# Economics and environment: An impossible reconciliation?<sup>1</sup>

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#### Abstract

It should be noted that, until now, the relationship between economics and the environment has never figured as one of mankind's primary or principal concerns. It presently does. The recent worldwide student mobilization for climate action, the Climate Change Congress in Paris (December 2015) and the so-called *dieselgate* scandals, involving companies in the automobile sector not complying with regulatory environmental norms (which also began in 2015), among many other events, provide evidence that this relationship is presently of central concern to questions regarding the future of mankind.

Nevertheless, we should remind ourselves of the fact that, despite being a recurrent theme in the media, the environment continued to be treated by economists as a subsidiary issue until, in relatively recent times, the effects of the global environmental crisis grew to proportions that meant it became a serious concern for the future of mankind.

The aim of this paper is to trace the historical relationship between the environment and economics. In all reality, the focus is more modest: we aim to illustrate the principal traces of the presence of the environment in economic science in an attempt to exhibit a path which might lead to the reconciliation of the one (the environment) with the other (economics).

#### Key words

Economics, Environment; Environmental economics; Ecological economics.

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Economics emerged as a scientific discipline with the scientific revolution of the 18th century

## 1. Background

The meaning of economics as we know it today first appears in the 18th century, in spite of the fact that there had long been speculation about the nature and morality of the economic process (Barber, 1982). According to Losee (1987), it should be indicated that all civilizations have worked toward attaining truths, however in ancient times, it seems that only Greeks were capable of directly examining nature, applying the force of reason. Possessed by an insatiable curiosity and a critical, secular attitude, they forged a conception of the universe that has dominated all of western thought. In this manner, Greek thinkers assimilated, along with many other elements that made up their cultural, scientific and religious reality, a vision of the world that dated back to eras long before them, in which the *whole* explains the *parts:* the *organicist* or *holistic* vision. This perspective conceives the world as a grand biological entity: *Mother Earth* (Granet, 2010). The break away from this focus occurs with the discussion of the nature and origin of wealth during the 16th-18th centuries; this is a discussion that has shaped economic science (Naredo, 2015).

It was the *physiocrats* who shifted the center of economic interest away from the acquisition of riches towards their production. Accepting the fact that the earth is the only source of wealth, they believed that man could, however, have a significant effect on its generation. Seeing the multiple interrelationships that exist among the representatives of the mineral, plant and animal kingdoms, and considering as Linnaeus does that everything created is useful, the physiocratic school of thought tries to reconcile the *private economy* with the *natural economy*, with the aim of achieving the enrichment of both (Quesnay, 1991). This holistic vision would later be abandoned, favoring the break between the economic and ecological realms.

In spite of the precedents that exist, it is not until the culmination of the scientific revolution in the 18th century that economics emerges as a scientific discipline. The accomplishments earned by physics led scientists and intellectuals to consider it as an example to be followed. The *new* science prompted the study of the world and of life, including mankind, with an analysis perspective that was strongly mechanistic (Crombie, 1985). The fathers of the social sciences did not escape this emerging paradigm, and so the world of economics that was structured during the 17th-19th centuries reflected the Newtonian principles of *atomism* and mechanics, with the basic notion of dynamic balance. Once the economic system was implemented, it would be seen to be governed by inertia, just like the universe, as emphasized by Naredo (2015). These intellectuals had confidence in the capacity of science to solve any problem, with reason, technique and work as tools.

The emerging economy, like other branches of knowledge, was affected by the process, which led to blindly believing in the unlimited capacity of science to solve any problem (present, future and even until then unknown), with reason, science, technique and work as the tools to achieve it. In turn, economic science itself would effectively collaborate to expand said belief, providing a conceptual apparatus that magnifies the productive and utilitarian achievements of the industrial society and covering up the destruction and servitude derived from it (Naredo, 2015). With regard to the role and responsibility of economics in shaping the modern world, economist Joan Robinson indicates that, among the many ideas and sentiments that form an ideology, those related to economic life always play a very important role, and economics "has always been part the vehicle of the dominant ideology in each era, and part scientific research method" (Robinson, 1966, p. 7).

