

Transitioning to “Geocratia”

the People and Planet and Not the Market Paradigm — First Steps

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Following up on my commentary to the March 2020 Great Transition Initiative (GTI) forum: “Planetise the Movement”,¹ I assess the diverse ideas discussed in the forum and concurrently elaborate with far more detail in this essay how I envision the first steps to materialise the change of paradigm from the current unsustainable market-centred ethos to a global movement that rescues our planet and provides sustainable life systems for our future generations and all living things. The implicit premiss in the forum is that there is already a movement yearning to transition from the current paradigm to a new truly sustainable one; in fact it is presumed that we are already in a trajectory that will shape a new planetary society, albeit because of *cultural, social, and political fissures*,² the outcome is still uncertain.



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In 2002, the GTI published a seminal paper: “Great Transition — The Promise and Lure of the Times Ahead”. It assesses the underlying causes of the complete unsustainability of world development and advances a long-term alternative scenario that examines the requirements to build a new sustainable paradigm *by identifying strategies, agents for change and values for a new global agenda*.³ In December 2017, the GTI revisited the issue, focusing specifically on “How Do We Get There?”⁴ What becomes evident is that there is indeed a growing number of people that have arrived at the conclusion that we cannot remain in the current unsustainable market-driven paradigm if we want to bequeath a planet where future generations of all species can enjoy a dignified quality of life. However, there is no agreement on the kind

¹ ↪ The Great Transition Initiative: “[Planetise the Movement](#)” — March 2020.

² ↪ Great Transition Initiative: [Why a Great Transition?](#), as of April 2020.

³ ↪ Paul Raskin et al: [Great Transition: The Promise and Lure of the Times Ahead](#), Stockholm Environment Institute - Boston Tellus Institute, 2002, Pp IX.

⁴ ↪ The Great Transition Initiative: “[How do We Get There?](#)” — December 2017.

of new system we envision; if it will be a presumed benign form of capitalism or of socialism or a completely new form of social organisation that can be truly sustainable ecologically and socially with much less inequality, violence and injustice. If we compare the discussions at the GTI between 2002, 2017 and 2020, there is not much difference, except for the sense that the need to build a new system is far more urgent, particularly as we have witnessed more and more environmentally-disruptive events and social conflicts, and even more so after the present Covid-19 pandemic. Indeed, if we glance at the diversity of opinions in the latest iteration addressing the need to transition to a new societal vision, there is still a profusion of ideas proposing how to go about it. There is no sense of convergence towards one explicit collective vision. It is evident that all the 2020 participants are still gradually coming to terms with reality.

In the 2020 “Planetise the Movement” forum, Valentine Moghadam, who started the discussion with her essay, considers the possibility of building two internationals, one horizontal and one vertical, that draw inspirations from movements such as the World Social Forum and the previous Internationals: *to balance the complementary needs of global coordination and plural autonomy, two internationals may be needed, one that remains horizontally based—the movement of movements—and the other vertically organised, drawing inspiration and lessons from the old Internationals.*⁵ Some endorse her proposal of a new International, whilst others envision a horizontal system that connects the dots of local, regional and national movements to create a movement of movements. Yet, what stands out is that when participants evoke where we want to go with a new form of global movement, the vast majority focus on the social dimension, on the forms of organising to transcend the current system and create new forms of social organisation, but few explicitly and specifically lay out the economic system that they deem to be sustainable nor do they place the rescue of our planet at the centre of the collective vision for a new paradigm.

In the discussion, a few have already arrived at a final conclusion, but there are still many participants that are completing their pondering journey. Closely linked to this situation is the fact that, while everyone agrees that the ecological issue is important and it must be addressed, only a few have concluded that the ecological rift that we have produced between humankind and the planet—the Anthropocene geological era—overwhelms all other considerations for the simple reason that the reactions of the planet to this epoch is taking us to a tipping point where we cannot sustain life for our species and all other species as we know it, and that we may not survive. This may be the reason it may appear that many still envision some market-driven system harnessed by strict regulations that eliminate the excesses we are enduring. And I stress that “it may appear”, because I could not find clear and explicit positions on what to do with capitalism, the Anthropocene and the ecological rift. Perhaps, the reason is that most participants focused on how to

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⁵ ↪ Valentine Moghadam, “Planetize the Movement!,” opening reflections for a GTI forum, Great Transition Initiative (April 2020)

organise, and how to planetise the movement. But no social movement will ever be able to accomplish such a challenging task if it does not develop a narrative that is convincing and enticing. It follows that it is imperative to

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develop a process to address in very concrete terms each of the fundamental dimensions that define the collective vision of the new paradigm that we aspire to build, which I advance as societal, economical and ecological. Surely, not all the members will agree to the specifics of each dimension, but I

believe that it would be impossible to planetise any movement if we do not put the energy to prepare an initial proposal—a working draft—which can be improved and refined as the ideas of those participants who gradually join the movement are incorporated. If we do not define the societal, economical and ecological dimensions of a new truly sustainable system, we cannot expect to raise awareness and allure people to join our prospective movement.

In the “Planetise the Movement” forum, the very early stage of defining the collective vision of what we would like to build for future generations is clear. On the subject of the economic dimension, the vast majority of participants denounce a type of capitalism. Neoliberal capitalism is mentioned the most (Moghadam, Löwy, Massiah, Falk, Mestrum, Della Porta, Greene, Juego, Beneria); others refer to patriarchal capitalism (Tarek, Smith, Consolo, Moghadam); Guy Standing talks specifically and very pointedly about “rentier capitalism” as the culprit and considers neoliberalism passé. Valentine Moghadam talks about challenging capitalism, about constituting a global movement against capitalism, but not specifically about the need to replace capitalism. Others denounce unregulated, racist and undemocratic capitalism. Yet none denounce the immeasurable need to replace any kind of capitalism, of getting rid of capitalism without adjectives. Moghadam agrees about the need to replace and not fix capitalism explicitly, but only in her response to my commentary. Indeed, nobody explicitly proposes that capitalism must be replaced and not fixed, not even remotely. So we take a risk if we assume that they mean replacing capitalism implicitly. We also risk assuming that by denouncing a type of capitalism they reject all kinds of capitalism, or only a specific kind because it is not explicit. It is far safer to conclude that most have not arrived yet at the cognition that all forms of capitalism must be eradicated from the face of the Earth if we want to be congruent with a truly sustainable ethos. It follows that one of the first tasks required to planetise the movement is the obvious need to define the specific political economy for the new paradigm.

I can say the same about the ecological dimension. Very few make a point to stress the absolute importance of rescuing the planet, of designing a new social organisational concept that first rescues the planet from the very unsustainable

Michael Löwy: the ecological crisis is already the most important social and political question of the 21st century, and will become even more so in the coming months and years.

situation that the Anthropocene has put it in, and of making sure that it remains sustainable in such a way that we do not consume more resources in one year that the planet can replenish in the same lapse of time. Almost nobody regards the ecological dimension not only as the most important but the

one that must be placed at the centre of what we envision and design. Only Michael Löwy states that the ecological issue must be the determinant dimension: *the ecological crisis is already the most important social and political question of the 21st century, and will become even more so in the coming months and years. The future of the planet, and thus of humanity, will be decided in the coming decades ... The ecological crisis changes also our strategic perspective ... the ecological issue should be at the heart of our strategy to “planetise the movement,” and for building a new Leftist International. It cannot be one item among many others; it must be a decisive dimension of our perspective.*

In my case, the first time I addressed the issue of environmental sustainability, in 2014, I was naïve and felt that there was still a way to keep private business and the capital-labour relationship, through a radical reform of the purpose of

business to provide an equitable balance between the public good and the private good.⁶ In 2016, as the evidence of climate change increased exponentially, I revisited the issue and proposed a radically different new paradigm, where we would need to transcend the market.⁷ I was foreseeing an ethos with only the existence of truly responsible businesses that went through a drastic process of corporate redesign, where workers and communities would be stakeholders with direct influence in the decision-making process, and no global corporations and global oligopolies. Yet I was still envisioning the private ownership of the means of production that had a business ethos of competitiveness and efficiency anchored on the maximisation of social and ecological sustainability at the same level as shareholder value. Today, with the great rift between our capitalistic system and the sustainability of our planet reaching an overwhelming evidence, I no longer believe this is possible if we want to be realistic about building a truly sustainable ethos. At least since 2017 I arrived at the conclusion with a high degree of certainty, confirmed by the events that keep unfolding unrelentingly in the social, economic, political and environmental dimensions, that the only way to build a truly sustainable and equitable ecological and social edifice is by replacing and not fixing capitalism.

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This paper argues that the underlying causes of the unsustainability of market societies belong solely to the intrinsic nature of capitalism, and of the unrelenting pursuit of the reproduction and accumulation of wealth, which requires the infinite consumption of resources, with no regard whatsoever for its impact on the economic, social and environmental dimensions. It also probes to demonstrate that this is completely incompatible—a true oxymoron—with the premiss of transitioning to a truly sustainable, democratic, equitable, peaceful and ecological paradigm. Lastly, this essay explores the key characteristics of the disastrous trajectory that we are still following, what we need to do to radically veer towards a sustainable path, my vision of where we should set course and the first steps to materialise a planetary movement to take us there.

Enduring the Anthropocene and its Doomed Trajectory

When Jus Semper began its work in 2003, our original concern was the immediate push to end the Unequal Exchange (Arghiri Emmanuel: 1969)⁸ taking place systemically in the globalised economy of the XXI century, where hundreds of millions of workers in the system's periphery are used in the global supply chains as Modern-Slave-Work commodities. Multinationals extract labour-value on behalf of their shareholders by paying their periphery workers a fraction of what they would pay to workers in their home countries for equal work of equal value.⁹ However, we gradually realised that there is a far more pressing issue: that anthropocentric “progress” of humanity—driven by the capitalistic ethos anchored on the quest for the unrelenting reproduction and accumulation of wealth—is taking us to a point of no return and no possibility of regret and rectification. This is a threshold possibly of cataclysmic proportions where humankind and most species will face extinction or, in the best case, will not live as we know it, except for a few survivors who will endure dramatically dire conditions reminiscent of the stone age or, yet unimaginable, but even worse. Thus we readdressed our mission and made it the all-encompassing question of pursuing the replacement of the current ethos by a radically different one, which I defined as the People and Planet and NOT the market paradigm. Without a shroud of

⁶ ↪ Álvaro J. de Regil: [Living Wages in the Paradigm Transition – The Imperative Challenge of Transcending the Market](#), The Jus Semper Global Alliance, May 2014.

