

Research Article

Sustainable Prosperity and Circular Economy in the Care of Mother Earth — The Blue Kiss

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Reflection on the feminine archetype in the development of conservation and environmental policy, in particular reflection on eco-feminism and its implications for the development of women's skills, abilities, and capacities now included in the circular economy. Proposal of new perspectives on the protection of Nature, circumscribed to innovation and sustainable prosperity, and biomimicry as a process to be taken into account in the search for efficient solutions to the complex problems represented by the Social and Ecological Rule of Law.

I. Women's Capacities and Skills, Now We Call Them Circular Economy

The feminine view of the environment is manifested in how women interact with it, in their protective and enterprising nature, in the transforming capacity they are endowed with. History and culture, from the distant matriarchy represented by the Paleolithic Venus of Willendorf, bring to our collective consciousness different images that link women and nature in a multifaceted way, as mother, as healer-protector, as reproducer and generator of opportunities, today we would say entrepreneur, Among the many references, we highlight Wangari Maathai, Nobel Peace Prize winner, who, using politics and ecology as peaceful weapons, has heroically contributed to sustainable development, democracy and peace, mobilising thousands of women to plant trees and halt the effects of desertification in Africa, in the so-called Green Belt of Kenya¹. Alongside them, the silent legions of women from all continents and all times who embody the spirit of ASTARTÉ, DEMÉTER, PACHA MAMA, COATLICUE, HOUTU O GANGA ² attached to their nature, Mother Nature's ³.

The archetype of ecofeminism includes the stories of nymphs, fairies, healers, sorceresses, and even witches, who have played a leading role in the world of the unknown, of imagination, and fear. They occupy a place that is not always fair in the cultural heritage of a history written by men and for men, where women have been silent until the recent outbreak of the "enough is enough" movement, despite the Amazonian efforts of the British suffragettes, led by Emmeline PANKHURST, and of political feminism, to which we owe the legislation for the promotion and equalisation of opportunities between the sexes. My reflections will be based on an egalitarian and inclusive ecofeminism. It will include, above all, the considerations of women who, through their actions, have built and continue to build a feminine sisterhood in the face of patriarchy, in the care of Mother Sister Earth⁴. The professional recognition of women in all areas, the most important domestic one being the care of the common village, is not only a requirement with legal implications in the dialogue of human rights, where equality is an imperative, but also values a closeness and understanding of natural phenomena of indisputable usefulness. In the relationship between women and the environment, in addition to the sensitivity that characterises them, they have developed adaptive capacities, skills, and abilities in the competition for food and resources, based on mutualism, commensalism, tenancy, in short, always symbiotic, aware that they cannot live independently and that they need nature to subsist. Indeed, relying on the position of equilibrium that women occupy in their habitat, from the igloo to the apartment in the shared neighbourhood of any city, is an ecosystemic reference that represents progress for humanity, which faces the challenge of saving itself and the planet from the new pandemics that threaten its health and life⁵. As Petra KELLY would say, "the time for a life-affirming biosphere policy is upon us"⁶. Unfortunately, this statement is almost 50 years old, and although much progress has been made, it is clearly insufficient in the light of climate change, the loss of biodiversity, and the progressive pollution of the oceans by plastics, which is causing springs to become, as Rachel CARLSON announced in her *Fable for Tomorrow*, silent, lifeless, and noiseless *springs*⁷.

We are not being able to live ecologically, despite the countless actions and awareness campaigns, which from different international, national, and local spheres, from public and private intervention, draw our attention to the problem of survival that environmental degradation represents. The secondary role that women still play in the centres of power probably has a lot to do with this, as decision-making based on traits linked to their nature would undoubtedly facilitate a way of life that respects the natural environment, as shown by the policies developed by women's governments. In

this regard, we recall Sheila WATT-CLOUTIER, who, as president of the Inuit Circumpolar Council, taught the world that it is possible to comply coherently with humanity and nature, placing the environment and human rights as a governmental priority. In her case, with the Inuit of Canada, Greenland, Alaska, and Russia and the Arctic ecosystem, particularly sensitive to environmental degradation⁸.

At the International Conference on Sustainable Development Goals, UNMAP 2019, the major blocks that make up the partnerships to achieve them were discussed, highlighting that the potential for sustainability is underdeveloped. Both due to external causes beyond the control of organisations (public institutions and private companies), as well as internal factors, especially those related to the lack of knowledge of sustainability tools, processes and actions⁹. It seems that we have once again embarked humanity on a titanic feat, without explaining well what the task at hand consists of, which will once again hinder its success. Particularly serious are the weaknesses in outreach and education, without which the policy and institutional requirements and constraints in relation to environmental protection, in particular with regard to the transformation that the circular economy represents as an economic, social and cultural paradigm for achieving sustainability, cannot be understood¹⁰. Reality shows us that there is insufficient management and commitment to environmental regulation, which until now, has consisted mainly of controlling polluting processes and activities. If we truly want to act for change, in terms of the United Nations, methods must be incorporated that, being women's skills, abilities and capacities now incorporated into the circular economy, reduce resources and waste from cradle to grave, applying objective indicators such as the Human Development Index¹¹, the Environmental Sustainability Indicator¹², or the ecological footprint¹³. These indices express objective data that show the reality in which we find ourselves and which we must all make known, as we are all involved. With regard to the Earth's footprint, in the last 20 years we have consumed 56% of resources in excess of the planet's biocapacity; therefore, to maintain the current level of consumption indefinitely, 1.5 planets would be needed.

