





**Legal and Economic Implications  
of the Encyclical Letter “Laudato Si”**  
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# The ecological crisis and the weakness of the international response

The Encyclical Letter “Laudato Si. On Care For Our Common Home”, issued by Pope Francis in May 2015, contains some relevant legal and economic aspects that go beyond a purely religious relevance, rather touching upon the political, social and ethical spheres.<sup>1</sup> The present contribution aims at identifying such aspects of the Encyclical Letter, providing a legal appraisal of its most interesting and relevant features. The Encyclical Letter is a particularly timely document, which encourages humanity to reconsider its role on the planet and its relationship with the other living species. It starts from the recognition of the compelling necessity to address the severe ecological crisis that is affecting our common home and which has been largely caused by the largely “irresponsible use and abuse” of Planet Earth resources made by human beings.

Pope Francis argues that “Nothing in this world is indifferent to us” and calls for “a new dialogue about how we are shaping the future of our planet” (para. 14). He starts by reviewing the most relevant aspects of the current ecological crisis (para. 15). To this effects, he provides a brief overview of “what is happening to our common home” (para. 17). In such a context, the attention is mostly devoted to the main forms of pollution affecting our planet, such as the exposure to air pollution (para. 20), pollution caused by waste (para. 21) and, more generally, pollution linked to the “throwaway culture” which affects our society (para. 22). In such a context, the Encyclical Letter firmly deals with the climate change issue. It interestingly identifies climate as a “common good, belonging to all and meant for all” (para. 23). Climate change is then recognised as “a global problem with grave implications: environmental, social, economic, political and for the distribution of goods. It represents one of the principal challenges facing humanity in our day” (para. 25). While acknowledging vari-

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<sup>1</sup> Pope Francis, 2015. *Encyclical Letter Laudato Si. On Care For Our Common Home*.

ous natural factors influencing global warming, Pope Francis takes a clear stance on the anthropogenic nature of climate change, by clearly stating that “a number of scientific studies indicate that most global warming in recent decades is due to the great concentration of greenhouse gases [...] released mainly as a result of human activity” (para. 23). Furthermore, Pope Francis warns that the negative effects of climate change “will continue to worsen if we continue with current models of production and consumption” and expresses “an urgent need to develop policies so that, in the next few years, the emission of carbon dioxide and other highly polluting gases can be drastically reduced” (para. 26).

Subsequently, the attention shifts on the issue of water (para. 27 ff.), with relevant references to both the qualitative as well as quantitative aspects. In such a context, the Encyclical Letter takes a very strong position by affirming that “*access to safe drinkable water is a basic and universal human right, since it is essential to human survival and, as such, is a condition for the exercise of other human rights*” (para. 30 – italics in the original text). It then continues by saying that “our world has a grave social debt towards the poor who lack access to drinking water, because *they are denied the right to a life consistent with their inalienable dignity*” (para. 30 – italics in the original text). In this context, Pope Francis also denounces the question of water waste, highlighting that “the problem of water is partly an educational and cultural issue” (para. 30).

The Encyclical Letter then focuses on the loss of biodiversity, underlining that “the earth’s resources are also being plundered because of short-sighted approaches to the economy, commerce and production” (para. 32).

Pope Francis then underlines the close connection between environmental degradation and the decline in the quality of human life (para. 43 ff.). In particular, he addresses both the individual dimension, warning that “we cannot fail to consider the effects on people’s lives of environmental deterioration, current models of development and the throwaway culture” (para. 43), and the societal one, stressing that “we cannot adequately combat environmental degradation unless we attend to causes related to human and social degradation” (para. 48).

Pope Francis highlights that, despite the gravity of the current ecological crisis, “the problem is that we still lack the culture needed to confront this crisis. We lack leadership capable of striking out on new paths and meeting the needs of the present with concern for all and without prejudice towards coming generations” (para. 53). This wording resembles the quest for intra- and inter-generational equity already made several years ago by the Brundtland Report.<sup>2</sup> On such premises, the Encyclical goes further by underlining the necessity to establish an appropriate legal framework to promote and support the shift needed in the ecological culture. To this respect, Pope Francis calls for the “establishment of a legal framework which can set clear boundaries and ensure the protection of ecosystems”; “otherwise, the new power structures based on the techno-economic paradigm may overwhelm not only our politics but also freedom and justice” (para. 53).