⁷ ↪ Álvaro J. de Regil: [True Sustainability and Degrowth in the citizens' Imaginary – The People and Planet paradigm in a truly democratic ethos unburdened by capitalism](#), The Jus Semper Global Alliance, June 2016.

⁸ ↪ Claudio Jedlicki: [Unequal Exchange](#), The Jus Semper Global Alliance, September 2007.

⁹ ↪ Intan Suwandi: [Labour-Value Commodity Chains — The Hidden Abode of Global Production](#), The Jus Semper Global Alliance, February 2020.

Contrary to conventional wisdom, we do not live in democratic societies but, rather, in marketocratic societies.

doubt, building a completely new edifice of true and long-term sustainability is the most pressing issue for humankind, if we want to bequest a planet where all living things would thrive and reproduce in a balanced manner.

With Planet Earth entering the Anthropocene, we have signed off the end of life for all species, including our own extremely predatory one, before the start of the next century. The Anthropocene, as explained by Bellamy Foster, is viewed as a *new geological epoch displacing the Holocene epoch of the last 10000 to 12000 years, to represent what has been called an “anthropogenic rift” in the history of the planet.* He explains: *formally introduced into the contemporary scientific and environmental discussion by climatologist Paul Crutzen in 2000, it stands for the notion that human beings have become the primary emergent geological force affecting the future of the Earth system. Although often traced to the Industrial Revolution in the late eighteenth century, the Anthropocene is probably best seen as arising in the late 1940s and early 1950s. Recent scientific evidence suggests that the period from around 1950 on exhibits a major spike, marking a Great Acceleration in human impacts on the environment, with the most dramatic stratigraphic trace of the anthropogenic rift to be found in fallout radionuclides from nuclear weapons testing.*¹⁰

Bellamy Foster points out in his work at the rather evident and urgent need to replace and not fix capitalism, so that we can aspire to *rebuild the house of civilisation under different architectural principles, creating a more sustainable metabolism of humanity and the Earth. The name of the movement to achieve this, rising out of the socialist and radical environmental movements, is ecosocialism, and Facing the Anthropocene is its most up-to-date and eloquent manifesto.* Yet he ponders on the possibility that *many would rather err on the side of denialism than on the side of “catastrophism” and hesitate to take action at this level until we know more.*¹¹ While we endure the ravages of the Anthropocene epoch, including COVID-19, we must become cognisant that, to secure sustainability for the planet and all its inhabitants, we must end the Anthropocene, and because the main driver of this era is capitalism, we must replace it with new forms of social organisation that are antithetical to capitalism’s intrinsic nature.

— Finding the root cause of our own demise

Reading Valentine Moghadam’s essay I find a strong affinity between her description of the main features of the current situation and my analysis, and, generally, with where we want to go in pursuit of a truly sustainable paradigm —*from an entrenched global system based on capitalist profit, top-down decision-making, war, and environmental degradation to a world where people and the planet take centre stage in politics and policy.*¹² However, her specific proposal—*movements need to stand for workplace democracy and shared management, and for long-term rational and people-oriented planning over short-term profit... breaking up huge corporations....*—envisions a very limited transition to an ethos where capitalism, an economy of consumption, of squandering, remains. This is too little in relation with what is necessary. It takes me back to my assessment in 2016, when I was still considering the possibility of private ownership of the means of production. But today it is clear that there is a complete chasm between the nature of capitalism and social and ecological sustainability. Applying a historical and materialist analysis, we need to become fully cognisant that capitalism and social and ecological sustainability are antithetical because capitalism is the engine of the anthropocentric epoch, and it has been imposed and deployed as an untrammelled system of extraction and depletion of human and natural resources for the benefit of a tiny cartel of global plutocrats who are fixated with power and material

¹⁰ ↪ John Bellamy Foster: [The Anthropocene Crisis](#), The Jus Semper Global Alliance, July 2017, p.1.

¹¹ ↪ *ibidem*, p. 5.

¹² ↪ Valentine Moghadam, [“Planetize the Movement!”](#), opening reflections for a GTI forum, Great Transition Initiative (April 2020)

wealth at the expense and demise of everything else, and this has created a huge break in the metabolism between humankind and the environment.

First, there is a mythology that allows the chasm between capitalism and social and ecological sustainability. Contrary to conventional wisdom, we do not live in democratic societies but, rather, in marketocratic societies. There are, of course, some spaces that allow some democratic practices. However, we have lived for as long as I can recall in marketocratic societies. As capitalism emerged from feudalism and mercantilism and became more pervasive, more sophisticated, and more predatory, the market encroached on the development of democratic societies and gradually captured the emerging nation-states of the nineteenth and twentieth centuries. The institutions of so-called representative democracy were hijacked in service of a tiny oligarchic elite, and a revolving-door system between corporations and government has allowed legislators and regulators to become executives in the economic sectors they had been regulating.

If we had market economies anchored on truly democratic societies, we would have a global binding regulatory system of business practice determined by the people, not by multilateral organisations, corporate lobbyists, and revolving-door politicians. But we do not, for the logic of the market has been imposed and placed at the centre of all the structures governing the so-called “democratic societies”. Hence, the usurpation of the democratic ethos was inevitable because capitalism and real democracy are inherently incompatible and thus cannot coexist. Such concepts as capitalist democracy or democratic capitalism are self-contradictory, for we can hardly find a more direct antagonism than between the *raison d'être* of democracy and capitalism.

Democracy prioritises social coexistence and the achievement of equal welfare for every rank of society, especially the dispossessed. Capitalism, in stark contrast, prioritises the pursuit of the individual's private interest with no regard for the impact that such activity has on the welfare of others including Planet Earth at the forefront. Fundamental elements of true democracy such as equality, social justice, welfare, and regulation are anathema to capitalism and thus to marketocracy. Capitalism thus cannot and will not be socially and environmentally responsible as long as the institutions of democracy remain captured by marketocracy. If they are liberated and true democracy emerges, capitalism would be replaced.

There are two impeccable and clearly paradigmatic cases of the calculated connivance between private interests and politicians to supplant the regulatory instruments of a truly democratic ethos. One of the clearest examples of the imposition of market-driven policies designed to replace any vestiges of the regulatory structures intended to keep in check the worst instincts that untrammelled capitalism is capable of unleashing was the repeal of the US Glass-Steagall Act of 1933. This law was instituted at a time when, on average, five banks collapsed on a daily basis under a deluge of non-performing loans due to the utterly speculative and corrupt practices of their main shareholders and managers—any resemblance with the current ethos is a “mere coincidence”. The law imposed a strong regulatory framework on the financial sector. The law deliberately separated commercial banking from investment banking with the specific purpose of prohibiting that commercial loans and savings would be securitised in financial markets. In this way, investment banks were barred from participating in the management of commercial lending to businesses and consumers and the earnings derived from savings. Furthermore, the law virtually barred any lending intended to be used in speculative operations and eliminated the pervasive possibility of conflicts of interest. At the time, moral hazard was under firm control. Hence, this law was instrumental in eliminating the main practices that triggered the 1929 debacle and played a fundamental role in the efforts for the economic recovery in the US after WWII.

Unfortunately, human greed is unrelenting. In 1980, parts of the Glass-Steagall Act were superseded by the Deregulation and Monetary Control Act. Then, in 1998, the US Congress attempted to regulate the derivatives in Commodity Futures Trading. But, Robert Rubin, Secretary of the Treasury, Larry Summers, his deputy, and Alan Greenspan, Chief of the Federal Reserve Bank, adamantly defeated any controls. For their conniving deregulatory manoeuvres, economist Dean Baker regarded them as the “high priesthood of the bubble economy”.¹³ Subsequently, in 1999, the core of the Glass-Steagall Act was repealed by the US Congress as a culmination of a \$300 million lobbying effort by the banking and financial-services industries. Its worst effect was a cultural change replacing prudent traditional commercial banking practices into a speculative spree that sought to securitise commercial banking. Finally, in 2004, the US Securities and Exchange Commission allowed investment banks to increase their debt to capital ratio from 12:1 to 30:1 or more, with the aim of enabling them to acquire more mortgage-backed securities, inflating the housing bubble in the process.¹⁴ Moral hazard became normalised, instituted and put under firm control with the consolidation of the financialisation of the global economy. A few years later, as you may recall, we endured the worst global financial meltdown since the Great Depression of 1929.

The second paradigmatic case is the US Supreme Court rule that companies ought to be regarded as legal persons with individual rights, almost as if they were natural persons, and, therefore, that corporations have the right to the first amendment, which, otherwise, would be exclusively part of the Bill of Rights of the citizenry, in a political context. In this way, the court equated the persona of corporations to that of citizens, so that corporations can exercise their “right” to freedom of speech in political campaigns.¹⁵ With this ruling the court provided corporations unlimited influence over US elections. Companies can now spend as much as they want to support or oppose individual candidates.¹⁶ With some variation, the halls of government have been overwhelmed by corporate power all over the world. Thus, with this kind of political ethos it would be a complete delusion to expect governments to fulfil their so-called “democratic” mandate by moving forward and developing a strict regulatory framework to control the market and its owners, namely financial market speculators. What has happened for decades is exactly the opposite of what should take place in a truly

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democratic ethos: the market has overtaken the public arena and dictates over the lives of societies around the world. A study designed to track how closely government policies in the US matched the preferences of voters at different points of the income distribution, found that the influence of average voters drops to insignificant levels, while that of economic elites remains substantial when the elites’ interests differ from those of the rest of society. When this occurs, it is their views that count —almost exclusively. As Gilens and Page, the authors of the study explain, we should think of the preferences of the top

10% as a proxy for the views of the truly wealthy, say, the top one percent —the genuine elite.¹⁷ It follows that assuming that we live in democratic societies is a blatant myth.

The above notwithstanding, all of this becomes irrelevant if we remain oblivious to the state of our planet. Unless we address, in a determined manner, the anthropogenic pressures on our planet and their direct underlying cause that

¹³ ↪ Dean Baker, The high priests of the bubble economy. The Guardian, 10 0,87 2008.

¹⁴ ↪ Joseph Stiglitz, Capitalist Fools, Vanity Fair, January 2009.

¹⁵ ↪ United States Supreme Court: Citizens United v. Federal Election Commission, 21 January 2010.

