plastics claim to be biodegradable but instead

¹¹² Pete Seeger, 'If It Can't Be Reduced', *YouTube*, 2014, retrieved 7 April 2021, https://www.youtube.com/watch?v=ZhaXBCLmxiE&ab_channel=PeteSeeger-Topic.

¹¹³ 'Waste and recycling', *European Commission*, n.d., retrieved 6 April 2021, <https://ec.europa.eu/environment/waste/index.htm>.

¹¹⁴ *Ibid.*

¹¹⁵ 'EU Circular Economy Action Plan: A new Circular Economy Action Plan for a Cleaner and More Competitive Europe', *European Commission*, n.d., retrieved 7 April 2021, <https://ec.europa.eu/environment/circular-economy/>.

¹¹⁶ *Ibid.*

fragment into small particles that end up in the ocean.¹¹⁷ Therefore, we suggest increasing awareness among citizens about the different types of plastics, namely through clear communication, and to enforce stricter regulations of those that are not recyclable.

Moreover, the European Directive 2019/904 of 5 June 2019 on the reduction of the impact of certain plastic products on the environment encourages a clear communication on certain plastics (on its waste management options and the presence of plastics in the product) listed in the annex D of the Directive. Nevertheless, this annex only contains 4 types of products namely: “(1) Sanitary towels (pads), tampons and tampon applicators; (2) Wet wipes, i.e. pre-wetted personal care and domestic wipes; (3) Tobacco products with filters and filters marketed for use in combination with tobacco products; (4) Cups for beverages”.¹¹⁸ This list being restrictive could be more elaborated. The EU should also take measures towards misleading labels that do not clearly differentiate a “industrially” compostable” from a “naturally” or “domestically” compostable plastic.

Furthermore, there is a need to think “less but better” regarding plastic use. Therefore, the EU should encourage a smarter, innovative and more sustainable plastics industry in order to allow a better lifespan and reusability of plastic or even a better recycling. The idea of recycling leads us to our next proposal.

III.2 Common Recycling Objectives

Tackling the issue of recycling at EU-level is particularly challenging because of national divergences in the way waste is disposed, processed, and recycled. Taking example from the most advanced EU Member States in this field, a common European recycling system or scheme of reference could help address lack of awareness and foster a shared sentiment of environmental citizenship. Indeed, having a common European understanding that, for example, Blue bags are for plastic waste and yellow ones for residual waste, could, on the one hand facilitate the sorting throughout Europe and increase the feeling of environmental citizenship. To reach this, the EU should support intergovernmental cooperation regarding waste bags colours. Moreover, the EU should come in support of the development of highly modernized and advanced recycling sectors. During the process of reaching this objective, the EU could also encourage MS to cooperate, namely with technology exchanges, in order to improve their waste sorting. This could thus allow country A to help country B to improve its recycling by recycling the plastic waste of country B.

In addition, the teaching of waste sorting should start at early ages. Once a common European waste sorting scheme is implemented, this will make more sense to younger

¹¹⁷ Ellen MacArthur Foundation, *Oxo degradable plastic packaging is not a solution to plastics pollution, and does not fit in a circular economy*, May 2019, p. 2, retrieved 6 April 2021, <https://www.newplasticseconomy.org/assets/doc/Oxo-statement-May2019.pdf>.

¹¹⁸ European Parliament and Council of the European Union, ‘Directive (EU) (2019/904) of 5 June 2019 on the reduction of the impact of certain plastic products on the environment (Text with EEA relevance)’, *Official Journal of the European Union*, L 155, 12 June 2019, pp. 1-19.

generations; however, teaching and training on such issues should already start before the full implementation of the scheme. Once again, ensuring that all Europeans possess or have access to the right tools to act positively for the environment will improve and increase their sense of environmental citizenship.

III.3 Financial Incentives for Sustainable Waste Management

With regards to waste management, financial incentives should be used to promote the reduction of waste and increase recycling rates. More specifically, schemes charging waste producers depending on the amount of waste they produce and tax refunds for recycling can be applied. A first step towards this direction was taken in 2018 with the adoption of the Waste Framework Directive. According to the European Environmental Bureau, "Article 4 (3) requires EU Member States to use economic instruments in order to provide incentives for the effective application of the waste hierarchy. These instruments are primarily to be set up and used by EU Member States, not at the EU level."

In this context, EU Member States have developed different policies that have resulted in better management or reduction of waste. Examples include the '*Pay as you throw scheme*' in Veneto, Italy, the '*Extended producer responsibility scheme*' in France, and '*Public awareness campaigns*' in Slovenia. However, those policies are not systematically applied, and major regional differences persist.¹¹⁹ In 2017, only 46% of all the municipality waste generated in the EU28, Norway and Iceland were recycled - and this number hides significant national and regional disparities.¹²⁰ Thus, the diffusion of successful and innovative policies should be encouraged - for instance, through the Open Method of Coordination. Although enforcement will be more effective at the local level, the EU could provide additional funds and support if needs be.

¹¹⁹ Darko Bizjak and Piotr Barczak, *EXPLAINED - ANNEX IVa OF THE EU WASTE FRAMEWORK DIRECTIVE: Examples Of Economic Instruments And Other Measures To Provide Incentives For The Application Of The Waste Hierarchy*, European Environmental Bureau, 2020, retrieved 20 March 2021, <https://eeb.org/library/explained-economic-instruments-waste-prevention/>

¹²⁰ 'Waste recycling', *European Environment Agency*, 2019, retrieved 20 March 2021, <https://www.eea.europa.eu/data-and-maps/indicators/waste-recycling-1/assessment-1>

IV. Using Ecolabels and Digital Tools to Encourage Sustainable Consumption

European citizens are consumers, but they do not stop being citizens when they consume. Indeed, according to a recent study conducted by the European Consumer Organisation (BEUC),¹²¹ “over half of European consumers say that sustainability concerns have an influence on their eating habits. The lack of information, the challenge in identifying sustainable food options, and the latter’s limited availability are the main perceived barriers to sustainable eating.”¹²²

Around the world, numerous countries practice ecolabelling and implement digital tools to promote sustainable consumption. Ecolabelling is a “voluntary method of environmental performance certification which identifies products or services proven to be environmentally preferable within a specific category.”¹²³ The purpose of these labels is to encourage consumers to take environmental concerns into consideration when purchasing products or services.

This chapter will therefore focus on how to empower citizens to reflect their societal choices in their daily lives through their consumption by providing them with transparent, clear, and easily accessible information. We thus propose the extension of the use of ecolabels and especially the development of a symbiosis between these labels and digital tools. In this context, we propose the implementation of QR Codes to provide insight into the sustainability of products’ supply chains. We also propose the unification of environmental information for consumers in one app that works across Europe - *an App by Consumers and for Consumers* - enabling citizens to obtain scan products and discover the environmental implications of products within the internal market.

IV.1 Expanding the Scope of the EU Ecolabel

An ecolabel consists of a logo that provides a simple and efficient way for consumers to identify the environmental impact associated with certain products, and to make informed choices.¹²⁴ The EU has a Strategy on Ecolabels and has been active in the promotion of sustainable consumption. Established in 1992, the EU Ecolabel accounted for nearly 76,000 products (goods and services) in September 2020. However, despite its increasing importance in both number and territorial coverage, there is still room for improvement.

¹²¹ The European Consumer Organisation (BEUC), *One bite at a time: Consumers and the transition to sustainable food*, 2020, retrieved 7 April 2021, https://www.beuc.eu/publications/beuc-x-2020-042_consumers_and_the_transition_to_sustainable_food.pdf.

¹²² *Ibid.*

¹²³ ‘What is Ecolabelling?: GEN Member Ecolabels are Among the World’s Most Rigorous Environmental Labels for Products and Services’, *Global Ecolabelling Network*, n.d., retrieved 7 April 2021, <https://globalecolabelling.net/what-is-eco-labelling/>

¹²⁴ European Parliament and Council of the European Union, Regulation (EC) No 66/2010 of 25 November 2009 on the EU Ecolabel (Text with EEA relevance), *Official Journal of the European Union*, L 27, 30 January 2010, pp. 1-19.

In particular, we propose to extend the use of this label to new categories of services such as restaurants, caterings, and events, as well as for second-hand goods. Another possibility for improvement relates to the incorporation of manufacturing methods, packaging, and transport considerations. Finally, considering the big gap existing between European countries in demand and implementation of the EU Ecolabel, convergence must be sought through the targeting of the countries with the lowest numbers and figures - such as Luxembourg, Slovak Republic, Malta, Croatia, Latvia, Romania, Hungary, Cyprus, and Slovenia.¹²⁵

IV.2 QR Codes to Scan Products' Characteristics and Lifecycle

As mentioned above, it is necessary to provide simple and readable information to enable consumers to make quick and informed choices. In this context, ecolabels are great - but they are not enough. We propose to make the most of digital tools and services to give European consumers access to more detailed and understandable information.

