THE CRITICAL CROSSROADS

On the ecosocial crisis and the change of historical epoch

Fernando Prats, Yayo Herrero y Alicia Torrego

Collaborations: J. Riechmann, M. Novo

Á. M. González-Tablas, N. Morán, A. Serrano

M. Mediavilla, F. Marcellesi, M. E. Rodríguez Palop

J. Bellver, N. del Viso, O. Abasolo, L. Vicent

SUMMARY

TIME
OF
TRANSITIONS

TIME
OF
TRANSITIONS

THE CRITICAL CROSSROADS

REFLECTIONS ON THE ECOSOCIAL CRISIS
AND THE CHANGE OF HISTORICAL EPOCH

—————————— **SUMMARY** ——————————

Fernando Prats, Yayo Herrero y Alicia Torrego

Collaborations: J. Riechmann, M. Novo, Á. M. G. Tablas, N. Morán
A. Serrano, M. Mediavilla, F. Marcellesi, M. E. Rodríguez Palop
J. Bellver, N. del Viso, O. Abasolo, L. Vicent

PREFACE

> *Humans are now the most significant driver of global change, propelling the planet into a new geological epoch, the Anthropocene. We can no longer exclude the possibility that our collective actions will trigger tipping points, risking abrupt and irreversible consequences for human communities and ecological systems. (...) We cannot continue on our current path. The time for procrastination is over.*
>
> *Nobel Laureates' Memorandum on Sustainability, Stockholm, 2011*

These are decisive times; times when current generations are faced with the responsibility of dealing with a global ecological crisis capable of determining the future of human societies on our planet. As the Nobel Laureates warned in the Stockholm Memorandum, the unsustainable patterns in production, consumption, and population growth are already overstepping the planet's biophysical limits.

We have also witnessed a change in perceptions of the scope of the ecological crisis since 1972 when the main institutional, business, and academic elites rejected the warnings contained in *The Limits to Growth*, a report prepared for the Club of Rome by a group of scientists from the Massachusetts Institute of Technology (MIT). That pioneering report had the merit of anticipating the scenarios of foreseeable global ecosocial crisis towards which humanity is hurtling and at that time already considered the need to urgently implement profound transformations in the prevailing patterns of development.

Four decades of precious time later, the main messages transmitted by MIT and the Club of Rome enjoy well-deserved recognition around the world. Important figures and institutions of the most diverse backgrounds (the United Nations and the European Union, Pope Francis, the Nobel Laureates, the main scientific institutions working on the climate and natural systems, NASA, and even President Obama himself) have made statements that, despite the inadequacy of the commitments made and their contradictions, recognise the extraordinary importance of the ecological, energy, and climate challenge and the need to tackle it without delay. All of this explains why the 2015 United Nations Climate Conference in Paris (COP21) was a global convention with 195 countries debating on 'the urgent threat of climate change'.

Theories denying the existence of the ecological crisis and its relationship with human activity have essentially been debunked and, despite the deep and complex contradictions that pervade the world, central importance has been gained by debates on certain crucial issues:

- the capacity/incapacity of technoscience alone to resolve the growing contradictions between the prevailing patterns of development and the preservation of life systems;

- the possibility/impossibility that the process of change could be led by the same political and economic power conglomerates that have brought us to this point;

- to trust in the idea that the transformations we need can be driven by a globalised (Market or State) capitalism fuelled by the logic of accumulation and unlimited/indiscriminate consumption or to acknowledge the need to come up with new paradigms, principles, and logics of action that could allow us to live decently and without harming the biosphere; or even

- whether the 'windows of opportunity' for change are still open at all or, on the contrary, have been closed, shedding doubt on the success of efforts to efficiently redirect the path towards ecosocial collapse.

Knowing that what is at stake are the foundations of contemporary life, in 2013 the CONAMA and FUHEM Foundations launched the transdisciplinary plural think tank Transitions Forum (Foro Transiciones), with the aim of enriching debate around the change of epoch and the issues that, from the ecosocial perspective, are going to decide the future of humanity. In this regard, the Forum has recently taken the initiative to support studies that, under the heading 'Time of Transitions'1 ('Tiempo de Transiciones'), offer analyses and proposals to address processes of change in our country, taking into consideration other more global contexts, especially Europe.

The Critical Crossroads: On the ecosocial crisis and the change of historical epoch, the text summarised here, forms part of that initiative and its content delves into the question of how to deal with the challenges described. For this, its authors present a series of analyses and proposals in order to begin to articulate a coherent narrative to address these challenges: 1) they identify the change of historical cycle, the relationship of the overshoot of the biosphere's limits with the prevailing patterns of development, and the inadequacy of the measures adopted so far; 2) they insist on the need to shed light on new paradigms and general principles to redirect the processes of ecosocial destabilisation towards scenarios where the limits of the planet's biocapacity may coexist with inclusive and adequate levels of well-being; 3) they demand a cycle of exception and emergency in order to reach certain key transformations by mid-century, suggesting proposals to shape the bases of a more democratic, just, and sustainable Country-Project; and 4) they warn of the predictable resistance of the economic and political elites when it comes to changes in logics, priorities, and constituent initiatives that support a deepening of the democratic power of majorities. Lastly, the book concludes with a series of articles by members of the Forum presenting diverse visions on and issues related to transitions.

We hope that the publication of *The Critical Crossroads* will be useful for stimulating debate in society on the importance of ecosocial challenges for current and future generations. Because, despite our knowledge gaps, we know enough

---

1. The task of the Transitions Forum is to support the publication of studies that are considered to be of general interest, but the Forum, due to its plural character, does not necessarily share collectively in the arguments presented in each case by the corresponding author(s).

to start to transform a reality in which life as we know it is in danger for the first time in human history.

TRANSITIONS FORUM*

*The Transitions Forum is currently formed by the following members: **Alicia Torrego**, manager of the CONAMA Foundation and secretary general of the Spanish Physicists Association; **Álvaro Porro**, co-founder of the CRIC (Centre for Research and Information on Consumption) and the journal *Opciones* and member of Guanyem Barcelona; **Andrés Gil**, journalist, co-founder, and chief editor of eldiario.es; **Ángel Martínez y González Tablas**, professor of International Economy and president of the FUHEM Foundation; **Antonio Lucio**, member of the Madrid Assembly's Corps of Lawyers, director of the journal *Ecosostenible*, and vice-president of the Spanish Green Building Council; **Antonio Serrano**, president of Fundicot (Interprofessional Spatial Planning Association), professor of Urban and Spatial Planning, and former secretary general of the MIMAM (Ministry of the Environment); **Cote Romero**, co-founder and state coordinator of the Platform for a New Energy Model and coordinator of Ecooo; **Fernando Prats**, co-author of the *Informe sobre las ciudades* and member of the Steering Committee for Reports on Energy, Transport, and Building in the Universidad Complutense de Madrid's (UCM) Global Change Spain 2020/50 Programme; **Florent Marcellesi**, spokesperson for EQUO in the European Parliament, member of EcoPolítica and the journal *Ecología Política*, and author of numerous texts on political ecology and ecosocial transitions; **Jorge Ozcáriz**, former director of the City Council of Vitoria's Department of the Environment and co-author of the *Informe sobre las ciudades* within the Universidad Autónoma de Madrid's (UAM) Global Change Spain 2020/50 Programme; **Jorge Riechmann**, poet, essayist, professor of Philosophy in the UAM, and author of multiple publications on political ecology; **José Bellver**, researcher for FUHEM Ecosocial and member of the Research Group on Socioecological Transitions in the UAM; **Lucía Vicent**, researcher in the Complutense Institute of International Studies (ICEI-UCM) and in FUHEM Ecosocial; **Luis Álvarez Ude**, former director general of the Spanish Green Building Council and director of the Report on Sustainable Building in Spain within the Global Change 2020/50 Programme; **Manuel Monereo**, political scientist and member of the Civic Platform Somos Mayoría; **Marga Mediavilla**, professor and member of the Research Group on Energy, Economy, and Systems Dynamics in the Universidad de Valladolid (UVA) and vice-president of the Advisory Board for Ecogermen; **María Novo**, UNESCO Chair in Environmental Education and Sustainable Development in the Universidad Nacional de Educación a Distancia (UNED) and author of several books on this subject; **María Eugenia Rodríguez Palop**, PhD in Law, author of numerous publications on law and the environment, and tenured professor of Philosophy of Law in the Universidad Carlos III de Madrid (UC3M); **Manuel Garí**, former director of the Department of the Environment in ISTAS (Trade Union Institute of Employment, the Environment, and Health) and co-director of the Universidad Politécnica de Madrid's (UPM) University-Business Chair; **Nerea Morán**, PhD in Architecture, researcher in UPM, expert on urban agriculture, food systems, and bioregions, and member of the collective Surcos Urbanos; **Nuria del Viso**, social anthropologist and expert on socioecological issues and conflicts in FUHEM Ecosocial; **Olga Abasolo**, deputy in the Madrid Assembly and former chief editor of FUHEM's *Papeles de Relaciones Ecosociales y Cambio Global*; **Pedro J. Lomas**, PhD in Ecology, researcher in ICTA (Institute of Environmental Science and Technology) in the Universidad Autónoma de Barcelona (UAB), and collaborator in the Report on Millennium Ecosystems in Spain; **Víctor Viñuales**, director of the Ecology and Development Foundation (ECODES) and associate professor of the Higher Programme in Managing Corporate Responsibility at IE Business School; **Yayo Herrero**, former confederal coordinator of Ecologistas en Acción and general director of the FUHEM Foundation. The administration is run by **José Luis Fernández Casadevante**, sociologist, member of Garúa, activist, and author of *Raíces en el asfalto*.

SUMMARY CONTENTS

ON THE BOOK AND ITS KEY CONSIDERATIONS

> *One civilization is ending and we must build a new one. Doing nothing, or too little, will lead us directly to social, economic, and ecological collapse. But if we start today, we can still become the protagonists of a society that is united, democratic, and in peace with the planet.*
>
> *'Last Call' Manifesto (2014).*

If the travellers with the cheapest spots on the Titanic had been asked about their grievances a few hours before the shipwreck, they most likely would have considered questions about the precariousness of their cabins, the food, or the discriminatory treatment received, but none would have been able to demand a change of course in order to avoid the catastrophe. They simply could not have done so because the information they had was not enough to know that the vessel's course had been recklessly determined by the owners and was leading them towards a shipwreck that would claim many lives.

Our lives are at stake

In a way, when we talk now about the ecological crisis and the threat of social collapse, the dynamics of today's world seem similar to those of the Titanic. Our lives are at stake and, in a world determined by short-term corporate interests, there is a lack of understanding of the seriousness of the risks we are taking if we do not change these dynamics in a very short space of time.

The Critical Crossroads has a 'proactive' spirit in the sense that it tries to suggest urgent and profound processes for a change of course, refusing to accept that 'there are no alternatives', even if it is also aware that the real dynamics of today's world suggest otherwise.

In the service of that spirit, its authors try to do three things: 1) to summarise information from well-known institutions and research centres in order to argue that the ecological crisis is real and is leading towards the collapse of the societies we live in; 2) to contribute to the debate by outlining a coherent narrative and suggesting the bases of an alternative contract between social majorities to try to take advantage of what could be the last 'windows of opportunity' and to make the ecosocial change as lucid and well-organised as possible; and 3) to try to make this text reach the greatest number of people through its open online distribution.