¹⁶ ↪ Robert Barnes and Dan Eggen: Supreme Court rejects limits on corporate spending on political campaigns, The Washington Post, 22 January 2010.

¹⁷ ↪ Dani Rodrik: [How the Rich Rule](#), Project Syndicate, 10 September, 2014.

capitalism clearly embodies, an ecological crisis will unfold to a point of no return, and it is already overshadowing all other issues. A groundbreaking study from the US National Academy of Sciences¹⁸ found that, since the dawn of civilisation, humankind accounts for only 0,01% of all living things, but it has destroyed 83% of all wild mammals and half of all plants, but livestock husbanded for human consumption abounds. We have invaded and destroyed a great portion of the Earth's ecosystems that, otherwise, would have remained pristine.¹⁹ Although the Covid-19 pandemic is the emblematic example of what is to come as the direct result of the Anthropocene driven by our autocratic capitalistic system, the study unequivocally shows that we are a plague to the planet, a true pandemic, a pest much worse than Covid-19 or anything else, unless we change to take good care of the home that feeds our species.

In a very basic and succinct manner, the Anthropocene constitutes the depredation of the Earth system by consuming more than what the Planet can replenish in the same amount of time. This is completely unsustainable and for this reason it is breaking all equilibriums, described by ecologists as the metabolic rift between humankind and our home, Planet Earth. Capitalism requires the deeply unsustainable infinite consumption of resources on a finite planet, making it the overwhelming driver of the Anthropocene for that single reason. If we consume much more than what the Planet can produce, we are ravaging it. It is basic arithmetic. Jonathan Rowe and David Bollier made an interesting allegory of capitalism that works as an analogy to the previous statement: *It has a fatal character flaw – namely, an incapacity to stop growing. No matter how much it grew yesterday it must continue to do so tomorrow, and then some; or else the machinery will collapse.*²⁰

From a social perspective, the pursuit of the individual's private interest with no regard for its impact on the welfare of others clashes directly with the fundamental principles of true democracy such as equality, social justice, welfare and regulation, as previously explained. To recover a sustainable planet where all living things can live and thrive, capitalism's innate tenets, growth and profit—which require the unrelenting consumption of resources—must end. Moghadam's assessment of today's major problems, such as environmental degradation, labour exploitation, the systematic violation of human rights, the increasingly undemocratic political climate and the increase of right wing populism are all symptoms of the underlying cause that has put us on the brink of our Planet's—and all its inhabitants—demise.

By the same token, the COVID-19 pandemic is also the direct result of capitalism's encroaching of previously pristine habitats. An ad hoc essay just pre-published and publicly released, points at the structural trade and land-owning relations and calls for giving them central focus in the quest for the causes of these increasingly-recurring pandemics.

¹⁸ ↪ Yinon M. Bar-Ona, Rob Phillips, and Ron Milo: [The biomass distribution on Earth](#). 6506–6511 | PNAS | June 19, 2018 | vol. 115 | no. 25

¹⁹ ↪ Damian Carrington: [Humans just 0.01% of all life but have destroyed 83% of wild mammals](#) – study, The Guardian, 21 May 2018.

²⁰ ↪ Jonathan Rowe and David Bollier: [The Missing Sector](#), Jonathan Rowe | Writings on economy, commons, language and other things

COVID-19 — a direct by-product of the Capitalist mode or production

Modelling emergencies, however necessary, miss when and where to begin. Structural causes are as much part of the emergency. Including them helps us figure out how best to respond moving forward beyond just restarting the economy that produced the damage.²¹ The authors point out that the failures to deal with the pandemic were actually planned decades ago, by systematically dismantling and monetising / financialising the shared commons of public health. As a result, a country captured by a regimen of individualised, just-in-time epidemiology—an utter contradiction—with barely enough hospital beds and equipment for normal operations, is by definition unable to marshal the resources necessary to pursue a China brand of suppression.²²

The virus emerged at a regional supply line of exotic foods in a wild food market in Wuhan, China. The virus, subsequently, through the networks of the global economy, diffused exponentially worldwide. By the same token, a globalised commodity agriculture that expanded production to remote reservoirs previously pristine, with little or no human activity, served as the propulsion engines that allowed the dissemination of a myriad of pathogens from the most remote areas to the largest urban conglomerates both North and South. *The lengthier the associated supply chains and the greater the extent of adjunct deforestation, the more diverse (and exotic) the zoonotic pathogens that enter the food chain. Among recent emergent and reemergent farm and foodborne pathogens, originating from across the anthropogenic domain, are African swine fever, Campylobacter, Cryptosporidium, Cyclospora, Ebola Reston, E. coli O157:H7, foot-and-mouth disease, hepatitis E, Listeria, Nipah virus, Q fever, Salmonella, Vibrio, Yersinia, and a variety of novel influenza variants.* The production networks and the markets that demand these exotic foods as well as the large globalised agribusiness of certain commodities, have practices that accelerate the transmission and evolution of pathogen virulence. *Growing genetic monocultures—food animals and plants with nearly identical genomes —removes immune firebreaks that in more diverse populations slow down transmission.*

A series of multinational-based “Soybean Republics,” for instance, now range across Bolivia, Paraguay, Argentina, and Brazil. The new geography is embodied by changes in company management structure, capitalisation, subcontracting, supply chain substitutions, leasing, and transnational land pooling. In straddling national borders, these “commodity countries,” flexibly embedded across ecologies and political borders, are producing new epidemiologies along the way.

These new exotic food and agribusiness networks produce virulent outbreaks that contaminate and ravage *livestock, crops, wildlife, workers, local and national governments, public health systems and alternate agrosystems to produce pandemics, such as the present one, as the direct result of the capitalist mode of production.*

Indeed, the authors state that *the underlying cause of COVID-19 and other pathogens is not found just in the object of any one infectious agent, but also in the field of the ecosystemic relations of capitalism.*

And here is their recommendation for the citizenry and not the market agents. *To avoid the worst outcomes here on out, disalienation offers the next great human transition: abandoning settler ideologies, reintroducing humanity back into Earth’s cycles of regeneration, and rediscovering our sense of individuation in multitudes beyond the capital state. However, economism, the belief that all causes are economic alone, will not be liberation enough. Global capitalism is a many-headed hydra, appropriating, internalising, and ordering multiple layers of social relation.*

In a nutshell, if we want to prevent the killing of vast sectors of the world population, with the precariat in the Global North and the vast majority of the Global South bearing the most peril, we must directly confront the owners of the capitalist system and their agents in the structures of political power. The authors warn us that *agribusiness is at war with public health. And public health is losing.* The same thing can be said of capitalism in general and human rights.

The repeal of the Glass-Steagall Act, the regard of corporations as natural individuals by the US Supreme Court, the capture of the halls of government, the mockery of representative democracy and the COVID-19 pandemic are all symptoms directly resulting from capitalism encroaching all life systems, including our own Planet Earth. This is the underlying cause. We are enduring a marketocratic ethos—the dictatorship of the owners of the market—who have captured the democratic institutions of societies. Hence, the only way to build a truly sustainable paradigm is not by addressing the symptoms but by tackling the root cause, the disease. It follows that we must not fix but replace

²¹ ↪ Rob Wallace, Alex Liebman, Luis Fernando Chaves and Rodrick Wallace: [COVID-19 and Circuits of Capital](#), Monthly Review Magazine, May 2020.

²² ↪ ibidem for all italics in this box

capitalism with new and truly sustainable economic structures. If we remove the disease, the symptoms will dissolve. Without capitalism we would live frugally, in a trajectory closely in sync with the sustainability of the planet. We must shift to sustainable patterns of production and consumption to end the anthropocentric era that we are enduring. And the only way to accomplish this is by drastically reducing our unsustainable ecological footprint. At the same time, we must continue to fight for social justice in a world with an undemocratically entrenched system designed to exploit people, plunder natural resources vital for life, exhaust the riches of our planet, violate human rights, and generate increasing inequality for the benefit of a tiny cartel of plutocrats, the global robber barons of today. To succeed, we must fight for a transformation of society based on a radically different social and ecological paradigm that serves the welfare of people and planet.

Consequently, we cannot pretend to fix the problems inherent to capitalism without replacing capitalism. If we become cognisant about the root cause and consequently aspire to build a completely new paradigm, then we must realise that many elements of our value system will cease to have meaning. The concept of a “living wage,” for example—that we at Jus Semper continue demanding in the current paradigm—would be treated as a relic of the marketocratic system, as the wage system and capital-labour divide are antithetical to true democracy. We must instead transcend the market in order to redefine how work will be remunerated in new socially and environmentally sustainable enterprises.

— Unassailable Natural Law and Capitalism

All my argumentation is anchored on a moral context, which, of course, is subjective and reflexive. However, there is a far stronger argument emanating from the laws of nature, which are exact and not influenced by the reflexivity of human

to build a truly sustainable paradigm, we cannot have a system that requires the unrelenting consumption of resources taken from a planet with finite resources (second law of thermodynamics or entropy).

interactions that bind the social sciences, and thus cannot be contested because it constitutes an axiom. To build a truly sustainable paradigm, we must drastically cut humankind’s ecological footprint. Hence, we cannot envision a market-driven system that requires the unrelenting growth of production to assuage artificial needs anchored on a system of

consumerist societies, designed explicitly for the infinite reproduction and accumulation of wealth by the owners of the system, even if it is redesigned to dismantle multinationals and pseudo democratise its ethos. And it does not matter how much technology is developed to control the consumption of energy and all of its externalities, because natural law cannot be changed or conquered. If we want to save our home, we must envision a new ethos that requires a tectonic replacement of structures to make it truly sustainable and truly democratic. Henceforth, to build a truly sustainable paradigm, we cannot have a system that requires the unrelenting consumption of resources taken from a planet with finite resources (second law of thermodynamics or entropy).²³

Indeed, technological hubris cannot suspend the mathematics of capitalist accumulation and the laws of thermodynamics. The second law of Thermodynamics, first formulated by Sadi Carnot, states that *the transformation of energy is not completely reversible due to a quantity called entropy, which represents the unavailability of a system's thermal energy for conversion into mechanical work, often interpreted as the degree of disorder or randomness in the system.* This second law states that entropy always increases with time: *the sum of the entropies of all the bodies taking part in the process.* Consequently, if the diverse forms of transformation of energy (heat, movement...) are not completely reversible, it is not possible to have any consequences in economics, which is based on such transformations. Yet this was customarily ignored by economists. It was not until the 1970s that ecology was included in economics with the