Innovative applications have appeared on the market, such as Yuka or Clear Fashion, which allow articles to be scanned in order to decipher the information behind the labelling and to provide simplified information and explanations. Those private applications are however still imperfect and are subject to much criticism,¹²⁶ which tends to reduce citizens' confidence in this type of information.

Therefore, we propose the implementation of such an application fuelled by public and reliable information and monitored by NGOs and consumers associations. We also propose to set up a similar QR code system for the following services. An application of these characteristics could provide a wide range of information regarding the composition, production method, transport, ease of repair and recycling through scales of values or colour code. It would enable the consumer to make a more informed decision by no longer being reduced to the choice between "good" and "bad" products - those with and those without a label - while at the same time making it possible to combat greenwashing, which confuses citizens who wish to act in favour of the environment.

An application that would help citizens, by scanning a product, understand how recyclable the latter is and in which bin it must be thrown away. Thanks to this app, the consumers might feel a greater responsibility to act properly and the number of errors in recycling could be significantly reduced.

¹²⁵ The number of EU Ecolabel products and licenses keeps growing despite the COVID-19 crisis - figures of September 2020 show', *European Commission*, n.d., retrieved 6 April 2021, <https://ec.europa.eu/environment/ecolabel/facts-and-figures.html>.

¹²⁶ Yuka, for example, has been sued for defamation in France: Ryad Ouslimani, 'L'appli Yuka condamnée après une plainte de l'industrie de la conserve', *RTL*, 2020, retrieved 6 April 2021, <https://www.rtl.fr/actu/debats-societe/l-appli-yuka-condamnee-apres-une-plainte-de-l-industrie-de-la-conserv-e-7800237443>.

IV.3 A European App by Consumers and for Consumers

A replacement for the primitive practice of printed flyers could be a Europe-wide and multilingual app (suggestions are 'EuShoppEnv' or 'ConsEUmethic'), aiming to introduce eco-friendly digital practices in business, engaging consumers as ethic shoppers and reducing environmental impact. The app should be developed by DG ENV or the EEA (the latter having developed apps such as 'Europe Air' and 'Marine LitterWatch'). It aims to empower citizen communities, by providing relevant data about eco-friendly products while creating more awareness at the local level on ethical consumerism. It also provides a platform for eco-shoppers to gather, share their knowledge and spread the awareness to new consumers.

After creating an account, consumers insert in the map, according to their geographical location, the existence of any shop selling environmentally friendly products, according to specific criteria to be agreed upon (origin, packaging, carbon footprint, labelling, nutritional values, traceability, etc.). The app creates a public database collecting information about stores and products, which can then be used by any citizen willing to purchase eco-friendly items or services. With a specific feature, consumers in the store can scan the product for more information, upload pictures and write a review on the product and/or on the store. Everyone would have the responsibility to collect information, assess the environmental impact of the product and share it with the local community. Furthermore, customers can receive a digital receipt directly in their personal account, thus reducing an important amount of paper waste. Nowadays environmental-friendly business practices are essential, as they push consumers to become more eco-conscious and develop their responsibilities as environmental citizens. A 2018 survey reveals that 96% of consumers feel that their actions of buying ethically and recycling make a difference, and that 88% prefer buying goods from businesses applying ethical practices.¹²⁷

¹²⁷ Solitaire Townsend, '88% Of Consumers Want You To Help Them Make A Difference', *Forbes*, 2018, retrieved 8 February 2020, <https://www.forbes.com/sites/solitairetownsend/2018/11/21/consumers-want-you-to-help-them-make-a-difference/?sh=70dd83206954>.

V. Encouraging Sustainable Online Practices

The European Green Deal aims at achieving the transition toward a climate neutral and digital economy. But it is important to bear in mind that the uses related to digital tools consume energy and therefore produce emissions. While digitalisation is an important tool in achieving the transition towards a carbon neutral economy and offers real opportunities to do so, it also has an impact on climate and the environment which must be taken into consideration.

Achieving 'digital sobriety' means transitioning away from our current intensive and uncontrolled digital usage to a more controlled and oriented one that takes into account the risks and opportunities involved in the deployment of new digital infrastructure and the development of associated uses.

As it became evident in the discussion regarding the deployment of the 5G, there is a need to understand the environmental and climate implications of using certain digital systems and infrastructures. To do so, we must take into account the public debate on the energy and resource consumption of new digital systems and infrastructures. This has also to be accompanied by changes in consumption behaviours by companies and citizens. In this context, a key question emerges: how can we place European citizens at the heart of digital sobriety implementation in the EU?

V.1 Eco-Friendly Shopping & Digital Consum-Actors

In line with the Commission's priority for a digital transformation that works for all, the future digital solutions need to put people first, offer new opportunities for businesses and power up reliable technology to support an open, democratic, and sustainable society.¹²⁸ In this sense, digital practises would facilitate a green transition and fight against climate change, whereby all consumers contribute as a new generation of 'digital consum-actors'. A key and growing digital practice concerns shopping habits.

- Growing trend of people ordering online - has become too easy to click "order" on Amazon, etc.
- But real environmental impacts - travel, packaging, etc. (even useless products)
- Our solution: an app for "Ethical Purchasing Groups", that relays information about eco-products and eco-stores

Customers can use the app to find stores offering promotions and/or lower prices, considering that eco-friendly products are usually more expensive than traditional products and this can represent the first hurdle of a consumer approaching a more sustainable lifestyle. Since prices decrease when the demand increases, big communities of environmental citizens should purchase green products, thus investing more in the production and in turn reducing prices. The creation of an eco-community is an essential

¹²⁸ 'Shaping Europe's digital future: Commission presents strategies for data and Artificial Intelligence', *European Commission*, 2020, retrieved 6 March 2021, https://ec.europa.eu/commission/presscorner/detail/en/ip_20_273.

element to shape environmental citizenship, increase demand of eco-friendly products and cut down prices. Therefore, the app offers a platform for users to create so-called 'ethical purchasing groups', whereby many consumers cooperate to buy goods directly from producers or big retailers at a price that is fair to both sides. The main values of the purchasing group are respect for the environment (local products, reusable goods) and solidarity between the group and the traders (promoting human rights, fair-trade goods, local economy). These are some of the responsibilities of the environmental consum-actors: exercising their duties as active agents of change at local level (triggering a national/global movement), through individual (as eco-conscious consumer) and collective actions (as member of an ethical purchasing group) solving environmental issues and supporting local and sustainable economy.

V.2 Reducing our “Digital” Carbon Impact

Today, the ICT sector represents 5-9% of electricity use, namely 2% of global GHG emission, and at this pace, digital carbon footprint could increase to 14% of global emission by 2040.¹²⁹ Digital carbon footprint does not include only checking email, but also streaming music, watching Netflix, buying e-books, reading online news, etc. Some initiatives against digital pollution are already in place. The search engine Ecosia donates 80% of its profit for reforestation, removing 1770 tonnes of CO₂ daily.¹³⁰ Some tech giants, like Amazon, have committed to meeting the Paris Agreement target ten years earlier than the deadline, and are planning to use 100% renewable energy by 2030. Microsoft, for instance, has pledged to attain carbon neutrality by 2030.¹³¹

In our everyday routine, as eco-conscious consumers, an awareness campaign is useful to share suggestions to reduce our digital carbon footprints and implement sustainable practices. Firstly, we should unsubscribe from unwanted emails, such as advertisements by multiple brands, through our promotions and spam folders. Secondly, we need to optimise our charging routine by unplugging the power supply once the device is fully charged, or, even better, investing in a solar charge. Thirdly, downloading instead of streaming would minimise carbon output and put less strain on networks, since data centres hosting Netflix, YouTube, and Facebook consume 1% of the world's electricity.¹³² Eventually, due to the pandemic-driven shift to remote work, one-hour video conference emits around 150-1,000 grams of CO₂ and requires up to 12 litres water: hence, leaving

¹²⁹ European Commission, *Supporting the Green Transition: Shaping Europe's Digital Future*, 2020, retrieved 7 April 2021, https://ec.europa.eu/commission/presscorner/api/files/attachment/862091/Supporting_the_green_transition_en.pdf.pdf.