It is within such a context that the Pope stigmatises the remarkable gravity of the weakness of the international responses to the ecological crisis experienced so far, witnessed by the “failure of global summits on the environment” (para. 54). In the Pope’s view, this is directly related to the fact that “our politics are subject to technology and finance” (para. 54). This entails two negative consequences. On the one side, “there are too many special interests, and economic interests easily end up trumping the common good and manipulating information” (para. 54). On the other side, “the alliance between the economy and technology

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<sup>2</sup> United Nations Commission on Environment and Development, 1987. *Our Common Future (Brundtland Report)*, Oxford, Oxford University Press.

ends up side-lining anything unrelated to its immediate interests” (para. 54). As a result, we are witnessing both a “superficial rhetoric” aimed at environmental protection and the failure of any attempt to introduce change. In the Pope’s wording this is expressed as follows: “the most one can expect is superficial rhetoric, sporadic acts of philanthropy and perfunctory expressions of concern for the environment, whereas any genuine attempt by groups within society to introduce change is viewed as a nuisance based on romantic illusions or an obstacle to be circumvented” (para. 54).

On the same line of reasoning, Pope Francis highlights that “economic powers continue to justify the current global system where priority tends to be given to speculation and the pursuit of financial gain, which fail to take the context into account, let alone the effects on human dignity and the natural environment” (para. 56). Within such a framework, Pope Francis calls for a greater effort to address the challenges posed by the ecological crisis and warns about the risks of “a false or superficial ecology which bolsters complacency and a cheerful recklessness” (para. 59). In other words, humanity seems neither ready nor willing to take courageous decisions to tackle the profound ecological crisis, thus showing a certain degree of “evasiveness”, which “serves as a licence to carrying on with our present lifestyles and models of production and consumption. This is the way human beings contrive to feed their self-destructive vices: trying not to see them, trying not to acknowledge them, delaying the important decisions and pretending that nothing will happen” (para. 59).



# The human origin of the ecological crisis

Following the analysis of the several aspects of the ecological crisis, Pope Francis argues that “it would hardly be helpful to describe symptoms without acknowledging the human origins of the ecological crisis”; to this effect, his analysis focuses in particular on the “dominant technocratic paradigm” (para. 101). Notwithstanding the positive outcomes brought about by the scientific and technological progress in the last two centuries, Pope Francis raises a fundamental issue related to the globalisation of the technocratic paradigm, by arguing that the problem is not represented by technological progress as such, but the issue to be addressed is rather “the way that humanity has taken up technology and its development according to an undifferentiated and one-dimensional paradigm” (para. 106). In other words, as the Encyclical Letter points out, “many problems of today’s world stem from the tendency [...] to make the method and aims of science and technology an epistemological paradigm which shapes the lives of individuals and the workings of society” (para. 107). In fact, relying on such a paradigm, humanity has developed a destructive approach, which legitimises an excessive exploitation of natural resources. This is in line with the “idea of infinite or unlimited growth, which proves so attractive to economists, financiers and experts in technology” and which is “based on the lie that there is an infinite supply of the Earth’s goods, and this leads to the planet being squeezed dry beyond every limit” (para. 106). Moreover, “the technocratic paradigm also tends to dominate economic and political life” (par. 109).

In such a context, Pope Francis takes a clear stance against the widespread belief that “current economics and technology will solve all environmental problems” (para. 109). Therefore, the question implicitly raised by Pope Francis is essentially the following: how to react against such a dominant technocratic paradigm and prevent its negative consequences? To this respect, Pope Francis calls for a “resistance to the assault of the technocratic paradigm”, which should be based on a new and “distinctive way of looking at things”, which also implies a new “way of thinking, policies, an educational programme, a lifestyle and a spirituality” (para. 111). Otherwise, as Pope Francis correctly points out, “even the best ecological initiatives can find themselves caught up in the same globalized logic” (para. 111). In fact, “to seek only a technical remedy to each environmental problem which comes up is to separate what is in reality interconnected and to mask the true and deepest problems of the global system” (para. 111). In sum, it may be said that in order to overcome the presently dominant technological paradigm, the Encyclical Letter proposes a fundamental shift in the ecological culture, which is currently limited “to a series of urgent and partial responses to the immediate problems of pollution, environmental decay and the depletion of natural resources”

(para. 111), suggesting “to slow down and look at reality in a different way, to appropriate the positive and sustainable progress which has been made, but also to recover the values and the great goals swept away by our unrestrained delusions of grandeur” (para. 114).