Moreover, this book is especially addressed to the drivers of new politics and new cultures. To the former, because its content will only find its proper path through political action, which requires an innovative vision that is independent from the powers that be that determine the world's pace. And to the latter,

because the necessary changes, which are of immense significance, will only be possible with a profound overhaul of the values and symbols that shape the opinion of individuals and citizens' movements, the real agents of social change.

A tentative narrative on transitions towards more democratic, just, and sustainable future scenarios

We must also point out that the structure of the narrative and the issues it deals with are the result of the reflections and experiences that its authors, beyond their own personal journeys, have shared over the years. Firstly, in the development of the Fundación General de la Universidad Complutense de Madrid's Global Change Spain 2020/50 Programme (2008–2011) and, later, in the studies developed in connection with the Transitions Forum, which reflect on the change of historical epoch from the ecosocial perspective.

The Critical Crossroads can only be understood as an incomplete and perfectible first step in a complex and normally neglected subject that, in the authors' opinion, could be useful for stimulating debate among citizens on how to deal with extraordinary challenges that cast doubt on the systems that support (our) life on Earth.

The book that this **Summary** describes contains an introduction, two parts with twelve chapters in total (each focused on the ecosocial issue), an epilogue, and a series of articles. It can thus be read partially or in full, which in turn means that in the overall text some reiterations may be noted. The general **Introduction**, after exploring the historical dimension of the ecological crisis, outlines the socio-economic and political context of the current recession, the breakdown of the social contract, the imposition of neoliberal austerity formulas, the increase in social inequality, and the resulting institutional crises.

The First Part takes a general approach. Chapter 1 synoptically explores the change of epoch and the need to identify new paradigms of ecosocial evolution and adaptation. Chapter 2 looks at the strategic importance and urgency of dealing with energy and climate change challenges. Chapter 3 considers the need to understand the historical change as a complex process of transition with an initial 'short cycle' of exception and emergency up until the middle of the century. Chapter 4 reflects on the real possibilities that exist to combine social well-being with the correction of the ecological/climate overshoot and emphasises the importance of social imaginaries in changing times. Lastly, chapter 5 highlights the centrality of cities and citizens in the coming transitions.

The Second Part focuses on Spain and reviews various elements on which to build possible social agreements for transitions. Chapter 6 explores the democratic re-appropriation of the political framework and the opening up of possible constituent processes. Chapter 7 considers the question of the necessary preservation/resilience of ecosystems and ecosystem services. Chapter 8 points to the necessary transformation of the energy/climate field in order to progress towards future scenarios with low carbon levels by mid-century. Chapter 9 reconsiders the logics and the material scale of the economy and of its productive sectors.

Chapter 10 evaluates and redefines territorial and urban strategies. In chapter 11, contributions are called for from culture and science in order to sustain/ adapt to the change. And this second part ends, in Chapter 12, by reflecting on areas of action, especially in relation to the necessary revamping of the common European framework.

Lastly, the book has a short **Epilogue** that considers how the definition of a 'way out of the crisis' also needs to include ecological challenges, followed by the section **Transitions: Under Debate**, which presents a series of opinion articles written by different members of the Transitions Forum.

Next, we present **ten considerations that summarise the central ideas of the book** and allow for an overall sense of its main proposals.

1. A CHANGE OF HISTORICAL EPOCH

There is every indication that we are facing a change of historical epoch in which the ecological crisis and the threat of social collapse are real; time is critical and the measures adopted so far are insufficient.

The information provided by the main international panels of experts (the United Nations (UN), the European Union (EU), the Organisation for Economic Co-operation and Development (OECD), and numerous universities) is explored in **Chapter 1** and points to the following considerations: 1) we are witnessing a change of era conditioned by our overstepping the limits of the planet's biocapacity; 2) this reality is linked to the ecological impacts generated by the logics of capital accumulation and unlimited consumption that prevail in the main global economies (China, the United States, the EU, Japan, India, and Russia); and 3) if these logics are not modified in time, the processes of deterioration and crisis of the systems that sustain life as we know it could lead to a systemic crisis of extraordinary scope.

The *Memorandum of the Nobel Laureates' Symposium on Sustainability*, held in the city of Stockholm in 2011, reaffirms this when it warns us that 'Unsustainable patterns of production, consumption, and population growth are challenging the resilience of the planet to support human activity. (...) Science indicates that we are transgressing planetary boundaries that have kept civilisation safe for the past 10,000 years. Evidence is growing that human pressures are starting to overwhelm the Earth's buffering capacity.'

Ecosocial collapse as a global process of progressive loss of complexity and social stability

Ecosocial collapse is understood here as a global process of growing/discontinuous loss of ecosystemic complexity (the impossibility of maintaining energy and natural metabolisms as intense and interrelated as current ones) and of social stability (the fight for resources and territories, socio-political disruption, and migrations), and the path towards it is paved by our overstepping the Earth's biocapacity:

- Currently, we are increasingly exceeding the planet's ecological limits and already in 2010 this was reflected in a rate of global overshoot (ecological footprint/biocapacity) of approximately 150 per cent.

- If the current demographic patterns continue, new population growth is estimated at 40 per cent (9,600 million inhabitants) by mid-century

and at 60 per cent (11,000 million inhabitants) around the year 2100. Furthermore, the ecological impact per inhabitant continues to grow due to the general imitation of the socio-economic models of the countries with the largest economies and the greatest ecological deficits per capita.

Beyond circumstantial junctures (for example, the oil crisis today), we can already discern growing structural shortages in energy and natural resources, in different foods, and in certain materials. There is also evidence of increases in critical disturbances in the biosphere's ecosystems and life cycles, among which we find, though not alone, the carbon cycle and its effects on the climate. That is to say, we are facing a problem of global, and not merely climatic, overshoot.

The contribution of certain techno-scientific advances (the circular economy, eco-efficiency, renewable energy systems, etc.), while vital, is insufficient for curbing the growing ecological overshoot in the context described. And we must not forget that, on many occasions, the deployment of R&D in the service of prevailing economic logics constitutes one of the most significant vehicles for the generation of ecological unsustainability.

It is essential, therefore, to understand ecological trends as global phenomena with diverse manifestations (for example, in terms of energy, climate change, and other ecosystemic disturbances) that interrelate with each other and are rooted in the world's dominant patterns of socio-economic development, which are extraordinarily voracious in terms of resources and the disturbance of natural systems.

As indicated in 2013 by the European Environment Agency (EEA) in its report *The European environment - state and outlook 2015*: 'Taken together, the analysis suggests that neither environmental policies alone nor economic and technology-driven efficiency gains are likely to be sufficient to achieve the 2050 vision. Instead, living well within ecological limits will require fundamental transitions in the systems of production and consumption that are the root cause of environmental and climate pressures. Such transitions will, by their character, entail profound changes in dominant institutions, practices, technologies, policies, lifestyles and thinking.

The time for tackling the change is critical and the commitments made so far are insufficient

The information available warns, moreover, of the critical evolution of life cycles and the non-viability of future trends if transformations deeper than those committed to until now are not implemented.

Among many other reports, it is worth mentioning the United Nations' 2005 *Millennium Ecosystem Assessment*; the *Planetary Boundaries* study, coordinated in 2009 by the University of Stockholm; the *Resilient People, Resilient Planet* document, prepared by the United Nations for the Rio+20 Summit in 2012; and the successive **reports by the Intergovernmental Panel on Climate Change** (IPCC).

Also significant are the evaluations of the International Energy Agency (IEA). In its 2015 *Special Report on the Paris Climate Change Conference*

(COP21) it recognises that the advances made by the main countries (China, the European Union, and the Obama Plan in the United States, among others) will not be enough to prevent increases in temperature at the end of the century from surpassing the limit of between 1.5 °C and 2 °C. This limit is established relative to pre-industrial levels and is considered as a red line which must never be overstepped.

In a more expressive way, the ***Living Planet Report***, prepared annually by the World Wildlife Fund (WWF) together with the British Ecological Society and the Global Footprint Network, indicates that already in 2010, before the resurgence of the economic recession, 1.5 planets were needed to compensate for the excessive impact caused by humanity. Moreover, it claims that in the absence of profound changes, the number of planets needed will likely increase to 2 in 2030 and to 2.8 by mid-century. Something which is, of course, unviable.

Figure 1 shows how humanity's ecological footprint (EF) continues to expand while the Earth's biocapacity (BC) reduces, increasing both the tendency towards ecological overshoot (EO = EF/BC) and the depth of the ecological collapse.

FIGURE 1. EXPANSION OF THE ECOLOGICAL FOOTPRINT IN
RELATION TO THE PLANET'S BIOCAPACITY

EF: Ecological Footprint / BC: Biocapacity / EO: Ecological Overshoot
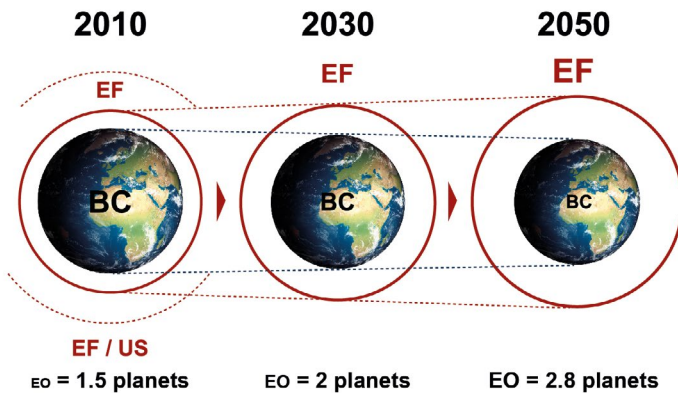
Source: Compiled by authors using the WWF *Living Planet Report 2010.*

2. THE CHANGE AS A COMPLEX TRANSITION

We need to bring forth narratives and new social consensuses on the current change as a transition, based on new paradigms, time scales, principles, and strategies that unite diverse themes, from the local to the global scale.

If we are facing a new historical epoch and the idea is to try to reroute the worst scenarios of the ecosocial crisis, we need narratives and paradigms that shed light on new perspectives and agreements with which we can begin to build a different future. Pressure in this direction is growing and **Chapter 3** reflects how, for decades, there has been a fragmenting of visions and proposals that (based on critical perspectives with certain basic premises of modernity and capitalism) begin to join together from worlds as disparate as those of civil society thinking and religious ethics.

A safe, just, and democratic space

Since the Club of Rome's famous report *The Limits to Growth* (1972) and subsequent studies on the threats caused by ecological overshoot and the continued deterioration of life cycles and ecosystems, in the scientific and social arenas there has been recognition of the need to rethink the principles of civilisation on the basis of, among other things, three fundamental considerations: decent living (democratic and adequate), just living (inclusive), and safe living (healthy and compatible with the biosphere's limits).

One of the most pedagogic expressions of this new perspective is presented by K. Raworth in her article **'Defining a Safe and Just Space for Humanity'** (2013) for the Worldwatch Institute, where she advocates advancing towards an ecosocial space with a 'foundation' formed by universal rights and a safety 'ceiling' formed by the planet's ecological boundaries. Logically, in a space like that, inequalities would have to be reduced and democracy (understood as a collective pact for peaceful coexistence in that space) would have to be much deeper, better regulated, and distanced from neoliberal theses.