In the creation of a better and more ecological future through ancient concepts with modern names, such as the circular economy, women are finally taking centre stage, making a reality what Vandana SHIVA in India and in Spain Yayo HERRERO¹⁴ have already advanced together with that unknown list of great ecofeminist women¹⁵, who in the development of their microcosm have been recycling, reusing and reducing in constant and continuous respect for the natural capital represented by biodiversity and natural resources¹⁶.

In the spirit of Clarissa PINKOLA, *women run with the wolves*¹⁷ ignoring this great advantage means losing the talent and knowledge that are essential for the necessary action to protect nature and humanity. It is not for nothing that the basic principle of legal protection of the environment is manifested in sustainable development, which another woman, Gro Harlem, once again proclaimed as that which meets the needs of the present without compromising the ability and capacity of future generations to meet their own needs. The report that bears her name, the famous BRUNDTLAND report, has been pointing the way to economic and social development since the 1980s¹⁸.

Sustainable development defines the current agenda that humanity has given itself for the next decade, and so in the 20-30 Agenda, the United Nations has proposed 17 Goals, the Sustainable Development Goals (SDGs), to achieve a better and fairer world, by transforming the way we live, manage, produce, exploit, and consume¹⁹.

Until the first decade of the 21st century, progress depended on a model based on the conquest and domination of nature, with man and the linear economy as the reference, and it is not surprising that it was conceived as infinite and unlimited. The predatory and parasitic relationship with the environment, the exclusion of women, and the failure to appreciate the finiteness of our world have led to the current ecological impact of global proportions. We are witnessing what Frederick ENGELS called the revenge of nature, warning us with the experience of ancient civilisations: "The men who cut down the forests in Mesopotamia, Greece, Asia Minor, and other regions in order to obtain arable land could not even imagine that, by eliminating the forests, they were laying the foundations for the present aridity of these lands"²⁰. Today we could say that nature is taking revenge, but personally I prefer to think of it as reacting, among other things, through the so-called greenhouse effect, which is raising the temperature of the planet, with all the disasters that climate change brings.

We are witnessing the progressive depletion of natural resources, the over-consumption of water, the dumping of pollutants into the atmosphere, the soil, and the oceans, especially in the countries of the so-called Third World, which generate violence and misery from which populations flee into exile. The plundering of resources by the linear economic model has been and continues to be carried out mainly in poor countries that are rich in natural resources and have a high population density, which is considered a human resource for business development. In these countries, both in the extraction and transformation processes, the costs of management that take into account environmental and equity parameters, such as the right of workers to a fair wage or paid rest, are not applied. Here again, women workers, including children, are the most inhumanely treated, as noted in the UN 2020 report

on SDG 5, which aims to achieve gender equality and empower all women and girls. The report points out that they are hit hard by the COVID-19 pandemic, with circumstances that have already contributed to an increase in violence, and the increased time they spend on unpaid work is likely to be a burden that will worsen. The report also notes that the world is still far from parity, with women's decision-making power clearly lacking ²¹.

The search for a better place to live is the fundamental driving force behind migration; today, environmental degradation, violence, and poverty are at the root of migratory flows across borders to countries with better living conditions ²². In the human rivers of immigration, degradation, pollution, and tragedy are daily occurrences among the weakest, which once again prey on children and women, victims of trafficking, sexual abuse, and domination in all its manifestations, as highlighted by the recent report of the Council of Europe Commissioner for Human Rights, which warns of the deteriorating situation of migrants in the Mediterranean.

In the picture of our reality, we never tire of saying that the accumulation of waste poses serious problems related to plastics and, in short, there is a constant and continuous degradation that leads to the loss of biodiversity, desertification and other adverse effects that directly affect life on the planet, which also affects us by dehumanising us. Against this background, from the Stockholm Conference in 1972 to the new American adoption of the Paris Treaty in 2021, measures and actions have been activated from a variety of political, legal, economic, scientific and technical approaches that seek to minimise the damage caused by behaviour based on a misunderstanding of the economic relationship that links us to our natural environment. It is interesting to note how the voices of conventional economics, based on common sense and knowledge, have criticised linear economic growth, such as SCHUMACHER in *Small is Beautiful*,²³ and GEORGESCU-ROEGEN who explained the degradation of matter and energy in the economic process with the so-called fourth law of entropy, showing, as LEFF points out, the physical limits imposed by the second law of thermodynamics on the expansion of production ²⁴. In the search for solutions to minimise these effects and to ensure a future in which we can live without the dangers that pollution poses to humanity, sustainable development proposes a shift to a circular economy based on eco-efficiency, which establishes economic development through new business models and forms of production that correct previous excesses. It is a good interpretation of the proposal for a symbiotic and feminine model of governance and management to reduce the consequences of a domineering, selfish and patriarchal model.

Since the Sustainable Development Goals and the media impact of the Youth Climate Fridays movement, inspired by the example of the young activist Greta THUNBERG, climate change, ecology and care for the environment are at the centre of political discourse and the philosophy of companies and institutions, as evidenced at COP 25 ²⁵ under the premise that we must act now to achieve sustainable development that limits climate change and its devastating effects, the same idea was discussed in the last COP 28 in Dubai ²⁶.

Certainly slowed down by the effects of the deadly pandemic that is haunting us, the triple focus of development - social, environmental, and economic - shapes opportunities and challenges, especially for the legal and entrepreneurial sectors, which provide solutions, products, and services that the market and society demand in a trend characterised by ecological, more sustainable, and fairer consumption, in which women's contribution stands out for its uniqueness. This has been recognised in the recent strategy of the Spanish Entrepreneurial Nation, which envisages an ecological and equitable transition in which women's entrepreneurship is one of the keys to a green reconstruction.
²⁷.