At this point, we consider it relevant to include in this brief description of the context in which economic science came about another element that is crucial for understanding the Adam Smith proposed that labor, not nature, is the quintessential factor of production impact derived from economic activities on the environment: the emergence of the modern state during the Renaissance, accompanied by the emergence of puritanical morals. Both circumstances contributed factors of both an institutional and an ideological nature that made a radical change possible in how production and the accumulation of property and wealth were considered. Until the Renaissance, material security was compensation for moral conduct. As the Old Regimen is wiped out, the individualistic ideology of success ensures people's needs. Only one more new ingredient was needed to complete the breeding ground for the nascent economy: the value of labor.

## 2. Smith and classic analysis

Adam Smith (1723-1790) is recognized as the father of economic science, in a large part due to his work *The Wealth of Nations*. Smith identifies the exchange with utilitarian egotism and the pursuit of profit, and thus it would follow, according to the author, that all men are merchants and humanity as a whole is a true commercial society (Smith, 1994). Furthermore, he states that work is the measure of the exchange value, which is the only meaning of the concept of value that he considers to be of economic interest. Smith's work marks a turning point in the relevance given up to that point to nature as explaining production and growth, shifting it from this point on to labor.

Smith also contributed to implementing the abstract idea of the free market, a framework in which the different parts and elements of the economic system would relate to one another. In this system, the profit motive would occupy the role of universal gravitation in the physical world, ousting the interest in the crucial values of things, still present with the physiocrats, in favor of pecuniary values.

Along the exact same lines, Thomas R. Malthus (1766-1834) understands wealth as "the material things necessary, useful or agreeable to man, which have required some portion of human exertion to appropriate or produce" (Malthus, 2008, p. 43), thus establishing the definition on which economic science is based. A logical consequence of this is that all wealth must necessarily be useful, but not everything useful constitutes wealth, for example, natural assets.

Malthus was concerned about the existence of an inherent trend, in his opinion, by human beings to reproduce without any limitations, as he clearly expresses at the start of his famous work, *An Essay on the Principle of Population:* "The principal object of the present essay is to examine the effects of one great cause [...]. The cause to which I allude, is the constant tendency in all animated life to increase beyond the nourishment prepared for it" (Malthus, 1998, p. 7).

The problem of the scale of the economic process has remained until recent times on the sidelines of economic analysis. As Fernando Tudela indicates in the prologue of one of the Spanish editions of said work, vindicating the importance of Malthus' work: "There is a feature in Malthus' original work that did not escape the sagacity of Keynes: the emphasis on the concepts of scale, limit and threshold as pertinent for the theoretical construction of the political economy. Neoclassical economic theory focused its efforts on the mechanisms used to allocate resources" (Malthus, 1998, pp. XXXIII-XXXIV). If economics has traditionally focused most of its attention on problems of allocation and distribution, the consideration of scale as one of the fundamental problems of economic analysis constitutes precisely the main new aspect of the ecological focus. It could be said that Malthus and Ricardo opened up the first relevant intellectual debate on the limits of growth.

Malthus was concerned about the matter of scale, because of the tendency by man to reproduce without any limits A contemporary of Malthus, David Ricardo (1772-1823) maintained that natural qualities do not add value to commodities. Thus, the price of products is obtained from the calibration between offer and demand: for the first time, scarcity appears as the determinant of value (Ricardo, 1973). The physiocratic remnants that remained in Smith's work have disappeared in that of Ricardo, who insisted that production depends exclusively on the work and technology that have been applied, coinciding in this aspect with other authors of his time, such as Marx.

Economics emerged in a cultural and social context in which the material pursuit of an individual was justified under the presumption that, once the material needs were met, people would have the conditions to pursue moral improvements, although in the words of Polanyi (1947), set out in his excellent booklet entitled "Our Obsolete Market Mentality," the step taken for the emergence of economic science was dramatic: "Labor and land were made into commodities, that is, they were treated as if produced for sale. [...] The true scope of such as step can be gauged if we remember that *labor* is only another name for *man*, and *land* for *nature*. The commodity fiction handed over the fate of man and nature to the play of an automaton running in its own grooves and governed by its own laws."

# 3. The emergence of the neoclassical paradigm and its critics

In the last third of the 19th century, the *neoclassical or marginalist revolution* took place, with the simultaneous appearance of different works on the *theory of marginal utility* (Schumpeter, 1971).