# Major paths of dialogue

In order to address the human origin of the ecological crisis, the Encyclical Letter proposes a series of “major paths of dialogue”, which may be relied upon to overcome “the spiral of self-destruction” which humanity is currently confronting (para. 163).

Firstly, it is stressed the importance of a “dialogue on the environment in the international community”. In this context, Pope Francis notes that “beginning in the middle of the last century and overcoming many difficulties, there has been a growing conviction that our planet is a homeland and that humanity is one people living in a common home” (para. 164). At the same time, it is acknowledged that “interdependence obliges us to think of *one world with a common plan*” (para. 164 - italics in the original text). As a consequence, “a global consensus is essential for confronting the deeper problems, which cannot be resolved by unilateral actions on the part of individual countries. Such a consensus could lead, for example, to planning a sustainable and diversified agriculture, developing renewable and less polluting forms of energy, encouraging a more efficient use of energy, promoting a better management of marine and forest resources, and ensuring universal access to drinking water” (para. 164). However, as highlighted by Pope Francis, despite the increased concern for the widespread environmental degradation at international level, “recent World Summits on the environment have not lived up to expectations because, due to lack of political will, they were unable to reach truly meaningful and effective global agreements on the environment” (para. 166). In particular, the Encyclical Letter, while acknowledging the partial success of the 1992 Rio Summit (para. 167), points out the “wide-ranging but ineffectual outcome document” emerged from the 2012 Rio+20 Summit (para. 169). More generally, it underlines that with regard to climate change “the advances have been regrettably few”, remarking that “reducing greenhouse gases requires honesty, courage and responsibility, above all on the part of those countries which are more powerful and pollute the most” (para. 169). Pope Francis concludes the dialogue on the environment calling for “a more responsible overall approach”, which is “needed to deal with both problems: the reduction of pollution and the development of poorer countries and regions. The twenty-first century, while maintaining systems of governance inherited from the past, is witnessing a weakening of the power of nation states, most notably because the economic and financial sectors, being transnational, tends to prevail over the political one. Given this situation, it is essential to devise stronger and more efficiently organized international institutions, with functionaries who are appointed fairly by agreement among national governments, and empowered to impose sanctions” (para. 175).

Secondly, the attention is shifted on the “dialogue for new national and local policies”, needed to address both the environmental and economic development challenges (para. 176). In such a context, Pope Francis focuses on two fundamental elements, namely the centrality of the State and the centrality of the law (para. 177). As for the centrality of the State, it is stated that “given the real potential for a misuse of human abilities, individual states can no longer ignore their responsibility for planning, coordination, oversight and enforcement within their respective borders” (para. 177); as for the centrality of the law, it is underlined that “one authoritative source of oversight and coordination is the law, which lays down rules for admissible conduct in the light of the common good. The limits which a healthy, mature and sovereign society must impose are those related to foresight and security, regulatory norms, timely enforcement, the elimination of corruption, effective responses to undesired side-effects of production processes, and appropriate intervention where potential or uncertain risks are involved” (para. 177). On such premises, Pope Francis concludes by highlighting the creative role of law, affirming that “political and institutional frameworks do not exist simply to avoid bad practice, but also to promote best practice, to stimulate creativity in seeking new solutions and to encourage individual or group initiatives” (para. 177). A particularly relevant role is assigned to the local dimension, as “local individuals and groups can make a real difference. They are able to instil a greater sense of responsibility, a strong sense of community, a readiness to protect others, a spirit of creativity and a deep love for the land. They are also concerned about what they will eventually leave to their children and grandchildren” (para. 179).