¹³⁰ 'Ecosia users have planted 100 million trees: a milestone and a beginning!', *The Ecosia Blog*, 2020, retrieved 6 April 2021, <https://blog.ecosia.org/100-million/>.

¹³¹ 'Digital and Environment', *GIP Digital Watch*, n.d., retrieved 6 April 2021, <https://dig.watch/trends/digital-and-environment>.

¹³² BioEnergy Consult, "How to reduce your digital carbon footprint", October 2020, retrieved 6 April 2021, <https://www.bioenergyconsult.com/how-to-reduce-digital-carbon-footprint/>

the camera off can reduce footprints by 96% and streaming videos in standard definition rather than high definition can reduce them by 86%.¹³³

The current growth of digitalisation has led to an increase of digital carbon footprint by 8% yearly.¹³⁴ Technical progress has enabled energy efficiency, but a more eco-conscious approach to ICT, in everyday life, needs to reverse this trend to reach climate neutrality by 2050.

V.3 Reversing the Trend: Purchasing New Electronic Devices

The use of digital tools is increasing sharply each year, and with it its impact on resources and energy. For instance, recent studies have observed a yearly increase of 9% in energy consumption from digital sources.¹³⁵ Technological devices, furthermore, become rapidly obsolete, whether by design or by new trends. In this context, European citizens have a role to play in determining how often they dispose of technological devices and purchase new ones.

Furthermore, industrial considerations are also of key importance. Most of the digital infrastructure is manufactured outside the EU in carbon-intensive factories consuming coal and fossil fuels, thereby adding an important environmental cost before any digital equipment is even used for the first time. According to recent studies, between 70 and 90% of the climate impact of digital infrastructure or equipment is caused during the manufacturing process. We encourage the European Commission to foster intra-EU production of technological infrastructure, and to maintain high quality standards in this regard, to ensure transparency and durability.

European policies should adopt a holistic vision in the development of future digital policies. This includes: integrating outsourced services, the impact of the manufacturing of digital infrastructure equipment, the performance of the electrical mix of manufacturing and operating sites, training and management of sustainable digital transition skills, and both architecture and software development choices.

Therefore, we recommend the constitution of a digital stakeholders' assembly within one of the European Institutions (the European Parliament would of course be the preferred one, but this is not the creation of a parliamentary committee) composed of public powers, private actors, national and European regulators, web and digital designers,

¹³³ Renee Obringer, Benjamin Rachunok, Debora Maia-Silva, Maryam Arbabzadeh, Roshanak Nateghi, Kaveh Madani, 'The overlooked environmental footprint of increasing Internet use', *Resources, Conservation and Recycling*, vol. 167: 105389, 2021, pp. 1-4.

¹³⁴ 'Why we need to redesign the internet to fight climate change - Connect University, *European Commission*, 2020, retrieved 6 April 2021, <https://digital-strategy.ec.europa.eu/en/events/why-we-need-redesign-internet-fight-climate-change-connect-university>.

¹³⁵ Maxime Efoui-Hess, 'Climat: L'insoutenable usage de la vidéo en ligne. Un cas pratique pour la sobriété numérique. Résumé aux décideurs', *The Shift Project*, July 2019, p. 1, retrieved 6 April 2021, https://theshiftproject.org/wp-content/uploads/2019/07/R%C3%A9sum%C3%A9-aux-d%C3%A9cideurs_FR_Lin_soutenable-usage-de-la-vid%C3%A9o-en-ligne.pdf.

consumers and sociological experts on digital uses.¹³⁶ Such an assembly could be organised on the model of the Belgium German-Speaking parliament, and could be consulted for each policy proposal, legislation of regulation that is related to digital questions, issues and challenges and would emit consultative opinions on each piece of legislation, with the possibility to consult experts in order to help them build their position. The functioning of the assembly would be related to specific rules of procedures that could rely on environmental citizenship, environmental rights and digital's climate and environmental impacts.

This assembly for a sustainable digital transition could have other functions, such as the construction of tools for training in the use of digital technology - in particular, on the evaluation of the consequences of technological choices on the climate and the environment. They could also provide pedagogical and training tools for all the major actors and public decision-makers who will oversee the deployment of digital infrastructures.

This Assembly could also reflect on the means to be implemented to limit the negative externalities of digital technology in social, economic, energy and climate terms. It could also launch discussions on the motivation to operate in the economic models of digital product suppliers to limit these impacts, as well as on the levers to be activated to limit automatic consumption. This would involve the creation of educational tools for consumers but also a way for designers to modify web design to limit usage.

As far as procedural rules are concerned, these could be largely inspired from the elements contained in this report, in particular with regards to the creation of a European Pillar of Environmental Rights (cf. Chapter 2). An interesting opportunity to launch this assembly, could be the creation of a European moratorium on 5G, which would be the occasion to feed the agenda of this assembly with the remarks of the European citizens while making pedagogy on digital sobriety and responsible digital uses.

¹³⁶ Hugues Ferreboeuf, 'Déployer la sobriété numérique : Résumé aux décideurs', *The Shift Project*, 2020, p. 4, retrieved 6 April 2021, https://theshiftproject.org/wp-content/uploads/2020/10/Deployer-la-sobriete-numerique_Resume_ShiftProject.pdf.

VI. Sustainable Modes of Transport

In 2017, the European transport sector accounted for 27 percent of total EU-28 GHG emissions,¹³⁷ and the first forecasts seemed to point towards a general increase over the years, although more recent observations have shown this increase is slowing down.¹³⁸ Emissions caused by the aviation sector, however, keep increasing, and fast. The sector represents the first transport GHG emitter. Emissions caused by road transport remain relatively stable, despite numerous measures taken at European, national, and local levels. Regarding public transportation, buses seem to be the most widespread method of public transportation in Europe.¹³⁹ The latest data (2012), shows that each urban citizen makes on average three trips in public transportation per week. The European Union should be a key supporter for increased environmental action in the transport sector and accompany the reduction of carbon-intensive transport solutions by taking advantage of the already existing low carbon means of public transport. The priority should be focused on reducing the global impact of the transport sector by (1) limiting the use of carbon-intensive individual or air transport solutions and (2) reduce the global emissions linked to transport.

VI.1 Shared Mobility

We propose that the EU accompanies the general trend of reduction of personal vehicle ownership, with the aim of reducing the use of resources for cars that are used infrequently. The average personal vehicle is parked and unused 95 percent of its lifetime. In this context, resource use could be improved, not only to fit individual needs but also to reduce use of public space, dedicated to individual vehicles, i.e., parking lots and roadside. This could also foster increased cooperation among citizens, as they would belong to a common group of users, with whom one would create a community. In this context, ideas regarding car-sharing could be considered. However, it is also important to consider that shifting away from the car-centric discourse that has dominated transport discussions is necessary if the transport sector is to become net climate neutral by 2050.

¹³⁷ 'Greenhouse gas emissions from transport in Europe' (Old Version), *European Environmental Agency*, 2020, retrieved 6 April 2021,

<https://www.eea.europa.eu/data-and-maps/indicators/transport-emissions-of-greenhouse-gases/transport-emissions-of-greenhouse-gases-12>.

¹³⁸ 'Greenhouse gas emissions from transport in Europe' (Current Version), *European Environmental Agency*, 2020, retrieved 6 April 2021,

<https://www.eea.europa.eu/data-and-maps/indicators/transport-emissions-of-greenhouse-gases-7/assessment>.

¹³⁹ Anne Lenormand, 'L'utilisation des transports publics urbains en Europe a augmenté de 8% de 2000 à 2012', *Banque des Territoires*, 2014, retrieved 6 April 2021,

<https://www.banquedesterritoires.fr/lutilisation-des-transports-publics-urbains-en-europe-augmente-de-8-de-2000-2012>.

VI.2 Rethinking Urban Spaces and Promoting Cycling

The way in which major living areas are organised must be rethought. Creating neighbourhoods close to employment opportunities, close to accessible transport facilities, with more room for green, liveable spaces, is crucial. Not only because of the improved carbon footprint – with less individual transport, for instance – but because these would also benefit the urban area in general, by reducing average temperatures in the city centres during heat waves,¹⁴⁰ for instance. Good practices between cities could be shared and put forward for citizens to take inspiration and lobby in favour. Cities like Copenhagen, for instance, already show increased social and environmental awareness in their development. Eco-boroughs including social aspects, for instance in the Vauban area in Freiburg im Breisgau, also demonstrate how good planning could work.

Several European initiatives already exist in this regard, such as the European Green capital Award and the European Green Leaf Award.¹⁴¹ Further action in this direction is required.