II. Law as a Fundamental Tool for Progress, Development, and Life

The dynamogenesis of the environmental values shows how the axiological mood of society, which has been attached to the value of the environment since the 1950s, has defined environmental interests and problems, which have found expression in multi-level regulation since the last decade of the last century ²⁸. Certainly, the international order has contributed, with particular emphasis, to a large number of international treaties and conventions that seek the commitment of countries to protect our common planet. This is shown by the Development Division of the United Nations Department of Economic and Social Affairs, in a long list that begins with the UNESCO Convention on the Protection of the World Cultural and Natural Heritage and culminates today with the Millennium Development Goals, predecessors of the current SDGs. In this field, the environmental law of the European Union has had a decisive influence on the legislation of its Member States. We can say that there is already an important normative and institutional network, with the European Environment Agency as a reference point, which shapes the content of environmental law, despite the timid recognition of the right to a living environment adequate for the development of the individual. It is true that, since 2010, the right to water and sanitation has acquired the status of a human right.²⁹, The right to the environment, as DELGADO PIQUERAS points out, is the right "to be preserved, protected

from deterioration and, where appropriate, improved at the time and in the specific place where a situation of actual or potential deterioration is manifested"³⁰.

In the economic field, what was once a trend is now a reality in today's market, which values responsible production and consumption. An example of this is biodegradable products, which have undoubtedly marked a step forward in the reduction of plastic waste, the final expression of which is the legislation banning single-use plastics ³¹.

The promotion and incorporation of the circular economy in **business performance**³² is a commitment by European, national, and regional institutions to develop a wide range of collaborations and actions that integrate eco-innovation into the design of processes, products, and services. In this balance between the economy and environmental regulations to protect natural capital, European policy requires a commitment to what was set out in the EU's 7th Environmental Action Programme, "Living Well, Respecting the Limits of our Planet," which was due to expire in 2020 and has been extended due to the pandemic. Its announced urgent implementation of legal instruments to prioritise environmental policies for the next seven years gives prominence to law as a tool to facilitate the content of the next 8th Programme, entitled 'Reversing the trends together'. The objectives it sets out focus on the irreversible and progressive reduction of greenhouse gas emissions, climate change, the acceleration of the transition to a circular economy, the protection of the health and well-being of citizens from environmental risks and impacts, biodiversity and the enhancement of natural capital, the promotion of environmental sustainability, and the reduction of the main climate and environmental pressures associated with production and consumption. All this outlines on the old continent what I believe to be the concept of sustainable prosperity within the European Green Deal ³³.

From the research group that I lead, Law, Ecotechnology and Innovation: Keys for the development of the 21st century at the Catholic University of Murcia, we consider sustainable prosperity as an expression that must be legally incorporated into the state framework in order to speak openly of environmental states. Under its premises, applying the circular economy with the SDGs as a reference, a reciprocal and direct relationship is established between productive growth and environmental protection. Sustainable prosperity incorporates the environmental needs of society, as LYLE indicates, by describing processes that restore, renew, or revitalise the energy sources and materials needed for productive activity. This proposal democratically incorporates transformation factors in the social pact, where the population satisfies its needs through demands on public authorities and private

institutions, respecting ecological conditions, economic growth, and social justice in circular processes of products and services.³⁴ In this sense, sustainable prosperity manifests itself as a requirement of what could be called the ecological welfare state, in which the social state of law gives priority to environmental protection.

The incorporation of sustainable development into state policies introduces a new value into the strategic axes of traditional powers and policies, as was once the case with human rights. Let us recall that the Rule of Law, in its original formulation, was born in the face of the absolutist State, in particular through the function of creating and maintaining a law which, through rights, limited the action of the State. Just as the convulsive revolutions of the 17th and 19th centuries in France and England gave rise to the rule of law and then to the social rule of law, a fundamental transformation of legal systems is needed through the effective recognition of the right to an environment adequate for the dignified development of the individual. Without the recognition of this right, it will be difficult to fulfil the above-mentioned institutional aspirations of the United Nations and the European Union, both for the world and for Europe, which, moreover, proclaim without any complexes the guiding principles of social and ecological states governed by the rule of law.

The so-called welfare state, typical of post-modern industrial societies, is the model that has emerged from the transformations of neo-liberalism and democratic socialism. It creates an amalgam in which economy and politics, money and power are confused, which is why in the 1960s, coinciding with the beginnings of environmentalism, it was conceived as a welfare state. In this sense, ELIAS DÍAZ has pointed out that "neo-capitalism, with its famous welfare state... does not manage to overcome the alienation of the masses or to reduce social inequalities".³⁵ Certainly, the professor was not wrong; the welfare state today is characterised by the marginalisation, alienation, and anomie of our times, and it seems that neither the liberal approach achieves freedom for all, nor the social states, incapable of making social rights effective, achieve material equality for their populations. In order to overcome all this demagoguery, we need, as I have said, a referential element that relativises and gives meaning to freedom and equality.³⁶ In my opinion, only the dignity of the human being, linked to the protection of the environment, has this capacity, since it directly affects survival, a primordial power that can serve as a spark to ignite the engine of what is called the social and ecological state governed by law. That is to say, "the form of State that proposes to apply the principle of economic and social solidarity in order to achieve sustainable development, with the aim of seeking substantial equality among citizens, by means of legal control in the rational use of the natural heritage"³⁷. From this

point on, we could speak of bringing to reality the pretensions that, adorned with grandiloquent expressions, express the content of the 20-30 agenda, going beyond the materialistic conceptions of the *welfare state* and the *welfare society* ³⁸.

