

*Laboratory of MEIC Naples (Ecclesial Movement of
Cultural Commitment) on Assisi 2020*

TOWARDS A NEW ECONOMY

*FROM THE ECONOMY OF THE FRANCISCAN
SCHOOL TO THE CIVIL ECONOMY TO THE CIRCULAR
ECONOMY*

*Mariarosaria Angrisano, Martina Bosone, Vinicio Mosca,
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1. INTRODUCTION

1.1 The world today is characterised by a dual challenge: the social challenge of poverty and growing inequalities and the ecological challenge, i.e. the loss of biodiversity, due to pollution and climate change. These are two challenges that evoke a single issue of justice: justice between actors of this generation and the justice between this generation and future generations, which may have living conditions well below those we enjoy/good about today, because of climate change.

Climate change, due to its irreversible effects, beyond a certain threshold, is the most general issue of our century, on which depends the same social challenge.

Yet there is often a strong underestimation of this problem in opinion public and in politics itself. Climate change affects little or nothing because it is perceived as an issue that concerns researchers only (and not the ordinary people) and with which one can agree or disagree, being something questionable.

The issue of climate change is irresponsibly under-resourced also in educational institutions, as well as in the media.

1.2 First of all, we would like to point out that, the perspective within which can be framed any possible action plan for emerging from the current social and environmental crisis, is that of recognising climate change as the greatest threat of the century. We need to move in the direction of the transition to decarbonisation, with less climate-changing emissions. The speed of climate change appears to be increasing, while the speed of our response appears to be increasingly slow and ineffective. Climate change has impacts on the environment and natural ecosystems, the economy and finance. But it has very also strong on people's health and perception of well-being. But this dimension centred on health has been very little "cultivated" (especially by the mass media), with the result of not having determined a conscious public opinion and a consequent "reaction" in the same as well as in politics.

Yet health is the only value around which there is always a unanimous consensus, regardless of culture and geography. On the contrary, health protection is the first human/social instance to be referred to in order to start a change of course. In fact, interest in health protection comes before other interests.

1.3 The ultimate cause of this double crisis is the economy. The current economy, which is mostly financialised and characterised by many speculative aspects, is founded on the following principles on the only particular interest disconnected from any general interest always creates new vicious (and in any case not virtuous) circuits.

In a very recent document prepared by a Research Group on behalf of the Com European mission are brought back the various current crises to a single source: the incapacity and the inadequacy of the current economy, which is described as «*resource-eating, socially divisive and environmentally hostile*» (European Commission, 2020). Well, the Encyclical *Laudato Si'* five years ago anticipated this conclusion with extreme clarity.

1.4 A great effort must be made today to improve the way we produce, redistribute and recover wealth, so as to decouple/disouple the production of value from the production of negative social and environmental impacts.

In short, we need a new economy that is capable of improving the status quo, avoiding a systemic crisis. We need a "hybrid" economy, able to consider not only instrumental values, (deduced on the basis of a utilitarian/anthropocentric approach) but also intangible, intangible/intrinsic values, linked to man and the natural ecosystem. The experiences of Taranto, Priolo, Porto Marghera etc. are very clear in their paradox of generating economic wealth and at the same time social and environmental poverty.

It is necessary to creatively combine the capitalist market economy with the ecological economy (i.e. with ecology) and social economy. We need an economy capable of hybridizing competition and cooperation, efficiency and solidarity, short and medium terms, economic capital and human capital.

1.5 Well, the places in space where the production of economic wealth are the cities. They make a very high contribution to regional and national/international GDP . According to the OECD, this percentage reaches up to 60% of GDP. Cities are therefore the place where a new economy can be regenerated. But they are also the place in space where the highest energy consumption occurs, consumptions of natural resources, various materials, etc., resulting in a strong contribution to the effect of the greenhouse and pollution (see diagram 1).

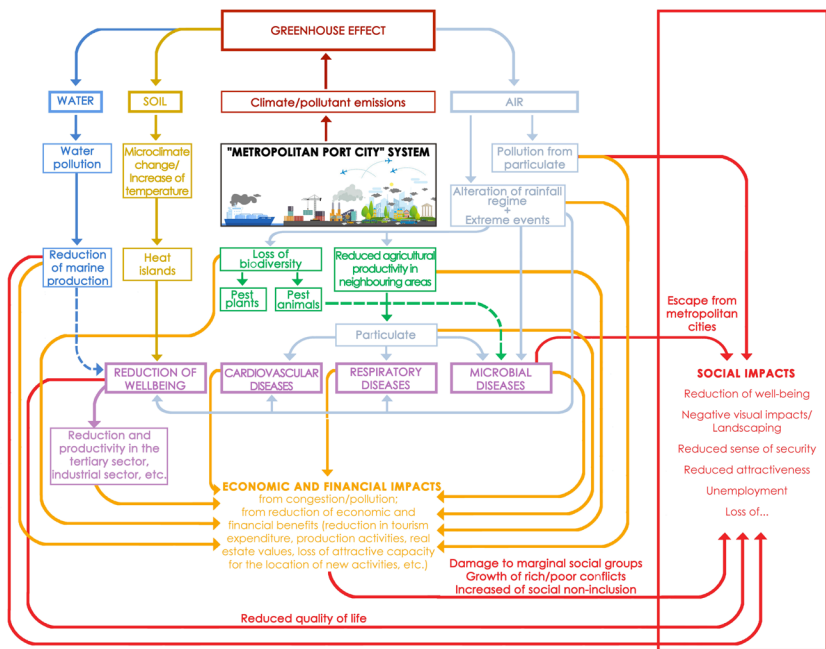


Diagram 1: *The polluting and climate-altering impacts of the city on health, the economy and the company (Source: Lancet Countdown Report on health and climate change).*

Nowadays, this model of the new economy is called the circular economy model. This model was also anticipated in the Enciclica Laudato Si' (cf. §22) (Pope Francesco Bergoglio, 2015). The thesis that is proposed in this Document, the result of the reflection of the Laboratory MEIC of Naples in the course of 2019/2020 is that this new economy finds its own origins in the principles of the Franciscan Economic School and later in the School Neapolitan Antonio Genovesi of Civil Economy. Cooperation, reciprocity, confidence (Zamagni and Zamagni, 2008) are the pre-conditions of eco-

conomic development that the Franciscan School and the Neapolitan School already had with extreme clarity identified («*trust binds, unites, creates bond in society: it is what is the strength of cohesion and mutual attraction in the natural bodies... without which one cannot have no firm and durable masses, but everything becomes dust and sand that dissolves at the first bump*» – (cap X, Civil Economy Lessons).

This new/old economy is therefore capable of promoting a development “human-centred”, i.e. an integral and sustainable human development (as the *Laudato Si'*), characterized not only by competition but also by participation, relationality, inclusion, reciprocity, symbiosis, community.

2. GLOBAL WARMING: THE GREATEST CHALLENGE OF MANKIND TODAY



Fig. 1: Comparison between the extension of an Arctic glacier in the early twentieth century (left) and in 2002 (right) (Photo: Christian Åslund, Norwegian Polar Institute).

This photo is that of an Arctic glacier, taken in the same exact position, in the Svålbard islands, at the Norwegian polar center, at the beginning of the twentieth century and then, again, below, in 2002. It testifies that global warming is a documented fact, beyond any debate.

It is now certain that human activities, such as use of fossil fuels and massive deforestation, have contributed to the emission of CO_2 in the atmosphere in ever-increasing quantities in the last 200 years and, significantly, in the last 50 in particular, with frantic economic and industrial expansion worldwide.

