

# THE ROLE OF INDIVIDUAL AND SOCIETAL WILLINGNESS IN THE TRANSITION TO A FUTURE LOW CARBON ECONOMY

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## ABSTRACT

The most common approaches to the topic of low carbon economy (LCE) have been the purview of economics (analysis of new business opportunities in the field of renewable sources of energy and energy efficiency) and engineering (developing and making available new technologies). However, an analysis of the human being's inner nature and associated behavior along with their potential power to promote or oppose goodness in the transition to a LCE can contribute to removing anthropogenic obstacles to its implementation through a process of consciousness. While the transition to a LCE has already begun, its timetable remains in question. Anticipating this transition is critical, as its delay can lead to high economic and human tolls; and the worst case scenario could be the destruction of the planet and life on it. While the movement toward a LCE should proceed faster, an apparent lack of willingness on the part of man is representative of dichotomy between man consciously striving toward a better future but unconsciously delaying or sabotaging it. According to Analytical Trilogia, the main causes of mental illnesses and social disturbances drive from psychological factors that spring up from the individual's inner self linked to the inverted application of his will, encouraged by similarly inverted society and values. Using Analytical Trilogia, this study will seek to show how the inner nature and the behavior of the human being do not always match with the ideal of LCE, and how this is translated in man's unconscious obstructionism to rapid transition to a LCE. The Analytical Trilogia method allows one to understand how the human being's behavior is misled (pathology). With the understanding brought by this study, we can deal with the individual and social pathology in decision making, preparing society for anticipating the LCE transition and accepting a better future.

**Keywords:** Low Carbon Economy, Future, Willingness, Values, Analytical Trilogia, Consciousness.

## 1 INTRODUCTION

Future can be influenced by our individual choices (Amara, 1981). This applies to individuals as well as humankind as a whole. Therefore, it makes sense to study and see the future in all its diversity and try to influence it in a desirable way. The idea of sustainable development, or better, sustainable existence has drawn society's attention.

Our economy is very carbon intensive, highly dependent on fossil fuels, such as coal, oil and natural gas, which are likely to become more unstable and erratic in future decades. They also emit carbon dioxide (CO<sub>2</sub>) that contribute to global warming and climate change. Consensus worldwide states that greenhouse gas emissions must be reduced in order to preserve future life on our planet. This means that we need to develop a low carbon economy (LCE) characterized by the use of renewable sources of energy.

The transition to a low carbon economy (LCE) is already taking place. From 2013 on, there has been a greater increase in electric generation capacity from renewable sources of energy than from the non-renewable ones worldwide. In 2013, the increases were 143 GW of renewable energy versus 141 GW of non-renewable ones (Bloomberg New Energy Finance, 2014). However, the issue is the timing. The time is getting short and it is urgent to anticipate this transition. If the transition takes too long, it may be too late to avoid the deterioration of life on Earth. The question arises: what influences our choices and willingness?

Although we should go faster, there seems to be a lack of willingness on the part of man to act in favor of a conscious future. Consciously the human being is eager to reach a better future but unconsciously he is not.

Analytical TrilogY (AT), introduced in section 4, is a new methodology that allows man to understand the misled behavior of the human being. With this understanding we can deal with individual and social pathology in decision making, so to assist society in anticipating the LCE transition aiming at a better future. This study presents concepts of Analytical TrilogY for understanding how humanity is unconsciously disturbing and slowing the transition process to a LCE.

Analytical TrilogY states that mental illnesses and social disturbances are caused by the indi-

vidual's inner self and the inverted<sup>1</sup> use of his will, and this inversion is enforced by the inverted society and values. AT is a science midway between psychology and sociology, explaining both aspects using the same hypotheses, with the goal of leading humanity on its true course for a better future.

LCE is usually studied in the field of economics (new business opportunities and energy efficiency) and engineering (new technologies). Innovatively, this paper brings into discussion the inner self of the human being and the potential power of human endeavor for promoting goodness in a world where obstacles of human pathology would be conscientized.