Figure 2 depicts K. Raworth's proposal, in which the 'social foundation' is established on the basis of the fulfilment of 11 basic factors linked to the studies that gave rise to the United Nation's **2030 Agenda for Sustainable Development** (September 2015) and the 'environmental ceiling' is set using 9 life cycles identified in the aforementioned *Planetary Boundaries* report.

FIGURE 2. A SAFE AND JUST SPACE FOR HUMANITY BY K. RAWORTH
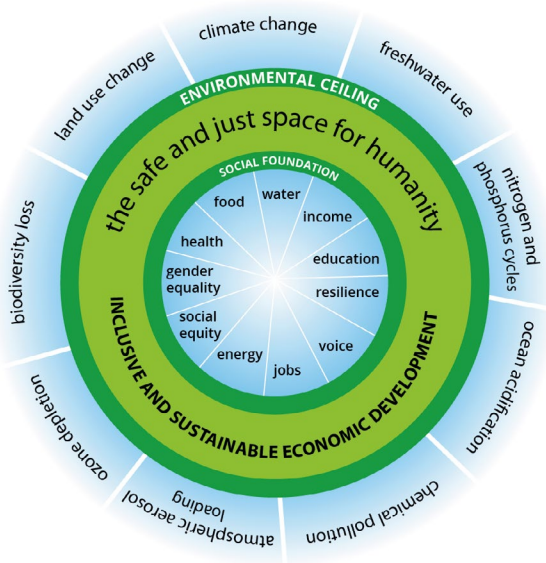
Source: K. Raworth (2013), 'Defining a Safe and Just Space for Humanity', Worldwatch Institute Report.

In the world of spirituality and religion, which influences the imaginaries of thousands of millions of people (beyond certain indigenous, oriental, and evangelical currents that on numerous occasions have managed to maintain links related to self-restraint and nature), Pope Francis's recent encyclical ***Laudato Si' On Care For Our Common Home*** (May 2015) takes on special relevance. In it, the leader of a Church that is closely entwined with the countries with the highest incomes and the greatest economic power and ecological responsibility, warns us of the seriousness of the environmental crisis, its relationship with inequality and poverty, and the need to rebuild new ethical paradigms that would allow us redirect the future of humanity.

Pope Francis insists on the need for an authentic ecological conversion: 'The establishment of a legal framework which can set clear boundaries and ensure the protection of ecosystems has become indispensable; otherwise, the new power structures based on the techno-economic paradigm may overwhelm not only our politics but also freedom and justice. [...] All of this shows the urgent need for us to move forward in a bold cultural revolution. Science and technology are not neutral; from the beginning to the end of a process, various intentions and possibilities are in play and can take on distinct shapes.'

The historical change as a complex transition with different temporal cycles

It seems clear that the future will be different, that it will entail enormous changes, and that, in any case, it would be incredibly naive to attempt to forecast concrete

events that depend on so many actors and variables that are so interrelated and contradictory. What does seem feasible is that we are facing a complex transition (a 'long cycle', possibly lasting decades or centuries), leading towards civilisation's painful decline, as described by J. Randers in ***2052: A Global Forecast for the Next Forty Years*** (2009). To the extent that we are capable of reacting on time and with due depth, the alternative to that decline would be geared towards bringing about new social scenarios based on the profound ethical, political, and economic reformulation of the paradigms that currently guide behaviour among human beings and towards the planet.

Backing the second option, as this text does, involves urgently redirecting, within a 'short cycle', the immediate threats that loom in the fields of energy-climate-nature-food and that could dramatically worsen current contradictions and social instability. But this would oblige us to urgently bring about significant socio-economic transformations that would affect the spatial dimension and organisation of the energy-economy nexus and that would need to be completed, at the latest, within three or four decades.

The 'short cycle' as a 'period of exception and emergency'

The 'short cycle', identified as a 'period of exception and emergency' lasting until mid-century, should urgently tackle the drastic and differentiated (according to the conditions/responsibilities of each region/country/person) reduction of energy consumption and the associated greenhouse gas (GHG) emissions in order to avoid the increase in temperature exceeding 1.5 °C by the end of the century.

Additionally, this first cycle should involve the adoption of the appropriate transformations in order to: guarantee the necessary food supply for a population of some 9,600 million inhabitants; reformulate the distribution/socialisation of resources/wealth to achieve greater social justice and to provide the means to cope with the change; promote agroecology and the corresponding diets; transform cities and spatial patterns in sustainable terms; correct the most serious or urgent impacts that are preventing the recovery of natural systems and cycles; and increase resilience against the climate and ecological changes that are already taking place.

In any case, we face extraordinary difficulties when it comes to giving shape to the goals of this 'short cycle' within the time that the 'windows of opportunity' remain open and when it comes to moving forward with them through more ambitious long-term roadmaps.

The main political and economic elites (associated with 1 per cent of the population that, according to Nobel Laureate J. Stiglitz, hoards 50 per cent of overall wealth) unfortunately interpret their own interests, which are linked to the unlimited exploitation of the planet, in ways that exacerbate the abovementioned difficulties. Moreover, large sections of the social majorities, uninformed about what is at stake, still think that another world is not possible, that science will take on the task of correcting the excesses, and that personal and social well-being are inextricably linked to an unlimited increase in the consumption of material goods.

The changes needed to preserve life systems will only be possible in a society that is better-informed, more critical, and more proactive in relation to projects for social change. Therefore, it is indispensable that we act on two fronts: 1) educational, in the broad (training) sense, designed to facilitate all people in learning contexts with knowledge related to sustainability in its personal, ecological, and social dimensions; and 2) socio-political, regarding the stimulation of debates to shed light on new political agreements/powers based on ethical and socio-economic paradigms in which general well-being is considered according to criteria of justice and compatibility with the Earth's biocapacity.

3. THE NEED TO URGENTLY TACKLE THE CHALLENGES OF ENERGY AND CLIMATE CHANGE

The urgency of the need to tackle the challenges of energy and climate change demands the adoption of exceptional measures in order to achieve structural transformations by mid-century.

The energy-climate relationship is structural and, as reflected in **Chapter 2**, it represents a double challenge that humanity must address urgently. This must be done taking into account: 1) the end of the availability of abundant and cheap energy based on fossil fuels (approximately 80% of the energy consumed currently in the world is fossil-based); and 2) the progressive exceedance of the atmosphere's capacity to assimilate greenhouse gases (GHG), which, originating primarily from the burning of these fuels, is resulting in growing global warming associated with processes of climate change that are already distorting the foundations of contemporary life on the planet.

The energy and climate crisis, two sides of the same coin

In relation to the end of abundant and cheap energy, suffice it to say that according to the OECD International Energy Agency (IEA), the period of maximum oil production was in 2005/2006 and, beyond market circumstances, new oil deposits (at viable costs) are not enough to cover the increase in the corresponding demand forecast for 2050. This means that two thirds of that demand would have to be met by unconventional fuels.

At the same time, the rates of energy returned on energy invested (EROEI) are reducing in conventional fuels as extraction becomes more complex, dropping from 100 to 20 units for each unit invested. Moreover, this is in a context in which the rates of EROEI of renewable energies, which are significantly lower, do not permit replacements on a par with traditional fuels.

In relation to climate change, according to the aforementioned **2015 *Special Report*** by the IEA, the (non-binding) Paris Conference (COP21) agreements could continue resulting in temperature increases of 2.6 °C (other sources suggest 3 °C) and 3.5 °C by the end of this century and the next (without taking into account possible 'abrupt changes' following increases of 1.5 °C). Everything suggests that if the commitments made so far are not multiplied, the possibilities of the global climate crisis worsening will be very high and this will entail dramatic consequences for humanity.

Figure 3, from the Synthesis Report of the IPPC's ***Fifth Assessment Report*** published in 2014, shows a series of key risks (physical, biological, and human) and their level (from very low to very high) arising from climate change in each world region, as well as the potential for risk reduction through mitigation and adaptation measures. The risks are measured for the present, the near term (2030–2040), and, with possible future temperature increases of 2 °C and 4 °C, the long term (2080–2100). As we can see, in a situation in which the majority of the key ecosystems and life cycles are already evolving negatively, the accumulated risks at the end of the century tend towards high or very high levels. Therefore, the mitigation and adaptation actions required would need to surpass those adopted so far.

FIGURE 3. MAIN RISKS ARISING FROM CLIMATE CHANGE
IN THE DIFFERENT WORLD REGIONS
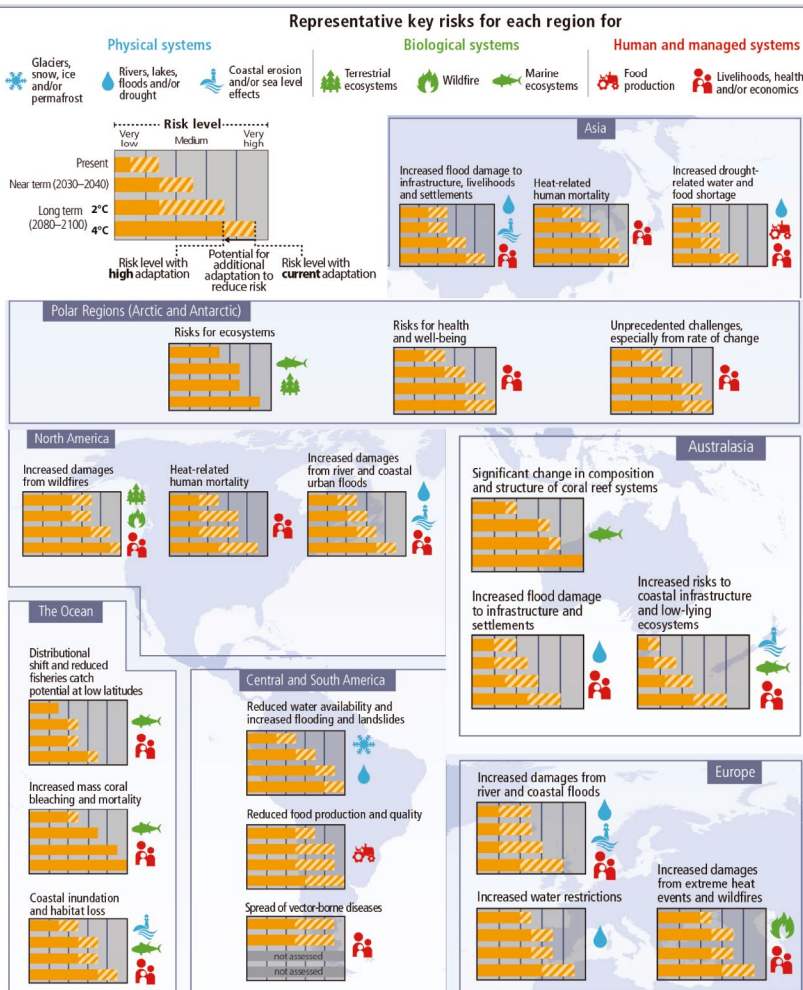
Source: IPPC (2014), *Fifth Assessment Report, Synthesis Report.*

In any case, we should also take into account the enormous difficulties entailed in the fact that, for the first time in the course of human history, resolving the contradictions inherited from the past requires a general reduction of resource consumption (especially, but not only, energy resources) and of the ecological impacts generated by an extremely complex society with an economy that needs to redefine its logics, dimensions, processes, and spatial organisation in order to be compatible with the limits of the biosphere.