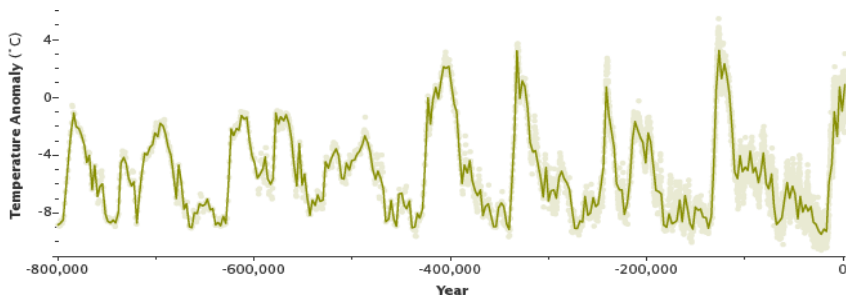


Fig. 2: Earth's temperature has undergone cyclical changes over time between ice ages (lowest points) and hot interglacial periods (peaks) (Source: Robert Simmon, NASA Earth Observatory).

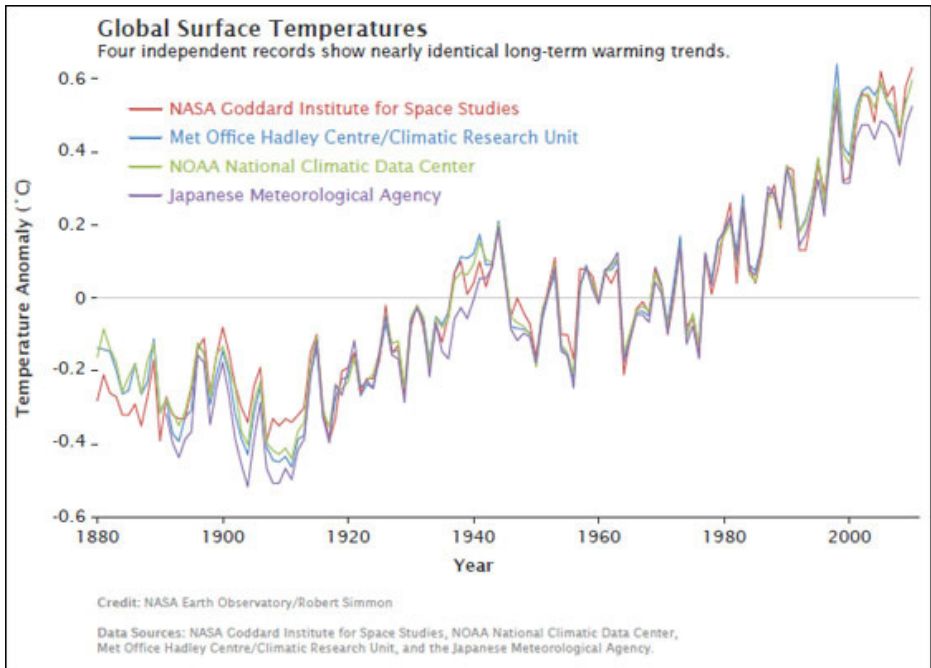


Fig. 3: Average Earth temperature rise in the last decades. 2016 was the hottest year from 1880 to 2018. The hottest 10 years of the 139 years considered in the chart are all from 2005. The hottest 5 years are the most recent 5 years. (Source: NASA Earth Observatory).

If urgent and effective measures about CO₂ emissions are not taken, the global average temperature is likely to increase by 0.33 °C or more every ten years, that means 3° C or more in a century, as reported by the Meteorological Organization of the United Nations. To have a perception of how significant this increase is, just think that in the history of the Earth an average temperature difference of only 5-6 °C has been calculated between the coldest periods of the ice ages and the hottest periods between them (Fig. 2).

The graph in Fig. 3 clearly shows, based on the survey of the various institutes listed, how the temperature has increased by 1 degree and more from 1880 to the present day, with an evidently steeper growth slope since 1960.

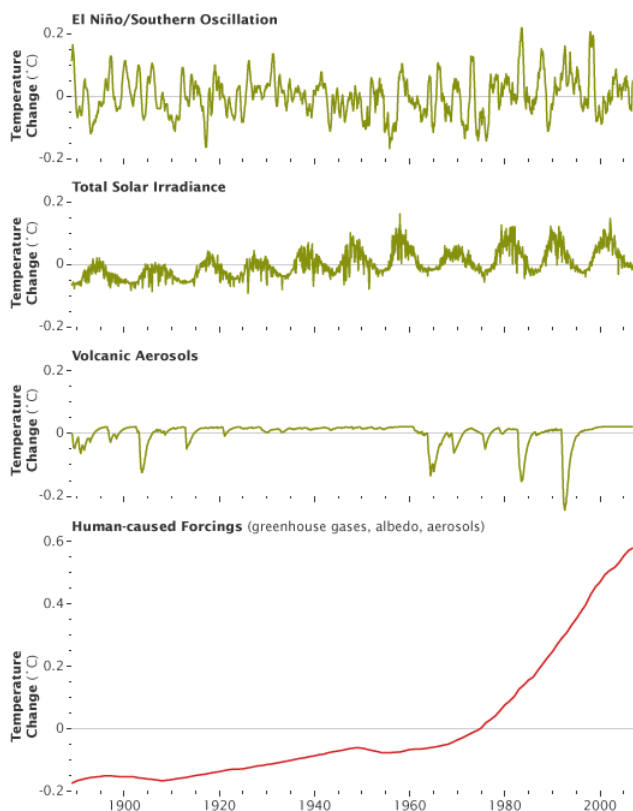


Fig. 4: *Despite the Earth's temperature fluctuating naturally, human influence on the climate over the past 120 years has overcome its natural fluctuations. Natural influences on temperature - El Niño, solar variability, volcanic aerosols - have contributed more or less 0.2°C (average 0), while human influences have contributed about 0.8°C since 1889 till today (Source: NASA Earth Observatory).*

In the graph of Fig. 4, however, the increase in CO₂ from 1960 to today is reported, as observed by the Hawaii Observatory.

To dispel any doubt that the temperature rise is related to the increase in CO₂, NASA's Earth Observatory has spun off contributions from El Niño, the Pacific warming phenomenon that occurs roughly every 5 years, that of Solar Radiation and that of volcanoes, thus highlighting how the contribution of CO₂ weighs for an overall increase of 0.8°C from 1889 to today.

But where does all the CO₂ produced by man come from? In contrast to popular belief, electricity production only accounts for 1/4 of greenhouse gas emissions. An equally large slice (24%), on the other hand, is represented by cattle breeding, which, if it were a country, would be the third largest producer of CO₂ in the world. Cars and transport in general (including planes, ships and trucks) account for only 14% of emissions.

As if to say, relying on renewable energy and electric cars will not be enough to solve the problem of greenhouse gas emissions.