This paper is organized as follows. Introduction contextualizes the objective of the study. Section 2 presents issues related to the future studies. Section 3 outlines the journey of society from the current carbon intensive economy toward a low carbon one. The fourth section presents the Analytical TrilogY method that explains the misled human behavior, which is an obstacle in accepting a better future. The fifth section provides examples of obstacles that hinder the transition to a LCE. Finally, the conclusion shows that most human beings are unconsciously acting as a brake in the process to a LCE and that we will only reach LCE in time if we deal with psycho-socio pathology<sup>2</sup>.

## 2 THE ROLE OF CONSCIOUSNESS IN DESIRABLE FUTURES

Future matters to us and the possibility of a future with greater freedom calls for the development of more systematic and refined tools for thinking about the future (Miller, 2006). Concomitantly, these tools should be developed keeping in mind the human psychopathology.

The purpose of futures research is to systematically explore, create, and test both possible and desirable futures in order to improve decisions. It is not reasonable to expect the world to create and implement these strategies without some gener-

- 1 Inversion means the process through which a person sees good in that which is evil and evil in that which is good. It will be explained in more detail in section of psycho-socio pathology.
- 2 Psychopathology means the study of psychological illness (pathos = illness, suffering). Also used as a synonym for psychological illness. Psycho-socio pathology is the study of psychological and social problems. Also a synonym for psychological and social problems. This will be explained more in detail in section 4.

al agreement about what that desirable future is (Glenn et al., 2014). Also, we need a deeper understanding of the human being's desires which can be attributed to their sane or pathological aspects.

Barney (1993) argues that our definitions of progress and success must take into account the future well-being of the entire ecosphere and this will require a new understanding of humankind as a species, a new approach to the ethics of interspecies relations, and a new vision for the future of Earth. Russell (2005) states that on this quest we should be developing a new worldview in which consciousness is a fundamental component of reality.

The study of consciousness was found originally in the realm of theology and philosophy and with the advent of science, it has been introduced to several areas such as psychology, neurology, physics etc. In the Middle Ages Bernardino Telesio and Tomasso Campanella studied consciousness verifying it as the connection between feeling and knowing. Later on, Blaise Pascal said that the heart has reasons, the reason is unaware of, and that people should conscientize their contradictions instead of running away from them. Illuminism dealt extensively with the theme of consciousness and Voltaire believed progress would come through consciousness (Keppe, 1981). In the field of psychotherapy, Frankl (1973) saw conscientization as synonymous with responsibility.

Amongst all writings on consciousness, the two most frequent approaches are: the one that considers it in a moral sense and the second one that sees it as a general perception<sup>3</sup>. However, the third, unifying approach, is developed in AT which sees consciousness as a total awareness of reality (internal and external). It results from the unification of love, intelligence and action, and includes awareness of right and wrong, of psychological attitudes, and of true reality (goodness, beauty and truth). Thus, Silvano (2013) states that when the conscious person perceives mistakes and evils, he is compelled to correct them.

According to Keppe (1978), consciousness exists in itself but in the human being, accepting it depends on the use of will. In other words, human beings already have consciousness whether accepting or rejecting it. Therefore, the human being of the future is the human being of today

with a slight but fundamental difference of accepting the consciousness. The greater degree of consciousness or transformed consciousness will shape the very future. Furthermore, Keppe says that we can predict the society of the future by observing a single individual: an individual who accepts consciousness and takes the path to development, spiritual connection and realization in opposition to an individual closed to his own fantasies and subsequent mediocrity.

When people accept their consciousness and reach a higher level in feelings, accomplishment and intellectual realm, they achieve a greater development in all areas (Pacheco, 2014). The acceptance of consciousness will lead to the flourishing of Civilization as happened in the past, for example in the Renaissance when the superior elements of the past Hellenic civilization were accepted, allowing a more serious examination of the medieval barbarities against society and the human being. Similar phenomenon is about to happen due to the acceptance of the true reality (Keppe, 1983).