In the ecological state, the subject of rights is the present and future generations, in short, humanity, which makes sense of the right to the environment as a fundamental right of the person, perhaps of humanity, which, in the degraded environmental situation of our time, takes shape as a right to be.

This ecological welfare state is similar to the social state, which the Germans regard as "Daseinvorsorge," i.e., as a state responsible for "existential provision." As formulated by FORSTHOFF, it assumes that people develop their existence in an environment with a series of situations, goods, and services, both material and immaterial, that make up their living space. ³⁹, which today must ensure sustainable prosperity through a circular economy.

In this field, women's entrepreneurship is characterised by the incorporation of the circular system into the economic artery that is business activity. We can see that through business projects, micro-enterprises, and SMEs, guided by a particular sensitivity specific to their gender, they go beyond economic performance and respect both the biological cycle, which focuses on the safe return of waste to nature, and the so-called technical cycle, which aims to ensure that products and their components are designed and marketed in such a way that they can be reused. Among many entrepreneurs and businesswomen, we highlight the work of the biologist Janine BENYUS, who, in her book *Biomimicry: Innovations Inspired by Nature*, explains how to develop, through technology, responses to needs, the creation of sustainable products, and processes based on the mechanisms developed by nature and the animal world. She applies this directly in her company Biomimi Guid ⁴⁰, in a concrete exercise in sustainable prosperity. Since the Swiss engineer George DE MESTRAL invented Velcro in 1941 by observing how the hooks of burdock seeds stuck in his dog's fur and interlocked, biomimicry has used technology and observation of nature to solve complex technical problems such as the famous sonic boom of the Japanese bullet train. The solution was to design the front end of the train in the shape of a kingfisher's beak. The aerodynamic shape of the kingfisher's beak means that the train does not splash when diving, as it changes from air to water density. The kingfisher beak train improved acceleration by 10% and reduced power consumption by 15%. It is fascinating and encouraging to see the role of technology, innovation, and creativity in achieving sustainable prosperity, so examples of biomimicry are increasingly all around us. It is widely used in the electronics industry, from the properties of butterfly wings to improve screens, to anti-reflective properties from the study of insect

eyes, to waterproof glues made from mussel proteins, and robotic applications inspired by ants that can move up to 2,000 times their own weight ⁴¹.

Likewise, the observation of natural ecosystems can inspire processes and applications in the two cycles of the circular economy, the biological and the technical, adding value and quality to a productive system that is ecologically and economically restorative.

Within the productive process, whose reference point is sustainable prosperity, the elements are used, recovered, or restored in a much more efficient system than that of traditional industrial economies, it is necessary to reinforce the actions for the care of our ailing blue planet. The inclusion of feelings in reasoning, which is typical of the feminine world, has traditionally been criticised by the scientific discourse, which is mainly based on the development of the Cartesian principle. My proposal is for sustainable prosperity through a circular economy, clearly committed to rules that generate an affective bond with the population, in order to achieve an attachment to the planet as a criterion for modifying productive behaviour that inspires the model of the 21st century state.

Far from being an independent contribution, the emotional resource is fundamental to the rules for the protection and management of the natural resources of several indigenous populations, whose effectiveness and efficiency are unquestionable. It is also part of the so-called rationalisation of moral options in relation to the *Essentia Iuris*, which we will only outline, referring the reader to the reflections of MORALES LUNA, who studies the legal philosophy of Uberto SCARPELLI and its consequences for the nature of law ⁴². In this discourse, it is also interesting to consult HART and his considerations on the *Rule of recognition* in conjunction with the question of the validity of Law ⁴³ and the lawyers who develop the dialogue of rights. Thus ALEXY proposes its serious treatment, and my teacher LUCAS VERDU, a great connoisseur of the German doctrine, together with Paulo BONAVIDES (KANT, SCHMITT, BÖCKENFÖRDE, SCHNEIDER, HABERLE and STEIN, among others), HABERLE and STEIN, among others, explain how, in addition to their subjective dimension, there is an objective dimension which is expressed in the political formula of the constitutional texts and which must guide the reason and foundation of the social and democratic state of law, as SMEND ⁴⁴, which we take up here for the social and ecological state of law.

The more critical view of Kelsen and the neo-positivist school accepts that it is the spirit of the laws that evokes a sense of participation that leads members of the community to comply with the rules, because they feel them affectively as demanding mandates over and above the authority represented

by the established powers. This suggestion could be particularly useful in the present day, when an exaggerated individualism is asserting itself and opening cracks in the observance of the established rules in a generalised way.

If the survival of the species through health and life is fundamental to the preservation of natural capital, it is also fundamental in terms of the present, employment, and economic growth, which is why, as we have indicated, the application of the circular economy to achieve sustainable prosperity is a priority. In this sense, it would be desirable for the law to establish binding rules that optimise the use of resources and the reintroduction of waste into the economic cycle through reuse, recycling, and repair, with a psycho-emotional appeal. In today's liquid, egocentric, and hedonistic society, where fear is ineffective and threat has lost its *raison d'être*, the energy that drives this process could come from the positive effect of contentment and the propensity to act that is generated by positive feelings derived from affection. After more than twenty years of reflection on these questions, which I leave to better minds with more capacity than mine, I have given the term "blue kiss," which reflects the universal version of affection and the colour of our planet, the name of the very complex and multidisciplinary concept we are dealing with on the nature of normative obligation in environmental matters, located in the sphere of intermediate territories, between the sciences of nature and of the mind, or so-called social sciences.