Because of his complete and structured analysis, Léon Walras (1834-1910) is considered the leading *marginalist* author (Schumpeter, 1971). If classical scholars understood economics as the science of wealth, the continuationism of Walras in this aspect is evident, in opposition to what in the future will be customary among economists, as it defines it objective as "the theory of social wealth" (Walras, 1987, p. 126). He identifies the two conditions of an asset in order to consider it part of the wealth of a society: it must be *useful* (permitting a need to be satisfied) and *scarce* (available in limited quantities) (Walras, 1987). Here is where many elements that are the source of life and happiness only come to form part of the economy when they acquire an exchange value. For this reason, neoclassical economics is only concerned with natural resources once they have been recognized and exchanged, which has enormous significance for the understanding of the current ecological crisis.

Alfred Marshall (1842-1924), the incarnation of the economic orthodoxy referred to as *neoclassical synthesis*, approaches the objective of economics in a manner that is much less structured, but equivalent to Walras's approach. The author proposes the new idea of considering *free goods* to be those that are found in nature and available to man, the appropriation of which requires no effort whatsoever (Marshall, 2005). Therefore, it is easy to conclude that, for the neoclassicists, based on Walras and Marshall, property is the criterion through which assets become scarce that were not previously considered to be so.

Following the acceptance of the perfect capacity for resources to be replaced, the Neoclassicists not only disregarded the prevailing role of labor as the source of value and wealth that had been granted to it by the Marxists and Classicists, they also failed to take into account unorthodox visions, such as the Malthusian insights into the limits of growth and the scale of consumption of the population, the reflections by Jevons on the limited horizon offered by the carbon reserves (Jevons, 2000), and Stuart Mill's doubts about the sense of unlimited growth (Mill, 1978).

Another critical version: Mill proposed overcoming unlimited growth with the stationary state With regard to the sense of the unlimited growth process, it should be pointed out that Mill proposes overcoming it through the defense of the stationary state, anticipating by more than 200 years the main proposal contained in the first report to the Club of Rome in 1972 on the limits to growth (Meadows, Meadows, Randers & Behrens, 1972; Meadows, Meadows & Randers, 2006). For Mill, the trend towards unlimited growth of economic aggregates must promote questioning its intrinsic sense, a progressive phenomenon closely linked to the industrial revolution and mass production. In his opinion, it would not be fitting to infer a stagnation of human progress from a stationary situation, in terms of population or capital; quite the opposite, such an equilibrium could be understood as a great opportunity for the spiritual development of human beings (Mill, 1978).

We believe it is appropriate to observe that, in spite of the fact that the scale of the flow of the resources used and their finite nature are critical factors for evaluating the environmental impact of the economic activity, the allocation mechanisms used by neoclassical economists are indifferent to them (Daly & Cobb, 1993). As sustained by ecological economists, ignoring the difference that exists in nature between renewable flows and stocks prevents the proper management of natural resources (Naredo, 2015).

Furthermore, Neoclassicists have borrowed from the Classicists the driving idea behind the economic system: the desire for enrichment that supports the rationality of the homo economicus. Their contribution consisted of making this idea more specific, proposing that man acts with the aim of maximizing his own satisfaction through the consumption of goods and services. They thus define the *utility* provided by consumption as an explanatory variable. We believe the indicated change is crucial, as it means that economic analysis is shifting its focus away from the objective concept of wealth toward another emphasizing the psychological elements of human enjoyment. Many authors have highlighted important objections to this basis for human behavior, convinced that it represents a reduction of the principle of rationality of the economic agent. At this point, we should once again refer to Polanyi, who in the aforementioned booklet maintains that, according to Aristotle, man is a social being, not only an economic one. According to his opinions, it could be believed that man seeks the appropriation of material goods more for reasons of a social and relational nature than a desire to accumulate wealth. According to his reasoning, the incentives associated with human behavior have a mixed character: economic, of course, but also recognition of social approval (Polanyi, 1947).

With regard to Neoclassical scarcity, it should be indicated that, for example, Lionel Robbins (1898-1984) stresses that it is not an assessable phenomenon in absolute terms, but rather quite the opposite, it is relative in comparison (Robbins, 1944). This notion of scarcity is impossible to pigeonhole within objective limits: induced by ethical, social and institutional standards, it is born of human subjectivity. As a counterpoint, Naredo (2015) states that, in spite of the enormous power of our technology and the unprecedented accumulation of consumer objects that are found in industrial societies, they are headed towards, more than ever, scarcity.