Spain, energy/climate contradictions and proposals for change

In Spain, energy and climate change have become central issues, with the country presenting strong vulnerabilities in terms of both. In fact, between 75 per cent and 80 per cent of the country's GHG emissions come from burning fossil fuels. That is why talking about energy and climate in Spain, as indicated in **Chapter 8**, means discussing two sides of the same coin: the unsustainability of the logics of indiscriminate socio-economic development based on scarce and expensive fuels together with unacceptable ecological and climate impacts.

In the energy field, the contradictions are especially significant. Among them, it is worth mentioning the economy's high primary energy intensity (energy/GDP), the strong reliance on fossil fuels, the elevated carbonisation of the economy, the insecurity and cost of the external energy supply, the significant manifestation of social inequality in the spread of energy poverty, and the serious distortions caused by the interests of the energy oligopolies.

At the same time, the impact of climate change is especially significant in a country with Spain's geographic latitude (between 35° N–45° N), a hot and dry climate, extensive arid areas, and a 7,905-kilometre coast, half of which is beaches, low-lying coastal areas, and areas that have been artificialised through mass development processes.

In order to address the change of energy model and the impact of its climate by-products from and on Spain, the text points to a series of exceptional and urgent measures:

- Grant the type of legal-constitutional treatment to the energy-climate issue that would allow us address the goals set by the country's Parliament. Additionally, we urgently need to draw up a Comprehensive Energy-Climate Strategy for 2020/2030/2050 (CE/CS–20/30/50, or EIE/C–20/30/50 in its Spanish acronym) that would allow us reach future scenarios of general decarbonisation by mid-century and, at the same time, support the development of the National Plan for Adaptation to Climate Change (NPACC, or PNACC in its Spanish acronym).

- Consider (within that strategy) the complete energy-climate cycle, from the generation and consumption of the key socio-economic sectors to the impacts caused and the issue of resilience against climate change. Moreover, the strategy should reconcile demands to cover social needs and transform energy systems and productive processes, controlling, within certain limits, energy consumption and GHG emissions.

- Develop the programmes resulting from the CE/CS–20/30/50 and from the NPACC in order to be able to implement the right transformations in the necessary timeframes. This is an enormous challenge given that it would require significant measures on the political, legal, scientific, and economic levels, including the authority to intervene in the energy and financial sectors, which today operate as oligopolies. Within this context, the role of the public administrations would be crucial and close coordination would be necessary among all of the institutions, with the European Union, and with the rest of the energy and economic actors in the country.

In any case, the effort that would need to be made to implement the CE/CS–20/30/50 and the NPACC in time will only be possible with a broad social consensus among well-informed citizens willing to promote the strategies and share responsibility with the political authorities in the set of transformations to be achieved.

4. THE NARRATIVES ON CHANGE CONTAIN SIGNIFICANT GAPS

Significant knowledge gaps hamper the ability to make global change projects credible, especially in the socio-economic field when it comes to concretising alternative, more democratic, just, and sustainable social scenarios with the capacity to systematically reproduce themselves.

Socio-economic systems, understood as the set of logics that govern relations between social actors and the economy, determine many of the aspects that define coexistence and play an essential role in the stability of social systems. When that stability is lost, tensions are generated in the social fabric that, depending on their depth, may be resolved through the corresponding process of reforms or, where appropriate, through a change of course and of the social system.

The strategic weaknesses of the global economic system and their relationship with the biosphere's limits

In the current phase, dominated by a globalised financial-speculative capitalism that is essentially managed by the western centres of economic power, it seems as though the economic recession has come to question deep-rooted processes aimed at constantly increasing general gross domestic product (GDP), consumption, and revenues. This is not necessarily the overall case and these general indicators may have continued to grow during the crisis. Nevertheless, a broader look at the economy indicates that in recent decades socio-economic contradictions have increased.

Indeed, together with the significant growth of great fortunes, there are large sectors of the population in situations of absolute poverty, social inequalities have increased extraordinarily, debt has multiplied to possibly irresolvable levels (its global scale was 286% of GDP in 2014), and there is a significant transfer of public resources and wage income to large corporations and private fortunes. A crisis, no doubt, but also a rearrangement of the economy in favour of organised minorities linked to financial power.

The result of all this is so fragile and contradictory that in recent years, and as though it were only natural, public funding has been offered at almost zero cost to the large banking corporations, the computerisation of economic activities has been boosted to improve business profitability at the same time as unemployment and social precarity multiply, and in certain European countries there have been proposals to compensate for insufficient salaries with public funds at a time when business profits are growing significantly and continue to enjoy privileged tax rates.

It seems something does not add up in the economy when it comes to taking stock of the interests of the social majorities. And if to the fragile situation described we add the contradictions resulting from ecological overshoot and the problems it generates for the continuation of the logics of unlimited and indiscriminate growth in a finite and 'saturated' world, then the risks of ecosocial destabilisation multiply.

Therefore, alongside the political elites' claim that 'everything is under control, everything is fine', we also find: the increase in economists' uncertainties in relation to the 'growth paradox' presented by T. Jackson in **_Prosperity without growth_** (2008); the perplexity revealed by 29 large companies in terms of our economic future in the **_Vision 2050_** (2010) report for the United Nations; and the reinforcement of the warnings of ecologists on the risks of a possible capitalist crash, as presented by R. Fernández Durán and L. González Reyes in **_En la espiral de la energía_** (2014).

In spite of that, we should not underestimate capital's traditional capacity to adapt and strengthen in crises of its own making. Thus it is no longer surprising that, after directly contesting warnings on the development of a global ecological and climate crisis, it would now start to recognise that crisis as real and that it would take up ideas once disregarded to reformulate productive processes and reduce their ecological inefficiencies (renewable energies, closing cycles in a circular economy, ecological agriculture, etc.). Nor is it surprising that certain oligopolies would use their power to try to guarantee control of the change of the energy/productive model and to preserve the same logics of accumulation and consumption that have led to the current crisis.

The experiences of 'real socialism' (which in some aspects can be likened to a 'State capitalism' with unacceptable ecological impacts) have failed and the well-intentioned proposals of 'more (unlimited/indiscriminate) growth and better redistribution of wealth' promoted by the most traditional forms of social democracy have exhibited profound ecosocial contradictions. Therefore, it is clear that the difficulties in identifying new and robust socio-economic proposals capable of uniting justice, democracy, and sustainability undermine the credibility of the chances of overcoming the systemic crisis that is upon us.

In relation to this vacuum, a whole series of questions are presented in **Chapter 4** along the following lines:

What would be the material foundations of socio-economic systems that could overcome such a destabilising capitalism and be compatible with the biophysical limits of the natural world?

How could we sustain the most just reproductions of new social relations, the distribution/payment of work, and the funding of basic universal services such as healthcare, education, or housing?

Would it be enough to better distribute wealth and implement strong redistributive taxation or would we need to rethink the dimensions, metabolism, and space of the economy, reconsider the concept of decent living on the basis of the principle

of sufficiency, revise the limits of the status of property, and have access to social-ised resources to be able to deal efficiently with profound processes of change?

How can we rebuild deeply creative, self-restrained, democratic (with high rates of self-government), just, and sustainable societies and people willing to deal with profound global changes and able to overcome all kinds of domination on the part of privileged individual or state elites?

Reformulating socio-economic perspectives, models, and logics in Spain

In **Chapter 9,** we address the socio-economic situation in Spain. We compare its modern configuration, since the mid-1960s (strong material socio-economic development with ecologically unsustainable environmental, energy, and productive patterns), to the new principles of sustainability, well-being, justice, and democracy. We also establish some criteria, beyond what we indicated above in relation to energy and climate change, to define a general reorientation of the economic system:

- A remodelled economic system that: 1) optimises self-sufficiency, saving, and eco-efficiency in strategic sectors; 2) fosters the use of goods over ownership; 3) boosts self-restraint in consumption; and 4) takes advantage of foreseeable population stabilisation in order to direct resources towards the socio-economic transition. Moreover, we must advance towards an economic-territorial future that optimises networks of cooperation and (transport) logistics based on proximity, shaping eco-regional/national frameworks that optimise their ecological/food carrying capacities and their resilience against climate and global change.

- A more integrated, robust, decentralised, and democratic economic system, capable of fairly (primarily in relation to women) incorporating the world of care work, remodelled according to criteria of sufficiency, and with increased added value due to its capacity to combine greater productivity/saving in the circular use of energy/natural resources and the improvement of labour conditions. In relation to the main sectors, there is room for the following considerations: 1) an agri-food sector guided by ecological criteria; 2) a more responsible (including in relation to the durability of its products), unifying, and clean industry that is much more advanced in the reutilisation of the waste generated; 3) services (that are public in areas of general interest) geared towards social needs; and 4) an urban development and construction sector focused primarily on the comprehensive rehabilitation (including energy and climate factors) of cities and their built environments.

- General goods and services sectors that, due to their cultural functions (information, education, or training), material functions (handling of financial, energy, food, or land resources), or scientific-technological functions (necessary knowledge to address key collective challenges), have unmistakably democratic frameworks of protection, regulation, and intervention that, with the corresponding constitutional legitimacy, favour their improved contribution to strategies of change in the country.

- Sufficient, more just and redistributive public finances that facilitate the necessary resources to establish more robust systems of social protection and to decrease inequality. Combined with the policies of a more advanced Europe, this should allow for fostering the necessary transformations in the economy's energy, productive, distributive, and consumption systems.

An economic system like the one described would be adequate for supplying and redistributing the greatest quantity and quality of work possible and for promoting social equality, fostering the recognition and redistribution of activities related to personal and family care work, and offering alternative cover or activities to those who still could not access paid work. Moreover, coinciding with numerous Spanish studies on these subjects, the recent report by A. Wijkman and K. Skanberg for the Club of Rome, ***The Circular Economy and Benefits for Society*** (2015), concludes that a serious reordering of the productive system in terms of renewable energies and energy/material eco-efficiency could represent a reduction of GHG emissions in Spain in the order of 69 per cent and the creation of some 400,000 jobs by 2030 (in relation to 2009).

In any case, beyond the undeniable and varied difficulties in reaching social agreements that would allow us address the changes indicated, the operability of these new energy/economy logics would demand the availability of investment capacity. This would require considering profound changes in the criteria of treatment of accumulated debt in, among other places, Southern Europe, so that its burden would not fall solely on the debtor countries/societies and so that its volumes, interest, and terms would be compatible with the social, energy, and economic transformations put forward. All of this would be in line with the content of the proposed ***International law on sovereign debt and the protection of human rights*** developed by the United Nations in 2015.

Lastly, in Chapter 9 we also very succinctly analyse the main sectors of the Spanish productive system, including care work activities, through different variables (economic (GDP), well-being (employment), ecological (energy and CO_2 emissions), and strategic (consistency with new paradigms), outlining some general considerations on those sectors.