Futures studies have been divided into three categories by Masini (1993): i) prognosis that is the attempt of foreseeing what is about to happen; ii) the utopian view which shows the ideal future; and iii) vision, that is the most realistic approach as it considers the present and the past, and this vision is based on a conscious will to see the vision achieved and includes the capacity of building that future. This paper proposes the third approach for humanity in the transition to a LCE.

In the path to the desired futures, Nováček (2011) says that consciousness and its anticipated possibilities could form a gateway to a further development of humankind in the 21st century and calls for the spiritual transformation by saying "unless the moral and spiritual transformation of people draws level with and outstrips bio-technological evolution, we will be under the constant threat of the fatal misuse of our abilities and the resulting self-destruction." Therefore, we call the attention to the urgent need to understand what goes on within the human being, so that such a disaster would be avoided and humanity could change its destructive course. Barney (1993) says, "This change will require an immense amount of energy. Not the energy that comes from coal, gas, oil or nuclear fuel, but rather spiritual and emotional energy, enough to change the thinking and lives of more than 7 billion people." In all levels, energy becomes the crux of the matter.

3 German language shows clearly this distinction: Gewissen means the state of knowing or learning and Bewusstsein means conscience in moral and ethical sense.

### 3 TRANSITION TO A LOW CARBON ECONOMY

Energy, essential input to boost economic and social growth of nations, constitutes a strategic element for humanity towards a sustainable and desirable better future. Energy occupies a prominent role in business strategies and government policies which take into account the security of energy supply and reduction of greenhouse gas emissions (GHG). These are the reasons society has been seeking a path toward a low carbon economy (LCE) founded on renewable and clean sources of energy. The German Advisory Council Report on Global Change – WBGU (2009) states that the imminent transformation of the modern global industrial society to a LCE is a challenge without historical precedent – technologically, economically and socially.

There is a close link between producing and using energy from fossil sources and so-called global warming. If the average temperature of the planet increases over 2°C above the pre-industrial level, climate change will generate dramatic consequences. Therefore, the worldwide challenge constitutes in decarbonizing the atmosphere limiting the CO<sub>2</sub> concentration under 450 ppm (parts per million) in order to maintain the average temperature rise on the earth below 2°C (The Stern Report, 2006).

The Brundtland Report (1987) launched the term “sustainable development” as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. For Merico (2009), a sustainable economic development means making efforts for the permanence of the productive capacity of the natural environment meeting human needs over time. However, society is causing ruptures, surpassing many limits imposed by the biosphere: changing the water cycle, desertification, loss of biodiversity, climate change, etc. Therefore, environmental problems cannot be treated separately from the socioeconomic issues such as poverty and social disintegration (Graaf *et al.*, 1996).

The environmental crises indicate that the limits of nature present an indisputable and irreversible short-term reality. Humanity’s expectation of consumer goods, resulting in an insatiable thirst to have and possess that hardly will be possible to stop within the present social and global context. Consequently, the environmental crisis

presents us with an ethical and radical imperative: either we change our way of being and acting in the world, which implies re-educating habits, or we leave an increasingly unsustainable and irreversible legacy to future generations.

#### 3.1 NON RENEWABLE ENERGY SOURCES

For decades, the non-renewable energy sources have dominated the world energy matrix. Despite the efforts made in research on alternative energy sources, the dependency on fossil fuels is still substantial. These sources of energy represent 81% of the global primary energy supply, and in spite of the growing concern about climate change, it seems that fossil fuels will still reign in the coming decades and although decreasing, keep a stake around 68% in 2030 (IEA, 2014).

The global economy will not be “free” from oil so soon, but its share in the energy mix will decrease from 31.4% in 2012 to around 30% in 2030. When it comes to the transportation sector, oil has an even greater share (93% in 2010, falling to 88% in 2030) (IEA, 2014).