Furthermore, we must indicate that the social and economic world at the end of the 19th century was characterized by the great expansion of manufacturing production. As a direct consequence of this, not only was enormous growth seen in commerce and the accumulation of capital, there were also deplorable living conditions for the workforce (Polanyi, 1989). Thus, for Marx, the sense of economic analysis is restricted to revealing the laws of historical change that would bring about the destruction of capitalism. The development of the productive forces would be brought about by socialism, breaking the capitalist shell. For Marxists, therefore, any remedy intended to solve the problems associated with capitalist society is

For Polanyi, the fathers of economics transformed labor and land into commodities, as if they were created to be sold completely futile, given that the pretense of a constructive reform of capitalism is absurd in itself (Barber, 1982).

Concern for the environment is barely mentioned in Ricardo's work, and much less so in that of Marx. Both identify the origin of wealth and value with labor; i.e., in the social realm, abstracting the physical feasibility of the economic activities. Marxism, as an alternative social and economic model, did not represent any divergence in this regard from the capitalistic world (Naredo, 2015).

Moreover, the industrialized societies suffered an unprecedented crisis between the two world wars. The Russian revolution and the great crisis of 1929 shaped the economic concerns of the time. The orthodox economic tradition did not seem to be prepared to face the situation (Schumpeter, 1971). The reason why Keynes's *General Theory* (1956) was so difficult to accept at the time, in Joan Robinson's opinion, owes to one of the most disturbing propositions, which includes what is known as the paradox of thrift, according to which private virtues can be susceptible to becoming a source of social problems. In the words of this author, following the publication of Keynes's work, economics recovered its political economic nature (Robinson, 1966). However, the Keynesian terms (multiplier and accelerator, among others) introduced to capture the mechanical tendencies of the economic system, did not represent a break from the prevailing analysis with regard to the environmental dimension (Naredo, 2015).

When trying to comprehend the scarce sensitivity shown by the economy towards the natural environment, it must be remembered that the magnitude of the scientific and technological advances in the first half of the 20th century were such that, as Jonas (2008) indicates, faith was stimulated in the omnipotence of technology to solve any energy or material supply problem. The increase in the price of crude oil in the 1970s was what eventually brought about the demise of the illusion.

# 4. The focus on the institutional economy

Arthur C. Pigou (1877-1956) makes progress in the integration of the environmental problem by defending the implementation of political-economic instruments aimed at developing economic welfare, understood as a crucial component of mankind's well-being. In doing so, he laments the lack of exchange value that goods and services have that lie outside the market, among others, those provided by the natural environment. Since this circumstance is not captured autonomously by the economic system, Pigou reckons that intervention is necessary in order to ensure that community resources are distributed in a more efficient and rational manner (Pigou, 1946). Furthermore, Pigou also dedicates attention to another matter with enormous relevance for our study, according to which we tend to prioritize attention to present needs over future ones (Pigou, 1946), an idea that the concept of sustainability will re-examine.

In short, Pigou calls for State intervention, both to provide an incentive for activities that have positive effects for others, and to halt those whose social cost exceeds the private cost *(negative externalities)*. The technical problem will revolve around their estimation, in order to determine the premium or tax to be considered. For Pigou, state intervention must not be understood as synonymous with premiums or taxes, but rather including the institutional framework in which the economic activity takes place. The line of thought inaugurated by Pigou considers the state responsible for and capable of arresting the environmental crisis. It was accepted among economists until 1960, when Ronald H. Coase (1910-2013) published *The Problem of Social Cost*. Coase was disgruntled because, in his opinion, the state had been the main legitimizing institution behind the appropriations and aggressions perpetrated against the environment (Coase, 1981).

Coase criticized this interventionist focus and proposed reinforcing agreements among the affected parties Coase describes three scenarios, for which he suggests different solutions. In the first one, there are no *transaction costs*, the *property rights* are clearly specified, there is liability for damages, competition is perfect and there are only two parties involved. It is the simplest archetypal situation, corresponding to what is known as *Coase's Theorem*: agreement among the parties involved is possible. Many authors observe that, faced with the localized and reversible impacts to which this Theorem refers, the environmental problems surpass the limits of property, extending into the ecosystems and accumulating over time. While it is true that Coase's analysis makes it possible to internalize certain externalities, for others it proves futile.

Coase's works represented the starting point for a new focus: institutions matter when it comes to better understanding economic and environmental problems. In light of the neoclassical vision of economics, focused on scarcity and utilitarian, rational behavior, *institutional economics* is concerned with the study of the structure and functioning of the system in which human relations are embedded, including social and group objectives, parallel to individual ones (Kapp, 1995). For Jacoby (1990), the characteristics in common with the institutionalists would be: *indetermination* (the economy has an evolutionary character, as opposed to the neoclassical determinism), *endogeneity* (individual preferences are shaped by social institutions) and the *realism of economic behavior* (as opposed to *homo economicus*, they opt for psychological and sociological motivations, as well as economic ones).