In it, nature and social-historical reality are important as something that belongs to the interiority of the human being, which is not grasped by external experience, but by the intimacy through which man grasps himself in the societies in which he is grouped. Just law knows and must protect this experience, which DYLTHEY calls experience, which means living or lived experience, the impulse of human development ⁴⁵.

Environmental degradation and the current global pandemic show "the dependence of the spiritual on the natural connection, because the universal nexus of nature causally conditions those material changes and states which for us are regularly linked to spiritual changes and states without any discernible mediation"⁴⁶.

The transversal approach of ecology, which we have elevated to a *raison d'état*, as a requirement for the legitimacy of power and the powers of the current states, proposes the collaboration of technology and the rescue of the organicist interpretation of the socio-political structure with corrected criteria of anthropocentrism, where an ecofeminist vision, from the affective and emotional subconscious, drives not so much the consequence, the punishment, or the survival, but the pleasure of fulfilling a

greater good, the optimal management of the flows of materials, energy, and services, the promotion of an economy of functionality, where use prevails over possession ⁴⁷, generating what could be a natural capitalism ⁴⁸.

To this end, as Ricardo Estevez points out in *Circular Economy: Principles*, it is essential to take into account the maintenance and improvement of natural capital, the optimisation of resource yields, and the promotion of efficient systems for identifying and eliminating polluting factors⁴⁹. Leaving these considerations to voluntarism does not seem to produce the expected results, despite the inclusion of circular economy strategies in the market, where the trend towards ecological and sustainable consumption is opening up opportunities and new lines of business. The 2019 Annual Meeting in Davos will focus on women's leadership and harnessing the potential of the fourth industrial revolution we are experiencing, where collaboration is key.

In this sense, the different contributions of artificial intelligence, biomimicry, creativity represented by the orange economy, or the blue economy of PAULI, are useful to specify the dictates of doing or not doing that represent the legal norms, as we have indicated above ⁵⁰:

The implementation of the circular economy in the business sector can serve as a reference point for the challenge that the 21st century poses to states today. LOBATO GAGO ⁵¹ explains how it can be integrated at three non-exclusive levels. At the first level, efficiency is addressed through the so-called three Rs: reducing resource consumption and waste emissions, reusing resources, and recycling components, which women have always done. At a second level, the reuse and recycling of resources is pursued through supra-company organisations, and finally, at a third level, companies promote integration into different local production and consumption systems, encouraging the transit of resources between industries and urban systems ⁵².

The incorporation of these processes into the structure of the State can be developed along these lines, which would generate a significant increase in the efficiency and effectiveness of public authorities through the application of sustainable resources, enforceable in public procurement, both in products and services, in the design of processes to make them more efficient, with longer life cycles, interconnecting value chains to optimise material flows, reducing waste and recovering value throughout production. To this end, a legislative expression, which ultimately determines the direction of the popular will, will be a fundamental tool for society to democratically incorporate this new way of producing and living.

In the development of a circular economy within the State's activities, it is necessary to identify which capacities or processes we can use to face new opportunities and to study them with an eye to nature, in order to incorporate processes of continuous improvement through investment in technological and procedural innovation. Just as in the private sector, there are business opportunities in the public sector linked to the circular economy, including the exploitation of cascading value. With new technologies and citizen participation, the useful life of products could be extended through repairs, upgrades, and any other process that maintains or even increases value that would otherwise be lost. Here the illegality of planned obsolescence becomes an imperative. Development processes that work on products as services can also be incorporated, opening the way to new public services. Finally, the public authorities must be involved in shaping an ecological awareness that is important to the population, to which it is emotionally attached, and that involves not only an environmental improvement but also a social and economic one.

In order for the regulatory dictate to be effective, especially for groups such as women, it is necessary to create new professional opportunities that ensure their inclusion in work niches where they can be economically integrated on an equal footing, temporarily, linked to family reconciliation, and that represent recognition, given that it is in their nature to transform, which is necessary to achieve a better world, according to the dictates of the United Nations, without leaving anyone behind.

Footnotes

¹ Wangari MAATHAI (1940–2011–Kenya) was a political activist and environmentalist, the first African woman to receive the Nobel Peace Prize in 2004 for her contribution to sustainable development.

² For a better understanding of the role of these goddesses who are linked to agriculture and nature, see COMTE, Fernand: *Mitos y divinidades de los cinco continentes*. Grupo Anaya Comercial, 2011. As for the study of matriarchy, the magnificent work *Matriarcado. Una investigación sobre la ginecocracia en el mundo antiguo según su naturaleza religiosa y jurídica* by Johann Jakob BACHOFEN, translated by María del Mar LLINARES GARCÍA, Ediciones AKAL, 1987.

³ Elena GARCÍA QUEVEDO in *El viaje de las mujeres* Grupo Planeta, 2019, narrates a journey in which she introduces us to powerful women such as the Kumaris in Nepal, the widows of India, the peasant women in Turkey, and the Colombian leaders in the new continent. In Egypt, the matriarchs and the weavers of the threads of the soul of the North American Indians. Through her story, she deals with

women's awakening and their contribution, full of ancestral wisdom, of incalculable value for the convulsive present of our times.

⁴ MORGAN, Robin: Planetary feminism: the politics of the 21st century in *Sisterhood is global*, Garden City, Doubleday, 1984, p. 2.