Natural gas (NG) holds an interesting role in the global energy scene in the coming years due to its environmental appeal compared to other fossil fuels, constituting an adequate source of primary energy for the global transition to a LCE (Marques & Pereira, 2015). NG emits about 50% less CO<sub>2</sub> than coal, and 40% less than oil, being considered a partially “clean” fossil fuel (Eurogas, 2011). Its high calorific value, energetic high-output and low pollutant emissions enlarge the chances of NG as a substitute for other fossil fuels in the transition to a LCE. (Marques & Marcovitch, 2014). NG has been acquiring a strategic position in the primary energy supply matrix, accounting for 21%. It is forecasted to keep this position over the next two decades (IEA, 2014).

Coal is number one in electricity generation worldwide with a stake of 40%. As a primary energy source it holds second place (28.8%) in the global energy matrix (IEA, 2014).

Nuclear energy, with a share of about 6% in the global energy matrix, is seen as one of the cleaner energy alternatives for increasing energy demand (IEA, 2014). However, its use has been blocked by the concern of nuclear accidents, propagation of high radioactivity, uncertainty about the appropriate destination of nuclear waste and proliferation of nuclear weapons.

Given the present reality consisting of a “dirty” global energy mix with supremacy of non-renewable energy represented by fossil fuels and a future to be desired, made up of clean and renewable energy sources, we can envision a transition period focusing on an energy policy that manages the transition from a carbon-intensive economy to a LCE. Initially, the non-renewable energy sources will still hold a significant role, despite the damage done to the environment. Gradually, traditional energy sources will lose stake as they will be replaced with renewable sources aiming at the necessary energy supply in a sustainable way.

### 3.2 RENEWABLE ENERGIES

Renewable energy sources cause less damage to the environment than fossil fuels and they are becoming economically competitive owing to technological evolution. The interest in exploiting these sources is due to the desire to overcome the current energy model founded on fossil fuels. Increasing global pressure for the use of renewable and clean energy and the pursuit of diversifying energy supply sources favor the future of renewable energy.

Renewable energy sources have reached a stake of approximately 13.2% in the global energy matrix, which is still far from a clean matrix. Currently, oil, coal and natural gas predominate the matrix (IEA, 2014). However, they will be gradually replaced with renewable energy sources such as hydro, wind, solar and biomass over the next few years. Renewable energy sources are projected to account for approximately 36% of the global primary supply by 2023 (IEA, 2014).

Hydropower has a modest share in primary energy consumption globally (6.7% in 2014). Nevertheless, it is the main source of renewable energy in electricity production accounting for 20% worldwide (IEA, 2014).

Wind energy complements other renewable sources, such as hydroelectric generation in dry periods and during peak hours, reconciling the needs of a modern industrial society with preservation requirements of the environment. Wind energy contributes to the global energy supply safely and viably, reducing the risks of energy supply crises caused by external motivations or depletion of reserves, while minimizing global warming.

Solar energy is a promising option to supplement electricity generation. The technology improvements have increased the efficiency of solar modules and reduced production costs, signaling a positive outlook for solar electricity generation. Photovoltaic systems can generate electricity in any space where it is possible to install a photovoltaic panel. Thus, roofs and façades can generate electricity in urban areas and power plants can be built near or far from consumption centers. Weather conditions in tropical countries are extremely favorable for solar energy.

Exploring and developing biomass sources makes it possible to reduce carbon emissions, whether in the form of liquid biofuels (ethanol and biodiesel), that replace gasoline and diesel, especially for automotive vehicles, or in the form of bioelectricity, which meets a wide range of applications such as electricity production, heating and cooling for industries and residences.

In addition to the traditional renewable energies mentioned above, new forms of energy are surging. Amongst the most promising ones is the use of scalar energy. The name coined by Nikola Tesla to what Aristotle would call the Ether; and has been known since the beginning of history under various names such as “prana” in India, “chi” in China, and so on.

The greatest challenge has been how to harness scalar energy to serve humanity. New theories and technologies are emerging as humanity is giving up the materialistic view of reality, consolidated in Einstein’s theories that energy would derive from matter. The disinversion in Physics may lead humanity to an abundant source of energy and its consequent development. The question here is improving technologies to capture scalar energy and transform it into magnetism (Keppe, 1996) as well as increasing the human willingness to accept new theories and forms of living.