VI.3 Intercity Travels: Coordination Between the Air and Rail Sectors

Air transport is the first transport GHG emitter and continues to increase its emissions. In this context, it is of paramount importance that air travel remains active for those routes that are relevant. However, inter-city travels in the European Union are currently overly represented within the aviation sector.

These interconnections on local levels should be covered by high-speed trains, enabling fast travel on national scales. This means ensuring quick and efficient access to ‘airport hub’ facilities instead of a myriad of smaller airports. For those air routes that remain, more graphic representations of their emission levels should be provided to consumers at the time of purchasing, to ensure a proper understanding of the impact of their behaviour.

Some important progress is being achieved through initiatives such as the European Year of Rail.¹⁴² However, these initiatives must be implemented as durable transformations that green the mobility sector. These two simple measures ought to decrease short distance air travel, while developing local infrastructures and low carbon public transport. In addition, it would increase awareness of citizens on their transport behaviour and impacts.

¹⁴⁰ Bénédicte Weiss, ‘Verdir les villes : la solution pour faire baisser la température !’, *Alternatives Economiques*, 2019, retrieved 6 April 2021, <https://www.alternatives-economiques.fr/verdir-villes-solution-faire-baisser-temperature/00079431>.

¹⁴¹ ‘European Youth Portal: European Green capital and European Green Leaf Award’, *European Union*, 21 October 2020, retrieved 6 April 2021, https://europa.eu/youth/get-involved/sustainable%20development/european-green-capital-and-european-green-leaf-award_en.

¹⁴² ‘European Year of Rail: 2021 is the European Year of Rail’, *European Union*, n.d., retrieved 7 April 2021, https://europa.eu/year-of-rail/index_es.

VII. Green Pensions

Transitioning to a carbon neutral economy will require significant investment, and private sources of capital are of key importance in this context. However, “pension funds’ asset allocation to such green investments remain low”.¹⁴³

A useful field of application in an ageing Europe could be the sustainability of long-term oriented pension funds, accounting for around €3 trillion and equivalent to 25% of euro area GDP.¹⁴⁴ As pension schemes represent a tangible and necessary financial asset to almost every citizen, they are well-placed to closely connect the aims of the taxonomy with the demands of consumers. A clear classification of assets held by funds can thereby help green the economy.

ESG investing - environmental, social, and corporate governance - for pension funds has ‘evolved from being a niche consideration with relatively few options’ to a wide range of investment offers accommodating all investment objectives “from income to capital growth and everything in between.”¹⁴⁵ This opens new doors for action, incentivised not just by policy, such as the Taxonomy, but also by markets and investors.

In this context, we propose that the European Commission assists and encourages pension funds to help finance green growth. To channel green private investment, the European institutions must “provide supportive environmental policy backdrop, create right investment vehicles and foster liquid markets, support investment in green infrastructure, remove investment barriers, provide education and guidance to investors, and improve pension fund governance.”¹⁴⁶

VII.1 Raising Awareness on Pension Schemes’ Climate Impacts

“I certainly was never aware of the fact that my pension could be a kind of weapon for change. It is just an amazing new bit of action that you can take”, a comment by Richard Curtis, a writer and filmmaker and recent campaigner for *Make My Money Matter*.¹⁴⁷ While the potential power and influence of €3 trillion funds is entirely unknown to most of the public, most citizens are appalled when faced with the companies listed on their pension

¹⁴³ Raffaele Della Croce, Christopher Kaminker and Fiona Stewart, *The role of pension funds in financing green growth initiatives*, Paris, OECD Publishing, 2011.

¹⁴⁴ Jordi Guetiérrez Curos *et al*, ‘New Pension Fund Statistics’, *ECB Economic Bulletin*, vol. 7, 2020, retrieved 4 April 2021, https://www.ecb.europa.eu/pub/economic-bulletin/articles/2020/html/ecb.ebart202007_03~5ead7cb1dc.en.html

¹⁴⁵ John Fleetwood, cited in Josephine Cumbo, ‘How green is your pension?’, *Financial Times*, 26 February 2021, retrieved 6 April 2021, <https://www.ft.com/greenpensions?desktop=true&segmentId=d8d3e364-5197-20eb-17cf-2437841d178a>.

¹⁴⁶ Raffaele Della Croce, Christopher Kaminker and Fiona Stewart, *opt. cit.*, p. 3.

¹⁴⁷ Based on excerpts from Richard Curtis’s campaign, cited in Jess Sheldon, ‘Pensions, Actually: Richard Curtis urges Britons to check pensions - “weapon for change”’ *Express*, 14 February 2021, retrieved 6 April 2021, <https://www.express.co.uk/finance/personalfinance/1397111/pension-uk-my-contributions-scheme-richard-curtis-ethical-sustainable>.

portfolio and the carbon footprint and social impact they are responsible for.¹⁴⁸ Despite pensions accompanying us for most of our lives, we remain mostly uninformed about our investments and lack the tools, time and knowledge to thoroughly investigate this. While the vast majority of savers believe that climate change is an important issue, the majority of them are unsure whether their pension is actually contributing to a healthier environment.¹⁴⁹ PSLA warns that pension funds are missing out on engaging with their customers about the positive and proactive actions they are taking.¹⁵⁰

The rising demand for consumption and investment aligned with ESG objectives presents a huge opportunity for pension funds to attract new customers by branding and marketing their climate actions more publicly and showing their savers how they are helping to green the €3 trillion pension market. Beyond customer engagement, campaigns such as Richard Curtis new film on love and pensions and even policymakers can play a crucial part in informing citizens about the footprint of their pensions. To avoid misleading information or 'greenwashing' of certain funds, the taxonomy will bring transparency on the sustainability of funds and allow banks, local pension providers, public authorities and campaigners to effectively inform customers. Precise and targeted campaigns by pension providers and public bodies alike on social media, pension scheme websites and branches, or even in universities and workplaces can help spread awareness about this invisible 'weapon for change' and motivate people to reassess their pension choices.

VII.2 Using the EU Taxonomy as Guide for Pension Investments

Firstly, the EU Taxonomy for Sustainable Activities can assist investors through clear identification of sustainable assets, detection of greenwashing and "making investment flow in the right direction."¹⁵¹ While the Sustainable Finance Disclosure Regulation is set to increase the awareness of new climate-related risks and accelerate demand for change among pension fund members,¹⁵² a clear and transparent classification based on the taxonomy will be required to effectively shift investment and clearly inform consumers on the sustainability of their pension funds, whether public or private.

¹⁴⁸ Sheldon, *op. cit.*

¹⁴⁹ Chris Seekings, 'Most Savers unaware of pension scheme climate action,' *The Actuary*, 17 February 2021, retrieved 6th April 2021, <https://www.theactuary.com/2021/02/17/most-savers-unaware-pension-scheme-climate-action>.

¹⁵⁰ Pensions and Lifetime Savings Association (PLSA), in Chris Seekings, 'Most Savers unaware of pension scheme climate action,' *The Actuary*, 17 February 2021, retrieved 6th April 2021, <https://www.theactuary.com/2021/02/17/most-savers-unaware-pension-scheme-climate-action>.

¹⁵¹ Bernard Delbecque, 'Europeans missed out on €1tn of additional wealth since 2008', *Funds Europe*, 2021, retrieved 4th March 2021, <https://www.funds-europe.com/news/europeans-missed-out-on-1tn-of-additional-wealth-since-2008>.

¹⁵² Jack Grey, 'Pension Funds urged to play their part in EU green transition', *European Pensions*, 2021, retrieved 4 March 2021, <https://www.europeanpensions.net/ep/Pension-funds-urged-to-play-their-part-in-EU-green-transition.php>.

VII.3 An App to Compare Sustainable Pension Funds

Secondly, enabling consumers to easily and clearly identify the degree of sustainability of pension funds will allow for more informed and financially sound decisions. As pensions represent around 20% of households' net financial wealth,¹⁵³ sustaining people's investments and ensuring visible classification of the sustainability of their pension schemes is an extension to the taxonomy which will allow consumers to compare, evaluate and alter pension schemes. Bringing the taxonomy close to the consumer by demonstrating the financial sustainability of pensions with digital means of mobile applications will inevitably bring about forceful change in financial markets, making pensions safer and more sustainable while directing large (€3 trillion) amounts of financial power towards green investments. This has the potential to truly align the mitigation of financial risks and sustainable consumer demands.