5. WE ARE STANDING AT A 'CRITICAL CROSSROADS'

If we are still in time to change course and avoid the worst version of ecosocial collapse, we are obliged to overcome certain dichotomies and, beyond the 'green and local', to also address the 'brown and global' world, urgently articulating comprehensive and multilevel perspectives and proposals for transition.

In general, alternative/ecological culture is especially rich in the fields of defensive thought and action and in proposals at the local level, and mistrusts, not without reason, interests in developing its activity in institutional spheres far removed from the general population. However, that perspective can be insufficient when it comes to the systemic and planetary scale that our exceedance of the biosphere's limits has taken on.

Therefore, to the extent that there may still be time to redirect such processes in an organised way, it would be necessary to develop perspectives/actions capable of expressing the democratic will of citizens in multiple fields, from the local/regional to the multinational/global, without forgetting that the phenomena that cause the ecological crisis always find their roots in concrete places and societies.

The idea of a 'Critical Crossroads' here suggests that we may form part of the last generation with the ability to redirect a global confrontation with nature and that it is very likely that, due to the aggressive tendencies of socio-economic development, the time for reaction is ending, if it has not done so already. Either we continue as we have done until now or, perhaps, we could still try to change course and redirect certain processes, or at least reduce their most dramatic effects.

Global contexts are also crucial

Although the challenges to be addressed, due to their systemic character, have above all an ethical, political, and economic significance, it is worth looking at one of the most representative fields (energy and climate change) and its investment variables. **Chapter 2** indicates how, among others, the ***Energy (R)evolution*** (2012) report by Greenpeace and the Global Wind Energy Council estimates that the economic and energy investments needed to force the continuity of logics based on the primacy of fossil fuels until 2050 (several tens of trillions of dollars) could end up being similar to, if not greater than, those needed to carry out a major transformation of the energy system in renewable terms.

The importance of this is that it allows us extract two considerations. The first is that the time to counteract the trends that are in motion is ending and if today we do not back the renewable option with extraordinary determination, it is very possible that humanity will lose its last chance to avoid the path towards a process of general destabilisation.

The second has to do with the fact that today global struggles are also inevitable and they must have a place in the work agendas of organisations that represent the social majorities. We have to get a handle on desirable global socio-economic scenarios, demand the democratisation of global institutions and key economic sectors, and apply the corresponding social pressure to reach the necessary agreements. Moreover, as ecological contradictions are emerging and growing, more and more citizens join the fight to resolve them, as reflected in **Figure 4**.

FIGURE 4. 1,600 ORGANISATIONS AND 300,000 PEOPLE
PROTEST IN NEW YORK DURING THE CLIMATE CONFERENCE
AT THE UNITED NATIONS HEADQUARTERS, 2014

Source: *El País*, 22 September 2014.

We have to start thinking in terms of a 'state of emergency'

We should begin to see ourselves as being in a 'state of emergency' consistent with the scale of the transformations and the effort to be made to reduce the threat of global ecological crisis on time. The problem is that the economic-political elites have always lagged, and still do, behind events, refusing to question the prevailing socio-economic system and the need to carry out profound changes that could affect their most immediate economic interests. The IEA has estimated the devaluation of oil, gas, and carbon assets at 270,000 million euros if measures aimed at limiting the increase of temperature to 2 °C by the end of the century are adopted.

Chapters 12 and 9, on Europe and Spain, address the issue from the perspective of the investments needed to tackle a change of course on time and, again,

the scale of the decisions to be adopted, including in the financial field, is very considerable. These decisions should be included among the objectives of political, social, and citizen organisations.

Should the EU increase its current meagre budgets (around 1% of regional GDP) to foster public-private funds capable of launching a full-scale offensive against this issue? Is the EEA right when, in its 2013 report *The European environment – state and outlook 2015*, it considers the need to invest 270,000 million euros annually during the next forty years (a little over 2% of the annual European GDP) to begin to transform the prevailing energy/productive model and the inherited stock (for example, millions of energetically inefficient buildings)? Is there truth to the abovementioned report *The Circular Economy and Benefits for Society* (2015), which looks at five European countries, when it estimates that we need additional yearly investments in the order of 3 per cent of GDP?

What about the 'ambitious' Juncker Plan, which aspires to invest a little over 100,000 million euros in three years (some 33,000 million euros per year, equivalent to 0.25% of European GDP) in multiple fields and infrastructures without even considering their energy/climate balance? And in that context, what opinion should be held of Spanish politicians who barely believe in climate change and who, favouring the short-term interests of the big energy companies, insist on avoiding the necessary commitment to the change of energy model and to renewable energies?

In these two chapters, we consider that addressing the urgent and exceptional ecological situation also requires considering other economic strategies and launching the idea of creating public-private Integrated Investment Funds (IIF) in Europe and in Spain that, as 'catalysts', could support truly ambitious strategies and programmes.

This would mean prioritising saving, eco-efficiency, the generation of distributed renewable energies to favour policies on self-responsibility and self-sufficiency, and the drastic reduction of the consumption of energy and materials, as well as carbon emissions, in the key demand sectors by mid-century. The text also points to the need for initiative to become a tool to overcome the oligopolistic reliance of the energy sector and to strengthen regional/local networks.

Logically, a proposal of this kind would require an ambitious tax reform and a reform of financial regulations supported by the social recognition of the need to take on exceptional and forward-looking measures in order to try to prevent extraordinarily powerful processes of ecosocial destabilisation.

6. CITIZENS AND CITIES ARE CRUCIAL

Considering the scale of the ecosocial challenge, we have to look towards territories and cities, since they are the key centres of the social metabolism and they concentrate the transformative potential of citizens with the capacity to bring about profound ethical, cultural, political, and socio-economic changes.

We must move away from perspectives that, with meagre success, have focused recent programmes against the ecological crisis on technical and market applications, far-removed from information access and social empowerment. In their place, we need to reclaim what the secretary general of the 2012 Earth Summit, M. Strong, declared in the closing session: the (global) sustainability battle will ultimately be won or lost in cities.

It is clear that the network of metropolises constitutes a tapestry of decisional nodes that, despite their actual disconnection from the rural/natural world, control human development on the planet. Not only does the majority of the population live, produce, and consume in cities, but also the growing global homogenisation of cultural patterns, living standards, and also conflicts, is expressed, more and more, in urban terms. And every corner of the planet where there are goods or services susceptible to being commercialised by the economic system is connected to that network of urban settlements headed by the large global metropolises from which the world is governed.

Today, as indicated in **Chapter 5**, after the continuous increase of the ecological deficit and the institutional crisis of global governability, it can be argued that without the immediate and decisive action of cities and their citizens and without recognising the need to rebuild a balanced territorial relationship between countryside and city, it will be very difficult to evolve towards more sustainable future scenarios.

What historical significance does the emergence of new urban movements have?

In this regard, the text refers to social mobilisations with clearly urban roots that, starting with Iceland and Tunisia (2009–2011), have been expanding throughout the rest of the world, including the United States and the European Union, shaping a doubtlessly novel socio-political phenomenon, contradictory in its processes and results, but, in any case, potentially important in terms of the future.

In *Networks of Outrage and Hope* (2012), Manuel Castells offers an interesting version of what might be happening: 'It was not just poverty, or the economic

crisis, or the lack of democracy that caused the multifaceted rebellion. Of course, all these poignant manifestations of an unjust society and of an undemocratic polity were present in the protests. But it was primarily the humiliation provoked by the cynicism and arrogance of those in power, be it financial, political or cultural, that brought together those who turned fear into outrage, and outrage into hope for a better humanity.'

In this context, **Figure 5** recalls how in October 2011, under the slogan 'United for Global Change', hundreds of thousands of outraged citizens mobilised in cities and contexts as disparate as Madrid, Tokyo, Berlin, Rome, Lisbon, Brussels, London, or New York. It appears something is shifting at the heart of global society.

FIGURE 5. THE 'UNITED FOR GLOBAL CHANGE' PROTESTS
MOBILISED CROWDS OF CITIZENS ACROSS THE WORLD

Source: Compiled by authors using photos from *El País*. The text reads: 'And the 15-M overflowed borders: This movement was one of the phenomena that placed Spain on the world map in 2011. In a year marked by bad news, it brought a breath of fresh and combative air with its non-violent DNA.'

The importance and the highs and lows of the new urban social movements in Spain

Chapter 10 looks at how the cities-citizens nexus in Spain is evolving at breakneck speed. This is due to the neoliberal corrections applied since the economic crisis began in 2007, the overwhelming levels of corruption, and the breakdown of the social contract (with the corresponding dramatic increase in inequality and unemployment).

It all started in 2011 with the 15-M *indignados* movement. In just four years, large sections of the population have travelled a path that extends from the initial protest struggles and the first pre-institutional political demands, to the clear backing of democratic participation through elections in order to access power and undertake a second political transition, thus transforming the country's political landscape to an extent that it is still too soon to interpret.

In the local sphere, after the elections held in May 2015, it is worth reflecting on some of the characteristics of the events we are experiencing today: 1) the

extraordinary electoral success of the citizen platforms that has allowed them, among other things, to win the local governments in the most important cities in the country, including Madrid and Barcelona; 2) the strong commitment to a whole series of measures for democratic renewal and solidarity with the people and sectors most affected by the crisis; 3) the 'unfinished business' in relation to the creation of authentic systems for the active participation of citizens in key city issues; 4) a certain disregard for the concept of the eco-region/nation as a crucial space for rebuilding/optimising a balanced relationship between city, countryside, and nature, and between the ecological footprint and biocapacity; and 5) the weakness of the programme and project for change in terms of the difficult and complex economic field and, beyond certain declarations relating to the Paris Conference, in terms of problems linked to the global ecological crisis. This final point represents an extraordinarily serious deficiency due to the importance of the participation of cities/citizens in these fields.

In the abovementioned chapter, as well as considering territorial proposals to advance towards the key concept of eco-region, we also point to a series of actions that could encapsulate the necessary compatibility between democratic, social, and ecological objectives when considering what to do with urban policies in the coming years:

- Renew democracy, establishing participative systems, regaining competences, and strengthening the independence of the institutions from economic power, as well as multiplying processes of cooperation between cities/citizens committed to innovation and the comprehensive regeneration of urban policies. Moreover, we would have to reclaim the public guarantee of basic rights and social services, complemented by specific solidarity-based programmes for the social sectors most affected by the crisis and promoting local networks of cooperation and solidarity.

- Boost the local economy and local employment. This is an area of work that tends to be reduced to institutional activities, but which should be expanded 'upwards' and 'from below'. In the first case, contributing to the transformations of the economic system formulated in **Chapter 9**, and, in the second case, supporting economic activities at the district/neighbourhood level through an innovative perspective of urban life and with the participation of neighbours and social collectives.

- Recover urban models that are restrained in terms of land occupation, compact, and well-integrated into their rural or natural surroundings. Create Comprehensive District/Neighbourhood Plans involving citizen participation to guarantee the necessary social facilities, boost the energy change, stimulate non-motorised mobility systems and collective transport, and support social initiatives for creating local socio-economic activities.

- Establish strategies to adapt the urban metabolism to the local biocapacity and climate change. Increase resilience and reduce the ecological, energy, and climate footprint in order to drastically improve the carbon balance by mid-century. The book provides a summary of the ***Informe sobre las ciudades***, which forms part of the Fundación de la Universidad Complutense

de Madrid's **Global Change Spain 2020/50 Programme** (2008–2011). As indicated in **Figure 6,** the report identifies key lines of work to improve the quality of urban life and to adapt its ecological footprint to the country's biocapacity.