²³ ↪ Nicholas Georgescu-Roegen, *The Entropy Law and the Economic Process* (Cambridge, Mass.: Harvard University Press, 1971).

work of Nicholas Georgescu-Roegen: *The economy excludes the irreversibility of time*. So it ignores entropy, the irreversibility of the transformations of energy and matter. Consequently, residue and pollution are not factored-in in economic activity.²⁴ This is why Georgescu-Roegen explains *Had economics recognised the entropic nature of the economic process, it might have been able to warn its co-workers for the betterment of mankind—the technological sciences—that ‘bigger and better’ washing machines, automobiles, and superjets must lead to ‘bigger and better’ pollution.*²⁵ Furthermore, although technology can increase the energy efficiency to reduce the ecological footprint of economic activity, it increases exponentially the use of new technologies that combined increase the ecological impact, which is explained by the phenomenon of the Jevons Paradox, or rebound effect.²⁶ A greater efficiency paradoxically turns into a greater use of the resource.²⁷

This is why Georgescu-Roegen argues that it is impossible to have an infinite growth in a planet with limits, and, thus, the need to think out a bio-economy.²⁸ But, in a clear display of sheer hubris—imbued by utter greed—this is

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customarily disregarded in economics and in public policy. We should not be surprised, therefore, that the entire negative impact of business activity on people and planet, and on its sphere of influence, is completely dismissed. To this date, the neoclassical capitalist economics as well as the core principles of business culture, globally, send to oblivion the impact of economic activity as if there were no

ecological limits. The centres of capitalist hegemony created the term “externalities” to avoid the direct responsibility of the systemic economic structures. That is why the so-called practice of Corporate Social Responsibility is a hoax.²⁹

Herman Daly exposes very clearly the sheer hubris of marketocratic economics: *The neoclassical view is that man, the creator, will surpass all limits and remake Creation to suit his subjective individualistic preferences, which are considered the root of all value. In the end economics is religion.*³⁰ This explains why, to this date, the climate change summits have not been able to reach legally-binding agreements. All remains in the sphere of laissez-faire practice favoured by the apologists of the current system in the halls of governments, who really work as agents of the owners of the market and not as guardians of the common good. This is the scientific argument explaining the unavoidable *raison d’être*, beyond any ideological or philosophical inclinations, of why any market-driven system is completely unsustainable. This can be regarded as an axiom; succinctly: there cannot be unlimited consumption of limited resources.

To be sure, there is a current of thought developed by the owners of the system to challenge natural laws and assert that there are no limits that humankind can’t overcome. As Daly explained, they assert, believe it not, that man is the creator and the Earth and the universe is to be possessed. And so, the apologists of this hubris developed ecomodernism to argue that production and consumption face no limits because technology will overcome it with no systemic changes. It has also permeated into some so-called socialist circles that argue that extreme technology development coupled by a

²⁴ ↪ Serge Latouche: *La apuesta por el decrecimiento*, Icaria – Antrazyt 2006, p.21-22.

²⁵ ↪ John Bellamy Foster, Brett Clark, and Richard York: *The Ecological Rift - Capitalism’s War on the Earth* - Monthly Review Press, 2010. Pp. 62-63.

²⁶ ↪ *Ibidem* Pp. 201-214.

²⁷ ↪ The Jevons Paradox occurs when new technologies increase efficiencies that reduce the amount of a resources used, but elicits the greater use of the technology, resulting at the end in the greater use of the same resource than what was used with the older technology. Demand for the new technology in production processes increases, drawing greater consumption of a resource. Bellamy Foster, Clark and York, provide a detailed illustration of this paradox with real examples such as the “fuel efficiency of automobiles” and the paperless office paradox in John Bellamy Foster, Brett Clark, and Richard York” “THE ECOLOGICAL RIFT, *Capitalism’s War on the Earth*”, “THE ECOLOGICAL RIFT, Monthly Review Press, 2010. Pp. 265-271.

²⁸ ↪ Serge Latouche: *La apuesta por el decrecimiento*, Icaria – Antrazyt 2006, p.21-22.

²⁹ ↪ Álvaro de Regil Castilla, “*Why ‘Corporate Social Responsibility’ Is a Hoax,*” forum contribution (*Corporations in the Crosshairs: From Reform to Redesign*), Great Transition Initiative, December 2019.

³⁰ ↪ Herman E. Daly: *A Steady-State Economy*: Sustainable Development Commission, UK (24 April, 2008)

fair redistribution of wealth and resources, would allow us to sustain our consumeristic lifestyles. Bellamy Foster offers us a clear rebuttal of this position in an essay where he directly challenges the arguments of what he calls the best example of so-called ecomodernism, set forth in the special issue of *Jacobin* magazine, entitled “Earth, Wind, and Fire”. *According to the authors in this special issue and their related works, the solution to climate change and other ecological problems is primarily one of innovation in the development and application of new technologies and does not require a critique of the process of capital accumulation or economic growth. Activist groups such as Greenpeace and most ecosocialists come under attack for their catastrophism or apocalypticism, their direct action, and their emphasis on the need for qualitative changes in the human relation to the environment. ...In this vision, ecological necessities are once again subordinated to notions of economic and technological development that are treated as inexorable. Nature is not a living system to be defended, but a foe to be conquered.*³¹

The conceptual convergence between ecomodernism and these self-styled socialists is the argument, or rather the myth, that because of the belief in our inherent power that places us above anything else, we will be able to defeat the entropy law, because we would like to assume that mankind has an infinite entropic dowry. Georgescu-Roegen wrote decades ago a powerful essay to expose the economic myths over the use of energy, debunking in great detail and clear articulation the myriad of fallacies that pretend that we can control and modify the laws of nature. He explains the second law of thermodynamics or Entropy Law:

*The economic process, like any other life process, is irreversible (and irrevocably so); hence, it cannot be explained in mechanical terms alone. It is thermodynamics, through the Entropy Law, that recognises the qualitative distinction which economists should have made from the outset between the inputs of valuable resources (low entropy) and the final outputs of valueless waste (high entropy). The paradox suggested by this thought, namely, that all the economic process does is to transform valuable matter and energy into waste, is easily and instructively resolved....³² the Entropy Law requires only that the entropy of the entire system (the environment and the organism) should increase. Everything is in order as long as the entropy of the environment increases by more than the compensated entropy of the organism...³³ the Most important for the student of economics is the point that the Entropy Law is the taproot of economic scarcity. Were it not for this law, we could use the energy of a piece of coal over and over again, by transforming it into heat, the heat into work, and the work back into heat. Also, engines, homes, and even living organisms (if they could exist at all) would never wear out. There would be no economic difference between material goods and Ricardian land. In such an imaginary, purely mechanical world, there would be no true scarcity of energy and materials. A population as large as the space of our globe would allow could live indeed forever.*³⁴

The problem is that in the natural world that we belong to, as just another species, there is always a deficit, regardless of any efficiency and technological prowess that we develop. Hence, we cannot reverse the waste and recover the energy. *In the context of entropy, every action, of man or of an organism, nay, any process in nature, must result in a deficit for the entire System. Not only does the entropy of the environment increase by an additional amount for every gallon of gasoline in your tank, but also a substantial part of the free energy contained in that gasoline, instead of driving your car, will turn directly into an additional increase of entropy...³⁵ If there were not this entropic deficit, we would be able to convert work into heat, and, by reversing the process, to recuperate the entire initial amount of work—as in the*

³¹ ↪ John Bellamy Foster: [The Long Ecological Revolution](#), The Jus Semper Global Alliance, March 2019.

³² ↪ Nicholas Georgescu-Roegen. "Energy and Economic Myths." *Southern Economic Journal* 41, no. 3 (1975): 347-81. Accessed April 27, 2020. doi:10.2307/1056148. P 353.

³³ ↪ *ibidem*.

³⁴ ↪ *ibidem*.

³⁵ ↪ *ibidem* p. 354.

*imaginary world of the preceding paragraph. In such a world, standard economics would reign supreme precisely because the Entropy Law would not work... actual efficiency depends at any one time on the state of the arts. But, as we know from Carnot, in each particular situation there is a theoretical limit independent of the state of the arts, which can never be attained in actuality. In effect, we generally remain far below it.*³⁶

This is why the amount of energy and material low entropy is finite. We cannot reverse the energy that is wasted (high entropy). Once again, the maxim: “we cannot consume infinite amounts of resources in a finite world”, applies. We cannot solve the issue in a sort of *Deus ex-machina*, as the apologists of the current system—pursuing promethean ambitions of sheer productivism—pretend. This unambiguously demonstrates that the only way to achieve sustainability is to drastically reduce our consumption of the Earth’s resources to a level where the planet can replenish them within the same amount of time that we consume them. Parting from the fact that capitalism is a system that requires unrelenting growth in order to increase its reproduction and accumulation through the expansion of exchange value—its

The masters of marketocracy have also made sure that the millions of workers in their labour-value commodity chains in the periphery and the millions that have been forced to join the precariat in the metropolises of the Global North remain disenfranchised, deliberately misinformed and, thus, unaware about the root causes of their demise.

only purpose—it requires an infinite consumption that produces the metabolic rift between humankind and the planet. Consequently, to amend such rift to attempt to achieve true and long-term sustainability, we need to drastically cut our consumption of resources and completely stop the unrelenting growth of production, which then disembowels the essence of capitalism. We would still have markets, to be sure, yet not in pursuit of

profit but designed to procure the welfare of people and planet sustainably. There is no other way, but cutting drastically our ecological footprint to pursue the rescue of our home and sustain it.

Trespassing the Threshold of no Return and Rectification

As capitalism evolved and encroached on the democratic institutions of society, the public agenda has been permanently controlled by the owners of the system to impose the economic structures that provide them with the best conditions for the maximisation of shareholder value. This has accelerated the metabolic rift in the human relation to the Earth, exacerbated inequality and despair worldwide, waged wars on behalf of a renewed imperialism and destroyed any possibility for a truly democratic agora with the Demos driving the public agenda, as in real democracy. The masters of marketocracy have also made sure that the millions of workers in their labour-value commodity chains in the

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periphery and the millions that have been forced to join the precariat³⁷ in the metropolises of the Global North remain disenfranchised, deliberately misinformed and, thus,

unaware about the root causes of their demise.