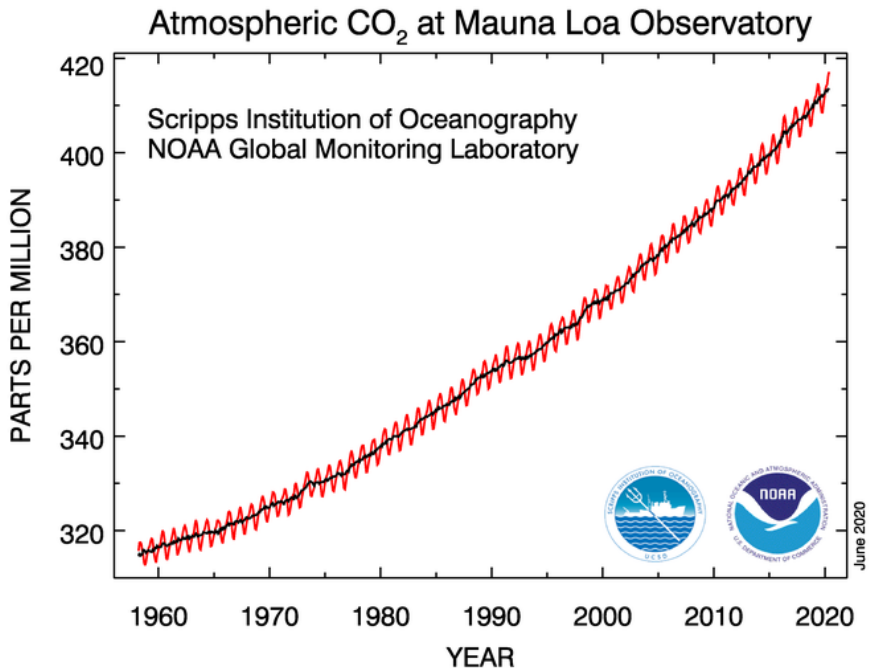


Fig. 5: According to the observations of the Mauna Loa center, the global annual CO₂ concentration has gone from 310 levels per million (ppm) to 411 ppm in the last 50 years. (Source: Mauna Loa Observatory, Hawaii (NOAA-ESRL)).

What was the path that led to this awareness at the global institutional level?

Let's give some reference dates:

Geneva 1979: a convention on transboundary air pollution is approved.

Rio de Janeiro 1992: the Earth Summit was arranged; it was the first major event on the topic with the participation of all the heads of State. It had a considerable media coverage.

In 1997 takes place the writing of the famous Kyoto Protocol, at the United Nations Framework Convention of on Climate Change (UNFCCC). The protocol came into force only in February 2005, with the subscription by Russia.

In 2015, then, again the UNFCCC issued a warning with the Paris Agreements, thanks to which it was clearly established that any action must be taken to limit the increase of the average global temperature below 2 degrees, if possible even below 1.5 degrees Celsius. How can we do this? With adequate funding, rethinking and innovating technology at our disposal, supporting the Development Countries, which are still far from their peak of industrial expansion and, consequently, of CO₂ emissions.

According to the Paris Agreements, to obtain these results a child born today will see at the age of 10 the elimination of all use of coal in the United Kingdom and Canada. At 20, the abolition of all petrol and diesel cars in France. At 30, in 2050, the achievement of the so called *net-zero*, meaning the achievement of zero greenhouse gas emissions worldwide.

In order to monitor not only the climate and therefore the measures taken each time by the heads of government, whether they are effective or not, the IPCC (Intergovernmental Panel on Climate Change) was founded in 1988. So far it has published 5 reports, with an average of about one report every 5 years. The organization, for these studies, won the Nobel Peace Prize with Al Gore in December 2007. In an update of 2019, the IPCC reports that the emissions trend to date already deviates from the Paris agreements, so it is probable that, at this rate, we will exceed the 1.5 °C target for 2030.

2.1 The effects on health of global warming

After this introduction, I would like to focus on the effects of climate change on health: effects that are not only physical, but also mental.



Fig. 6: The steps necessary to reach net-zero in 2050 (Source: Net-Zero 2050, European Climate Foundation).

In this regard, I referred to the Lancet countdown, an international and multidisciplinary collaboration, which sees the participation of climate scientists, ecologists, mathematicians, engineers, economists, doctors, social and political scientists and more. This collaboration is dedicated to monitoring the evolution of the health profile, with regard to climate change. To do this, 41 indicators were identified in 5 key areas: Impact of climate change, adaptation and health planning; mitigation actions for health; economics and finance; political and public commitment.

Of these 41, I would like to highlight 5 indicators and in particular:

- parameter 1.1 on the effects of heat on health,
- parameter 1.2 on the relationships between health and extreme events,
- parameter 1.4 about infectious diseases sensitive to climate,
- parameter 3.3.1 about exposure to pollution in cities,
- parameter 3.3.2 about premature mortality from exposure to air pollution.

Let's start with the relationship between health and heat: the increase in the average global temperature and above all in the frequency and duration of the peaks of heat constitute, of course, the most direct impact of climate change on health, which is manifested by heat stroke, stress, increased cardiovascular risk and, perhaps it is less obvious, also an increased risk of interpersonal and collective violence. The risk is particularly significant for children and especially for those over 65, who in 2018 experienced an increase in exposures of 220 million people.

Indicator 1.2 is dedicated to health and extreme events such as fires, floods and droughts. Especially fires have seen an exacerbation of respiratory disease in populations affected following exposure to combustion fumes, with enormous economic consequences, double those of an earthquake and 48 times those of a flood.

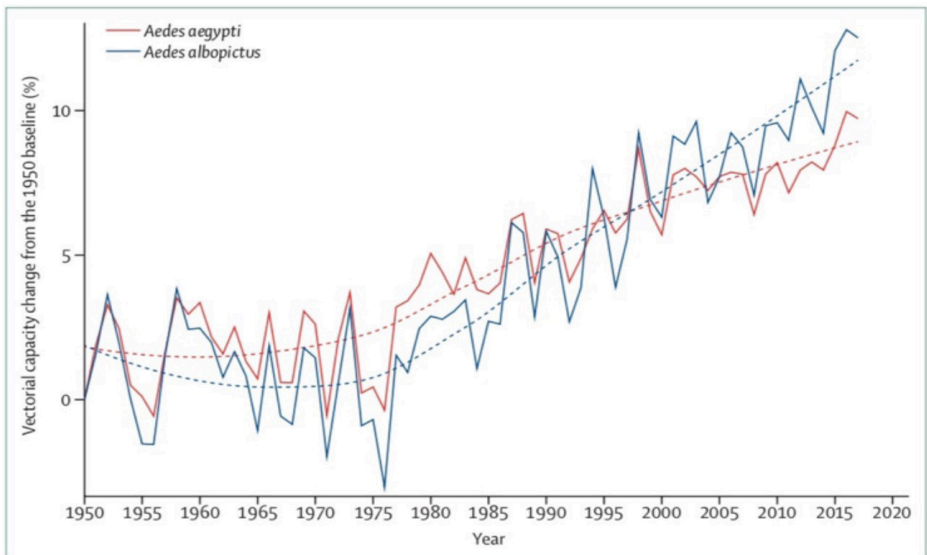


Fig. 7: Changes in global vector capacity for the dengue virus vectors *Aedes aegypti* and *Aedes albopictus* from 1950 to today (Source: The 2019 report of The Lancet Countdown on health and climate change).

Just think of the devastating effects of the fires of last winter in Australia, which have had important repercussions, including political ones. Indicator 1.4 is the one dedicated to climate-sensitive infectious diseases, in particular cholera (*Vibrio Cholerae*) and dengue fever (*Virus Dengue*), which strike with greater force where the conditions of temperature, humidity and precipitation are favorable. *Vibrio cholerae*, a bacterium,

is particularly sensitive to the salinity and temperature of the surface of the sea, on the basis of which statistics of increase in its infectious power have been made. The *Dengue Virus*, on the other hand, is transmitted by the mosquito *Aedes aegypti*, the same responsible for the transmission of the *Zyka Virus*, and *Aedes albopictus*, the “tiger mosquito” now also common in Italian latitudes. Well, from 1950 to today, as can be seen from the graph, their “vector capacity”, ie the average daily rate of cases in the sensitive population starting from an infected case, has grown, particularly from the 2000s onwards. Indicators 3.3.1 and 3.3.2 instead give us data on the organism’s exposure to urban pollution. In particular, few cities have managed to contain PM2.5 particle emissions below the limits set by the WHO below 10 µg / m³. Instead, it is pointed out that China has a positive exception which, although starting from a disastrous pollution situation, has done much to increase the air quality of its cities. In 2016, premature deaths from cardiovascular and respiratory diseases due to PM2.5 exposure were estimated at 2.9 million.