⁵ María Antonia BEL BRAVO,: *Ecofeminismo: un reencuentro con la naturaleza*, Volume 48, University of Jaén, 1999. A current reference is the work of Lidia PERALTA, Manuel CHAPARRO, and Lara ESPINAR. *Las mujeres como impulsoras de transiciones ecofeministas hacia sociedades más justas y diversas: Castilla-La Mancha como laboratorio de experiencias* Editorial UOC, 2020.

⁶ Kelly, PETRA: *For an alternative future*, Paidós, 1997, p. 153.

⁷ Carson, RACHEL: *Silent Spring*, Grupo Planeta, 2010, p. 1- 3.

⁸ He received the UN Human Development Award in 2007. For a closer look at his character and his work <http://www.mujeremprendedora.net/sheila-watt-cloutier-premios-nobel-alternativos-2015/> <https://calentamientoglobalclima.org/2007/03/05/lideres-inuit-testify-about-climate-change-before-the-inter-american-human-rights-commission/>

⁹ It is essential to carry out business-related diagnoses that include the ecological paradigm in the management and development of business strategy. On the International Conference on Sustainable Development Goals, UNMAP 2019, held in the Canary Islands. See DOMINGUEZ, Vicente BOISSIER, BUENO Reyes, María de la O, CAJA MOYA, Cristina et al *Los objetivos de desarrollo sostenible* J.M Bosch, 2019.

¹⁰ The term "circular economy" was first used in Western literature in 1980 (PEARCE AND TURNER 1990) to describe a closed system of interactions between the economy and the environment. The circular economy refers to an economic system that maximises the reuse of products and raw materials and minimises their devaluation. This system differs from the current linear system, where raw materials are used to manufacture products that are destroyed at the end of their useful lives.

¹¹ An indicator promoted by the United Nations Development Programme (UNDP) to differentiate human development from economic development, it is based on an average of three key measures: life expectancy at birth, educational attainment, and the logarithm of per capita income.

¹² The *Environmental Sustainability Index* provides a data-driven summary of the state of sustainability around the world. Using 32 performance indicators in 11 issue categories, the EPI ranks the

environmental health of ecosystems in 180 countries and provides results that measure the achievement of environmental policy goals. For 2020 data, see Environmental Performance Index 2020 Global metrics for the environment: Ranking country performance on sustainability issues https://epi.yale.edu/downloads/epi2020report_20210112.pdf. WENDLING, Z. A., EMERSON, J. W., DE SHERBININ, A., ESTY, D. C., et al. 2020 *Environmental Performance Index*. New Haven, CT: Yale Center for Environmental Law & Policy. epi.yale.edu.

¹³ *The Ecological Footprint*, by REES and WACKERNAGEL, understood as a measure of the impact of human activities on nature, represents the surface area necessary to produce the resources and assimilate their impact.

¹⁴ HERRERO LOPEZ, Yayo: Miradas ecofeministas para transitar a un mundo justo y sostenible in *Revista de economía crítica*. n°16, 2013, pp. 278–307.

¹⁵ In the Anglo-Saxon world, ecofeminist theorists include Carol ADAMS, American writer, feminist, and defender of animal rights; Karen WARREN, philosopher and writer dedicated to the fields of scientific thought, ethical problems, and ecofeminism; and the Australian Val PLUMWOOD, ecofeminist philosopher of *Deep Ecology*. In Europe, the German Petra KELLY is an undoubted point of reference for her pacifist writings and her activism, which led her to co-found the German Greens. In India, Vandana SHIVA stands out, who in the mid-seventies joined the Chipko movement to prevent the felling of forests in the Himalayas through the practice of non-violent resistance inspired by GANDHI, who said that women would save the world.

¹⁶ Natural capital is understood, according to AZQUETA, in *Introducción a la Economía Ambiental*, MC Graw-Hill, 2002, as that which provides the natural resource base of the biosphere. Especially interesting is the economic analysis of the value in the future that he makes on pages 144 and following. On the use and abuse of the concept, we recommend reading *Use and Abuse of the "Natural Capital" Concept*, published by Herman DALY on November 13, 2014; the author understands it as the capacity of the ecosystem to provide both a source of natural resources and a flow of natural services. <https://steadystate.org/use-and-abuse-of-the-natural-capital-concept/>

¹⁷ Clarissa PINKOLA ESTES describes in her book *Women Who Run with the Wolves* what she calls the Wild Woman, whom patriarchal society tries to civilise by limiting her to traditional roles that override her instincts. Through stories from different cultures, she opens up psychological and

ecological reflections for the healthy state that knowledge of the wild feminine soul implies. Published by Zeta Bolsillo, 2005.

¹⁸ The former Norwegian minister Gro Harlem BRUNDTLAND first used this term in the Brundtland Report, an outcome of the United Nations World Commission on Environment and Development, which discusses and analyses the economic development policy of 1987 and the environmental problems resulting from it.

¹⁹ This is stated in the preface by António GUTERRES, *Secretary-General, United Nations*, in which he explains that the 2030 Agenda for Sustainable Development was launched to end poverty and set the world on a path of peace, prosperity, and opportunity for all on a healthy planet. The 17 Sustainable Development Goals (SDGs) call for nothing less than a transformation of the financial, economic, and political systems that govern our societies today to ensure human rights for all. To see the current status of their development, we recommend consulting the 2020 report <https://unstats.un.org/sdgs/report/2020/>

²⁰ Cited by Carlos GÓMEZ GUTIÉRREZ III. El desarrollo sostenible: conceptos básicos, alcance y criterios para su evaluación at <http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Havana/pdf/Cap3.pdf>. ENGELS' manuscript *El papel del trabajo en la transformación del mono en hombre* in 1876. First published in the journal "Die Neue Zeit", Bd. 2, Translated from German. No. 44, 1895-1896 can be found at <https://webs.ucm.es/info/bas/es/marx-eng/oe3/mrxoe308.htm>

²¹ <https://unstats.un.org/sdgs/report/2020/goal-05/>

²² I have already dealt with this issue in "Migratory Movements and the Human Rights of Foreigners: Between the Drive for Survival and the Dignity of the Person", to which I refer in *Revista de Direito Brasileira*, 2011, pp 469-485.