This has taken us to a point where, if we have not already crossed a threshold of no return, we are very near its edge. This threshold or tipping point means that if we have already crossed it, we would no longer have the human capacity, despite our supposedly technological prowess, to rectify and implement the systems and structures required to rescue the planet and build sustainable life systems. We do not really know for sure, but scientific evidence indicates that we are on the brink of such tipping point. Environmental degradation of ecosystems worldwide, global warming, the extinction of thousands of species and the new coronavirus attest to this situation of truly cataclysmic proportions. Four

³⁶ ↪ Nicholas Georgescu-Roegen. "Energy and Economic Myths." Southern Economic Journal 41, no. 3 (1975): 347-81. Accessed April 27, 2020. doi:10.2307/1056148. P 355.

³⁷ ↪ Guy Standing: The Precariat: The New Dangerous Class (Bloomsbury Revelations, 2016).

years ago, scientists alerted that the metabolic rift is taking place at a faster rate than previously predicted. The World Meteorological Organization reported that the first six months of 2016 broke all previous global warming records.³⁸ And a report from the United Nations Environment Program (UNEP) considered the December 2015 Paris Agreement on climate change as outdated even before taking effect.³⁹ Additionally, this rift is nearing tipping points that will carry large and partly unforeseen consequences in many geological subsystems.

A project led by Johan Rockström at the Stockholm Resilience Centre developed an analysis (2009) of nine planetary boundaries, which are indispensable for maintaining the Earth's sustainability to allow humanity to live sustainably in harmony with our home. These boundaries are: (1) climate change, (2) ocean acidification, (3) stratospheric ozone depletion, (4) biogeochemical flows, particularly the nitrogen and phosphorus cycles disrupting ecological system, (5) fresh water use, (6) change in land use, (7) biodiversity loss, (8) atmospheric aerosol loading and (9) chemical pollution. As Bellamy Foster explains, the boundaries for climate change, ocean acidification, and stratospheric ozone depletion can be regarded as tipping points where, if we cross their thresholds, we would make the Earth unhealthy for life, whilst the boundaries of nitrogen and phosphorus cycles, freshwater use, change in land use and biodiversity loss are seen as the onset of irreversible environmental degradation. The situation is already dire, for climate change, the nitrogen cycle, and biodiversity loss have already crossed their boundaries and constitute an extreme ecological rupture. Ocean acidification, the phosphorus cycle, global freshwater use and land system change are rapidly emerging global rifts. Only the stratospheric ozone depletion was stabilising and may be subsiding.⁴⁰

Yet such situation was valid over a decade ago. An update from the Stockholm Resilience Centre from 2015, reports that four of nine planetary boundaries have now been crossed as a result of human activity, as reported by an international team of 18 researchers in the journal *Science* (16 January 2015). These are: *climate change, loss of biosphere integrity, land-system change, altered biogeochemical cycles (phosphorus and nitrogen)*. *Two of these, climate change and biosphere integrity, are regarded by scientists as "core boundaries". Significantly altering either of these "core boundaries" would "drive the Earth System into a new state", which entails a much less liveable state. Indeed, the lead author, Will Steffen, at the Australian National University, Canberra, asserts that "Transgressing a boundary increases the risk that human activities could inadvertently drive the Earth System into a much less hospitable state, damaging efforts to reduce poverty and leading to a deterioration of human wellbeing in many parts of the world, including wealthy countries."*⁴¹

All of the above is taking us on a trajectory indicating the high probability that we won't be able to reverse it, even if, by a miraculous event, the most perverse instincts of humanity abruptly disappear and suddenly we converge to radically devote all humankind's energy to removing the structural systems of ecological degradation—beginning with our individualistic and consumeristic lifestyles—to replace capitalism with a new global political economy and a new truly democratic ethos that drastically drops our ecological footprint. Even envisioning such a supernatural event, it will take at the very least an entire generation (30 years) to dismantle the physical structures of depredation. This is a trend that increasingly seems too slow and too late when we look at the pace that Mother Earth, our home, is reacting.

Not just from a moral perspective, but all the more so from a practical and survivalist perspective, we must contain our worst instincts and throw ourselves wholeheartedly to stop this economic pandemic of capitalism that is the underlying

³⁸ ↪ WMO: [Global Warming Happening Faster than Predicted](#), Voice of America, July 21, 2016

³⁹ ↪ Jess Shankleman, "[Climate Headed for Catastrophic Change Despite Paris Accord](#)," Bloomberg News, November 3, 2016

⁴⁰ ↪ John Bellamy Foster, Brett Clark, and Richard York: *The Ecological Rift - Capitalism's War on the Earth* - Monthly Review Press, 2010. Pp. 15-16.

⁴¹ ↪ Steffen et al. 2015. [Planetary Boundaries: Guiding human development on a changing planet](#). *Science* Vol. 347 no. 6223 DOI: 10.1126/science.1259855

cause that is killing the planet. We do not know if there is still a chance—if we have not crossed beyond the tipping points and planetary boundaries—but we must assume there is still some time and act accordingly. The COVID-19 pandemic is, without a doubt, the best window of opportunity that we have faced in our lifetimes to become cognisant about this damning catastrophe, stop our numbness and individualism and coalesce to change the current doomed trajectory and veer to what Paul Burkett calls an *eco-revolutionary tipping point*: the cross-sectoral defensive struggles of ecological, communitarian and urban movements coalescing as an ecological socialist movement against monopoly financial capital interests.⁴²

we must make saving the environment the fundamental issue and the overarching and quintessential cornerstone of our effort to transition to a new sustainable paradigm. It cannot be one of many key issues, but the single element driving our vision to achieve sustainability, fundamentally determining how we draft our vision for our new paradigm.

This takes us back to the argument rightly stressed by Michael Löwy in the GTI forum, that we must make saving the environment the fundamental issue and the overarching and quintessential cornerstone of our effort to transition to a new sustainable paradigm. It cannot be one of many key issues, but the single element driving our vision to achieve sustainability, fundamentally determining how we draft our vision for our new paradigm. We must place it at the centre and develop from that perspective a plan to transcend the current paradigm. If we acquiesce to this reality, then we must also accept that capitalism must be replaced and not fixed.

What is the trajectory that we are following?

We are on a trajectory that has reached unsustainable levels of inequality, social polarisation with increasing tendencies to resort to authoritarian quasi-fascist political agendas in many parts of the world and ecosystems that have been ravaged on a planetary scale. Building a new paradigm must address comprehensively this existential conundrum by building a new ethos where social justice, true democracy and long-term environmental sustainability are guaranteed. However, given that saving our planet is the overarching premiss that conditions any approach to building egalitarian forms of human organisation, I will centre this discussion on the environmental trajectory that we are following under the capitalistic form of social and economic organisation that humanity embarked on over two centuries ago.

Unless we organise to planetise the movement to save the Earth, our species, all other living things and the specific Earth's resources required to thrive and achieve long-term sustainability, we are on a direct trajectory to produce our own self-extinction, at the very least insofar as how we understand our species living in our home, our Mother Earth. I won't detail all the additional indicators and hard scientific evidence of the profound ecological rift that is the direct product of the anthropocentric geological era that we have produced. Suffice it to say that in 2019 humankind required 1,75 planets and the US—the main driver of the marketocratic paradigm—required nearly five planets to continue living the way we do.⁴³ Thus, as long as we continue living on this pathological overshoot of the natural resources that the Earth requires to replenish and sustain life as we know it, future generations will not survive and thrive, and they may disappear, as the planet continues to react to the depredation and ensuing climate change that, mostly, we have created.

The Ecological Footprint Network rightly rubs salt into the wound. *Humanity has shattered its budgetary limit:... The IPCC 1,5°C special report (October 2018) confirms unequivocally that the only option is to transition to regenerative economies that live off, rather than liquidate, our natural capital. Natural resource production can be infinite if we*

⁴² ↪ Paul Burkett: [An Eco-Revolutionary Tipping Point? — Global Warming, the Two Climate Denials, and the Environmental Proletariat](#), The Jus Semper Global Alliance, April 2020.

⁴³ ↪ [Global Footprint Network](#), (accessed on March 2020).

*maintain that capital. In contrast, business as usual is eroding our ability to thrive. Living within the means of our planet does not mean that people have to live with discomfort and without human dignity. Thriving is possible if we put our heads, hearts and hands to it.*⁴⁴ In essence, we are rapidly approaching a point of no return that, at the very least, will no longer allow humanity to enjoy life on our planet, and may put an end to our existence all together, pushing us to the final cliff of our self-annihilation.

We must also become well aware, in a rather conspicuous manner, that we are currently being driven into a rather dangerous deception⁴⁵ about our transition to regenerative economies to live off sustainable energy sources. This is because the powers owning the prevailing structures of domination are energetically working to incorporate into their structures of reproduction and accumulation, their so-called “green initiatives” to add to the mix of so-called “green products” that are touted as far more fossil-fuel efficient or simply free of fossil-fuel use for their energy sources, as well as energy sources that are touted as being truly green or completely clean energies that we should embrace wholeheartedly to sustain our present standards of living. This is what constitutes “green capitalism”, a total greenwash of unsustainable energy solutions in our production and use of energies. Energy is a critical component in the functioning of modern societies and is playing a key role in how we are living and how we may transition into new sustainable ecosystems. Thus, we must raise our understanding about the great risks and perils that we are currently facing in the development of our future sources of energy given the trajectory that we are following.

The best example in the case of fossil-fuel efficient energies or simply free of fossil-fuel energies is the emergence of zero fossil-fuel or hybrid vehicles that the motor-vehicle industry is gradually embracing. They sell them as genuinely green solutions, as if the manufacturing of these vehicles—including all their parts and the manufacturing processes applied to make them, as well as the sources of energy used to manufacture them—overwhelmingly fuel-fossil sources—by the many different producers in their supply chains—lack large ecological footprints. These include the lithium-ion batteries that generate large footprints for their manufacturing and will also leave large footprints of very polluting components, such as lithium and cobalt, which are also non-renewable sources of energy that power the Teslas and other electric vehicles. As for the hybrid vehicles of today, they are now in the process of switching to the use of lithium-ion batteries from lead-acid and nickel-metal hydride batteries which are extremely toxic. And so far we have not even considered the cost of recycling these batteries that weight nearly one ton. We have not considered as well the fossil-fuel energy used for recycling, that expels toxic fumes into the air, and the inputs and processes—such as cryogenic freezing—that are used to dispose of them after seven to ten years. Moreover, according to Tesla, only 60% of the materials are recycled whilst the rest are dumped into the environment in landfills,⁴⁶ particularly the most toxic part, albeit Tesla claims to be developing technologies to increase the efficiency of their recycling.⁴⁷ Lastly, we also have to consider all the mining that is done. Lithium is mined in North and South America, Asia, South Africa, Central Andes and China, whilst cobalt comes primarily from the Congo. Argentina, Bolivia and Chile hold the greatest lithium reserves in the world, with half of all the reserves,⁴⁸ and mining it creates horrific environmental damage, including the massive use of water, the killing of fish in rivers and the disposal of toxic chemicals that are filtered out of the brine produced, such as hydrochloric acid. Here’s a riddle that succinctly illustrates part of this damage: *what links the battery in your smartphone with a dead yak*

⁴⁴ ↪ [Global Footprint Network](#): where we are going (accessed on April 2020).