Thirdly, the Encyclical Letter presents the necessity of a “dialogue and transparency in decision-making”. In fact, “an assessment of the environmental impact of business ventures and projects demands transparent political processes involving a free exchange of views” (para. 182). In particular, it stresses the importance of local populations involvement in decision-making, stating that “the local population should have a special place at the table; they are concerned about their own future and that of their children, and can consider goals transcending immediate economic interest. We need to stop thinking in terms of ‘interventions’ to save the environment in favour of policies developed and debated by all interested parties” (para. 183).

Finally, the Encyclical Letter addresses the issue of a correct “dialogue between politics and economy for human fulfilment”. “Politics must not be subject to the economy, nor should the economy be subject to the dictates of an efficiency-driven paradigm of technocracy” (para. 189). With a special reference to the ecological crisis, Pope Francis clearly affirms: “environmental protection cannot be assured solely on the basis of financial calculations of costs and benefits. The environment is one of those goods that cannot be adequately safeguarded or promoted by market forces” (para. 190).<sup>3</sup> It is underlined that it is not realistic “to hope that those who are obsessed with maximizing profits will stop to reflect on the environmental damage which they will leave behind for future generations” (para. 190). In fact, “where profits alone count, there can be no thinking about the rhythms of nature, its phases of decay and regeneration, or the complexity of ecosystems which may be gravely upset by human intervention” (para. 190). It is therefore necessary to embrace a new development path, which may pave the way “to different possibilities which do not involve stifling human creativity and its ideals of progress, but rather directing that energy along new channels” (para. 191). In this sense, “for new models of progress to arise, there is a need to change

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<sup>3</sup> Originally in Pontifical Council For Justice And Peace, 2004. *Compendium of the Social Doctrine of the Church*, (p. 470).

‘models of global development’, this will entail a responsible reflection on “the meaning of the economy and its goals with an eye to correcting its malfunctions and misapplications” (para. 194).<sup>4</sup> Pope Francis states the necessity of clear-cut choices, focusing on a correct definition of progress: “it is not enough to balance, in the medium term, the protection of nature with financial gain, or the preservation of the environment with progress. Halfway measures simply delay the inevitable disaster. Put simply, it is a matter of redefining our notion of progress. A technological and economic development which does not leave in its wake a better world and an integrally higher quality of life cannot be considered progress” (para. 194). From the Encyclical Letter it is clear that the gravity of the problems requires a certain degree of courage in the definition and implementation of correct solutions. In this sense, Pope Francis warns against inadequate solutions by taking for instance a very critical position towards sustainable growth, as an example of a misleading concept. To this respect, Pope Francis states that talking of “sustainable growth usually becomes a way of distracting attention and offering excuses. It absorbs the language and values of ecology into the categories of finance and technocracy, and the social and environmental responsibility of businesses often gets reduced to a series of marketing and image-enhancing measures” (para. 194).

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<sup>4</sup> Originally in Benedict XVI, 2010. *Message for the 2010 World Day of Peace*, (p. 43).

# The “integral ecology” and the call for an ecological conversion

Starting from the assumption that “everything is closely interrelated, and today’s problems call for a vision capable of taking into account every aspect of the global crisis” (para. 137), Pope Francis proposes to embrace an integral ecology as a possible solution. Such an integral ecology is composed by an environmental, economic and social ecology, a cultural ecology and an ecology of daily life.

The (environmental) ecology, which “studies the relationship between living organisms and the environment in which they develop”, “entails reflection and debate about the conditions required for the life and survival of society, and the honesty needed to question certain models of development, production and consumption” (para. 139). In this context, Pope Francis highlights the importance of trying to devise effective and “comprehensive solutions which consider the interactions within natural systems themselves and with social systems” (para. 139). This is closely related to the recognition that there are not “two separate crises, one environmental and the other social”, rather “one complex crisis which is both social and environmental” (para. 139). In order to properly address such a complex crisis, adequate solutions must be based on an integrated approach “to combating poverty, restoring dignity to the excluded, and at the same time protecting nature” (para. 139). The comprehensive and integrated approach proposed by the Encyclical Letter should be relied upon also to determine the environmental impact of business activities on ecosystems. In such a sense, “we take these systems into account not only to determine how best to use them, but also because they have an intrinsic value independent of their usefulness” (para. 140). Furthermore, there is “the need for an ‘economic ecology’ capable of appealing to a broader vision of reality. The protection of the environment is in fact ‘an integral part of the development process and cannot be considered in isolation from it’” (para. 141).<sup>5</sup> Moreover, the Encyclical Letter stresses the need for a social ecology as “the health of a society’s institutions has consequences for the environment and the quality of human life. [...]In this sense, social ecology is necessarily institutional, and gradually extends to the whole of society, from the primary social group, the family, to the

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<sup>5</sup> Originally in *Rio Declaration on Environment and Development*, 1992. Principle 4.

wider local, national and international communities” (para. 142).