In particular, children are at risk of developing diseases such as asthma and COPD, 90% of whom live exposed to PM2.5. The latter are unequivocally for the most part attributable to human activities. So what further steps need to be taken to avoid this increase, to which we seem doomed? According to an article in the BioScience magazine, published in January 2020, there is talk of a “moral obligation” for scientists to spread the alarm on the climatic emergency and to suggest actions to be taken. In particular, regarding energy, it is necessary to focus on clean energies and stop the process of extracting fossil fuels. Furthermore, the wealthiest nations should support the poorest in the transition from fossil fuels to renewables.

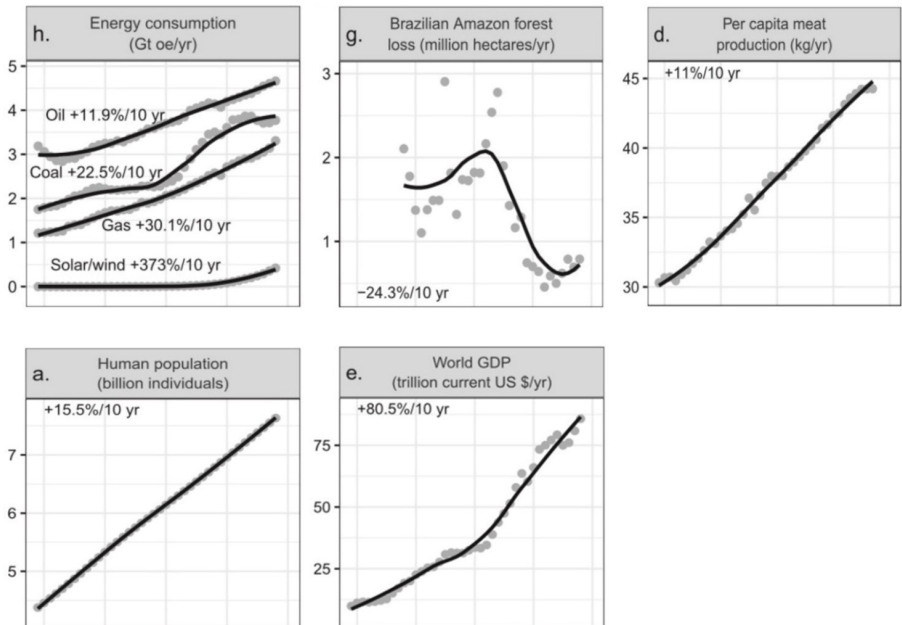


Fig. 8: Changes in global human activities from 1979 to today. These indicators are related at least in part to climate change. The data in the graphs are the percentage changes for each decade from 1980 to 2020. The annual data is shown in gray. Black lines are regression lines (Source: *World Scientists' Warning of a Climate Emergency*, *BioScience*, January 2020)

Concerning nature, biodiversity must be preserved when phytoplankton, coral reefs, forests, savannah are capable of sequestering atmospheric CO_2 and they can help us out. Regarding food, the consumption of animal products, in particular those related to ruminants, must be reduced and the enormous waste of food must be drastically reduced.

Regarding economy, the exploitation of ecosystems driven by economic growth alone should be stopped and a focus on a carbon-free economy. We must therefore get out of the pure logic of the increase in GDP.

The population, which is growing at a rate of 80 million per year, must be stabilized, even with a serious birth policy.

In conclusion, the transformation for a sustainable future is a must, if we do not want to definitively ruin the relationship with our only home, Earth.

3. THE RELATIONSHIP BETWEEN THE NOTION OF SUSTAINABLE/ CIRCULAR DEVELOPMENT AND THE LAUDATO SI'

3.1 Pope Francesco in the text of the *Laudato Si'* (Pope Francesco Bergoglio, 2015) wants to address every person living on this planet in the face of the global deterioration of the environment.

The Encyclical opens with two very important questions: what kind of world do we want to pass on to future generations? What actions to take care of the Earth?

In the Encyclical, climate change together with the growth of inequalities is stressed several times with the aim of identifying appropriate sustainable development strategies to preserve our "common home".

In this contribution, the text of the *Laudato Si'* is read with the aim to identify:

- to identify the notion of "intrinsic value" (referred to several times in the text);
- to identify the principles for building an "integral sustainable and human" development model;
- to identify the strategies to define a new development model according with the circular economy model.

Analyzing the reference literature, we can say that there are different interpretations of the notion of "intrinsic value", starting from philosophical interpretations. The "Intrinsic value" is defined as the value independent of the contribution to a subject's direct well-being: as a value in itself and for itself. It is a value that conventional economists systematically ignores, in the name of an interpretation of value based on utilitarianism: something has value because it is useful, if it is useful to someone.

The evaluation of the "intrinsic value" and the "value of use" allows us to arrive at a more meaningful estimate of ecological damages.

In paragraph 33 of the Encyclical, the notion of "intrinsic value" is reported as follows: *«the different species are not only exploitable resources, they have a value in themselves»* (§ 33).

It is necessary to make responsible use of the resources available to us. The other creatures are completely subordinated to the good of the human being, as if they had no value in themselves and we could dispose of them at will. Man must respect the goodness proper to every creature in order to avoid a disorderly use of things (§ 69). Every creature has value and meaning. Nature is often understood as a system that is understood and used (§ 76).

The Encyclical takes up the notion of "*modern anthropocentrism*", man no longer feels the fundamental importance that nature plays in our lives. The men continue to exploit it and not to take care of it, he does not perceive it as a refuge: *«He sees it without hypothesis, objectively, as a space and material in which to realize a work in which to throw everything, and no matter what will result". In this way, the "intrinsic value" of the world is reduced. But if the human being does not rediscover his true place, he does not adequately understand himself and ends up contradicting his own reality...man must respect the natural and moral structure with which he has been endowed»* (§ 115).

It is necessary to promote constant research to take care of nature, which also allows us to recognize how the different creatures relate to each other, forming those larger units that we now call “eco-systems”. The natural resources have a significant “intrinsic value”, regardless of their use.

It should be remembered that ecosystems are involved in carbon dioxide capture, water purification, combating diseases and infestations, soil composition, waste decomposition and many other services that we forget or ignore (§ 140).

It is necessary to realize that we live in a reality that has been given to us and we are called upon to promote a sustainable use of these resources, favoring a constant capacity for the ecosystems regeneration of in its various sectors and aspects.

3.2 The *Laudato Si* text proposes a definition of “sustainable development” different from the conventional UN Member Organizations. The Encyclical speaks not only of sustainable development, but of «*integral and human sustainable development*». This interpretation refers to what should be the fundamental objective of any development strategy, namely the “humanization of reality” in which man lives, works and rests.

In 2015 – in Agenda 2030 – are defined the 17 objectives for sustainable development that should guide future development policies, with the aim of improving the economic, ecological and social dimension (United Nations, 2015).

Sustainable development is one that meets the needs of current generations without compromising the ability of future generations to meet their own needs (United Nations, 1982).

The meaning of sustainable development should be to improve quality of life or well-being in a “durable” way.

This is possible only maintaining the natural eco-biological life support system in its various forms, which represents the “basis” for any human activity.