⁴⁵ ↪ Okbazghi Yohannes: *The Biofuels Deception — Going Hungry on the green Carbon Diet*, Monthly Review Press, 2018.

⁴⁶ ↪ Michael Dawson: [Electric Evasion](#), Counterpunch, 15 October 2010.

⁴⁷ ↪ Fred Lambert: [Tesla is developing a 'unique battery recycling system'](#), 16 April 2019.

⁴⁸ ↪ U.S. Geological Survey, [Mineral Commodity Summaries, Lithium](#), February 2019

*floating down a Tibetan river? The answer is lithium – the reactive alkali metal that powers our phones, tablets, laptops and electric cars.*⁴⁹

This is the same case for the silicon used for the panels for solar energy that have to be mined and the back-up sources of energy used for wind turbines, creating more environmental damage. When assessing the trajectory that we are following and the potential solutions to the replacement of fossil fuels, we must account for the environmental impact incurred to extract the raw materials, including the energy and materials used to extract them, the energy used to manufacture the new technologies, and the environmental impact that we produce once we dispose of them after they have completed their life cycle. Just for the manufacturing of solar panels and wind turbines (including mining, manufacturing, transporting and installing), the fossil energy that is used is usually greater than the energy these technologies will produce. Indeed, for the operation of wind turbines, Ozzie Zehner, author of *Green Illusion*, asserts that *Fossil fuels supply the power behind these operations... Lifecycle calculations reveal that wind power technologies actually rely heavily on fossil fuels.*⁵⁰ This is because wind turbines rely on the use of fossil power when the wind is down, making this alternative a hybrid of wind and fossil-fuels. Consequently, it becomes evident that such “solutions” to the replacement of fossil fuels are creating new and major environmental damage. Photovoltaic cells for solar energy and wind turbines carry large ecological footprints from mineral exploration to manufacturing, delivery, operation, maintenance, and disposal,⁵¹ not even considering their high costs of operation, albeit it is expected that economies of scale would eventually make them competitive vis-a-vis fossil sources of energy, but will never stop generating large ecological footprints. The sun and wind are clean, free and renewable but not the technologies and processes used to generate electric power. Many thanks for the greenwash!

The above notwithstanding, the best example of a greenwash to produce electricity not using carbon, natural gas, oil, or enriched uranium, is biomass fuel—or biofuels—for electricity plants, that use primarily wood, but also agricultural waste, municipal solid waste, manufacturing waste, landfill gas and sewage sludge. Biomass accounts by far for the largest portion of renewable energy worldwide. The claim in this case is that biomass electricity producers use primarily wood from “working forests,” “managed forests,” or forests with “sustained yield” management practices and that the wood burned is low grade wood that otherwise would go to waste. However, because biomass electricity plants burn their resources, it has been demonstrated that all existing biomass power plants emit more CO₂ from their smokestacks than coal plants, consequently increasing CO₂ levels in the atmosphere. Furthermore, logging trees reduces the amount of carbon stored in the forest and destroys one of our best defences against climate change. Producers claim that they immediately replant trees where they logged matured ones, which makes the recovery of the forest to take from decades to over a century.⁵² It follows that this approach to the problem of fossil fuels is worse. It not only produces more CO₂, but it reduces the amount of carbon stored in forests and produces great environmental damage in the forests’ ecosystems for flora and fauna. Another greenwash scheme is the common practice, particularly in Europe, of co-firing coal and biomass plants, which is enthusiastically considered as an environmentally-friendly source of energy.⁵³ Thus, biomass may be a renewable source of energy but not green energy by any means. Yet, even worse is the fact that the biomass electric industry logic is driven by profit to produce “green profit”, because it is a business and, thus, it is not driven by a quest for true environmental solutions to reduce our ecological footprint. Lastly, many of these electricity

⁴⁹ ↪ Amit Katwala: [The spiralling environmental cost of our lithium battery addiction](#), Wired, 5 August 2018.

⁵⁰ ↪ Ozzie Zehner: *Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism* (Our Sustainable Future), University of Nebraska Press, 2012, Pp 41.

⁵¹ ↪ *Ibidem*, Pp 28.

⁵² ↪ Sasha Stashwick: [How the Biomass Industry Sent “Sustainability” Up in Smoke](#), Natural Resources Defense Council (NRDC), 25 July 2019.

⁵³ ↪ Michal Olszewsky: [A Polish appetite for biomass](#), 4 September 2014.

generating plants remain wired to electrical networks fuelled by fossil fuels. If, for any reason they lack biomass to burn, they may use fossil fuel to supply electric power to their end users.

As in the case of lithium-ion batteries, we are not even accounting for all the energy used by the machinery to log the trees, the transportation to send them to the processing plants and the energy used in these plants to produce the wood pellets to be burned. Michael Moore clearly shows the delusion that capitalism is attempting to instil in us about alternative sources of energy in his new documentary “The Planet of the Humans”. Ozzie Zehner clearly asserts in the

the central message of Moore’s documentary, supported by many documented examples, is that it exposes the fact that the environmental movement has been taken over by capitalism.

documentary that considering alternative sources of energy as somewhat different from fossil fuels is a dangerous illusion, because they also have large fossil-fuel footprints for their production. Nina Jablonski, an anthropologist at Penn State University, explains that *seeking technological fixes to energy, one*

after another, is going to lead us to another level of catastrophe sooner rather than later. This why the central message of Moore’s documentary, supported by many documented examples, is that it exposes the fact that the environmental movement has been taken over by capitalism, including corporations such as Exxon Mobil, the Koch Brothers companies, such as Georgia Pacific, and United Airlines, among many others.⁵⁴ Consequently, we must become aware that the trajectory proposed by the narrative of the growing so-called “green energy industry”, claiming that it will solve the unsustainability of continuing to use fossil fuels, in reality is a hoax advanced by the owners of global capital. What has really emerged is the “biofuels industrial complex” that has no real interest in mitigating climate change or other crises produced by the accumulation mode of production. Indeed, Olbazghi Yohannes rightly argues that *The convergence of interests between the grain-trading oligopolies and the biotech corporations led to the formation and consolidation of the biofuel-biotechnology industrial complex. This entity was determined to employ the triple crises in global poverty, global energy uncertainty, and global warming to shape and reshape the global food manufacturing system in ways that could purportedly solve the crisis of agricultural surplus production and, at the same time, find new outlets for the deployment of the over accumulated capital. To effectively market this overarching corporate aim, the biofuel-biotechnology peddlers continued to refine their presentation of biofuels as offering climate mitigation, poverty alleviation, and energy security.*⁵⁵

As for fossil-fuels, given that the peak-oil threshold of conventional oil production has already passed globally, producers have resorted to the development of hydraulic fracturing or fracking of non-conventional shale oil and gas. The

unless we react immediately to attempt to rescue our planet, we are following a trajectory that will not allow future generations to survive and thrive, for we will face a much less hospitable world, to say the least.

environmental footprint of this kind of energy is so devastating that even if reserves were higher and production feasible for oil companies, its impact on the environment includes risks of ground and surface water contamination, air and noise pollution, the potential triggering of earthquakes, and the consequential and already extensively documented health hazards.⁵⁶ This has not

stopped producers, particularly in the US, from heavily investing in this kind of production, resulting in deep ecological damage for many decades to come. Deloitte Consulting recently reported that *since 2009, North American shale oil and gas production has grown tremendously, with oil production growing by 140 percent and natural gas by 60 percent.*⁵⁷

⁵⁴ ↪ Youtube: [Michael Moore Presents: Planet of the Humans](#) | Full Documentary | Directed by Jeff Gibbs, 21 April 2020.

⁵⁵ ↪ Okbazghi Yohannes: The Biofuels Deception — Going Hungry on the green Carbon Diet, Monthly Review Press, 2018, Pp.15.

⁵⁶ ↪ Álvaro J. de Regil: [True Sustainability and Degrowth in the citizens’ Imaginary – The People and Planet paradigm in a truly democratic ethos unburdened by capitalism](#), The Jus Semper Global Alliance, June 2016, Pp 25-26.

⁵⁷ ↪ Duane Dickson: [How shale oil and gas is driving US refining and petrochemical investment](#), September 16, 2019.

This is the completely unsustainable trajectory that we are following to our own demise, a delusion perpetrated by the owners of the structures of capitalism to continue under the same mantra of consumerism. Consequently, unless we react immediately to attempt to rescue our planet, we are following a trajectory that will not allow future generations to survive and thrive, for we will face a much less hospitable world, to say the least. We are mounted on an ecological overshoot consuming a myriad of natural resources that are demanded by our market-driven consumeristic lifestyles, the majority of which are absolutely unnecessary to enjoy very dignified standards of life on our planet. These are lifestyles that have been imposed on us and captured us by unleashing unrelentingly the market weaponry of alienation from reality and has engulfed us on artificial and frivolous cultural patterns of utter individualism. We have been driven to an ethos of perpetual competition to have stuff, instead of being gregarious individuals that share and cooperate to live in harmony with our home. We grew up under the predicament between owning or being, just like Eric Fromm splendidly conveyed in *To have or to be?* an existential predicament of modern society between having or being, where, as anyone can easily attest, capitalism has made sure that, under the great promise of unlimited happiness, freedom, material abundance and domination of nature, consumerism reigns supreme.⁵⁸ If we do not have stuff we do not exist. Under marketocracy, the only way of being is by having. Hence, unless we completely change our cultural framework, we will continue on a trajectory of doom. Needless to say that the so-called Green New Deal is a naive fallacy that advances the solution of the deep social inequalities and environmental ravage perpetrated by marketocracy by using solutions to decrease inequality by increasing the consumer power of the dispossessed under the greenwash veneer of environmental technologies instead of reducing our ecological footprints. It addresses the symptoms instead of the root cause.