The integral ecology comprises also a cultural ecology, which expresses itself in “protecting the cultural treasures of humanity in the broadest sense. More specifically, it calls for greater attention to local cultures when studying environmental problems, favouring a dialogue between scientific-technical language and the language of the people” (para. 143). Eventually, the Encyclical Letter proposes an ecology of daily life as a prerequisite for an “authentic development”, whose attainment “includes efforts to bring about an integral improvement in the quality of human life, and this entails considering the setting in which people live their lives” (para. 147). This applies both to urban and rural settings, as “interventions which affect the urban or rural landscape should take into account how various elements combine to form a whole which is perceived by its inhabitants as a coherent and meaningful framework for their lives” (para. 151).

Furthermore, “an integral ecology is inseparable from the notion of the common good, a central and unifying principle of social ethics” (para. 156), which “also extends to future generations” recognising the existence of “our common destiny, which cannot exclude those who come after us” (para. 159). This remark recalls the already mentioned necessity of solidarity among generations (commonly referred to as the inter-generational equity principle) as a precondition of sustainable development (para. 159).

The quest for an integral ecology is accompanied by the recognition that “many things have to change course, but it is we human beings above all who need to change”; in fact, we “lack an awareness of our common origin, of our mutual belonging and of a future to be shared with everyone” (para. 202). In Pope Francis’ view, “a great cultural, spiritual and educational challenge stands before us, and it will demand that we set out on the long path of renewal” by developing “new convictions, attitudes and forms of life” (para. 202).

In such a context, Pope Francis notes that “since the market tends to promote extreme consumerism in an effort to sell its products, people can easily get caught up in a whirlwind of needless buying and spending. Compulsive consumerism is one example of how the techno-economic paradigm affects individuals” (para. 203). This entails two main consequences: on the one side, “when people become self-centred and self-enclosed, their greed increases [and] a genuine sense of the common good also disappears”; on the other side, “obsession with a consumerist lifestyle [...] can only lead to violence and mutual destruction” (para. 204). There is only one solution to overcome this negative situation: a decisive “change in lifestyle”. In fact, this “could bring healthy pressure to bear on those who wield political, economic and social power”, also increasing the value of consumer social responsibility (para. 206). In such a context, it is worth noting that the Encyclical Letter recalls the challenge posed by the 2000 Earth Charter,<sup>6</sup> according to which “common destiny beckons us to seek a new beginning” (para. 207).

Finally, the Encyclical Letter states that “an awareness of the gravity of today’s cultural and ecological crisis must be translated into new habits” and this compels us to address the “educational challenge” we are facing (para. 209). In this sense, Pope Francis notes that “environmental education has broadened its goals. Whereas in the beginning it was mainly centred on scientific information, consciousness-raising and the prevention of environmental

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<sup>6</sup> Earth Charter, 2000, at <http://earthcharter.org>.

risks, it tends now to include a critique of the ‘myths’ of a modernity grounded in a utilitarian mindset (individualism, unlimited progress, competition, consumerism, the unregulated market)” (para. 210). The new environmental education “needs educators capable of developing an ethics of ecology, and helping people, through effective pedagogy, to grow in solidarity, responsibility and compassionate care” (para. 210). It should promote the creation of an “ecological citizenship” and “encourage ways of acting which directly and significantly affect the world around us” (para. 211). Therefore, “the ecological crisis is also a summons to profound interior conversion”, identified by Pope Francis as an “ecological conversion” (para. 217).



# The main tipping points of the Encyclical Letter

After a brief reasoned analysis of the most relevant legal and institutional issues raised by the Encyclical Letter, it is now time to highlight some tipping points, which deserve a further more detailed comment, and contextualise Pope Francis' views in the light of the most relevant scientific literature on these topics.