If humanity wishes to preserve the planet and maintain or even improve its lifestyle it should strive for a world in which energy use, the primary element for the future of our civilization, is reliable with respect to the environment. The transition to a LCE is complex because it requires a change in thinking and business. This journey means intensifying technology development that facilitates the gradual replacement of fossil fuels with renewable energy sources and the relentless pursuit of energy efficiency, thus leading to a re-

duction of GHG. Moreover, we should seek and rescue values that can balance the gap between the source limits of nature and the limitless aspirations of human beings.

#### **4 CONSCIOUSNESS OF PSYCHO-SOCIO PATHOLOGY AND THE FUTURE**

Analytical Trilogy (AT) is a scientific methodology from psychoanalyst Dr. Norberto Keppe that makes use of dialectics<sup>4</sup> and interiorization<sup>5</sup> to address the deep psychological and philosophical belief structures underlying mental, physical and social distress. AT is not merely a psychotherapeutic method; it is a body of knowledge that unifies the fields of theology, philosophy and science (Frascardi, 2005). AT is currently applied to business, education, law, politics, arts, communications, science, productivity, creativity, technology etc.

Keppe (1983) states that "There had always been a great deal of controversy in regard to the origin of human ills until Freud demonstrated the existence of intra-psychological problems. The sociologists, on the other hand, maintained that it was society that harmed man. Traditional psychoanalysis has failed, and the sociologists, not knowing what to do, clamor for a new approach." Consequently, AT is defined as a science midway between psychology and sociology because it explains the two using the same hypothesis in order to be able to place society on its true course and humanity to a more peaceful existence. Keppe says that without a social transformation, it will be impossible to transform the human being, because he or she is an integral part of that system.

Bezerra (2013) mentions that Keppe considers that nervousness, neurosis, psychosis and physical diseases exist due to a battle that we carry on against truth, beauty and goodness which constitute the very essence of the human being. In other words, everything that exists in itself is by its nature good (except when we omit, deny or alter it).

If everything was originally good, why does humanity face illness, hunger, poverty, war, neu-

4 Dialectic used in AT is the Socratic or Christian dialectic to reach truth, consisting of dialogue between two real (self-existing) elements such as man - woman, thought - feeling.

5 Interiorization consists of using external reality as a mirror to understand more clearly what exists in one's inner self (feeling, thought, conscience, intuition, emotion, etc).

roses, addictions, widespread underdevelopment, injustice, exploitation, resource scarcity, pathology of power, climate tragedies, refugee immigrants and terrorism - all characterizing life on this planet. Humanity has not been able to free itself from these calamities due to a lack of understanding of their origins which lie in the human being's inner self (Bezerra, 2013). Pathology originates from the human interior - his emotions, ideas, mentality - creating all the social problems, and then, the established pathological social systems hinder human welfare and development. Nevertheless, if man returns to his inner self and uses his will to take advantage of all the goodness, truth and beauty he carries within himself, humanity will be able to see a significant scientific, technological, cultural and socio-economic development (Pacheco, 2014).

AT depicts the attitudes that have led humanity to the current psychopathological situation. These are namely i) inversion (understanding the world upside down), ii) alienation (lack of awareness of reality), iii) incoercionization (wilful attitude of concealing, repressing or denying one's consciousness) iv) fantasy and reality, v) theomania (the wish to be godlike) and vi) envy (wish to destroy existing goodness, beauty and truth). It would be useless to treat issues related to the future without considering psycho-sociopathology.

AT uses dialectics to conscientize what is false and erroneous in order to arrive to what is authentic and to gain equilibrium by the correct use of the will (Keppe, 1998). This process aims at conscientization. In section 2 it is explained how consciousness plays a central role in the desirable futures. However, people pathologically deny this process of conscientization (Silvano, 2013). For example, whenever a nation wants to develop to another level of consciousness, and if there is an established power structure against this development, society faces a conflict or revolution. This phenomenon occurs mainly because of an inverted way of thinking that if a person does not see a problem, it does not exist. People confuse the consciousness of a problem with the problem itself. As long as they are afraid of seeing problems, they will have difficulties in acting, as consciousness appears through action.