Undoubtedly, the approach that we must take—ending marketocracy—is absolutely radical, but so is the trajectory that we have followed since capitalism increased exponentially the human footprint on the planet to a point of complete unsustainability and near irreversibility. Thus, we must become cognisant with a clear sense of urgency that the ecological rift that we have produced overrides all other considerations. Paraphrasing Naomi Klein's book title, the Anthropocene, the direct product of capitalism, "has changed everything" and overwhelmingly. Indeed, Paul Burkett points out the fact that this is the message that the books of Ian Angus, Andreas Malm and Naomi Klein share.⁵⁹ By the same token, Burkett's own historical and materialist analysis arrives at the same unambiguous conclusion that capitalism must be replaced. *The sustainable development of human society co-evolving with nature including other species now depends on a definite historical break with capitalism (wage-labour, market competition, production for profit) as the dominant mode of production... To deny that the climate crisis is hardwired into capitalism, and that we need a new system to deal with it, is just as misleading and dangerous as to deny the existence of human-induced global warming. Both forms of climate denial must be overcome in theory and practice.*⁶⁰

⁵⁸ ↪ Erich Fromm: *To have or to be?* Harper & Row, 1976.

⁵⁹ ↪ Ian Angus's *Facing the Anthropocene*, Andreas Malm's *Fossil Capital*, and Naomi Klein's *This Changes Everything*.

⁶⁰ ↪ Paul Burkett: [An Eco-Revolutionary Tipping Point? — Global Warming, the Two Climate Denials, and the Environmental Proletariat](#), The Jus Semper Global Alliance, April 2020.

Geocratia: The People and Planet and Not the market paradigm

Parting from the fact that saving Planet Earth, our home, changes everything, we need to build a new ethos where the majority of humankind commits to a system whose only purpose is the pursuit of the welfare of people and Planet Earth. This requires that all Earth resources necessary for the enjoyment of life of all living things be managed to achieve true long-term sustainability. Beginning with removing the market from its encroachment of the institutions of society, this is a paradigm that will break many of the structures, beliefs and notions that we now regard as permanent into a sort of Geocratia—from Greek *ge* and *kratos*: government of the or by the Earth—which is the name I chose to refer to the new paradigmatic proposal. As you may expect, saving the planet will radically change our consumer-driven cultural frameworks and life systems, including the standards of living, consumption habits, use of energies, economic indicators, the conception of development, progress, growth and the concept of democracy. We do not know yet, but this may include a reconfiguration of the so-called nation states to give way to the formation of smaller social and geographical identities. Essentially, we must establish a new global citizens' contract between us and Mother Earth, where we commit to design new structures of social organisation devoted to living in harmony with our planet, where the use of the resources necessary for life will be managed so that consumption does not happen faster than the time required by the planet to replenish them. Concurrently, by building Geocratia's ethos we achieve happiness, peace and freedom, as in Epicurus' *ataraxia*, the enjoyment of peace, absence of fear and happiness, and *aponia*, the absence of pain.

— Outdated visions

The GTI paper of 2002: *Great Transition —The Promise and Lure of the Times Ahead*, developed six scenarios that speculate where we may go in the not too distant future depending on the course followed by humanity.⁶¹ Two are labelled as conventional world scenarios, one driven by “market forces” that continue to shape the character of global development for several decades and the other driven by policy reform. The former is unbridled, akin to our present time and the latter is regulated by governments, akin to post-war keynesianism but with some emphasis on poverty reduction and environmental sustainability. Rightly so, the “business-as-usual” of “market forces” is regarded as a utopian fantasy to solve the issues of inequality, increased polarisation and ecological unsustainability.⁶² Policy Reform, in contrast, is viewed as advancing some positive actions, such as harnessing the market forces, but is considered that it “may not be enough”.⁶³ Another two scenarios are described as the barbarization of humanity, where market forces spin out of control and drive us to the abyss. One is Malthusian and evokes the true end of human history; the other is described as “Fortress World” that embodies a turn to an autocratic ethos using military force to impose a fascist order with global apartheid to exclude the dispossessed majority from the privileged minority. It should be noted that many of the symptoms forewarned in these barbaric scenarios, such as environmental degradation, climate change, social polarisation and terrorism (including state terrorism) are already prevalent worldwide, which confirms that the current trajectory is taking us towards our final end if we do not react adequately. Indeed, eighteen years after the publication of the GTI exercise, we are much closer to Fortress World than anything indicating a recognition of our complete unsustainability under the current system. Instead, we are opting to escape by moving closer into the abyss.

The last two are potential outcomes of where we would like to go if the people of the world coalesce to relatively transcend marketocracy. One is a sort of anarchist dream of “smallness is beautiful”, whilst the other is called the “New Sustainability Paradigm”, which is regarded as the scenario where we would like to go—and to which we refer to as the “Great Transition Paradigm in 2002” or “GTI-2002 paradigm” for short. The goal is to materialise four tenets: peace (to

⁶¹ ↪ Paul Raskin et al: [Great Transition: The Promise and Lure of the Times Ahead](#), Stockholm Environment Institute - Boston Tellus Institute, 2002, Pp 16.

⁶² ↪ *Ibidem*: Pp 29.

⁶³ ↪ Paul Raskin et al: [Great Transition: The Promise and Lure of the Times Ahead](#), Stockholm Environment Institute - Boston Tellus Institute, 2002, Pp 41.

eliminate armed conflicts), freedom (to reduce all kinds of discrimination), material well-being (to eliminate hunger and reduce inequality) and environmental health care (to reduce the human impact of ecosystems to truly sustainable levels). I stress the fact that such paradigm is based on an assessment of the human and planetary conditions eighteen years ago. We live in a very fluid or liquid world, as Zygmunt Bauman rightly argued in his *Liquid Modernity*. So everything is rapidly changing, and even if we attempt to predict what may come in future decades, it is increasingly difficult to get it right given the fast pace of the changes propelled by the Anthropocene.⁶⁴ Thus, it is very likely that a new assessment by the GTI would be different. It would plausibly convey a far greater sense of urgency given the fast speed of damage inflicted to our planet and the overt and unrelenting rejection of governments and transnational capital to commit to the necessary structural changes to address climate change and environmental degradation by reducing them to the levels defined by the scientific community on this area, as well as the flagrant disregard for addressing the mind-boggling levels of social inequality and human rights violations worldwide. In the GTI forum discussion on “how do we get there?” of 2017, participants already show a sense of urgency and particularly more emphasis on addressing climate change forcefully.

The GTI’s 2002 assessment provides a valuable and comprehensive analyses of the core variables, dimensions and drivers that persist today—albeit surely not as clear than if a new assessment were to be written today—pointing out at the major disruptors of long-term sustainability, such as inequality, environmental degradation, armed conflicts, overpopulation, social polarisation with neofascist undertones and the cyclical financial crises of capitalism. Parting from the Policy Reform scenario, the specific new paradigm advanced, adds to this scenario a faster pace and care for environmental sustainability by decreasing “materially-intensive lifestyles”.⁶⁵

Nonetheless, the GTI-2002 paradigm has a major flaw, which is that capitalistic/market mechanisms remain. Albeit

The proposal advanced stresses growth with equity but growth and sustainability are an oxymoron, they are utterly incompatible because they move in opposite directions... the nature of transnational corporations and business in general goes in the opposite direction to the tenets of social and ecological sustainability.

closely regulated markets, we would still have a society of consumption and growth. It includes business nodes that strive in partnership with governments, NGOs and the citizenry and work to remain competitive and efficient. It follows that the logic of the market remains. This paradigm ponders around the idea that technological prowess added to market logic and the participation of governments, NGOs and the citizenry along with the undisputed power of transnational

corporations will change lifestyles, values, increase solidarity, decrease inequality and reduce our ecological footprints to sustainable levels using levers such as CSR and progressive taxation schemes including eco-taxes.⁶⁶

However, a system of reproduction and accumulation is still a society of growth, consumption, competition, exclusion and depredation. It is antithetical to the need to drastically cut our ecological footprint, reduce inequality and uphold the entire spectrum of human and nature rights. The proposal advanced stresses growth with equity but growth and sustainability are an oxymoron; they are completely incompatible because they move in opposite directions. Indeed, the nature of transnational corporations and business in general goes in the opposite direction to the tenets of social and ecological sustainability. We need to consume much less with equity, which entails a radically different structure that cannot allow reproduction, accumulation and growth. In the GTI-2002 paradigm, ecological sustainability is important but is not yet the underpinning pillar defining how we need to reorganise to become sustainable. This is why there is no

⁶⁴ ↪ Zygmunt Bauman: *Liquid Modernity*. Cambridge: Polity, 2002.

⁶⁵ ↪ Paul Raskin et al: [Great Transition: The Promise and Lure of the Times Ahead](#), Stockholm Environment Institute - Boston Tellus Institute, 2002, Pp 92.

⁶⁶ ↪ *ibidem* Pp 56, 72 and 74.

consideration of any strategy of degrowth to gradually descend to a stationary-state or steady-state economy (SSE), as an end in itself from the perspective of economic policy.⁶⁷ There is no consideration for the underlying chasm juxtaposed between its agents of change: on one side the premiss of truly democratic governments, NGOs and the citizenry and in the other corporations and all for profit businesses. Essentially, in 2002, the GTI still hoped for capitalism to be fixed and not replaced. That may have been reasonable. In my previous assessment in 2016, I considered that transnational corporations could no longer remain and needed to be dismembered. But I still contemplated a scenario where smaller businesses with shared decision making between owners, workers and communities could work. I no longer think that any kind of for profit entity seeking to reproduce and accumulate should remain, for my increased awareness of the ecological rift has changed everything. Any business will undoubtedly behave following market logic. It will compete to

We need to create an ecological civilisation where we submit ourselves and restrain our presence in the planet to the limits necessary to allow nature to govern us, instead of unrelentingly attempting to conquer nature and its natural laws... It follows that we must surrender to the planet, capitulate as conquerors, and let the planet take the lead and govern us in a sort of Geocratia—government of the Earth. If we don't, we would be destroying the home that nurtures us and accelerating our own demise.

grow and gain market share and demand for its products and services to profit and accumulate, which makes it completely incompatible with with our premiss of drastically cutting consumption to cut our footprint to achieve sustainability. The ecological tipping point is so close that we cannot afford to allow any scheme in pursuit of growth to remain, because that would obviously reduce our capacity to drastically—and at the fastest possible pace—cut our footprint on the planet. Banking on the hope that we still have not crossed the threshold of no return and that we still have time for redressing the current situation, we must reduce before the end of this century our consumption from 1,75 planets a year to one

planet in the same amount of time. The GTI-2002 paradigm had not yet grasped the fact that the ecological rift triggered by the Anthropocene has placed us on the brink of crossing a threshold with no return that completely changes how we must address our pursuit of true holistic sustainability. We would hope that if the GTI prepares a new assessment it would converge to the new reality and put the ecology in the driving seat defining how we should organise to save our home. It follows that both our previous collective visions are outdated.