There are different possible approaches and dimensions to sustainable development: that of the economist, interested in growth, that of the environmentalist interested in protection and that of the sociologist interested in equity: but there is no sustainable development if an integration between these three dimensions cannot be found.

In the paragraph 147 of the Encyclical reads that in order to speak of authentic development, it will be necessary to verify that there is an integral improvement in the quality of human life, and this implies analyzing the space in which people’s lives take place.

The environments in which we live affect our way of seeing life, feeling and acting. At the same time, in our room, our home, our workplace and our neighborhood we use the environment to express our identity. We strive to adapt to the environment, and when it is disorderly, chaotic or saturated with visual and noise pollution, excess stimuli test our attempts to develop an integrated and happy identity (§ 66).

The relationship that man has with the earth is fundamental. Man is called to cultivate and preserve it. As a result, the originally harmonious relationship between man and nature has turned into a conflict: attacks against nature must be prevented (§ 66).

Today there is an urgent challenge to protect our «*common home*». The whole human family should be committed to the search for sustainable and integral development. The continual acceleration of the changes of humanity and the planet today joins the intensification of the rhythms of life and work. Although change is part of the dynamics of complex systems, the speed that human actions impose on it today contrasts with the natural slowness of biological evolution.

Added to this is the problem that the objectives of this rapid and co-existence change are not necessarily oriented towards the common good and a human, sustainable and integral development.

For example, paragraph 20 states that there are forms of pollution that affect people on a daily basis. Exposure to air pollutants produces a wide range of health effects, particularly for the poorest people, and causes millions of premature deaths, as documented by the WHO in its reports. People become ill, for example, due to inhalation of high amounts of smoke from cooking or heating fuels. Add to this the pollution that affects everyone, caused by transport, industrial fumes, landfills that contribute to soil and water acidification, fertilizers, insecticides, fungicides, herbicides and toxic pesticides in general.

Technology which, linked to finance, claims to be the only solution to problems, is in fact unable to see the multiple relationships that exist between things, and for this reason it sometimes solves one problem by creating others (§ 20).

If we take into account the fact that the human being is also a creature that has a special dignity, we cannot neglect to consider the effects of environmental degradation, the current model of development and the culture of waste on the life of people (§ 43). Ultimately, it is necessary to correct growth patterns that seem incapable of ensuring respect for the environment. «*The book of nature is one and indivisible, the degradation of nature is closely linked to the culture that shapes human coexistence*». It is important to recognize that the natural environment is full of wounds produced by our irresponsible behavior (§ 6).

In new models of development, it is important to consider the real problems that particularly affect the excluded.

They represent the majority of the planet's population, billions of lost. Today they are mentioned in international political and economic debates, but mostly it seems that their problems are posed as a secondary problem, as a matter that is added almost out of obligation or in a peripheral way (if we do not consider them a mere collateral damage). In fact, at the time of to activate concrete implementation solutions, they frequently remain at the last seat. This is partly due to the fact that so many professionals, opinion leaders, media and centers of power are far from them, not only geographically but also socially, economically and culturally (§ 49).

This lack of physical contact and encounter, sometimes favored by the fragmentation of our cities, helps to ignore part of reality. This sometimes coexists with the "green" development policies. But today we cannot fail to recognize that «*a true ecological approach always becomes a social approach*», which must integrate justice into environmental discussions in order to listen to «*both the cry of the earth and the cry of the poor*» (§ 49).

The Encyclical proposes a series of critical reflections on the current model of development based on economic growth.

There is a need for better distribution of wealth, responsible care for the environment and the rights of future generations. Maximizing profits alone is not enough. But the market alone does not guarantee integral human development and social inclusion. Even the poorest need regular access to basic resources. It is not sufficiently clear what are the deepest roots of the current imbalances, which have to do with the orientation, purpose, meaning and social context of technological and economic growth (§ 109).

In modernity there has been a considerable excess of anthropocentrism which, in another guise, today continues to undermine any reference to something common and any attempt to strengthen social ties. This is why the time has come to pay attention once again to reality with the limits it imposes, which in turn represent the very conditions for “*human, integral and sustainable*” development. The current culture states that let the invisible forces of the market regulate economy, because their effects on society and nature are inevitable damages. But with what results?

It is the same “disposable” logic that produces so much waste just for the disorderly desire to consume more than you really need. And so, we cannot think that political programs or legal texts will be enough to avoid the behaviors that affect the environment, because when it is culture that is “corrupted” and no longer recognizes any objective truth or universally valid principles, the laws become insufficient (§ 123).

We need to reflect responsibly «*on the meaning of the economy and its purpose, to correct its dysfunctions and distortions*».

Criticism of the current economy continues with the questioning of the profit maximization principle, which tends to isolate itself from any other consideration. It is a “conceptual” distortion of the economy: if production increases, it is of little interest whether it is produced at the expense of future resources or the health of the environment; if the cutting of a forest increases production, no one measures in this calculation the loss which implies desertification a territory, destroying bio-diversity or increasing pollution.

That is to say, companies make profits by calculating and paying a very small proportion of the costs. Only behavior in which «*the economic and social costs of using common environmental resources are transparently recognized and fully supported by those who use them and not by other populations or future generations*» (§ 195).

In the text of the *Laudato Si*, we read that it is in the city where this type of economy, which is not very attentive to the consumption of natural resources, takes shape.

Pope Francesco has always focused his attention on the city, where “*God lives where the Church lives*”. *Faith teaches us that God lives in the city*” (CELAM, 2007). The city becomes the place of the mission of the believer (Pope Francesco Bergoglio, 2013).

The city is suspended between evolution and involution, between new opportunities and crisis.

Cities play a central role in triggering new development processes fueled by technological innovations. But they are also the place of concentration of various forms of pov-

erty and environmental degradation. They are the human construction for excellence, but they are also the most sensational contradiction of this human/relational project: the place of fragmentation, social atomization, isolation, loneliness, marginality.

In the text of the *Laudato Si* there is an clear invitation to take care of public spaces urban landmarks that increase our sense of belonging, our feeling of rootedness, our "feeling at home" within the city that contains us and unites us. It is important that the different parts of a city are well integrated and that the inhabitants can have an overall vision instead of locking themselves in a neighborhood, giving up living the whole city as a shared space with others.

Any intervention in the urban or rural landscape should consider how the different elements of the place form a whole that is perceived by the inhabitants as a coherent picture with its wealth of meanings. In this way, the others also cease to be strangers and can be perceived as part of an "us" that we build together. For the same reason, both in the urban and rural environment, it is appropriate to preserve certain spaces in which human interventions that continuously modify them are avoided (§ 151).

Home ownership is very important for the dignity of the family and for the development of the family. It is a central issue of human ecology. If chaotic clusters of precarious houses have already developed in a given place, it is primarily a question of urbanizing these neighborhoods, not eradicating and expelling their inhabitants. When the poor live in polluted suburbs or in dangerous agglomerations, *«if they are to be relocated and in order not to add to the suffering, it is necessary to provide adequate and prior information, offer decent housing alternatives and involve those concerned directly»* (§ 152).

At the same time, creativity should lead to the integration of disadvantaged neighborhoods into a welcoming city.

«How beautiful are cities that overcome unhealthy distrust and integrate the different and make this integration a new factor for development! How beautiful are cities which, even in their architectural design, are full of spaces that connect, connect and promote the recognition of the other!» (§ 152).

It is, as is well evident, an interpretation of beauty that is not only characterized by an aesthetic dimension, but is connected to the lived life.

In cities there is a need to improve the quality of life, primarily by improving the transport system, the management of traffic flows, reducing the consumption of large quantities of non-renewable energy (§ 153).