# 5. Reintegrating economics with ecology

At this point, a critical reflection is necessary about the frontiers between economics and the natural environment. Two separate schools of thought have emerged that approach the matter in radically different ways: environmental economics and ecological economics.

*Environmental economics* seeks to revise the instruments of orthodox analysis in order to incorporate the environmental impact within the customary economic system. Its decisions are based on price, cost and profit, and their corresponding optimal values and equilibriums (Azqueta, 1994). Pigou and Coase are recognized by most environmentalists as being the most influential economists (Aguilera, 1998). The precise measure of the environmental impact is a topic that is dealt with extensively in the literature. However, this task proves difficult or even impossible for many critics, due to the following factors (among others) (Baumol & Oates, 1982; Pearce & Turner, 1995):

- The complexity of the earth's ecosystems and their evolution.
- The uncertainty regarding the scope of the damage occurred in terms of time and space.
- The existence of numerous temporal asymmetries between the damage and its effects.
- The fast evolution of the applicable science and technology.

The main problem, according to Naredo (2015), stems from the fact that the very nature of the problems considered is opposed to any monetary valuation. Even if it were possible to overcome this difficulty, another problem arises: the pressure applied in order to prioritize the consumption of the present period of time. Tackling future needs with a finite stock of resources would mean accepting that the prices of environmental assets would skyrocket, generating a complete shock in our current economic system.

In any case, we believe it is only fair to mention some of the most important contributions made from this focus, beyond the limitations indicated by the ecological authors, such as the renewable and non-renewable resource management models (Pearce & Turner, 1995), instruments for measuring environmental impact, such as the ecological footprint

In light of the emergence of the environmental problem, two main schools of thought have emerged: environmental economics and ecological economics (Wackernnagel & Rees, 1996), or the focuses incorporated into bioeconomics or the economics of sustainability (Baumgärtner & Quaas, 2010).

In short, both the allocation of Pigouvian taxes and negotiations among those affected seem to offer only a partial and rather unsatisfactory response to serious environmental problems. It calls to mind Robbins, when he states that economics cannot relieve us of the obligation to choose; in short, to declare our preferences (Robbins, 1944).

As a result, an alternative focus emerges, *ecological economics*, which expands the objective of economic science to include, independently of property rights, both resources and waste. Along with the problems of allocation and distribution, to which economics has traditionally dedicated its attention, it focuses its interest on scale (Aguilera, 1998). An appropriate scale is one that does not diminish the carrying capacity of the environment over time, and thus it must not be determined according to prices, but rather by a social decision that reflects the ecological limits of the planet (Daly & Cobb, 1993). More than a theory per se, ecological economics would represent the strategy that scientists of different disciplines would use to work shoulder to shoulder with one another, with the pretense of learning together and defining new economic policies together that contemplate the human impact on the natural environment (Costanza, Cumberland, Daly, Gooland & Norgaard, 1999).

Ecological economists have refocused their work towards a new form of economics that transcends both the lack of information that economists have about the natural sciences and the specialized knowledge that characterizes their practitioners. It is difficult for a system to be managed for which we lack in-depth knowledge. Thus, one salient characteristic of ecological economics is its systemic focus. From the perspective of *general systems theory* (von Bertalanffy, 1993), classical economics offers appropriate focuses for understanding a system with weak interaction among its parts, but it is not very appropriate when attempting to understand a complex system.

Furthermore, Garrett Hardin (1915-2003) offered the opinion that the future of mankind is disastrous if it pursues its interests while considering common spaces as free spaces. Ecological economists believe it is very important to consciously define, through political decision-making, the carrying capacity of the environment by linking it to the desired standard of living. In this regard, Hardin questions the difficulty of promoting moderation, given that regulations normally set limits for how we act that must be obeyed, but not suggestions for a better life (Hardin, 1989).

Nicholas Georgescu-Roegen (1906-1994) proposes, in turn, that entropic degradation not be relegated to the environment, thus preventing the magnification of the utilitarian aspects of production and consumption. Its proposal enters into direct conflict with the faith in economic growth maintained not only by a majority of economists, but also scientists, politicians and citizens even today (Georgescu-Roegen, 1989). Along these lines, ecological economists coincide in believing that reversing our dependence on crude oil will represent a huge evolutionary change (Costanza et al., 1999).