This process is called alienation. When people are afraid of seeing the problems that exist in society and in themselves, they enter into a deep alienation with its tragic consequences. An

example of social alienation is the exaggerated value (fantasy) given to money over accomplishment and human life. It is due to this attitude that humanity has become sick. People see things upside down considering perception harmful, and therefore, when they see a mistake or corruption, they tend to make an effort to stifle the perception. (Pacheco, 2014).

Alienation is caused by envy and theomania. Theomania is the hidden desire in all human hearts to be as powerful as a god, or in other words, not accepting the fact of being human and wanting to live what cannot exist (fantasy). Theomania can manifest in megalomania which is a mania of grandeur, desire for power, perfectionism, narcissism, fanaticism and intransigence (Genzani, 2012). On the contrary, individuals who accept consciousness and are interested in the common good, are more balanced and creative.

In his early studies of psychopathology, Sigmund Freud had already noticed that seriously mentally ill individuals were very envious. Keppe considers envy the fundamental problem in the human being (Coelho, 2003). By envy he means the attitude of destroying what is good in one's own life and the life of others. This understanding is based on the etymological origin of the word envy in Latin, *invidere*, that means, "not to see".

If envy is not conscientized, the human being will automatically make a projection. Projection is a psychological mechanism by which people see their problems (or qualities) outside themselves thereby placing themselves out of reality (Genzani, 2012). The most serious aspect of the mechanism of projection is that the person projects onto others the causes of the problems for which he himself is responsible. This leads to a never-ending, self-destructive process that prevents humanity from solving their problems because they are not conscious of their real origin (Pacheco, 2014). Unless this resistance to accept goodness is treated, i.e. conscientized, it will be difficult for humanity to accept a better future.

The situation becomes worse as the social organization reinforces the pathology of its members. We should correct society so that it permits consciousness and true action to flow naturally, because today's social structure plays an important role in alienating people (Camargo, 2013). It is due to envy, inversion and theomania that humanity has built an inverted social system under which we suffer continuously. Individuals create

systems that feed their craziness resulting in an insane society that helps to create more sick individuals (Santos, 2007). The sickest people seek power and society has been organized to serve their interests leading to a vicious circle practically without a solution unless we become conscious of the real causes (Pacheco, 2010).

Envy leads to inversion. Due to envy, people close their eyes to what is beautiful and good labelling it ugly and bad. In other words, inversion means that we perceive reality opposite to what it is. We see reality as bad and imagination and fantasy as agreeable, truth as aggression and work as sacrifice, love as being vulnerable. (Keppe, 1997) The discovery of inversion laid the bases for AT and made a deeper analysis of human endeavor possible (Soos, 2005). Inversion is directly linked to the role of will, and it is the central point in AT methodology. It is the key point in continuity or annihilation of our civilization, because our existence depends on our choice. The problem comes in when we use our will contrary to what is good for us, others and society.

The will is connected to our emotions: envy and theomania impede the existence of love (energy) triggering all kinds of calamities (Genzani, 2012). Because of inversion, we substitute love as a bases of life for envy and arrogance (Keppe, 1987). In addition, it would be exactly love, that we reject, that furnishes the basic energy needed for all intellectual and physical action. Love is always present within us: our rejection of it is the source of great anguish and discomfort (Pacheco, 2014).

Understanding individual and social inversion has led to innovative solutions in regard to a LCE such as the groundbreaking Keppe Motor Technology. Based on studies of metaphysics, Keppe came to the conclusion that if our technology and the use of energy are destroying resources and polluting the planet, there must be something wrong with this technology (Soos, 2005). His perception culminated in understanding that "The fundamental mistake in physics is of the equation of energy with matter", instead matter is a sub-product of energy, and this energy can be tapped directly without destroying the planet's resources (Keppe, 1996). This new discovery can have a fundamental role in the transition to a LCE.