The first of the main tipping points emerging from the reading of the Encyclical Letter is the very harsh critique of the dominant technocratic paradigm made by Pope Francis. In the Encyclical Letter, it is clearly stated that the problem is not technology as such. The main problem lies in the way in which humanity is developing and making use of technology, according to the above-mentioned paradigm, that is legitimising a destructive approach towards nature and an over-exploitation of natural resources, which is making our Planet being squeezed above any reasonable limits. In such a context, as already mentioned, Pope Francis takes a clear stance against the belief that "current economics and technology will solve all environmental problems". In this sense, Pope Francis' position can be read also as a critique of the widespread idea of an infinite or unlimited growth, that unfortunately still finds a broad support in contemporary politics and economics. To this respect, it should be underlined that this position of Pope Francis echoes the warnings raised in the scientific literature by many scholars, such as Schumacher, Tiezzi, Daly, Costanza, Georgescu-Roegen, Capra and Luisi.<sup>7</sup> According to such authors, it is well demonstrated that a limitless economic growth can hardly be sustainable in a Planet characterised by limited natural resources and sinks for waste.<sup>8</sup> This is also in line with the Planetary Boundaries theory, which

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<sup>7</sup> On this issue see, for instance, Schumacher E. F., 1973. *Small is Beautiful. A study of Economics as if People Mattered*, London, Blond & Briggs; Tiezzi E., 1984. *Tempi storici. Tempi biologici*, Milano, Garzanti; Daly H. E., 1977. *Steady-State Economics. The Economics of Biophysical Equilibrium and Moral Growth*, W. H. Freeman and Company; Costanza R. and Daly H. E., 1992. Natural Capital and Sustainable Development, *Conservation Biology*, vol. 6, pp. 37-46; Georgescu-Roegen N., 1986. The Entropy Law and the Economic Process in Retrospect, *Eastern Economic Journal*, vol. 12, pp. 3-25; Capra F. and Luisi P. L., 2014. *The Systems View of Life. A Unifying Vision*, pp. 362 ff., Cambridge, Cambridge University Press.

<sup>8</sup> On the impossibility of a limitless growth on a limited planet see, for instance, Daly H. E., 1996. *Beyond Growth. The Economics of Sustainable Development*, Boston, Beacon Press.

defines the Earth's biosphere as the "safe-operating space" for humanity.<sup>9</sup>

Pope Francis' critique also includes a call for a resistance to the assault of the technocratic paradigm, which should be based on a new way of thinking, on the promotion of different policies, on the revision of our education programmes and most interestingly on a change in the ecological culture and lifestyle. In such a context, the Encyclical Letter argues that should such changes not occur, even the best ecological initiatives will end up being captured in the same globalised logic and therefore will not produce any satisfactory results.

The second main tipping point which may be detected in the Encyclical Letter is the recognition by Pope Francis that the institutional and legal response, undertaken at international level to deal with the global ecological crisis, has been generally quite weak and certainly not sufficient to cope in an adequate way with the gravity of the problems we are facing. In this sense, it is worth noting the clear acknowledgement about the failure of the global summits on the environment which have characterised the last decades. This, in Pope Francis' view, is directly related to the fact that politics is substantially subject to technology and finance. In such a context, Pope Francis notes that special interests, and most notably economic interests, easily end up tramping the common good and manipulating information. As a consequence, not only has humanity not been able to put up an adequate legal framework to deal with the widespread ecological crisis, but we are also witnessing the triumph of a superficial rhetoric aimed at environmental protection, which is coupled with the failure to introduce any substantial change to the present situation. It is within this framework of analysis that Pope Francis warns about the risks of a false or superficial ecology which promotes a certain degree of complacency with the present situation and of evasiveness that serves as a license to carry on with the present lifestyles and models of production and consumption. According to Pope Francis, this is the way in which humanity is feeding its self-destructing vices: "trying not to see them, trying not to acknowledge them, delaying the important decisions and pretending that nothing will happen". In such a context, the solution suggested by Pope Francis to overcome the weakness of the international response consists in the establishment of an appropriate legal framework that may promote and support the already mentioned shifts needed in the ecological culture. Such a legal framework should allow us to set clear boundaries and to ensure the protection of the ecosystems upon which life and human prosperity are based. A good example of the urgent need to improve the institutional and legal response is represented by the climate change issue. To this respect, as mentioned above, the Encyclical Letter recognises a need to develop adequate policies coupled with a decisive change in lifestyle and the abandonment of the "current models of production and consumption". On this line of reasoning, Pope Francis more recently commented in a cautious way on the Paris Agreement on climate change, adopted in December 2015 at the Paris Conference on climate change. The Pope, in fact, instead of adding his voice to the ones simplistically