It is necessary not to neglect the state of abandonment and neglect from which many city dwellers suffer, especially in marginal areas, where essential services do not arrive and there are workers reduced to a condition of slavery, without rights or expectations of a more dignified life (§ 154).

The creativity of the human person is therefore called upon, in keeping with the humanistic approach.

Man is able to take care of the environment in which he lives, he is able to put his gifts of creativity and generosity into play.

For example, in some places, where the facades of buildings have deteriorated a lot,

there are people who care for the interior of their homes with a lot of dignity, or feel comfortable with the friendliness and friendship of the people. The positive life of the inhabitant's spreads light in an environment that at first glance is unlivable.

The feeling of suffocation produced by residential agglomerations and densely populated spaces is countered if human relationships of closeness and warmth are developed, if communities are created, if environmental limits are compensated in the interior of each person, who feels part of a network of communion and belonging. In this way, any place ceases to be hell and becomes the context of a worthy life (§ 148). Those who live in the suburbs very often feel disoriented by the crowding and social anonymity of large cities (§ 149). This can lead to a feeling of uprooting that encourages antisocial behavior and violence. In these conditions, people are able to weave bonds of belonging and coexistence that transform crowding into a community experience in which the walls of the ego are broken and barriers of selfishness are overcome. This experience of community salvation is what often provokes creative reactions to improve a building or a neighborhood (§ 149).

The design of urban spaces, of the entire cities, neighborhoods and buildings is the result of interdisciplinary work to understand the processes, values, including symbolic values and behaviors of people. The search for the beauty of design is not enough. It is necessary to "serve" another kind of beauty: the quality of people's life, their harmony with the environment, meeting and helping each other. This is also why it is so important that the point of view of local people always contributes to the analysis of urban planning (§ 150).

The recognition of the peculiar dignity of the human being (i.e. of his "intrinsic value") often contrasts with life in cities.

To conclude this reflection on the Laudato Si text we want to mention how the notion of circular economy is introduced.

The circular economy is an economic model which imitates the "economic model of nature" capable of regenerating itself, guaranteeing its eco-sustainability in the short/medium-long term (Ellen McArthur Foundation, 2014).

The circular economy offers a valid perspective to reduce the costs arising from the "transformation" of agglomeration economies into diseconomies of agglomeration and to make the principles of sustainable development operational.

There are nine levels of circularization that we can list to understand how to promote sustainable and circular development models:

- Re-use: preventing the use of raw materials;
- Reduce: reduce the use of raw materials;
- Reuse: reused products (product sharing);
- Repair: maintenance;
- Renew: renew a product;
- Rebuild: create new products from old ones;
- Reuse: use reused products for different purposes;
- Recycle: reuse materials;
- Convert: energy created by the conversion of materials (Porter and Kramer, 2014).

In some places, associations are being developed for the exploitation of renewable energy that allow local self-sufficiency and even the sale of surplus production. This simple example indicates that while the existing world order is powerless to take responsibility, the local authority can make a difference. It is there, in fact, that greater responsibility, a strong sense of community, a special capacity for care and more generous creativity, a deep love for one's own land, as well as thinking about what one leaves to one's children and grandchildren can arise.

The important issues addressed in the previous chapters need to be addressed by defining a new development perspective to solve them: the intimate relationship between the poor and the fragility of the planet; the conviction that everything in the world is intimately connected; the critique of the new paradigm and the forms of power that derive from technology/economics; the invitation to seek other ways of understanding the economy and development; the proper value of each creature; the human sense of ecology; the need for sincere and honest debate; the grave responsibility of international and local politics; the culture of waste and the proposal for a new way of life (§ 16).

It has not yet been possible to adopt a circular model of production that ensures resources for all and for future generations, and which requires limiting the use of non-renewable resources as much as possible, moderating consumption, maximizing the efficiency of exploitation, reuse and recycling. Addressing this issue would be a way of counteracting the culture of waste that ends up damaging the whole planet, but we note that progress in this direction is still very poor (§ 22).

Entrepreneurial activity, which is a noble vocation aimed at producing wealth and improving the world for all, can be a very fruitful way to promote the region in which it operates, especially if it understands that job creation is an indispensable part of its service to the common good (§ 129).

The circular economy is related to the issue of energy sources. In the context of national and local there is always a lot to do, for example promoting forms of energy saving. This means to promote industrial production methods with maximum energy efficiency and less use of raw materials, taking products that are not energy-efficient or more polluting off the market. We can also promote good transport management or techniques for the construction and renovation of buildings that reduce energy consumption and the level of pollution. On the other hand, local political action can be oriented towards changing consumption, developing a waste and recycling economy, protecting certain species and planning a diversified agriculture with crop rotation (§ 180).

4. THE ECONOMY OF THE FRANCISCAN SCHOOL, THE CIVIL ECONOMY OF ANTONIO GENOVESI SCHOOL AND THE CIRCULAR ECONOMY. WHAT RELATIONSHIP?

The concept of human-centred development has an important historical foundation which, starting from the Middle Ages with the economy of the Franciscan school, has deeply marked the thought of 18th century economists such as Antonio Genovesi, leading to the elaboration of the fundamental principles of the Civil Economy, up to the point of being an essential element for all recent development strategies.

Humanism has represented a real cultural revolution in European history: it represents a perspective that, evoking the notion of humanity, refers to a series of values that represent the basis for a project of humanization that enhances trust in the critical intelligence of the human being, but also in his emotional intelligence.

The humanisation project is linked to economic prosperity, inclusive development, but also to the recognition of the person's priority over the economy, the ability to work together, i.e. to cooperate, and the preservation of environmental conditions.

The Franciscans have had "a decisive role in the birth of the modern market economy" (Carbajo Núñez, 2014), and have made a fundamental contribution to the humanization of the new economy.

They seek innovative solutions to stimulate individual initiative within the common good (Zamagni, 2007). They are not satisfied with welfareism, but address the root of the problems and invite everyone, rich and poor, to contribute to their solution.

Rather than denigrate, moralize or repeat formulas already proposed, Franciscans listen to the needy and try to help them. The poverty and minority that the Franciscans profess frees them from all greed and group interests; their openness to the Supreme Good helps them to trust in the creative capacity and goodness of every human being.

Attentive to the concrete aspects of evangelization, the Franciscans were aware of the impossibility for wealthy families to have access to credit at a fair interest rate and were witnesses to the drama of so many families plunged into misery because they were strangled by usurers – Jews and Christians – without scruples.

Here lies the main reason for the creation of the "Monti di pietà": institutions conceived as a means of "curing" poverty, combating usury and economic and social development.

Man is a good and creative being, who finds his fulfilment only when he freely gives himself to build *communitas*.

Economic management thus fits into a broader horizon, in which each person is helped to develop in authenticity while strengthening the Christian identity of the community and avoiding the disintegrating effect produced by those who seek only their own interest.

Economic goods are not such if they do not promote public happiness and social well-being.

Franciscans analyze and evaluate economic positions starting from the community in which everyone lives, thus developing the idea of the subjective value of goods.

They believe that the market is a relational space (Carbajo Núñez, 2014).

The reference is always the community: to set the profit, the right price and the suitability of economic agents. It thus acquires the role of a concrete historical subject (Carbajo Núñez, 2014).

The concept of the common good presupposes that the person is intrinsically brought to social life and, therefore, is realized in giving oneself, that is, in reinforcing the relational bonds that found the community.

The individual does not dissolve in the community, but is the protagonist of his own well-being and of the other's one. Therefore, in the Franciscan vision, the value of money is closely linked to the relationships of trust that found the community.