The existing problems do not necessarily need to exist. If humanity makes an effort to conscientize its inversion, it can take a path toward a more favorable future and see the dreams

of many scientists and philosophers of the past coming true (e.g. free energy, a just society, abundance, and consequent peace). Nevertheless, this can only be done if we learn to deal with the unconscious elements (inversion, envy, alienation, theomania, etc) that are hindering and debasing the individual and social existence. On the other hand, if humanity uses its will in an opposite direction, the world shall see its total annihilation.

## 5 BRAKES ON THE TRANSITION TO A LOW CARBON ECONOMY

The topic of LCE is usually addressed in the field of economics or engineering; we seek to expand this understanding in a interdisciplinary way by pointing out factors related to the human being's inner self that influence the speed of the transition to a LCE. We applied the discoveries of AT that led us to understand the misled behavior of the human being. This makes it possible to deal with the individual and social pathology in decision making, and to effectively prepare society for anticipating the LCE transition and accepting a better future.

We can identify three types of individuals inclined to a misled behavior regarding a better future: the first one is alienated; the second one consciously desires a better future but unconsciously acts in an opposite way; the third one pathologically desires a bad future. In addition to these three types, the agent of social transformation is the idealist individual interested in goodness, who is willing to deal with the perception of individual and social pathology.

The misled behavior in fact works as a friction on the path toward a better future marked by a LCE. By friction, we mean actions, attitudes, behavior, interests, and mentality – everything that hinders the development of renewable clean sources of energy.

These frictions appear in many different ways, as follows:

i) Consider the economic interest and the power of the worldwide fossil fuel industry in exploring coal and oil up to their exhaustion, and at the same time jeopardising renewable energy development. We remember the energy invention suppression cases of Nikola Tesla, Diesel, Mallove, Pantone and others that tried to change this status quo (History Channel, 2015). Great for-

tunes were based on oil industry (Getty, Rockefeller, Mobil, Gulf and Western, Shell, Texaco, Standard and BP) and from the time oil was first discovered until today, there has been a complex economic manipulation including the conflict in the Middle East. When human actions are based on envy and theomania, enterprises exercise their functions solely for earning money. This has led to corruption, and a parallel civilization has been created to serve a little group of individuals that controls the rest. Others accept this situation due to their own envy and inversion that leads to alienation.

ii) Think of the possibility of destructive competition among sectors working on developing renewable new technologies, trying to prove the supremacy of one source against another. The incontinentized envy and greed over general welfare leads to backwardness. A famous example of this kind of competition occurred at the end of 19th century when Westinghouse and General Electric waged the “War of the Currents” in which the key roles were played by Thomas Edison and Nikola Tesla (Uth, 2015).

iii) Take into account that some specialists might be hiding knowledge. Sharing new discoveries without individual interests would anticipate a better future, but at the same time it would mean a revolution in the mindset considering the current pathological stage of the human being. For example, products carry a patent registration to prevent counterfeiting; but more frequently to prevent others from benefiting from them. Also, many times it is not the inventor who benefits from the patents, but rather those who hold the economic power and buy the patents to get profits for themselves. Important inventions can even be shelved to protect one's own interest.

iv) Corruption in conjunction with bureaucracy may be delaying renewable energy projects. Fiscal income including personal benefits may be more attractive than environmental issues and sustainable future. The interests of the powerful are opposite to those of the people. The former is concerned with increasing their power, whereas people in general are mostly interested in solving their everyday problems. Powerful people often project the problems onto the people although they were created in the first place by those who are in power.

v) Some people might be investing in renewable energy only to increase their personal wealth,



and not for the good of society, so any negative externality will be trusted with indifference and the business might be conducted unethically. For example, wind energy has negative environmental externalities caused by wind turbines, such as visual impact, audible noise, electromagnetic interference, and the facilities affect the migratory route of birds. Hydroelectric plants cause flooding of large areas resulting in significant losses of plant and animal species, migration of aquatic species interruption and loss of agricultural areas and other land uses, not to mention the need for relocation of local populations.

vi) Due to alienation human beings might act passively as they believe that regardless of the intensity of the tragedy going on, at the end of the day breakthrough technologies and new discoveries will provide a magical way out.