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<sup>9</sup> Rockström J., Steffen W., Noone K., Persson Å., Stuart III Chapin F., Lambin E., Lenton T. M., Scheffer M., Folke C., Schellnhuber H. J., Nykvist B., de Wit C. A., Hughes T., van der Leeuw S., Rodhe H., Sörlin S., Snyder P. K., Costanza R., Svedin U., Falkenmark M., Karlberg L., Corell R. W., Fabry V. J., Hansen J., Walker B., Liverman D., Richardson K., Crutzen P. and Foley J., 2009. Planetary boundaries: exploring the safe operating space for humanity, *Ecology and Society*, vol. 14, No. 32, at [www.ecologyandsociety.org/vol14/iss2/art32/](http://www.ecologyandsociety.org/vol14/iss2/art32/); Rockström J., Steffen W., Noone K., Persson Å., Stuart III Chapin F., Lambin E., Lenton T. M., Scheffer M., Folke C., Schellnhuber H. J., Nykvist B., de Wit C. A., Hughes T., van der Leeuw S., Rodhe H., Sörlin S., Snyder P. K., Costanza R., Svedin U., Falkenmark M., Karlberg L., Corell R. W., Fabry V. J., Hansen J., Walker B., Liverman D., Richardson K., Crutzen P. and Foley J., 2009. A Safe Operating Space for Humanity, *Nature*, vol. 461, pp. 472-475. On this issue see also Wijkman J. and Rockström J., 2011. *Bankrupting Nature: Denying Our Planetary Boundaries*, New York, Earthscan/Routledge.

celebrating the outcome of the Paris summit as “historic”,<sup>10</sup> in the immediate aftermath of the conclusion of the Conference affirmed that “The climate conference has just ended in Paris with the adoption of an agreement, which many are defining as historic”.<sup>11</sup> In such a context, it seems that Pope Francis intended to postpone his opinion on the Paris Agreement, while urging “the entire international community to continue with solicitude the path taken, in a sign of solidarity that will become more and more active”.<sup>12</sup>

The third main tipping point which, in our opinion, may be detected and should be highlighted is directly related to the critique of the technocratic paradigm and the proposal of a paradigm shift; it consists in the necessity to reassess and redefine the respective rights and duties of the most relevant actors involved: the State, the business community and the people.

As regards the State, Pope Francis notes that, within the present globalised world, individual States have somehow failed to fully exercise their regulatory powers with respect to, inter alia, environmental protection. In fact, in the contemporary world “it is the case that some economic sectors exercise more power than states themselves”. Pope Francis highlights the pivotal role that States should play, calling for a renewed responsibility of individual States for “planning, coordination, oversight and enforcement within their respective borders”. In particular, he stresses that each individual State, within its borders, has a responsibility to promote and implement national policies contributing to tackle the global ecological crisis. In this sense, the Encyclical Letter makes clear that States should also contribute to put in place adequate political and institutional frameworks, not only aiming at preventing and avoiding bad practices, but also striving at developing and implementing best practices to proactively address the ecological challenges.

With reference to the business community, Pope Francis warns that the immediate interest of the economy often overwhelms the general public interest. As a consequence, environmental protection is often limited to a “superficial rhetoric” and characterised by “sporadic acts”, rather than by a comprehensive approach aimed at introducing an effective change. Although Pope Francis recognises the positive outcomes that business may bring for society as a whole, he notes that the dominant principle of the maximization of profits, if considered and applied in isolation from other competing interests, may lead to “a misunderstanding of the very concept of the economy”. Within such a context, the economy is nowadays dominated by multinationals, which are often performing in an unsustainable way, mostly in developing countries. In particular, Pope Francis highlights that in some cases also the environmental and social responsibility of economic actors may be reduced to mere marketing initiatives without any substantial contribution to environmental protection. Instead, the Encyclical Letter contains a strong call for the need to change the development model, going beyond the simple balancing of the protection of nature with financial gains, towards an ecological conversion.