²³ SCHUMACHER, Ernst Friedrich: *Small is Beautiful: Economics as if People Mattered*, Ediciones AKAL, 2001. In the epilogue he refers to the possibility of measuring human well-being within parameters to achieve maximum well-being with minimum consumption through justice, harmony, beauty and health.

²⁴ LEFF, Enrique: *Environmental rationality: the social reappropriation of nature*, Siglo XXI, 2004, p. 15 .

²⁵ Madrid and Santiago de Chile, whose central governments jointly hosted COP25, hosted massive youth rallies joined by thousands of cities and towns around the world on Friday, 6 December 2019.

²⁶ The United Nations Climate Change Conference (COP28) closed with an agreement that signals the “beginning of the end” of the fossil fuel era by laying the ground for a swift, just, and equitable transition, underpinned by deep emissions cuts and scaled-up finance.

²⁷ https://www.lamoncloa.gob.es/presidente/actividades/Paginas/2021/110221-sanchez_ene.aspx

²⁸ MENDEZ ROCASOLANO, María and MARÍN GONZALEZ Luis Alberto: Axiological profiles on the normative nature of effectiveness and efficiency in fundamental matters for survival. El caso de las normas voluntarias de gestión ambiental" in *Revista de Direito Brasileira* v. 19 n 8 Jan./Apr. 2018, pp. 70 - 83.

²⁹ On 28 July 2010, through Resolution 64/292, the United Nations General Assembly explicitly recognised the human right to water and sanitation, reaffirming that clean drinking water and sanitation are essential for the realisation of all human rights.

³⁰ DELGADO PIQUERAS, Francisco: Régimen jurídico del derecho constitucional al medio ambiente. In *Revista Española de Derecho Constitucional* n°38, Centro de Estudios Constitucionales, Madrid, May-August 1993.

³¹ In particular, the Directive of the European Parliament and of the Council on the reduction of the impact of certain plastic products on the environment shows that it is one of the ways to implement the measures of the Circular Economy Action Plan set out in the European Commission's 2015 Communication entitled *Closing the loop: An EU Action Plan for the Circular Economy* aims to make the life cycle of plastics circular so that the design and production of plastics and plastic products fully respect the needs for reuse, repair, and recycling, and where more sustainable materials are developed and promoted. This directive should shape the content of Member States' legislation, defining the regulatory and institutional framework to effectively reduce the negative effects of plastic waste, especially on the marine environment.

³² This theory, born out of the research report for the European Commission *The Potential for Substituting Manpower for Energy* by Walter STAHEL in collaboration with GENIEVEREDAY, offers a vision of a circular economy and its impact on economic competitiveness, resource savings and prevention, and job creation, which I call *Cradle to Cradle*. It was developed by the chemist Michael BRANGART and the architect BILL MCDONOUGH and considers all materials used in industrial and commercial processes as nutrients through the efficient design of products with a positive impact on

trade and the environment. <https://www.ellenmacarthurfoundation.org/es/economia-circular/escuelas-de-pensamiento>

³³ It aims to be the answer to making Europe the first climate-neutral continent by 2050. Protect, maintain, and enhance Europe's natural capital. Protect people's health and well-being from environmental risks and impacts. https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_es

³⁴ Within the debate raised in the group, especially within the line of research of my disciple Pablo MIRÓ COLMENAREZ, we are concerned about population growth forecasts that show that we will need three times more materials and 70% more food. In the next twenty years alone, the need for water and energy will increase by 40%, which will have a direct impact on industry and will lead to higher prices. For further information on this issue, I recommend reading MIRÓ COLMENAREZ, Pablo: El derecho en la crisis alimentaria de la epidemia de sobrepeso y obesidad. In *Revista de Direito Brasileira* v. 18 n. 7, 2017, pp.463-503.

³⁵ DIAZ, Elias: Estado de Derecho y sociedad democrática avanzada, Taurus, Madrid, 1966, p. 173.

³⁶ COSSIO DÍAZ, José Ramón: *Estado social y derechos de prestación*, Centro de Estudios Constitucionales, Madrid, 1989, p. 36.

³⁷ Referring to the environmental state, Bellver Capella, Vicente: *Ecología: de las razones a los derechos*, Ecorama, Granada, 1994, p. 248.

³⁸ Enrique ALONSO GARCÍA refers to *Welfare rights*, which do not generate in the State a failure to act, but rather the right to benefits, a "positive obligation to act." He examines the different constitutionalising mechanisms of these rights through American case law. Cfr ALONSO GARCÍA, Enrique: Los límites de la Justicia Constitucional: la constitucionalización de los derechos prestacionales del "welfare state" en Norteamérica, in *Revista Española de Derecho Constitucional*, Year 4, n° 11, May-August, Madrid, 1984, pp. 139 to 195.

³⁹ On this concept, I refer to MARTÍN - RETORTILLO BAQUER, Lorenzo: La configuración jurídica de la Administración pública y el concepto de *Daseinvorsorge*. en *RAP*, n° 38, Madrid, 1962, pp. 35 y ss. Citado por GARCÍA PELAYO, Manuel: *Las transformaciones del Estado contemporaneo*, 9ª edic. Alianza Universidad, Madrid, 1995, p. 27.