FIGURE 6. THE POSSIBILITY TO REDUCE THE ECOLOGICAL
FOOTPRINT PER INHABITANT TO THE COUNTRY'S BIOCAPACITY
(DESIRABLE SCENARIO)
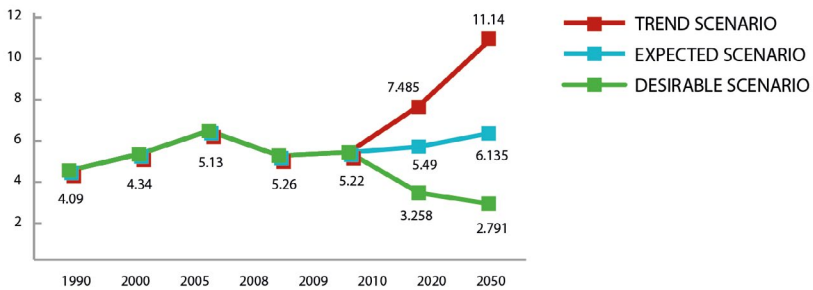
Source: J. Ozcáriz and F. Prats (2009), *Informe sobre las ciudades*, within the
Global Change Spain 2020/50 Programme.

- Foster citizen reflection on the meaning of the new paradigms and their application. For this, we could try to shed light on new thinking on cities, citizens, and territories through an exercise in reflection, participation, and action around a 'City and region/nation project for the coming 10/20 years' in order to stimulate greater practical innovation during the change.

7. TOWARDS A CONSTITUENT PROCESS CONSISTENT WITH THE CHANGE OF EPOCH

The ambition to develop a next-generation constituent project is timely in terms of content innovation (including ecosocial issues) and as the democratic expression of a new social (and power) contract between majorities.

The modern constitutions of western countries have been drawn up and ratified in moments of democratic boom, recognising that power resides in popular sovereignty and shaping the political agreements a society possesses to establish the set of norms that are to govern democratic coexistence.

But their content and, above all, their application in fact depend on the real power of social groups that dominate society at any given moment, and when the interrelation of forces that gave rise to the constitutional agreement vary, biased interpretations are made of the constitutional texts or, simply, they are modified.

The 'first generation' of liberal constitutions from the 18th century, the Century of Enlightenment, expressed the rise of the democratic bourgeoisie over the power of the absolute monarchies. While the 'second generation', the so-called 'social constitutions' after the two world wars, reflected a new social contract between triumphant capitalism and the rise of working and popular classes fuelled by their own strength and the existence of a socialist Soviet Union that had become a great world power.

Neoliberal 'deconstitutionalisation', democratic regression, and ignorance of ecological challenges

Since the 1980s, by the hand of Thatcher and Reagan, neoliberal theses have been imposed throughout the West. This has involved an as yet unfinished process in which the so-called 'Welfare State' contract has been broken and an offensive has been launched to establish a new distribution of wealth and income favouring the flow of big capital towards speculative financialisation and globalisation.

What is clear is that, without changing the texts of the constitutions, we are experiencing a neoliberal 'deconstitutionalisation' process, a term coined by G. Pisarello in *Procesos constituyentes: Caminos para la ruptura democrática* (2014). This process is reflected, among other things, in the following aspects: legislation that implements the regression/precarisation of labour, social, and democratic rights; constitutional/legal changes that attempt to dismantle the old agreements in order to introduce neoliberal principles and the pre-eminence of

the interests of financial capital; and, in addition, the establishment of new international treaties that, like the ***Transatlantic Trade Investment Partnership*** (TTIP) between the United States and the European Union, try to create supranational legal frameworks tailored to the interests of large multinationals.

Throughout this entire constitutional process, perhaps with the exception of certain European decisions and policies, the ecological issue has been non-existent or merely token. This was the case in the first generation of constitutions because the issue was simply not on the agenda. In the second generation, it was because the social contract was based precisely on the trust that control and unlimited exploitation of the world's resources together with technological advances would allow the central nations to get rich quick and to redistribute some of their profits among the corresponding working and popular classes, in exchange for their not questioning the foundations of capitalist accumulation.

Moreover, recognition of the seriousness of the ecological threat does not seem to be enough for the same economic and political forces that maintain the logics of environmental overshoot today to decide to incorporate this issue seriously, coherently, and with real transparency into current constitutions. Rather, we are witnessing the desire of the main global oligopolies to continue controlling the future of the key sectors, with everything that entails.

The 1978 Spanish Constitution and its general weakening under the neoliberal offensive

In **Chapter 6**, after identifying the context described above, we address the issue of the current Spanish Constitution (1978). The chapter shows how this document was written by a democratic parliament, influenced by the European texts of the time (inspired by the pact between Christian democracy and social democracy), and approved by referendum. We also indicate how, due to the break agreed with the old regime, the constitutional text incorporates certain commitments related to the Monarchy, the favourable treatment of the Catholic Church and, in fact, the limitation of the possibilities for citizens' direct participation in political life.

Beyond the general or superficial treatment of the environmental issue in Part I, a reading of the constitutional text today arouses interest due to how advanced some of its content is in relation to the current situation. For example, in the economic field, article 128 of Part VII states the following: '1) The entire wealth of the country in its different forms, irrespective of ownership, shall be subordinated to the general interest; 2) Public initiative in economic activity is recognised. Essential resources or services may be reserved by law to the public sector especially in the case of monopolies. Likewise, State intervention in companies may be imposed when the public interest so demands.' This content today could be considered extreme and even anti-establishment by the current economic and political powers that be.

In any case, after a couple of decades of significant economic growth that has modernised society, although with extremely high ecological costs, policies and legislative developments have been adopting the dominant neoliberal theses.

In 2011, a radical transmutation took place with the modification (without prior consultation) of article 135 of the Constitution, which, as dictated by the European Union, limits the deficit and prioritises payments to creditors over and above any other need the country has.

From that moment on, immersed in one of the periods in history with the most institutional corruption, the *deconstituent* process is rushed in with the regressive reformulation of the main labour, social, and also environmental laws, with the adoption of measures counter to those implemented by Narbona's Ministry of the Environment (2004–2008), and with other issues related to energy and climate change.

Towards a constituent process that embraces the determined fight against the ecological crisis

Certain sectors of Spanish society still consider it necessary to overcome the first transition, with special consideration for issues of democratic regeneration, the recuperation of social rights, or the revision of the territorial issue. Nevertheless, opening up a new constituent process would also be an excellent opportunity to debate about the need to advance towards a 'third constitutional generation'.

This adaptation of social contracts to new times would have to strongly incorporate the fight against ecological overshoot, the corresponding threats of the degradation of social systems, and the relationships of both with the exercise of democratic power; all the while recognising that not all subjects appear as priorities in the collective imaginary of Spanish society.

As well as bringing the issue of the ecosocial challenge to the political-legal forefront, **Chapter 6** points to the need to constitutionally enshrine the reduction of the ecological deficit, the development of Country-Strategies to reach safe ecological, energy, and climate scenarios by mid-century, and the possibility to establish exceptional measures for this. Specifically, the following issues are put forward:

- 'Forcibly' incorporate, as a constitutional objective, the reduction of the ecological overshoot, especially in relation to the energy-climate issue and the ecological preservation of natural systems (particularly those related to water) and agro-ecosystems.

- Establish Country-Strategies that, through the constitution (or its legislative development) and suitably coordinated with regional/national competences, would be recognised as appropriate instruments for reaching the necessary targets in the right timeframes. Some of the basic principles that should support these Country-Strategies are: agreement, collaboration, the definition of mechanisms for coordination, and the search for synergies between departmental, regional, and local actions

- Grant the democratic institutions sufficient capacity to enforce rights and protect the commons and to establish exceptional measures to agree on actions and to be able to access informative, financial, energy, and other resources that are indispensable for reaching the constitutional goals in

ecological and social participation matters and for overcoming oligopolistic strategies in key sectors.

• As expressed synthetically in **Figure 7**, the political-legal constitutional overhaul should favour the rebuilding of the architecture of power, combining, especially in shared strategic issues, the strengthening of grassroots democracy (as opposed to the de facto power of the elites) and the coordination of 'country' and regional/national contexts, the European Union, and the international sphere.

FIGURE 7. RECOVERING THE PREDOMINANCE OF THE DEMOCRATIC POWER OF CITIZENS
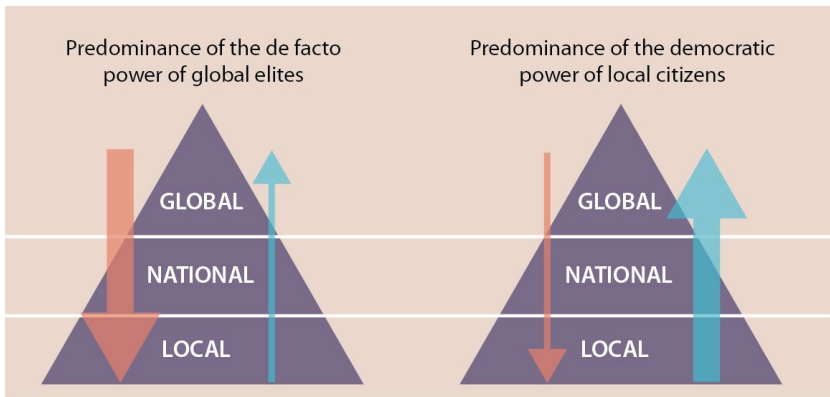
Source: Compiled by authors.

While we are witnessing the crystallisation of empowered citizen movements and a renewed and mature political representation capable of establishing difficult political alignments, there are still many problems that simply cannot wait nor do they require constitutional change to be addressed. Moreover, the possibility to inaugurate a new political cycle will only be feasible in the context of an overall journey to change reality taking advantage of the possibilities of the current Constitution.

8. CHANGE WILL NOT BE POSSIBLE WITHOUT RESHAPING SOCIAL IMAGINARIES

The construction of an alternative social imaginary is essential for enabling ecosocial change, yet values focused on unlimited accumulation and growth, productivism, consumerism, and individualism continue to be dominant in the world and in Spain.

So-called 'soft power', the most effective vehicle of psychosocial domination, shapes itself around the social imaginary as a 'world view' of each epoch that, on the basis of the pre-eminence of certain personal and collective values, offers stability in different historical epochs and social systems. And it is clear that social change goes hand in hand with changing social imaginaries.

In *Networks of Outrage and Hope* (2012), Manuel Castells recalls how 'power relationships are constitutive of society because those who have power construct the institutions of society according to their values and interests. (…) Coercion and intimidation, based on the state's monopoly of the capacity to exercise violence, are essential mechanisms for imposing the will of those in control of the institutions of society. However, the construction of meaning in people's minds is a more decisive and a more stable source of power. (…) This is why the fundamental power struggle is the battle for the construction of meaning in the minds of the people.'