¹⁵³ Jordi Guetiérrez Curos *et al.*, *op. cit.*



CHAPTER 4

EMBEDDING THE CONCEPT OF ENVIRONMENTAL CITIZENSHIP IN A JUST TRANSITION

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Chapter 4: Embedding the Concept of Environmental Citizenship in a Just Transition

Introduction

Social justice and equity are key elements of environmental policy's social dimension. These factors can be measured through specific criteria, such as the proportional impact on specific communities, the objective-result match, the adequacy of access to information, and eventual distribution inequalities in environmental quality. The transition process must be coupled with a large engagement in both social protection and social dialogue. Indeed, the inclusion of a social dimension enables the counterbalancing of structural change through the collective effort of governments, social and economic partners, and the citizens themselves. The first two categories will provide regulatory frameworks, ensure inter-institutional coordination, and engage in common consultations, while citizens will be called to greater responsiveness in the context of social dialogue. The active and collaborative effort of the actors involved is deemed essential to ensure a just transition 'leaving no one behind'. In the following section, we will discuss the main socio-economic challenges and relative proposals linked to environmental citizenship.

Considering that the European Green Deal directly involves citizens, an analysis of its implications must consider its social dimension. The European Green Deal must respect the principle of 'just transition' for the changes to be accepted and integrated by all. When applied to the environmental domain, the notion of just transition can be defined as "*just and fair, maximising economic opportunities for economic prosperity, social justice, rights and social protection for all*".¹⁵⁴ In other words, a just transition towards environmentally sustainable economies and societies requires that the changes be coupled with sufficient guidance and assistance tools. To this end, the European Commission has proposed a Just Transition Mechanism, which will assist companies and workers throughout the transition in the different domains of the labour market. In this chapter, we will tackle different aspects of a just transition, not only to put forward new, concrete, and smart proposals, but also to suggest its transversal implementation and consideration in climate action.

¹⁵⁴ The Green Initiative and International Labour Organisation, *Technical Paper: A Just Transition to Climate-Resilient Economies and Societies Issues and Perspectives for the World of Work*, December 2016, retrieved 6 April 2021, https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---gjp/documents/publication/wcms_536552.pdf.

I. A Transition for the Many, not the Few

Achieving carbon neutrality by 2050 will require a vast number of socio-economic changes in the European society. However, the European Green Deal cannot be effective and nor widely accepted if it solely focuses on GHG emission reduction and other technical parameters.

The EU has recently added a social dimension among its core environmental and energy objectives, aiming to guarantee equity in the policy design and implementation of the green transition,¹⁵⁵ better known as ‘Socially Just Transition’. The main idea is that the respective objectives of ensuring a fair environmental and energy transition should be complementary with that of fostering social cohesion.

The European Green Deal has reiterated the EU’s intention to “leave no one behind” and to minimise the potential regressive financial impacts associated with a transition from a consumption-based to a green and circular economy. However, the *leitmotiv* of ‘leaving no one behind’ still lacks a clear definition, and critics fear such promises may not translate into concrete realities. In this context, we propose a series of proposals that can help the EU ensure that the green transition is fair and inclusive, and that all European citizens can effectively become environmental citizens, too. More specifically, we discuss the benefits of increased citizens’ participation in the Renovation Wave in the housing sector, the need to provide environmental citizens with renewable electricity at affordable costs, and key steps to ensure that ‘digital exclusion’ does not become synonymous with the inability to fully exercise one’s rights as an environmental citizen.

I.1 Renovation Wave in the Housing Sector

The concept of the Just Transition was initially developed by trade unions and has since been incorporated into the works of the International Labour Organization and into the Paris Agreement. It “seeks to ensure that the substantial benefits of a green economy transition are shared widely, while also supporting those who stand to lose economically - be it countries, regions, industries, communities, workers, consumers or particular age groups.”¹⁵⁶ Yet the definition above fails to address or discuss the potential added value of direct citizens’ participation in the decision-making process associated with this transition. We argue that facilitating and encouraging citizens’ participation will not only bolster their sense of environmental citizenship but will also yield better results.

The construction sector is responsible for a great amount of GHG emissions in the EU, with 321 million tons of GHG emitted back in 2018, amounting to about 10% of total emissions. While the Commission is already working on a ‘Renovation Wave Strategy’ to mitigate these emissions, the exact modalities of the Strategy are still being discussed.

¹⁵⁵ Steve T. Pye *et al.*, ‘Addressing the social dimensions of environmental policy: A study on the linkages between environmental and social sustainability in Europe’, *European Communities*, 2008.

¹⁵⁶ ‘What is a just transition?’, *European Bank for Reconstruction and Development*, n.d, retrieved 7 April 2021, <https://www.ebrd.com/what-we-do/just-transition>

We propose to further involve citizens in the development of solutions and actions on the ground.

We propose the creation of a participatory body, which would decide on the allocation of certain subsidies. For instance, this could refer to public buildings. Involving people in the use of public funds, especially when affecting public buildings, could increase the consideration given to the current building. This involvement would naturally come with increased information, analysis, and expertise on the potential candidate buildings. This would not only ensure the good use of the funds, as it gives local accountability, it would also show the concrete use of EU Funds on people's daily lives, while improving the energy efficiency and use of sustainable materials.

I.2 Allowing Citizens to Choose “Green” Electricity at Affordable Costs

As producers of green electricity recently flourished and developed increasingly on the energy market, doubts were raised regarding their actual ‘greenness’. Indeed, in France, more than 70% of the suppliers are calling themselves so, which led the Agency for an ecological transition (ADEME) to propose a label to steer consumers towards actual clean energy producers. ADEME also noticed that most of the time, the greenest energy suppliers — and this applies to Belgium and Spain as well — asks for participation fees to enter energy cooperatives. Those costs can amount to more than a thousand euros depending on the location and type of subscriptions and can easily refrain citizens from choosing the best green alternatives.

Our proposals would tend to make it more affordable in the long run, by creating networks of larger households and negotiating abatement on such tariffs by prolonging the subscription time to encourage citizens to choose greener electricity suppliers. Similar proposal was experienced in Ontario and developed a cooperative that today supports “the public’s interest in green jobs, good health, strong local communities and clean, affordable energy”. The fact of supporting such energy suppliers would also pull prices down as demand would be ensured. Consequently, this would ensure a good match between suppliers’ need of certainty (demand) and fair cost for customers. It would also allow the gradual enforcement of citizens’ energy networks as the trend of Ontario shows.

I.3 Fair and Inclusive Digital Technologies

“What is perhaps most striking about the public reaction to COVID-19 is the pace and the scale at which digital technologies have been deployed.” Numerous reports have demonstrated how these technologies helped mitigate the impacts of physical distancing and fostered social proximity.¹⁵⁷ “More than communication tools, these virtual places of

¹⁵⁷ Maria Del Mar Negreiro Achiaga, ‘How digital technology is easing the burden of confinement’, *European Parliamentary Research Service*, 2020, retrieved 6 April 2021, [https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/651927/EPRS_BRI\(2020\)651927_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/651927/EPRS_BRI(2020)651927_EN.pdf).

encounter have facilitated knowledge exchanges across the world and greatly expanded the capacity for remote social learning. However, they also highlighted new challenges, including the digital divide, threats to data privacy and safety, and gaps in digital literacy.”

When studying the impacts of digitisation and the proliferation of social media on the emergence and consolidation of environmental citizenship, we must thus consider the capacity of people to connect and interact with the digital world. However, the notion of ‘digital world’, here, must be approached cautiously, for it does not refer to a digital replica of the physical world as we know it, but rather the embodiment of privileges and exclusionary spaces. Whilst digital technology can be praised in some instances for easing the burden of confinement, we should thus emphasise inclusivity, digital rights and approaches focused on helping the most vulnerable.

In this context, we propose that the European Commission should work towards ensuring that social media platforms provide an inclusive space that promotes environmental citizenship and participation.¹⁵⁸ Digital platforms should contribute to the consolidation of environmental citizenship, and the creation of further intergenerational divisions should be avoided, as well as the exclusion of those that have not had satisfactory access to the digital world until today.

¹⁵⁸ Matthew C. Nisbet, ‘Online News and the Demise of Political Disagreement’, *Big Thing*, 2012, retrieved 6 April 2021, <https://bigthink.com/age-of-engagement/online-news-and-the-demise-of-political-disagreement>.

II. Gender Equality as a Necessary Precondition to a Just Transition

Global warming does not affect everyone in the same way. The climate crisis will have the most detrimental effects on the poorest populations, but also on specific gender groups. Women, for instance, were found to be more vulnerable than men to climate change related impacts.¹⁵⁹ This can be partly explained by women's relative disadvantage compared to men in terms of access to education, economic resources, land, and ownership.¹⁶⁰

The transition to a sustainable and climate-neutral economy will create winners and losers. The Just Transition framework adopted by the European Union aims to tackle this issue by assisting territories highly reliant on CO₂ intensive industries in their transition to climate neutrality. However, it currently fails to address gender-related challenges in the context of the ecological transition. We argue that measures to preserve the planet should be used as an opportunity to reduce gender disparities.