As regards people, they may be involved in the ecological conversion first of all as ecological citizens that should promote environmentally sound behaviours and new patterns of consumption. In fact, the gravity of the present situation with regard to environmental degradation and the widespread ecological crisis challenge people to re-examine and reconsider their

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<sup>10</sup> UNFCCC (United Nations Framework Convention on Climate Change), <http://newsroom.unfccc.int/unfccc-newsroom/finale-cop21/>.

<sup>11</sup> Pope Francis, 13 December 2015. *Angelus*, Saint Peter's Square, accessible at [https://w2.vatican.va/content/francesco/en/angelus/2015/documents/papa-francesco\\_angelus\\_20151213.html](https://w2.vatican.va/content/francesco/en/angelus/2015/documents/papa-francesco_angelus_20151213.html).

<sup>12</sup> Pope Francis, *Angelus*, cit.

lifestyles. To this end, people should be promoters and actors of a decisive “change in lifestyle”, which could exercise a certain pressure on the political, economic and social forces by enhancing the relevance of consumers social responsibility. On the other side, people should play a more relevant role within decision-making processes. In this sense, the Encyclical Letter calls for a full involvement of people in the assessment of the environmental impact of business activities and projects. In such a context, Pope Francis highlights, in particular, the importance of the involvement of local populations, insofar they are directly concerned about their own land and can be in a position to better balance the competing interests at stake, not being overwhelmed by immediate economic interests.

In sum, Pope Francis, by calling to action the State, the business community and the people, seems to promote both a top-down approach and a bottom-up perspective. The advocated paradigm shift, in fact, needs a set of comprehensive initiatives to be undertaken at different levels.

# Conclusion

On the basis of what we have been saying so far, it emerges clearly from the Encyclical Letter that there is an urgent need of a shift in the ecological culture, which should be based on a profound paradigm shift, inspired by Pope Francis' call for an integral ecology. Obviously, the needed shift should not be performed abruptly or all at once. Should this occur, in fact, there would be a high risk of impairment of existing investments and of an overall negative interference with the development strategies of many countries. This could in turn endanger the stability of the economic and financial systems. Therefore, the needed changes should be gradual. However, they should be conceived as inescapable progressive steps and should be framed within a clear long-term ecological sustainability approach.<sup>13</sup>

In this sense, the patterns proposed in the Encyclical Letter shall be coupled with the actions to be taken in order to implement the Sustainable Development Goals (SDGs) adopted by the United Nations General Assembly in September 2015.<sup>14</sup> The SDGs, in fact, despite their shortcomings,<sup>15</sup> are the main driver for the global development agenda up to 2030 and are meant to represent an unprecedented attempt to contribute to “transforming our world” towards a more sustainable future. However, such a transformative change will be possible only if underpinned by the deep ecological conversion advocated by Pope Francis, both at individual and societal level, with a view to promote and create a new alliance between humanity and the environment which should replace the nowadays dominant “alliance between the economy and technology”.

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<sup>13</sup> On the concept of ecological sustainability see Bosselmann K., 2008. *The Principle of Sustainability*, (p. 53), Ashgate, Aldershot; Montini M., 2014. Revising International Environmental law through the Paradigm of Ecological Sustainability, in Lenzerini F. & Vrdoljak A. (Ed.), *International Law for Common Goods. Normative Perspectives in Human Rights, Culture and Nature*, (pp. 271-287), Oxford, Hart Publishing.

<sup>14</sup> General Assembly of the United Nations, 25 September 2015. *Resolution Transforming Our World: the 2030 Agenda For Sustainable Development*.

<sup>15</sup> Montini M. and Volpe F., 2016. Sustainable Development Goals: “much ado about nothing”?, *Environmental Liability*, vol. 23, pp. 141-147.

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