Chapter 4 looks at how the modern world view and capitalism emerge in Europe around the 16th and 17th centuries and how they have been interweaving together and adapting to their own evolutionary logics. Over time, this has led to their current configuration as global and financialised neoliberalism; as postmodernity (or second modernity) in the style of the 'society of individuals', the 'liquid society', or, in its most recent version, Silicon Valley's technological hyper-liberalism (**the Great Technological Singularity**); or as what philosopher Byung-Chul Han describes in *Psychopolitik* (2014) as psychological situations of voluntary submission to the logics of domination.

Mind you, all of these share two common features: 1) the direct or subliminal denial of global ecosocial threats resulting from the unlimited exceedance of natural systems and life cycles, whose consideration would entail questioning prevailing socio-economic paradigms and logics; and 2) the diminished cultivation of the capacity for personal and social determination to tackle the coming adversities.

Rebuilding cultural points of reference

Chapters 4 and **11** and **Figure 8** point to some considerations for 'deconstructing' and rebuilding current cultural points of reference and tracing new 'counter-power' world views through which we can try to make the ecosocial change we are immersed in as lucid and organised as possible. **Figure 8** presents certain elements to facilitate this cultural change:

FIGURE 8. FEEDBACK LOOP IN AN INTEGRATED CULTURAL
CHANGE PROCESS
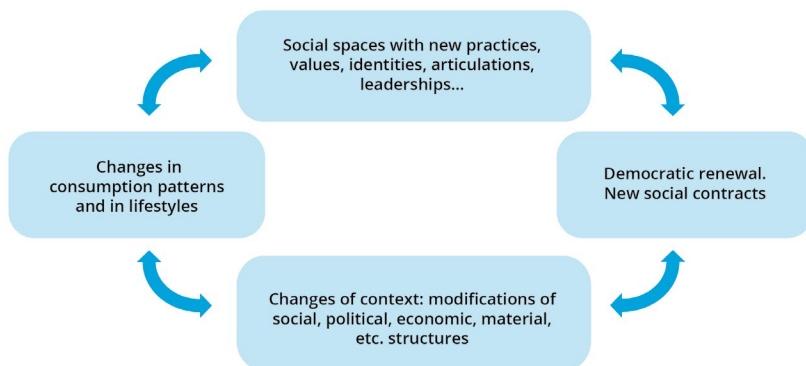
Source: Á. Porro (2013), 'Políticas públicas y cambios de consumo y estilos de vida: de círculos viciosos a círculos virtuosos', *Papeles de Relaciones Ecosociales y Cambio Global,* 121, FUHEM.

Other considerations include the following:

- Informing people about the reality of the risk of an ecological/climate crisis with a scope affecting all the paradigms of current civilisation and transmitting to the collective imaginary that, simply, our lives are at stake. It is indispensable that we relate our overcoming the aftermath of the 'Great Recession' and its social consequences to the need to immediately tackle the ecological challenges in order to reach very ambitious targets by mid-century. But none of this will be possible without progressing, at the same time, in terms of the overhaul of thinking (old and new knowledge), the development of alternative roadmaps, the promotion/learning of new educational content, practices, and concrete experiences, and the democratic empowerment of citizens.

- Debunking certain myths that, like the supposed need for unlimited GDP growth, accumulation, and consumption, lie at the root of humanity's overshoot of the planet's life systems. At the same time, we have to rebuild, with species and diversity awareness, new paradigms and values that are favourable to the preservation of life and show how personal and collective well-being does not derive from compulsive material consumption, but from having sufficient goods to be able to develop a decent, more just,

balanced, and personally and socially rich life. In this regard, the role of education is essential at all levels and throughout life; an education that could help people understand their role as members of the community of life, with shared responsibility in the task of taking care of ecological integrity and social equity.

- Reinforcing the concept of biomimetics, the need to make economic and social life compatible with the natural world, the recovery of an ethical sense of techno-science, and the need to establish impact limits for the main human activities and settlements.

Fostering pathways for change

In this regard, a whole series of 'levers' are considered in **Chapter 9** for rebuilding a 'new common sense' that would be beneficial for the change of paradigms:

- The importance of the ecological crisis that we are facing demands a 180-degree turn in ways of dealing with public affairs, as well as in ways of doing politics and making decisions.

- Today, the advertising and marketing industries represent an extremely powerful machine for the reproduction of consumerist culture. However, at the same time, they contain potentially valuable elements for transitions due to their capacity to influence new values and narratives. For their part, the media and the Internet today constitute the main tools for cultural dissemination and domination in consumer society, but they also shape channels of social communication and they could play an important educational and relational role with regard to new lifestyles.

- Cultural production contributes to shaping a society's identity. Emancipatory art and cultural goods invite critique and reflection and can foster new social points of reference that have credibility and legitimacy. Education is the first and perhaps the most important field of socialisation and personal and collective learning and, integrated into its cultural, material, and social context, it can stimulate and boost certain values, attitudes, and behaviours. It is thus one of the most powerful instruments of social reproduction and of the continuation, or overhaul, of established common sense.

- The now omnipresent field of techno-science has become an indispensable resource for addressing change, but also one of the main points of reference for a society that blindly trusts in it to resolve bio-geophysical problems that are beyond its capacities. Therefore, it is essential that we reformulate its paradigms, prioritising goals related to social well-being and sustainability. This also demands the recovery of the public prominence of R&D&I.

In any case, as J. Riechmann recalls in Interdependientes y ecodependientes (2012): 'There are no shortcuts. One does not invent a new prêt-à-porter culture like the magician pulls a rabbit out of a top hat'; what is needed is a sustained effort that would require being persistent over time and as resilient as possible.

9. THE NEED TO DEVELOP ALTERNATIVE COUNTRY-STRATEGIES

Facing the social failure of readjustment and extreme austerity policies, Spain needs a Country-Project capable of using existing potentialities to reshape an attractive future in terms of democracy, social justice, and ecological and climate rebalance.

It is clear that Spain is far from having Country-Strategies for comprehensive progress and that after almost a decade of crisis and the application of neoliberal formulas, the future seems charged with disappointing prospects, even for the dominant economic logics.

Without profound changes in current European policies, the main international future trends research centres point to worrying prospects for Spain: repayment of a country-debt several times greater than the national GDP that, if it were viable, would compromise the country's possibilities for decades; weak recovery of economic activity, maintaining high levels of unemployment and precarious employment up until 2020 and beyond; or the continuation of high levels of social inequality and precarisation as characteristics of the new times.

Moreover, it is true that there is no consideration of serious measures for reformulating an economic model that has repeatedly generated so many crises and, even less so, for complying competently with the reduction of ecological deficits required by the situation.

Furthermore, traditional social-democratic policies have so far not been able to offer very different perspectives from conservative ones. Meanwhile, the initiatives that are emerging among the most reformative social-democratic currents are firmer in terms of the need to address the excesses of the most extreme forms of neoliberalism, but fail to consider deeper changes to seriously and urgently tackle the threats originating from the ecosocial crisis.

Towards comprehensive, alternative, and solvent Country-Strategies capable of inspiring transitions in Spain

It is difficult to acknowledge, but it is certain that in Spain there is a lack of basic formulas that could shed light on strategies capable of fostering processes for a change of historical cycle given the current situation and its contradictions. Deficiencies in the alternative ideology have already been expressly indicated in terms of socio-economic questions, but also in terms of politics and culture. Without enriching social proposals and debates around the strategies and

scenarios of ecosocial change, it is very likely that this issue will be omitted from political agendas and from the demands that matter to citizens. This would extraordinarily weaken the possibilities for addressing the transformations that would enable us advance towards more sustainable future scenarios.

Still, with the limitations indicated, the text points to a series of guidelines in different fields that the Country-Strategies ought to consider:

- The development of roadmaps under institutional and social observation/control capable of linking the major socio-economic, ecological, and democratic issues with the main targets for mid-century. This would require implementing systems of transdisciplinary indicators that, beyond GDP and other economic references, would enable the comprehensive evaluation of the country's progress (well-being, (un)employment, inequality, ecological deficit, carbon emissions, territorial adaptation, etc.). **Figure 9** presents a 'meta-perspective' of the transition towards ecological sustainability in Spain as indicated in the ***Evaluación de los Ecosistemas del Milenio en España*** (Millennium Ecosystem Assessment of Spain) (2011).

FIGURE 9. THE TRANSITION TOWARDS ECOLOGICAL AND
WELL-BEING SUSTAINABILITY IN SPAIN
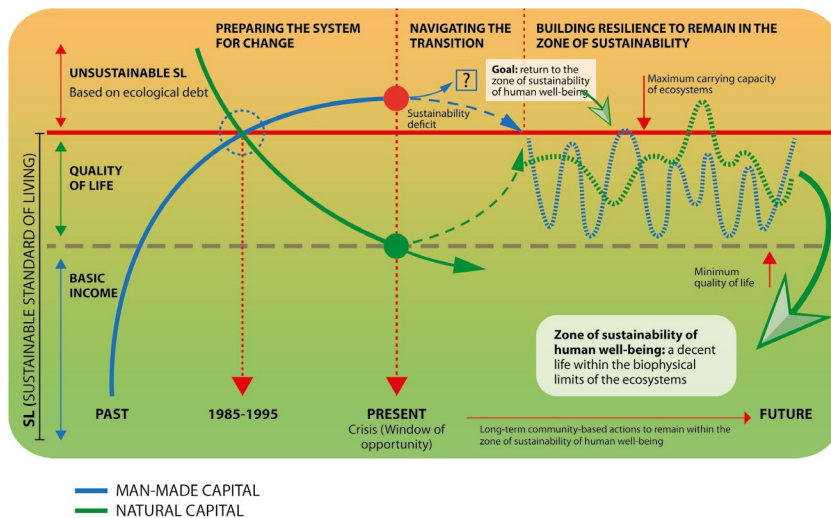
Source: *Evaluación de los Ecosistemas del Milenio de España* (EME), 2011.

- In terms of reducing the country's ecological deficit, in **Chapter 8** we point to actions to reach the general targets in energy saving, decarbonisation, and the increase of resilience. Scenarios related to the recovery of the key ecosystems and ecosystem services are presented in **Chapter 7**, considering how to halt the degradation of ecosystems and their services by 2020/2030 and achieve their recuperation by 2040/2050.

- In addition to this, the strategies should consider their interrelation with exceptional and urgent measures that could be established by the European/Spanish Parliaments to promote the necessary corrective actions. Those measures should consider innovations in matters of debt (restructuring, costs, and terms), as well as the capacity for regulation, intervention, and democratisation in the key oligopolistic sectors and the possibility to create powerful Integrated Investment Funds (IIF) to be able to undertake the corresponding transformations.

- As well as fulfilling their goals, the impact of these ecosocial strategies on critical issues (such as the use of fossil fuels and the corresponding GHG emissions) should not overstep the pre-established red lines. This would require implementing complex forms of planning and programming (like backcasting) in which these limits would condition processes/actions and in which the monitoring and correction of deviations would be carried out in a transparent way before citizens.

With the reservations noted, the text contemplates multiple fields of action and more than fifty proposals that could contribute to shaping the ecosocial content of the strategies mentioned. There are also many other important areas in the political, cultural, and socio-economic fields (agri-food, transport, building, waste), as well as in terms of all the aspects related to habits and education, whose analysis has been postponed until further studies are undertaken.