Women are also currently hit the hardest by the sanitary and economic crisis triggered by the COVID-19 pandemic. The unemployment rate has increased more significantly among women, the lockdowns have strongly disrupted service-related jobs in which women are disproportionately represented; and the closure of schools and other childcare facilities has left mothers to devote more time to domestic chores than their male counterparts. These imbalances should be tackled in the context of the recovery.

A gender dimension must be integrated into the narrative of the Green Deal and the Just Transition framework, and this should be reflected in the context of the Recovery Plan. President Ursula Von der Leyen has made the Green Deal the main priority of her political mandate, with the objective of tackling climate change and fostering a green transition. She has also made the fight against gender inequality a core principle of her Commission's action with the Gender Equality Strategy for 2020-2025. Nonetheless, no link has yet been made between the two strategies. The Commission should therefore avoid operating in silos and should therefore include its Gender Equality strategy in the design of all Green Deal policies, particularly in the context of the Recovery Plan. An intersectional understanding of climate justice and gender equality is key in delivering a Green Transition that is acceptable to all European citizens.

II.1 A Transition that does not Perpetuate or Exacerbate Gender Disparities

The EU needs to ensure that the recovery from the COVID-19 pandemic and transition towards a low-carbon economy will not perpetuate or exacerbate gender disparities. A stronger focus on gender issues must therefore be added to the European Green Deal.

¹⁵⁹ Karen Morrow, 'Integrating gender issues into the global climate change regime', in: Susan Buckingham and Virginie Le Masson (eds.), *Understanding climate change through gender relations*, London, Routledge, 2017, pp. 31-44.

¹⁶⁰ Irene Dankelman (eds.), *Gender and Climate Change: An Introduction*, London, Routledge, 2010.

To achieve this, the Commission should set up a task force in charge of revising the Green Deal through the lens of gender, and of adapting it accordingly. This integration of the gender perspective must also take place in the context of the Just Transition Framework, through measures such as gender parity conditionality for the obtention of funds and allowances.

Similarly, the notion of gender equality conditionality should be included and integrated in the Next Generation EU budget. This means that the obtention of Recovery and Resilience Facility Funds would be conditional to the implementation of gender equality measures in national recovery plans. More specifically, such plans should include (1) gender parity conditionality for companies that receive state aid, and (2) mandatory plans for companies that receive loans and that suffer from a low proportion of women to implement gender parity.

Finally, the European Commission could also set up a Recovery & Gender Equality Task Force to ensure a gender equality perspective within the Recovery Plan. In doing so, the Commission should integrate points raised in the European Parliament's Resolution on Gender Budgeting, which called the Commission and the Council to *"provide a firm basis for the promotion of gender equality by:*

- *setting adequate gender equality targets, indicators, tools, and redress mechanisms;*
- *ensuring the possibility to fund a specific action;*
- *integrating gender budgeting and gender mainstreaming obligations;*
- *targeted actions including the obligation to collect gender- and age- disaggregated data, to identify data gaps and to produce comprehensive statistics."*¹⁶¹

II.2 Gender Parity in Decision-Making Bodies

It is key that women participate in the green transition as agents of change. It must be ensured that women's rights and voices are central in the transition by promoting women in decision-making positions related to climate change.

Yet women are currently under-represented in decision making bodies related to climate change across the EU.¹⁶² This imbalance should be corrected to allow a feminist narrative on the ecological transition. In this context, we propose that, in constructing bodies with key decision-making power in the field of environmental and climate policy, the European Commission ensures that gender parity considerations are taken into account, to ensure that the green transition is inclusive.

¹⁶¹ European Parliament, *European Parliament resolution on Gender Budgeting in the EU Budget - The way forward*, 28 August 2018, p. 6, retrieved 1 April 2021, https://www.europarl.europa.eu/meetdocs/2014_2019/plmrep/COMMITTEES/FEMM/DV/2018/09-03/20180828DraftResolutionGenderBudgetingintheEUBudget-thewayforward_EN.pdf.

¹⁶² Ilze Burkevica, *Review of the Implementation in the EU of area K of the Beijing Platform for Action: Women and the Environment: Gender Equality and Climate Change*, European Institute on Gender Equality, 2012.

II.3 Gender Parity in Transition Sectors

It is also crucial to ensure parity in sectors that will undergo a significant transition. This means that the diffusion of low carbon technologies, for instance, must lead to further inclusion of women in related activities. Women are currently under-represented in low carbon economic sectors (renewable energy, electric vehicle industry, etc.). However, with the green transition comes an increased level of employment in those sectors. This, in turn, must translate into a reduction in the gender gap within these key sectors. Actions - including setting up quotas and facilitating access - should be undertaken at both the employment and education level to ensure equal participation.

An inclusive environment must be created from the outset, supported by education for women in sectors involved in the transition, and by making gender-conditional loans and subsidies available for these emerging sectors (cf. EP's Resolution on Gender Budgeting). Promoting and giving visibility to female champions in this socio-ecological transition will help inspire their counterparts and should thus be facilitated. Recent research has found that, while girl and young women's education is "disproportionately affected by climate change, it is a powerful yet underused climate solution". In this context, and in the run up to COP26, the European Commission should "leverage the link between girl and young women's education, gender equality and climate change".¹⁶³

¹⁶³ 'A greener, fairer future: Girls' education and climate action', *Chatham House*, 2021, retrieved 6 April 2021, <https://www.chathamhouse.org/events/all/members-event/greener-fairer-future-girls-education-and-climate-action>.

III. Transforming the Common Agricultural Policy

The Farm to Fork strategy is at the heart of the Green Deal, and aims at addressing the challenges of a sustainable food system by linking it to health, environment and sustainable development. The objective is to ensure a soft transition for all the actors in the food value chain towards a more sustainable one. A sustainable food system is a system which takes into account and produces benefits for the environment, climate, health, economic and social factors induced in the food value chain.

The current European food system faces social (health, social rights, affordable, animal welfare), environmental (climate, biodiversity, wastes, circular economy, and recycling) and economic (fairer prices for producers, just transition, new business, and jobs creation) challenges. To address these challenges, we propose to use the CAP as a central tool in the transition towards a sustainable food system, especially by helping farmers and growers implement sustainable practices, save competitiveness and ensure healthy food for all. Environmental citizenship aims at rethinking how individuals, communities and citizens conceptualise their relationship with the environment. This concept has a great role to play in the food value chain. The following proposals will explore different ways to use the CAP as a transition tool and how farmers and growers can take on a new and important role in this transition toward a sustainable food value chain.

III.1 Making the Common Agricultural Policy a Transition Tool

The Common Agricultural Policy (CAP) could be used as an incentive for farmers to engage in sustainable agri-environmental systems. The CAP represents 60% of the EU's budget, and budgetary resources should be allocated to support farmers and growers in the transition, instead of supporting the current unsustainable agriculture scheme.

The CAP could be used to improve the implementation of agri-environmental schemes, such as the perma-culture and circular economy between exploitations. The CAP could also play an important role in investing in high-cost agriculture technology and tools that are necessary to implement sustainable agricultural practices. The financing must be conditioned to the purchase of already identified sustainable and climate or environmental efficient tools and technologies. For instance, a specific CAP fund should be created with the purpose of incentivising farmers towards investing in biomethane production installations on their fields and exploitation. Finally, the obtention of funds from the CAP should be conditional and include training for farmers to promote the use of sustainable business models and innovative agricultural techniques.

III.2 European Agricultural Cooperatives Networks

Through agricultural cooperatives, producers, suppliers, and traders can access more suppliers and markets at a reasonable cost, while achieving economies of scale.¹⁶⁴ This process frees funds, which can be invested towards greener technologies and practice. We propose the creation of a European network of agricultural cooperatives to promote new agricultural models, such as permaculture. This would be an opportunity to give a real European dimension to farmers by giving them an institution of influence at European level, which takes into consideration the interests of farmers of all sizes and ages, strengthening the role and sense of ownership of those at the start of the food production process. It would also be an opportunity to share the costs of investments and agricultural machinery between all farmers in Europe. Equally, it could serve as a forum to share good practices, such as new farming systems and new sustainable business models. Finally, it would strengthen the resilience of the system by creating European solidarity between farmers.