Kenneth Boulding (1910-1993), one of the most representative and prolific authors to take part in this focus, in his article *The Economics of the Coming Spaceship Earth*, describes the economics of the past as cowboy economics, characterized by the identification of the increase in human well-being with the increase in material consumption and in which nature is reduced to the status of the resources provided by the suppliers. This perspective, as Boiral (2007) states, leads to an abstract and immaterial vision in which the ecological aspects are missing,

Environmental economics seeks to revise the orthodox instruments to incorporate the impact on nature something that is present, for example, in a large portion of the conventional literature on business management and administration. For example, for Hellriegel, Slocum and Woodman (1998), the environment is an "essential contingency" that includes several aspects, among them "terrorists and others," while no mention is made of any element of the natural environment.

In light of such reductionist perspectives, Boulding presents, in a metaphoric style, the economics of the future as spaceman economics, in which economic success would not be explained through the behavior of the aforementioned variables, but rather for the mental and cultural state of humanity (Boulding, 1989). Thus, any technological change that favors the maintenance of the overall heritage with lower levels of production and consumption would clearly be considered as profitable for the system.

Finally, it should be pointed out that the research group led by Crawford S. Holling (1930-2019) describes the behavior of the ecosystems as a dynamic sequential interaction among four functions: exploitation, conservation, release and organization. The resistance of the ecosystem depends directly on the effectiveness of the latter two, and so ecosystems do not have a single equilibrium status. It has been proposed that scientists and environmental agencies work together in order to continuously adapt management experiments to a changing system. Faced with a paradigm based on scientists who work in search of the truth, managers who apply it and citizens who passively contemplate the process, Holling invites us all to share in the learning and to assist with the definition, implementation and revision of the environmental policies (Holling, 1978).

## 6. By way of a conclusion

Ecological economics continues to evolve through the questioning of historical assumptions and the interaction of multiple disciplinary bases. Starting with the premise that the earth has a limited capacity to sustain the population, it proposes the development of specific policies that facilitate our subsistence in a stable manner, relocating the economic system within these limits.

Regarding proper environmental management, Margalef states that it must be acknowledged that often the most successful solutions to ecological problems are those that provide a focus based on the defense of individual interests, as opposed to those that attempt to defend the environment without taking into account the practical aspects of the matter (Margalef, 1977).

In any case, the use of accommodative strategies can only be defended to the extent that they serve to seriously tackle ecological challenges.

According to radical authors like Naredo, it would seem evident that the pretense of moving towards a socially and ecologically more balanced and stable world without questioning the current expansive trends of financial assets, monetary aggregates and the commodification of life in general is so naïve and uninformed that it would border on being stupid (Naredo, 2015). Likewise, it would also be naïve and dangerous to pretend that the exacerbated consumerism that unfortunately seems dominant in many countries could be something simply reconcilable with true sustainable development through proposals with varying degrees of sophistication aimed at generating a certain social Daltonism that makes it possible to confuse certain harmful realities that can be associated with brownish colors — popularly associated with various problems and afflictions — with the green hope of environmental awareness, but also with *greenwash*.

In closing this work dedicated to exploring the relationship that exists between economics and the environment, we believe it is fitting to remember Keynes, now that the generation of his It is time to move from awareness to continuous, integrated action by citizens, businesses and other social agents grandchildren, about whose economic possibilities he pondered in his famous work (Keynes, 1988) is reaching an age when they should do the same with regard to another upcoming generation. Keynes said that, for at least another century, man must accept the bad with the good on the quest for utility. Therefore, greed, usury and caution should be adored during this time, because they will be what saves man from need. However, Keynes warns us at the same time about overestimating these elements of human behavior, since they sometimes lead us to sacrifice matters of much greater value than economic need (Keynes, 1988). There are only a few years left before reaching the time horizon referred to by this great economist and scholar, and the need and urgency to end this fiction once and for all is undeniable. Therefore, welcome is the debate stirred by movements like that of a downturn that, with more or less precision, reposition the focus on the contribution made by great scholars, such as Ivan Illich (2008), an authentic archaeologist of modernity. But beyond intellectual debates of varying degrees of productiveness, it is clear that the time has come to move from awareness to continuous and integrated action, by citizens, businesses and other social agents alike.

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