4.1 Towards a Human-centered Economy

The circular model offers a new vision to guide strategies and actions: circular economy as an economy of relationships, synergies, symbiosis, cooperation (Fusco Girard and Nocca, 2019).

The model offered by the economy of nature, the "circular economy", enhances the landscape and at the same time generates economic prosperity. What is needed is an alternative model, i.e. a model of circular economy, inspired by natural self-organizing processes. The very quality of the landscape, i.e. its beauty, depends on the density of the circular processes, which avoid waste, non-use or under-use, and therefore deposit of waste/waste, etc., and which are not used or underused.

Ultimately, the circular economy (introduced by the *Laudato Si'* to § 22 and then by the United Nations in Agenda 2030 with objective 12) (United Nations, 2015) is configured as a co-evolutive economy, that is, it does not conflict with the economy of nature, and therefore with its beauty.

The most interesting aspect of the circular economy is that the processes that characterize it, when they involve different subjects, are based on cooperation and therefore on the density of interpersonal relationships, and therefore on the trust that, in turn, generates such reciprocal exchanges (Fusco Girard and Nocca, 2019).

Trust is one of the fundamental values of the city of the "new humanism" that draws its origin from the "civil economy" of the 18th century.

In this era, in fact, the civil economy became the promoter of an anthropology that did not utilitarian but relational (Becchetti et al., 2019). Trust is interpreted as the foundation of the bond between different subjects, from which flows the willingness to mutual cooperation, collaboration, coordination of choices: and more generally reciprocity, mutual solidarity, attention to the good of all, fraternity.

Antonio Genovesi in his *Lessons of Civil Economy* still refers to the "public faith" which is interpreted as "the mutual confidence of one citizen with another" (Genovesi, 1765-1769, Book II, Chap. X).

In Chap. X of the *Lessons*, Genovesi wrote that trust is "a rope that ties people together". If mutual trust is lacking, there can be no "humanity" because "[...] where faith is lacking, the rope that binds people, pacts are precarious or mocked. But neither can there be humanity [...] because each one concerns the other suspicious and enemy" (Genovesi, 1765-1769, Book II, Chap. X).

The city is "civil" if it is founded on these values that see trust as the source, the engine of the consequent cooperation, reciprocity, solidarity.

The relationship of interpersonal trust and respect for institutions therefore becomes a fundamental element, the prerequisite for a positive economic dynamic and more generally for good living, for a human dimension: to promote humanization.

The challenges of the contemporary city are so complex that without a "humanistic revolution" they will not be successfully faced.

4.2 What economy for the 'city of civil humanism'?

The circular economy is the economy that recognizes the centrality of all forms of capital, from natural to manufactured, social and human.

Moreover, the circular economy underlines the importance of use (i.e. values of use) with respect to the ownership of goods (and therefore their exchange value).

These are elements common to the civil economy that the various authors, from Genovesi to Galliani to Filangieri (Filangieri, 1780), have repeatedly stressed in their research. These values give shape not only to the economy of the city but also to the very idea of the organization of the city: they give the image of the city of Civil Humanism, aimed at achieving the good of all, the common good.

The "city of the new humanism" is first and foremost the incubator city of synergies/ symbiosis. Just as in nature the systems that work best are autopoietic systems, so the cities that best realize humanistic values are those organized to imitate natural ecosystems.

They are characterized by the paradigm of circularization, which thus becomes the organizational paradigm of the city of the new humanism.

Therefore, the city also becomes a privileged place to experiment with new management models which, overcoming the traditional dichotomy between state and market, public property and private property, make it possible to produce and reproduce the social/civil dimension as a third foundation.

It is therefore necessary to think of management tools based on respect for the principle of subsidiarity and oriented towards reciprocity, in which the transformation of cultural values into civil values favours the recomposition of its relational dimension by those who reinterpret it as a common good and transforms conflicts into synergies. This has become evident in recent experiences of shared management of goods and spaces recognized as "common goods" which, inspired by the model of government proposed by the Municipality of Bologna with the first "Regulation" in 2014 and then experimented by many other municipalities throughout the country, have brought to light the active role of communities in the "care" of physical space. In these practices a "collective consciousness of the territory" is developed in which productive, social and personal aspects are mixed with others of a cultural nature, giving rise, around the common goods, also to other, new, unprecedented skills, competencies and related activities" (Labsus, 2017).

The emerging character of these practices has strong social and cultural implications that translate into physical actions on the built environment based on collaboration and sharing, through which communities, in a self-organized form, design, equip,

manage different parts of the urban context re-introducing them into the “life cycle” of the city (Trillo, 2012). This approach strengthens the process of social empowerment and makes it sustainable through actions on the built environment, stimulating circular processes between common goods and the community and promoting a new capacity for self-organisation/self-management.

It can be said in conclusion that the civil economy, which finds its foundation in the economy of the Franciscan School of Duns Scotus, Ockham, Pelagius, etc., is a new way of life. (Carbajo Núñez, 2008; Bazzichi, 2015; Pelagio Sciacca, 2016) today can be interpreted as a fundamental component of the circular economy. The above, especially if one also thinks of Franciscan intuitions about the value of the fraternity extended to nature, flora, fauna, and stars, appears to be of extraordinary actuality (think of the *Canticum of the Creatures* by St. Francesco of Assisi).

The indications already present in nuce in Francesco’s economy with respect to the man-nature symbiosis, taken from the civil economy of Antonio Genovesi, are today the foundation of the model of the circular economy.

These values were taken as the starting point for the Assisi Manifesto in the fight against climate change, presented by Fondazione Symbola together with other representatives of the entrepreneurial and ecclesiastical world in January 2020, (which today has reached more than 3,000 signatories).

In it the environmental problem of climate change is addressed from a holistic perspective, considering not only environmental aspects but also those related to technological, institutional, political, social and cultural energies. This approach requires the contribution of all economic and productive worlds and above all the participation of citizens. In this perspective, social cohesion is interpreted as a productive factor capable of combining empathy and technology on which a large part of our economy depends, which is converted to the circular model, occupying leading positions at international level. Therefore, the challenge of the climate crisis represents an opportunity to focus on “an economy and society more on a human scale and therefore more capable of the future, more capable of producing well-being and development starting from sustainability and security. We will not be able to successfully face the challenge that awaits us by focusing only on a necessary and impressive public intervention, which is also the test of a new Europe. We need different values and cultures, empathy and technology. We need the resources of people and businesses. Social cohesion, in the economy as in all the situations we have to face, is a decisive but impossible element without a strong role of the Third Sector and without a valorization of local institutions starting from small municipalities”. (Fortunato and Realacci, 2020).

5. CONCLUSIONS: TOWARDS THE CITY OF MAN ON A HUMAN SCALE AS A “CIRCULAR CITY”

5.1 On the occasion of the fifth anniversary of the Encyclical, Pope Francesco has induced a “special year” (until 24 May 2021) dedicated to caring for the earth and our fragile brothers. The purpose of this proposal is to stimulate concrete action by all to care for the Earth as a common home and for the marginalized and marginalized. It represents a strong invitation to develop creative solutions capable of guaranteeing the health of people, the health of the economy and the health of the natural environment.

We are all aware that we are in an extraordinary, complex, contradictory moment. We need to re-configure points of view that seemed to be well established, with great care and great capacity for discernment.

First of all, it is necessary to make known the truth about the status quo, even in our microcosm and in the environment of Catholic associations. The question of the risks associated with climate change and its interrelationships with the pollution of air, water and soil is by no means underestimated, being traced back mostly to a mere “opinion,” ignoring “facts.” It does not seem that Christians are really aware of what is happening, of the profound change in the conditions of the environment. As if the care of creation was an optional and not something intrinsic to the Christian faith, as Saint Francesco sang. In particular, as if today everything could be resolved with the usual strategies of economic development.