III.3 Helping Young Farmers

This proposition is linked to the revaluation of farmers' role in our society, such as the better inclusion of farmers within the Farm to Fork Strategy, the facilitation of their expression within citizen deliberation bodies, and the enhancement of farmers' own Research and Development.

Policies linked to sustainable food value chains need to focus more on the place given to the producers in the value and policy chain. It has become clear that food producers are essential workers. In this context, it is of crucial importance to help young farmers secure rights and facilitate their access into the eco-market, providing them with new, environmentally sustainable opportunities.

Even though the Erasmus+ and Erasmus for Young Entrepreneurs programmes are open to young farmers, the access to the programme is not sufficient and some conditions should be reconsidered. In the same vein as our proposal of a new Environmental Erasmus Programme, we propose creating an Erasmus+ programme specifically for young farmers and fishers, which will enable them to discover other innovative practices, ways of life and cultures in the EU, while also reflecting on some of the common challenges they face.

¹⁶⁴ 'Agricultural Cooperatives: Types And Pros & Cons', *Earth Observing System*, 2020, retrieved 6 April 2021, <https://eos.com/blog/agricultural-cooperatives/>.

IV. Rewarding Sustainable Business Models

Production and consumption very often affect “consumer utility and enterprise cost outside the market mechanism in the form of uncompensated environmental effects”.¹⁶⁵ These costs are known as environmental externalities. The fact that the environmental cost or benefit of certain consumer behaviours are not taken into consideration by private actors, and are thus not reflected in the market equilibrium, constitutes a market failure. In other words, individual incentives for rational behaviour do not lead to rational outcomes for the group.

In this context, financial incentives can encourage European citizens to switch towards more environmentally friendly consumption behaviours and can therefore constitute a useful tool in rewarding sustainable business models. Financial incentives can be used to internalise externalities and ensure efficient market distribution. Rewarding sustainable business practices will ensure that consumers have competitive and sustainable choices at their disposal in the market, while encouraging more companies to switch towards the provision of such goods and services. Furthermore, it is worth noting that financial incentives have been shown to be more efficient than regulatory instruments.¹⁶⁶

IV.1 Greening State Aid

The EU should aim at greening the state aid scheme. By providing state aid to ‘green’ companies that either comply with the highest environmental standards or produce environmentally friendly products, their competitiveness would be increased, and therefore greener goods and services would become more affordable.¹⁶⁷ As has been shown by price sensitivity studies, such an evolution would lead to an increase in the consumption of greener goods and a decrease in the consumption of the equivalent more polluting ones. This option is also more politically feasible than the imposition of a ‘Pigou’ tax (in the form of increased VAT for non-environmentally friendly products) that would prejudice against low-income citizens and could lead to social unrest (for e.g., the yellow vests movement in France, initiated by the decision of the government to impose a carbon tax¹⁶⁸).

The EU already applies this logic to some goods and services. One recent example is the approval of a €300 million German aid scheme to support transition to sustainable local

¹⁶⁵ ‘Glossary of Statistical Terms: Environmental Externalities’, *Organisation for Economic Co-operation and Development*, 2003, retrieved 6 April 2021, <https://stats.oecd.org/glossary/detail.asp?ID=824>.

¹⁶⁶ Katri Kosonen and Gaedan Nicodeme, *Taxation Papers: The role of fiscal instruments on environmental policy*, Luxembourg, Office for Official Publications of the European Communities, 2009, retrieved 6 April 2021, https://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/gen_info/economic_analysis/tax_papers/taxation_paper_19.pdf.

¹⁶⁷ Michael Spence, ‘Cost reduction, competition, and industry performance’, *Econometrica: Journal of the Econometric Society*, 1984, pp. 101-121.

¹⁶⁸ Frédéric Simon, ‘Yellow vests’ spark EU debate about just transition to clean energy’, *Euractiv*, 2018, retrieved 6 April 2021, <https://www.euractiv.com/section/energy/news/yellow-vests-spark-eu-debate-about-just-transition-to-clean-energy/>.

public transport. Vice-President M. Vestager argued that that “The scheme will foster the reduction of carbon emissions through sustainable mobility and the rolling out of cleaner and cheaper forms of public transport, in line with the important objectives of the European Green Deal”.¹⁶⁹ This example can be extended to a broader scope, leading to greater benefits.

IV.2 Greenwashing & the EU Taxonomy for Sustainable Activities

In order to meet the EU’s climate targets of the European Green Deal, it is crucial to direct investments towards sustainable projects and activities. In the light of increased frequency of natural disasters and global losses amounting to €175 billion in 2020, with a peak of €290bn in 2018,¹⁷⁰ the financial sector currently carries an increasingly costly burden. In addition to the physical risk associated with climate change, liability risk for polluters and insurers, and most notably transition risk arising from changes and innovations in policy and technology lead to a significant reassessment of asset prices and thereby threaten the security and stability of thereof.¹⁷¹

To account for this risk and make the sustainability of assets more transparent, the 2020 Taxonomy Regulation sets a single standard across Europe to facilitate cross-border investments for the green transition.¹⁷² The legislation established an ‘EU Green Taxonomy’ presenting a classification system for financial assets based on their sustainability and the climate-related and environmental risk attached to them. An important characteristic of such a classification is its objectiveness, as it encourages investors to regard investment possibilities from a common standard, avoiding the negative impact of greenwashing. The precise list of sustainable activities in the context of this regulation, however, is yet to be established and continuously revised by an expert committee within the European Commission.¹⁷³ To bring the regulation closer to consumers, however, we suggest that it must become more readily available and easily accessible.

¹⁶⁹ ‘State aid: Commission approves €300 million German aid scheme to support transition to sustainable local public transport’, *European Commission*, 2020, retrieved 6 April 2021, https://ec.europa.eu/commission/presscorner/detail/en/IP_20_2518.

¹⁷⁰ ‘Record hurricane season and major wildfires: The natural disaster figures for 2020’, *Munich RE*, 2020, retrieved 6 April 2021, <https://www.munichre.com/en/company/media-relations/media-information-and-corporate-news/media-information/2021/2020-natural-disasters-balance.html>.

¹⁷¹ Mark Carney, ‘Breaking the Tragedy of the Horizon: Climate Change and financial stability’, *Bank of England*, 29 September 2015, retrieved 4 March 2021, <https://www.bankofengland.co.uk/-/media/boe/files/speech/2015/breaking-the-tragedy-of-the-horizon-climate-change-and-financial-stability.pdf?la=en&hash=7C67E785651862457D99511147C7424FF5EA0C1A>.

¹⁷² ‘EU Taxonomy for sustainable activities’, *European Commission*, 2021, retrieved 4 March 2021, https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en.

¹⁷³ EU Technical Expert Group on Sustainable Finance, *Taxonomy: Final report of the Technical Expert Group on sustainable Finance*, European Commission, 2020, retrieved 4 March 2021, https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf.

IV.3 Re-Thinking Marketing Strategies

A powerful tool to influence consumers' purchases are promotional flyers, used by retailers and manufacturers to communicate promotions in sectors such as grocery, electronics, drugstore, and furniture. Flyers accounted for 50% of the average retail marketing budget in Italy and 60% in France.¹⁷⁴ 12 billion flyers are printed yearly in Italy, producing 500,000 tons of carbon emissions.¹⁷⁵ Many points suggest that the integration of digital practices is needed to improve shopper marketing activities and the role of consumers. Despite the existence of websites and apps, the printing and distribution of flyers continues to have an impact on paper waste, carbon footprint and the awareness of eco-friendly consumers.

In this context, it is of key importance to reconsider marketing strategies as they have been developed until now. Significant evidence points towards the advantages of redesigning one's logo and website through eco-branding practices,¹⁷⁶ or reconsidering the impact of promotional emails and newsletter subscription. We propose that the European Union institutions start by reconsidering the environmental footprint of their websites and promotional materials, and in doing so encourage other market actors to engage in similar discussions.

¹⁷⁴ Cristina Ziliani and Marco Leva, 'Retail shopper marketing: the future of promotional flyers', *International Journal of Retail & Distribution Management*, vol. 43, no. 6, 2015, p. 489.

¹⁷⁵ *Ibid.*, p. 492.

¹⁷⁶ BALO, 'Quand le graphisme détruit l'environnement (Eco-branding)', *YouTube*, 2021, retrieved 6 April 2021, https://www.youtube.com/watch?v=gtmM3_cuz_I.