⁴⁰ To understand *Biomimicry*, *we recommend his book Biomimicry: innovations inspired by nature*, published by Tusquets Editores, 2012. Also <http://www.terra.org/categorias/articulos/que-se-entiende-por-biomimesis-una-conversacion-con-janine-benyus-14>.

⁴¹ Not to be forgotten here is the example of the Wyss Institute for Biological Engineering at Harvard University, which has developed a material similar to Shrilk plastic by studying the cuticle of insects, which has the same properties such as strength, resistance, and hardness as Shrilk plastic.

⁴² MORALES LUNA, Felix: La filosofía del derecho de Uberto Scarcelli. Análisis del lenguaje normativo y positivismo jurídico. For a reading on the essence of law, I recommend the classic H Rudolf STAMMLER: La esencia del derecho y de la ciencia del derecho, Universidad Nacional de Córdoba, 1958.

⁴³ The concept of validity of law, of its essence, and specifically that of Hart's rule of recognition, has been widely studied by the doctrine, and its appropriate treatment would be that of a specific and detailed study due to the meaning and scope it possesses; here we only refer to some authors who have reflected on its content, warning that the dimension of an appropriate reflection on the matter we propose would totally exceed the discourse that is maintained and the objective of the present investigation. In any case, I recommend reading FUERTES PLANES, Cristina: Validez, obligatoriedad y eficacia del derecho en H.L.A.HART, in *Anuario de Derechos Humanos*. Nueva Época Vol 8 pp. 131-186, 2007.

⁴⁴ SMEND, Rudolf: *Verfassung und Verfassungsrecht*, Teoría de la Constitución, Madrid, Alianza, 1982, p. 170 ff.

⁴⁵ ABBAGNANO, Nicolás: Historia de la Filosofía Tomo III .La filosofía del Romanticismo. Philosophy between the 19th and 20th centuries. Tradc. J. Estelrich and J. Perez Ballestar, Hora S.A, Barcelona 1982, p 489. In "La estructura y las ciencias del espíritu", (1910), he devotes the first chapter to life and the sciences of the spirit. He begins this chapter by saying: "The sciences of the mind are based on the relationship between experience, expression, and understanding. Therefore, their development depends both on the depth of the experiences and on the growing tendency to exhaust their content, and is conditioned, at the same time, by the extension of understanding to every objectification of the spirit and by the ever more complete and methodical discernment of the spiritual in the different manifestations of life". DILTHEY, Wilhelm: Critique of Historical Reason. Tradc and Prologue by C. Moya Espí, Edition by Hans-Ulrich Lessing, Península, 1986, p.255.

⁴⁶ For more than a decade, it has been announced that the approach to and solution of environmental problems requires a multidisciplinary vision where "each specialist has to contribute the factual data and considerations that his particular knowledge suggests, without renouncing a general approach to the problem, that is, with a receptive attitude to the elements provided by other specialists" (LOPEZ RAMON, Fernando: Ideas acerca de la intervención administrativa sobre el medio ambiente" in *Revista de Derecho Administrativo*, nº 190, April, June, 1981, p. 39 and CABANILLAS, SÁNCHEZ, Antonio: La reparación de los daños al medio ambiente, Aranzadi, Pamplona, 1996, p. 20. 39 and CABANILLAS, SÁNCHEZ, Antonio: *La reparación de los daños al medio ambiente*, Aranzadi, Pamplona, 1996. p 20).

⁴⁷ Antonio VALDIVIA, Sergi ROVIRA, Yanna STEFANU in "La economía circular, un novedo paradigma empresarial", *Márketing y Ventas* Núm. 144, July 2017, understand that the Circular Economy emerges as a new business model paradigm that seeks adaptations that minimise the use of natural resources and the emission of pollutants with harmful effects on the environment and, therefore, on people.

⁴⁸ This theory, formulated by Paul HAWKEN, Amory LOVINS, and L. Hunter LOVINS in their book *Natural Capitalism: Creating the Next Industrial Revolution*, refers to the world's stock of natural assets (e.g., soil, air, water, and all living things) and recognises that there are interdependencies between the production and use of man-made capital and the flows of natural capital.

⁴⁹ For a full consultation, see <https://www.ecointeligencia.com/2016/07/economia-circular-principios/>

⁵⁰ See <https://www.ecolec.es/informacion-y-recursos/economia-circular/>. The theory of biomimicry by Janine BENYUS is defined as the approach that studies the best ideas from nature to mimic those designs and processes to solve human problems. Biomimicry allows mimicking characteristics of nature, natural processes, and even an entire ecosystem, which is a reference in the development of the environmental state policies we are proposing. On the blue economy, Belgian entrepreneur Gunter PAULI in *The Blue Economy: 10 years, 100 innovations, 100 million jobs. A report for the Club of Rome*, Tusquets Editores, 2011, shows how by using the resources available in cascading systems, the waste of a product becomes an input to create a new flow. The blue economy speaks of solutions determined by their local environment and emphasises gravity as the main source of energy.

⁵¹ LOBATO GAGO, Ivan: *Economía circular. De la "eco-obligación a la eco-oportunidad* Autopublicaciones Tagus 2017. Here we have collected the author's considerations; we recommend reading the whole chapter, Chapter 4: La economía circular, un negocio redondo, p. 141 to 187.

⁵² In the author's view, this requires the development of local collection, storage, processing, and distribution systems, by product.

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