For a coherent 'way out of the crisis'

In any case, it is worth highlighting two central aspects related to the implementation of said strategies. The first is the fact that their formulation should form a substantial part of a 'way out of the crisis' that considers the interests of social majorities, or these could end up in effect too weakened to be able to influence the dynamics of the ecosocial crisis on time. The second has to do with the fact that their implementation would require significant investments and the creation of decent/stable employment, which could contribute, through verifiable sustainability strategies, to the implementation of social welfare policies. And this is one of the main priorities of the social movements and of citizens.

Moreover, we must recognise that the set of proposals presented here would find enormous implementation obstacles in the current European and Spanish political frameworks. However, this should not lead us to avoid the need to have in-depth debate on them in society or to try to find paths that would allow for progress towards their materialisation. The political and cultural actors capable of understanding the seriousness of the situation and transferring it, through information and action, into citizens' awareness have special responsibility here.

10. FOR A RENAISSANCE OF THE EUROPEAN PROJECT

As opposed to the most conservative version of a Europe dominated by neoliberal logics lacking in solidarity, we have to back the recovery of its best cultural traditions and its transformation into an advanced region in terms of democracy, social justice, solidarity, and determination in the fight against the global ecological and social crisis.

In a world plagued with open conflicts, Europe still constitutes a respected historical benchmark in terms of democracy, peace-keeping, the establishment of the social contract, and relatively advanced (although insufficient) positions in ecological matters. What is more, due to its historical, political, and cultural weight, its economic and trade importance, and its environmental heritage, a Europe that seriously backed the tackling of the change of historical epoch in all its dimensions could play an important role in redirecting the global processes of ecosocial destabilisation.

The severity of the neoliberal drift in Europe

However, it is true that the course Europe has taken in recent years does not invite optimism, especially since the outbreak of the crisis in 2008, the predominance of neoliberal positions in Brussels (and in many other countries) and the crisis originated by the "Brexit". A series of recent events reinforces the idea that we are witnessing a rupture of the European contract and a strong conservative offensive eager to reshape power, policies, and the economy in the region:

- The political crisis and the lack of a shared project. After the unfortunate episode of the Greek crisis, 'Brexit' reflects the political weaknesses of the European Union. The result of the June 2016 referendum in the United Kingdom, brought about by the combination of the social crisis, the surge in nationalism and xenophobia, and the disrepute of the political class, leaves Europe facing an uncertain future. Without a genuine leap forward in the reformulation of a more democratic, just, and sustainable shared project, this situation could intensify the divisive tensions in the Union.

- The fiasco of different European 'corporate champions'. In recent years, many large companies have had a double discourse: while fancying themselves as vanguards in corporate responsibility and self-regulation, they have failed to fulfil the basic conduct of elementary ethics. Beyond the scandals of institutions as important as Deutsche Bank and the threats

made by directors of the main energy companies against the EU in relation to climate policies, we also have the Volkswagen scandal and the investigation of another twenty-three brands on the cover-up of the emission of pollutants that very harmfully affect citizens' health. Equally or more worrying is the capacity of these 'champions' to manage to minimise the corresponding government measures to make them pay fairly and exemplarily for actions that can be defined as criminal offenses.

- With the social contract broken, a dual society is imposed. The breakdown of the social State, the uneven sharing of the costs of the crisis, and the general reduction and precarisation of employment and living standards are bringing about dual social models (including in terms of gender) in which inequalities grow and a large part of the population is marginalised and impoverished, including people who have work. Thus, it should be no surprise that there is a reinforcement of disaffection and expressly xenophobic options that are entering power in some European countries.

- The withdrawal from external solidarity. The lack of shared goals, the progressive growth of 'nationalist' feelings, the closing of borders, and the lack of a strategic vision around humanitarian cooperation are acted out daily in the dramatic rejection of refugees fleeing countries suffering military conflicts, terrorism, and/or socio-economic crises. The spectacle presented by too many states in the European Union in relation to the crisis of those displaced by the conflicts in Syria and Iraq constitutes shameful and not very intelligent behaviour on the part of the wealthiest countries in the world. What are we Europeans going to do when faced with the waves of people displaced by climate problems (between 250 and 1,000 million, according to the UNHCR) that will take place globally in the next 50 years?

- Constitutional deconstruction. The rejection of comprehensive, advanced, and more democratic constitutional reinforcement contrasts with the obscuritanism with which the ***Transatlantic Trade Investment Partnership*** (TTIP) is being negotiated with the United States behind citizens' backs. This is a partnership that is suspected to entail yet another step further in the transgression of the constitutional order in European countries in favour of large multinationals, with predictable disadvantages for the rest of the business fabric, for social and employment guarantees, or for the fight against the ecological crisis.

All of this is contributing to the social delegitimisation of the European project. The European Union's own surveys indicate that today most citizens believe that corruption is widespread and that the institutions and the laws are conceived to benefit the most powerful. And everything indicates that they are right.

Fortunately, it is also true that we are witnessing a socio-political repositioning of broad popular sectors that demand political regeneration, the recovery of social rights, and the renaissance of an advanced and solidarity-based European project for majorities. Nor can we ignore the extraordinary reaction in 2015

of many European citizens who, as illustrated in **Figure 10**, overcame the meanness of their leaders before the dramatic refugee problem; or the 2015 'Euromarches', which, under the slogan 'Let's build another Europe', enjoyed the participation of citizens from every corner of the Union. In any case, these movements, which seem to be profound, are too recent and their real scope in the future is yet to be assessed.

FIGURE 10. EUROPEAN CITIZENS MOBILISE TO RECEIVE REFUGEES

Source: European Press

A Europe that fails to curb its main ecological challenges

It is true that Europe has played relatively advanced roles in the international conventions on ecological matters, and that significant programmes and directives have been passed and important advances on different environmental fronts have been made. For example, in relation to the central issue of energy and climate change, roadmaps on GHG emissions have been introduced for 2020/2030/2050, the German turn towards renewable energies has taken place, sustainable urban strategies continue to be implemented in different cities, and initiatives have been developed in multiple local communities to recover independence in energy and water management, which has been controlled by the large companies in the sector. But all of this is insufficient for influencing the current deep-rooted dynamics.

Because it is also true that the European ecological footprint continues to grow, doubling its own biocapacity and quadrupling the global biocapacity, while different ecosystems and vital ecological cycles continue to recede.

Indeed, **Figure 11** summarises the diagnoses and perspectives developed by the EEA in the aforementioned 2013 report ***The European environment – state and outlook 2015***. Of twenty key issues, whose trends up until 2035 are analysed in relation to the policy targets, a third would not advance adequately, two thirds would do so in an uneven (in one case, unknown) way, and in none of the cases would positive trends predominate. This is an outlook that invites worry.

FIGURE 11. EUROPEAN ENVIRONMENTAL TRENDS IN RELATION TO POLICY TARGETS

	5-10 years trends	20+ years outlook	Progress to policy targets
Protecting, conserving and enhancing natural capital			
Terrestrial and freshwater biodiversity	☹	☹	☐
Land use and soil functions	☹	☹	No target
Ecological status of freshwater bodies	O	O	✗
Water quality and nutrient loading	☺	O	☐
Air pollution and its ecosystem impacts	☺	O	☐
Marine and coastal biodiversity	☹	O	✗
Climate change impacts on ecosystems	☹	☹	No target
Resource efficiency and the low-carbon economy			
Material resource efficiency and material use	O	O	No target
Waste management	☺	O	☐
Greenhouse gas emissions and climate change	☺	☹	✓ ✗
Energy consumption and fossil fuel use	☺	☹	✓
Transport demand and related environmental	O	☹	☐
Industrial pollution to air, soil and water	☺	O	☐
Water use and water quantity stress	O	O	✗
Safeguarding from environmental risks to health			
Water pollution and related environmental	☺	O	✓ ☐
Air pollution and related environmental health	O	O	☐
Noise pollution (especially in urban areas)	O	n/a	☐
Urban systems and *grey* infrastructure	O	O	No target
Climate change and related environmental	☹	☹	No target
Chemicals and related environmental health risks	☹	O	☐ ✗

Indicative assessment of trends and outlook		Indicative assessment of progress to policy targets	
☹	Deteriorating trends dominate	✗	Largely not on track to achieving key policy targets
O	Trends show mixed picture	☐	Partially on track to achieving key policy targets
☺	Improving trends dominate	✓	Largely on track to achieving key policy targets

Note: The indicative assessments presented here are based on key indicators (as available and used in SOER thematic briefings), as well as expert judgement. The corresponding 'Trends and outlook' boxes in the respective sections provide additional explanations.

Source: The European environment – state and outlook 2015

Backing a renaissance of the European project

After the crisis sparked by 'Brexit', we have to decidedly back a profound constitutional renovation of the Union. And the best European project can only emerge as a reflection of a political vision open to the change of epoch and shared by its institutions and citizens; a vision capable of innovating in terms of politics, culture, education, economy, and society and of doing so while multiplying commitments to tackle the challenges imposed by the drift towards ecosocial collapse.

In **Chapter 12,** we indicate some key actions that could contribute to the emergence of this project:

- Reopen the constituent process in order to advance in terms of political integration around a better and more grassroots democracy (truly equal for all and independent from economic power), greater social justice and solidarity within and beyond its borders, and backing a more decisive tackling of the challenges of the global ecological crisis, especially in relation to mid-century energy and climate targets.

- Recover/update the Community's shared identity features around paradigms, values, cultures, knowledge, and citizen rights based on ethical principles such as equality, self-restraint, sufficiency, solidarity, respect for diversity, co-responsibility, and ecological sustainability, reaffirming the pertinence of the precautionary principle.

- Collectively reformulate a shared future vision and project that more seriously and coherently contemplates the transformation of the productive and spatial model and that enables its decarbonisation, democratisation, and decentralisation, as well as the recovery of its natural systems. This would require and generate a stronger and more independent Europe, with greater and more just fiscal and budgetary capacity, and more open to boosting decentralised and local initiatives.

- Achieve commitments to external outreach/cooperation that are more ambitious, more generous, and more intelligent in their strategic vision and more committed in their concrete actions, in the service of a more diverse, just, sustainable, and solidarity-based world order.

Because if there are still possibilities to redirect the processes that drag humanity towards ecosocial collapse, it is reasonable to think that Europe could play an important role in the coming decades in this regard. This could be as likely as the fact that the region, under the control of neoliberal logics and large corporations, has become a battlefield in which the change in the correlation of political-economic forces between elites and social majorities is being played out, at the same

time as it plays out between countries with creditor and debtor financial systems or between European citizens lacking in solidarity and immigrants.

In fact, today everyone forgets that the region, overall, has balanced and healthy economic accounts and decent financial room to manoeuvre, that it continues to offer favourable trade options, and that its citizens would have a lot to lose in the slide towards a global ecosocial crisis.

It is possible that the incapacity to have a broad historical perspective is nothing but the reflection of European decline, but it is clear that if we want to consider the renaissance of an advanced region, capable of contributing innovative ideas to global change, we need an ambitious future project. This project should be built on different paradigms and values and developed through diverse institutions and citizenries (plural, since this is not the struggle of a single ideology, country, party, or social movement), and it should have the capacity to compete with the cultural and political hegemony of the current dominant economic/political framework.

COLLECTION
**TIME OF
TRANSITIONS**

Foro Transiciones