V. Further Coordination in the Area of Environmental Taxation

According to the principle of conferral, competences are split between the EU Member States and the EU.¹⁷⁷ In the case of taxation, the EU has only limited competences. We can however distinguish two types of taxations following this division of competences. On one hand, direct taxation mainly remains in the hands of the EU Member States (i.e. taxes dealing with income, wealth and capital).¹⁷⁸ Indirect taxation, on the other hand, are taxes that are not levied on income or property, such as value-added tax (VAT), excise duties, imports levies, and energy and other environmental taxes.¹⁷⁹ In order to directly address citizens' needs and face the social costs of a green transition, the following proposals focus on the local level, which we regard as the starting point for establishing social dialogue and promoting policy development. This implies the rejection of a 'one size fits all' approach, which would not allow for addressing all local specificities and social inequalities of different areas. The following proposals include, as their basic components, EU financial incentives in the framework of a distributive approach.

V.1 Indirect taxation and enhanced cooperation

The harmonisation and increase in taxation for high polluting goods and services is an effective tool to discourage consumers and companies from polluting, and therefore to encourage them to reduce their environmental footprint. However, this option may not seem fair for all EU Member States and their citizens, and thus a unanimous compromise might not seem realistic. In this context, Article 329 TFEU on enhanced cooperation could prove useful in overcoming this challenge and achieve great results.

The European Commission could propose a piece of legislation dealing with taxation on high polluting goods and services. Given the limitations of the EU's competences in tax-related matters, the Open Method of Coordination could allow for an exchange in best practices between the EU Member States and strengthen the discourse around sustainable options among stakeholders and civil society.¹⁸⁰

¹⁷⁷ cf. Article 4 and Article 5 (ex Article 5 TEC) of the Treaty on European Union (TEU), *Official Journal of the European Union*, C 202, 7 June 2016, p. 18.

¹⁷⁸ Dirk Verbeken and Dražen Rakić, 'Fact Sheets on the European Union: Direct taxation: Personal and company taxation', *European Parliament*, 2020, retrieved 7 April 2021, <https://www.europarl.europa.eu/factsheets/en/sheet/80/direct-taxation-personal-and-company-taxation>.

¹⁷⁹ Dirk Verbeken and Dražen Rakić, 'Fact Sheets on the European Union: Indirect taxation', *European Parliament*, 2020, retrieved 7 April 2021, <https://www.europarl.europa.eu/factsheets/en/sheet/81/indirect-taxation>.

¹⁸⁰ Erika Szyszczak, 'Experimental Governance: The Open Method of Coordination', *European Law Journal*, vol. 12, no. 4, 2006, pp. 486-502.

V.2 The EU Emissions Trading System (ETS)

The EU considers its EU emissions trading system (EU ETS) as the cornerstone of its green policy to fight climate change.¹⁸¹ Significant progress could be made by improving the system. To incentivise polluting sectors and CO₂ emitters to reduce greenhouse gases, the ETS could implement a threshold on quotas that can be traded per company; a threshold of surplus of quotas that companies would be able to keep for the future; and to set up a use-by-date quota system. These solutions would increase the price of carbon emission, and therefore potentially speed up the transition to a decarbonised and a low-carbon technology-based economy. This would prevent sectors facing economic difficulties to trade their credits, and therefore allow other sectors to pollute more, and therefore reduce price volatility on the EU ETS market. The European Union cannot afford price volatility on this market, as it happened prior and during the financial crisis of 2008.

As opposed to what happened in 2008, prices have surged by 60% since November 2020 onwards, hitting a record of nearly €40/tonne of carbon dioxide equivalent.¹⁸² Indeed, around 230 investment funds hold futures linked to the EU's allowance. Therefore, experts expect that, with a 55% objective, the number of allowances will decrease and the demand will increase, putting the price to €80/tonne - which would be really interesting for investors.¹⁸³ This may cause high volatility, as well as greater liquidity. Therefore, the European Commission should establish a control/monitoring mechanism on the market to prevent further volatility, as well as a price floor. This monitoring mechanism should include the main beneficiaries of these allowances, such as power utilities, industrial firms, as well as financial firms.

V.3 Customs Union and the Carbon Border Adjustment Mechanism (CBAM)

Furthermore, to complete the EU emission trading system, a carbon border tax must be implemented. Although a consultation on the "carbon border adjustment mechanism" is currently being conducted,¹⁸⁴ we present our contribution to the design and implementation of the system. The carbon border tax must be designed so that it fulfils the UN Sustainable Development Goals for 2030.

Indeed, it must encourage companies to produce within the European Union, and therefore comply with high EU standards and regulations dealing with social and environmental standards, or prevent companies from outsourcing their production in

¹⁸¹ 'Climate Action: EU Emissions Trading System (EU ETS)', *European Commission*, n.d., retrieved 7 April 2021, https://ec.europa.eu/clima/policies/ets_en.

¹⁸² David Sheppard, 'EU carbon price soars to record highs', *Financial Times*, 4 February 2021, retrieved 7 April 2021, <https://www.ft.com/content/915f168a-0d7d-4cb6-abe1-6dbf8f40188f>.

¹⁸³ 'Prices in the world's biggest carbon market are soaring', *The Economist*, 24 February 2021, retrieved 7 April 2021, <https://www.economist.com/finance-and-economics/2021/02/24/prices-in-the-worlds-biggest-carbon-market-are-soaring>.

¹⁸⁴ 'EU Green Deal (carbon border adjustment mechanism)', *European Commission*, n.d., retrieved 7 April 2021, <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12228-Carbon-Border-Adjustment-Mechanism>.

countries with low environmental standards, and therefore preventing an outsourcing of CO₂ emissions. In addition, it could raise the EU's own resources according.

Some fear "green protectionism" from such a measure.¹⁸⁵ However, this must be instead considered as 'precaution-ism' considering the EU's commitments within international fora as well as bilateral and multilateral agreements. The EU supports liberal multilateralism and reassures its compliance with the WTO's framework.¹⁸⁶ However, the EU, as well as the rest of the world, also committed to implement the Paris Agreement.

¹⁸⁵ María Victoria Lottici, Carlos Galperín and Julia Hoppstock, "'Green Trade Protectionism': An Analysis of Three New Issues that Affect Developing Countries', *Chinese Journal of Urban and Environmental Studies*, vol. 2, no. 2, 2014, pp. 1450016(1-32).

¹⁸⁶ Pascal Lamy, Geneviève Pons and Pierre Leturcq, 'A European Border Carbon Adjustment Proposal: Greening EU Trade 3', *Institut Jacques Delors*, 6 June 2020, retrieved 7 April 2021, <https://institutdelors.eu/en/publications/a-european-border-carbon-adjustment-proposalgreening-eu-trade-3-2/>.

Conclusion

At first glance, the green transition may seem to many as a burden, especially when we consider the additional economic, social, and psychological hardship caused by the COVID-19 pandemic. However, it is both necessary and unavoidable, and it will completely transform society as we know it. The European Union has been at the forefront of climate action for the past decades, and it has the opportunity to once again set an example for other countries and regions in the world by openly supporting environmental citizens. This would not only reaffirm the EU's position as a global climate leader, but also send a strong message to other environmental citizens in the world: that this transition affects everyone, and that the solution to the challenges it represents is to work all together.

Placing environmental citizenship at the centre of the European Union green transition would encourage further public participation in the EU policy-making process and reinforce the accountability of EU institutions. It would support the idea that, despite our national differences, we all share the rights and duties of a common European environmental citizenship. In turn, this could constitute a core pillar of the European identity that so many have sought to promote before us. The concept of environmental citizenship could thus also play a major role in encouraging further European integration and bringing European citizens together around shared values and principles.

Crucially, encouraging citizens to act together under the umbrella of environmental citizenship would also help create and sustain momentum for additional changes as part of the green transition. Governments and political institutions have a major responsibility in guiding this transition and providing an appropriate framework for all European citizens, but they must also provide opportunities for more bottom-up participation. For instance, new and better standards can be put in place, but their long-term success will often depend on the degree of inclusion of (environmental) citizens in the conception and implementation of such measures.

A higher level of participation is not only key to address democratic concerns and share best practices, it is also essential to ensure that the green transition benefits all European citizens fairly. In this report, we have aimed at delivering tangible and effective proposals that will bolster the notion of environmental citizenship and make it accessible to all EU citizens. After identifying a theoretical framework and a series of key principles, we have addressed this notion from an educational and democratic participatory point of view. We presented proposals to encourage more sustainable lifestyles but also to remind private, public, and individuals actors of their own responsibilities. Finally, we discussed the meaning of a just socio-economical green transition and its implications for environmental citizenship. It is our hope that this report will contribute to the important debate that surrounds the green transition, and provide some helpful ideas to ensure that all European citizens participate, contribute and benefit from the green transition.

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