In reality, climate change, because of its irreversible effects, from a certain threshold onwards, is the most general issue of our century from which depends on solving the same social challenges. However, it is a question perceived as concerning distant times, future generations and not as an emergency of the “here and now”. As such, it is of very little interest to politics (as “politics”).

This issue of climate change is irresponsibly under-dimensioned in public opinion, because it has failed to transform a specialist scientific knowledge in a common knowledge.

5.2 A great responsibility for the current situation dates back to the way in which wealth is produced and redistributed to the economy.

It is actually necessary to reconfigure and regenerate the economy in order to improve the economy itself, starting with the issue of climate change, in order to produce work, goes hours, quality of life, future for our children and grandchildren...

This applies internationally, nationally and especially in the south (see Taranto, Priolo, Naples/Campania, etc.).

In Taranto as in Italy as elsewhere, political/economic choices need to be re-configured so that the health of people and at the same time the health of the economy and the health of the environment are guaranteed.

5.3 If it is true that the Encyclical can be interpreted as the Encyclical of circularisation/symbiosis between humanity (i.e. between the city) and nature, it follows that

the responsibility of each subject (private, social, public) becomes that of contributing to the realization of such symbiosis/synergies in today's city.

The city becomes the place where all the problems of our time are concentrated: it therefore becomes the concrete space in which to exercise responsible choices, also in the field of

of the economy.

The circular economy model, where applied, shows that "cooperation is convenient", because it produces profit, reduces climate/pollutant impacts and also contributes to employment.

The territorialisation of the circular economy model is the so-called "circular city".

It, like the circular economy, is founded and in turn promotes cooperation, synergies, symbiosis, it is based on the cooperative/collaborative capacity between the various subjects. Trust is the general condition for the birth and development of forms of co-operation/complementarity.

5.4 Responsibility means attention to the consequences of actions/choices, attention to the general interest, to the common good, which in different contexts must be interpreted and recognised. Attention to the common good means, for example, taking care of the landscape, the cultural heritage (e.g. of a disused and re-functionalised church), the environment, etc., from which the promotion of community welfare can be achieved.

It focuses on a series of instances that give shape to the image of a desirable city. Some lines of orientation and action are offered in chapter V: the need to use renewable energy sources, regeneration of public spaces, multifunctional management of peri-urban agricultural areas, waste recycling, the circularisation of urban processes, participation in the evaluation of urban/territorial choices, etc.

The need for a new model of economic development, with the repeated invitation to "look for other ways of understanding the economy", means transforming/modifying the current urban economy.

Therefore, in stressing the need to go beyond the economic rationality of the mental, the model of "circular economy" is evoked several times, both explicitly (cf. § 22, 180, 192) that in an implicit/indirect way (cf. § 123, 140, 211, 222).

The above interpretation (i.e., the circular economy as a new model for producing value) is, on the other hand, quite consistent if we consider that the perspective already in Francesco d'Assisi *Canticum of the Creatures* was the promotion of a symbiosis between humanity and earth, between humanity and nature: between the "mother" and "sister earth" who nurtures/sustains humanity in its many activities and humanity who in turn takes care of the health of the earth, so that the processes are not lost. In the model of St. Francesco, all the components of creation, plants, birds, stars, moon, sun, wind are seen among themselves according to a systemic, unitary interpretation: in a reciprocal and circular relationship of cosmic brotherhood.

St. Francesco can be considered in some way a forerunner of the "ecological economy", which recognizes that the foundation of all economic values is outside the econ-

omy, it is in ecology, that is, in the intrinsic ecosystemic values.

The circular model is in fact a co-evolutionary model, which offers a totally different vision from that of Marx, Darwin, Freud, etc. For these, the engine of development is competition. Reality, on the other hand, shows that there is the moment of competition, but there is also a time for cooperation.

We need to look for a new economy for the common good.

5.5 There is a need to promote a new economy in which economic values are integrated with social and ecological values and which enables the production of wealth/profit. New business models are needed.

The circular economy and circular city model are moving in this direction.

If it was Jacques Maritain who proposed the vision of "human city" (Maritain, 2002) it was thanks to Giorgio La Pira, Giuseppe Lazzati and Adriano Olivetti that this image was explored in operational terms. For Olivetti, the economy becomes "more human". (AA.VV., 2017) if it is based on the community of people (Olivetti, 2014): that is if the economic pension (aimed at producing profit) integrates with the social pension aimed at generate both interpersonal and territorial relationships.

In short, Olivetti's "new economy" focuses on the community. It provides the glue/bond that is needed for a good economy. And the economy of relationships already intuited in Genoese's Civil Economy Lessons. Today this olivettian vision of economy of relations also includes natural ecosystems.

Olivetti thus went beyond the interpretation of very poor circular economy proposed by mainstream economics, i.e. the economic exchange between only individual utilities, opening the perspective of social utility, or more generally of the social economy open to the good of all and the good of the city. Olivetti's "City of Man" is in fact founded on communities of communities, that is, on values of solidarity and brotherhood that were already spoken of in the Franciscan school and in the civil economy. The above is connected to define today the actualized vision of Lazzati, La Pira and Dossetti concerning the "City of Man on a human scale".

As in the encyclical *Laudato Si'*, for them too the city is the space of the mission of Christians.

As in the *Laudato Si'* also for La Pira, public intervention serves to avoid the production of "human waste". To build today the city of man on a human scale, it is necessary to contribute to the new circular organization of the city and its economy.

The city that today defines itself as "human centred" is the city capable of regenerating social ties, communities, able of reducing isolation and marginality, as well as social inequalities. It is the city that promotes inclusion. It is the city that experiences new relationships with "mother" and "sister nature/land". The city that today defines itself as "human centred" is the city capable of regenerating social ties, communities and communities of communities, capable of reducing isolation and lamarginality, as well as social inequalities. It is the city that promotes inclusion. It is the city that experiences new relationships with mother and sister nature/land. In short, it is the city that continuously regenerates all its forms of capital and in particular trust, collaboration, cooperation.

5.6 In practice: how many metropolitan, medium and small cities are being inspired by the lines proposed today in the Encyclical? How have their instruments been in any way attentive or not or even conflicting with the Encyclical's demands?

For example, how many cities (out of the more than 8,000 municipalities in Italy) have drawn up and approved Mitigation and Adaptation or Strategic Development Plans or various pacts relating to the fight against climate change, also with the contribution of the ecclesial Movements?

More specifically, how many projects of this kind have been supported or solicited by the local ecclesial community?

How many projects directly in the ecclesiastical area have been attentive in the Campania Region: to the use of photovoltaic, other renewable energies, solar thermal, water recycling, use of local materials, geothermal exchangers, natural ventilation, lighting natural energy, geothermal energy, green spaces, urban gardens, waste recycling / composting, etc., heat recycling, micro-communities, cooperative enterprises? Actually, the challenges of regeneration that are so much talked about today, as well as economic/ecological/social, are challenges related to cultural, ethical and spiritual regeneration. How much and how do we contribute to our Associations?

And again. How have we contributed to rebuild trust, which is the foundation of the good functioning of the market, but also of public institutions and society? It is the foundation of every cooperative, synergistic, symbiotic capacity, which especially today is absolutely essential to achieve a "new economy".

To push in this common direction it is necessary to become the civic defenders of the next generations. In short, we must exercise responsibility in every choice, small or large, private or public.

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