The normative approach for a better future would include solutions such as better technologies, fair income distribution, education, reformulating the socio-economic system etc. However, without consciousness of envy, anger, hatred and theomania humanity will only organize more inverted systems as seen in many revolutions in the Human History and harm itself until the total annihilation. Therefore, we understand that the dissemination of the AT methodology will help us to understand humankind's misled behavior, thus being able to act consciously seeking a better future.

## 6 CONCLUSION

Energy is essential for socio-economic growth of nations, constituting a strategic element for humanity to reach a sustainable and better future. This paper provides a unique approach to a low carbon economy (LCE) as it brings forth the inner characteristics of human beings and the potential power of human efforts for promoting goodness in a potential future world where the anthropogenic obstacles would be controlled as a result of a higher level of consciousness.

The concern on fossil fuel dependency, their possible exhaustion and the consequences of the increased GHG emissions has led society to seek a path toward a LCE to guarantee an energy supply compatible with environmental sustainability. This journey includes intensifying the development of technologies that gradually replace

fossil fuels with renewable energy sources and the relentless pursuit of energy efficiency, thus leading to a reduction of GHG. In addition, we should promote and rescue values that can balance the gap between the source limits of nature and the limitless aspirations of human beings.

The transition to a LCE is happening but the concern is the timetable. There is a clear need to speed up this transition process in order to avoid the deterioration of the planet. However, there seems to be a lack of willingness to act in favor of a conscious future. Consciously man strives for a better future but unconsciously he does not.

Despite many efforts to free itself from current calamities (poverty, pollution, wars, terrorism, exploitation) humanity finds itself in a vicious circle of destruction. The very origin of these tragedies lies in the human being's inner self. It is from the human interior - his emotions, ideas, mentality - that all pathology originates creating the social problems, and then, these established pathological social systems hinder human welfare and development.

The human being's pathological behavior is a friction on the path toward future well-being characterized by a LCE. By friction, we refer to actions, attitudes, behaviors, interests, and mentality - everything that could impede the development of renewable, clean sources of energy necessary for reaching a LCE. These frictions appear in many different ways, such as: (i) economic interest of fossil fuel industry in exploring coal, natural gas and oil up to their exhaustion, jeopardizing and delaying renewable energy development; (ii) destructive competition among sectors working on developing renewable energy; (iii) hiding knowledge by some specialists; (iv) corruption in conjunction with bureaucracy that delays new renewable energy projects; (v) people investing in renewable energy only to increase their personal wealth, and not necessarily for the good of society; and (vi) human beings acting passively believing that at the end of the day new technologies will save the planet.

Although it is important to develop solutions such as better technologies, fair income distribution, education and reformulating the socio-economic systems, without consciousness of psycho-socio pathology humanity has no chance to survive. However, if man learns to deal with his inner self and uses his will to take advantage of all the goodness, truth and beauty innate in

his structure, humanity will see a significant development in scientific, technological, cultural and socio-economic areas. Therefore, we suggest that more studies should be conducted on how the transition to a LCE is happening in different countries regarding to their sociopathological stage of development.

Analytical Trilogy (AT) explains the misled human behavior that is an obstacle in accepting a better future, meaning that human beings are unconsciously acting as a brake in the process to a LCE. Therefore, the dissemination of the AT method will help human beings to understand this pathological behavior and then act on correcting it in the search for a better future. The human willingness has a fundamental role in accepting or rejecting consciousness. Accepting consciousness will lead to the flourishing of civilization coming as a consequence of acceptance of superior elements, allowing a more serious examination of current barbarians against society, leading to a better future.

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