— Fundamental pillars of “Geocratia”

Parting from the fact that the metabolic rift between humankind and Planet Earth has fundamentally changed everything, I will not explore different speculative scenarios similar to those developed in the GTI-2002 paradigm. Instead, I will describe a basic sketch of the tenets and core components of what I believe necessary to rescue our home and achieve true long-term sustainability. It is about what we need to do to make it happen. Because the fundamental premiss of this paradigm is first rescuing and then preserving the planet at sustainable levels, we must place this premiss at the centre of its collective vision, around which we develop, organise and structure the fundamental pillars and core components of new forms of human organisation. Consequently we must change our perception of humankind from our innate anthropocentrism to regarding us as just another species, another part of nature, and not as conquerors that subjugate the planet to soothe our passions and desires. We need to create an ecological civilisation that, as Fred Magdoff argues, must be the opposite of capitalism.⁶⁸ Correspondingly, we submit ourselves and restrain our presence in the planet to the limits necessary to allow nature to govern us, instead of unrelentingly attempting to conquer nature and its natural laws. Indeed, as argued in the preceding sections of this paper, the only way to achieve sustainability is by radically

⁶⁷ ↪ According to Herman Daly, : “an economy with constant stocks of people and artefacts, maintained at some desired, sufficient levels by low rates of maintenance ‘throughput’, that is, by the lowest feasible flows of matter and energy from the first stage of production (depletion of low entropy materials from the environment) to the last stage of consumption (pollution of the environment with high entropywastes and exotic materials).”Daly [22, p. 16]. For further detail see: Christian Kerschner: Economic degrowth vs. steady-state economy, Journal of Cleaner Production 18 (2010) 544–551, 2009.

⁶⁸ ↪ Ian Angus’s Facing the Anthropocene, Monthly Review Press,2016, p. 196.

redesigning our life systems to be in harmony with the planet and all its ecosystems. It follows that we must surrender to the planet, capitulate as conquerors, and let the planet take the lead and govern us in a sort of Geocratia—government of the Earth. If we don't, we would be destroying the home that nurtures us and accelerating our own demise.

To be sure, materialising Geocratia entails an enormous challenge for human kind, for it requires us to restrain from

Geocratia needs an economy that drastically cuts its size, where GDP and supply and demand cease to have any meaning and are replaced by new indicators of global, regional, national, communitarian and local ecological footprints, along with human development as the true indicators of progress.

many of our passions, particularly those associated with capitalism and its Anthropocene, such as owning, possessing, consuming, having power and conquering. Yet, so is the size of the damage that we have inflicted on our planet, that we have no alternative but to change our forms of organisation from societies of consumption to societies of frugal but dignified qualities of life, a sort of “good living in harmony with our home”.

● *Planetary Sustainability:* The overarching variable is the environment. It follows that it becomes the guiding principle of any initiative to achieve true sustainability. Geocratia is not necessarily the ideal vision, given our innate preference for an anthropocentric vision where we see the planet and all its lifeforms and resources at the service of humankind, even if it is no longer anchored on a capitalist system. Geocratia is what I believe to be absolutely necessary for our survival, by rescuing our home from the Anthropocene. To make it a realistic premiss, we must internalise it to the extent of becoming subjects and agents of change to rescue the planet from today's human footprint. Consequently, Geocratia needs an economy that drastically cuts its size, where GDP and supply and demand cease to have any meaning and are replaced by new indicators of global, regional, national, communitarian and local ecological footprints, along with human development as the true indicators of progress. The etymology of economy is the administration of our house. If Planet Earth is our home, then administering our house takes us back to the original meaning of the term. To cut down

we need to organise outside of the current structures to bring our vision into fruition by peacefully forcing a new Social Contract between society and the planet at each national state, for the owners of the system will never accept it unless we democratically organise to prevail, as in true democracy.

the size of our economy we need to embark on a strategy of degrowth in our consumption for decades, until we finally achieve human and environmental sustainability and therefore move into a steady-state economy of no growth. However, to produce equity and social justice, degrowth must be designed in a way that we increase consumption levels of the billions of dispossessed by capitalism, both in the Global North and South, including the precariat, to provide a frugal but dignified quality of

life. At the same time, we must drastically cut consumption of the privileged and middle classes, both North and South as well, to bring it down to dignified but frugal levels. It follows that, at the end of the process, the ecological footprint of humanity drops to sustainable levels and the gaps between the higher and the lower new standards of living diminishes drastically to a ratio of not more than three times between the highest and lowest quintiles. This strategic transition requires as a precondition a complete replacement of our market-driven consumer cultures, with life systems that centre on the construction of a truly democratic ethos, anchored on the enjoyment of the entire spectrum of human rights, innovative concepts of our use of time that emphasise more personal and leisure time and, lastly, less work organised predominantly in the form of cooperative decision making enterprises and organisations.

Geocratia will not be possible unless we first establish a new ethos of truly democratic practice, which is antithetical with the current marketocratic regime. It follows that because of the inherent incompatibility of true democracy with the current marketocratic ethos that has captured and controls the nation states through so-called representative democracy, the customary structures of power will never agree to replace capitalism to redress the planet and build new systems and

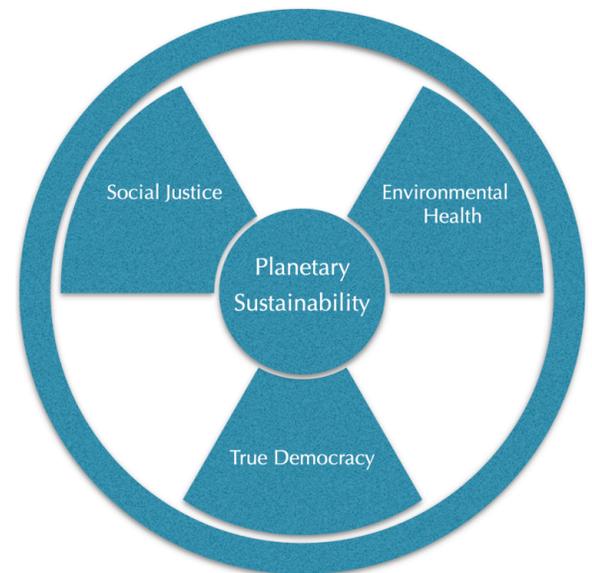
forms of social organisation to materialise Geocratia. Hence, we need to organise and mobilise outside of the current structures to bring our vision into fruition by peacefully forcing a new Social Contract between society and the planet at each national state. We and only we, the citizenry, can make it happen, for the owners of the system will never accept it unless we democratically organise to prevail, as in true democracy. In the last section of this essay, I will elaborate the first steps to get there in detail.

The three tenets and columns of the new paradigm are: True Democracy, Social Justice and Environmental Health, and they represent the contours of our ultimate mission: the sustainability of our planet (figure 1). The three columns are interdependent but building a truly democratic ethos is the factor that will pivot the power to achieve social justice and bring up the health of the planet to long-term sustainable levels. This will in turn make it possible to achieve planetary sustainability. Unless we are capable of transcending from the current marketocratic /autocratic regime to serve the owners of the system, we will never achieve social justice and a healthy planet. Following is a description of the three fundamental columns of Geocratia required to achieve long-term planetary sustainability.

● *True Democracy*: In Geocratia power lies in the Demos anchored on structures of direct and true democratic practice, whose only purpose is to go in pursuit of the welfare of every rank of society—with particular emphasis on the dispossessed—and the planet, in an equitably and sustainable manner. It follows that to accomplish this it must follow a trajectory that goes in the opposite direction to that followed by capitalism. In this ethos, the Demos is permanently in the driver's seat of the public agenda and decision making flows in a bottom-up direction for all relevant matters affecting the sustainability of our new structures and takes place in a liquid manner, always evolving and adjusting as the agoras convene to propose, debate and resolve the agreed course of action on specific issues. It follows that decision making at the executive and legislative branches of government is permanently shared with the Demos. It is an ethos exercising the systematic and customary direct involvement of society in the entire public arena, so that all meaningful government decisions are reached by direct consensus with the demos and not just approved by the different branches of government. This government by consensus should include, preponderantly, the periodic ratification, in short intervals, of all popular elective posts in all levels of government, through referenda, to make those governing, as public servants, truly responsible before those who they govern. Accordingly, this is about making proposals and initiatives emerge primarily from the social fabric towards the branches of government.

Correspondingly, the Demos must accept its social responsibility to be permanently involved in the public matter for its own vested interest, so that the wide spectrum of citizen interests reach the public arena and are debated to reach a majority consensus. We must transcend the reactive behaviour of only participating when we are asked to do so and internalise and adopt a proactive approach to be involved permanently in the public matter, to ensure a truly democratic practice. This is about, as in the old Greek Agora, establishing an ethos that truly reconciles the public with the individual's private interest, always with the common good—the welfare of people and planet—with preeminence over the individual's private good. This is about establishing permanent communicating vessels between communities and

Figure 1. Geocratia's fundamental columns to achieve long-term planetary sustainability



governments at all levels, so that the latter truly command by obeying the people's will. In consequence, this is about processing all public matter decisions of significance (laws, treaties, budgets, economic, social, environmental, foreign, security policies...) through citizen consultations via referenda and plebiscites.

Yet these instruments of citizen-public service interactions must not be carried out as political propaganda campaigns, deprived of objectivity and immersed in manipulation, in which the interests with the greatest power of manipulation generally win. Government initiatives should be carried out simply presenting the options objectively without campaigns for or against them. Obviously, this is about regulating elections in the same fashion. Parties are dismembered in lieu of temporary electoral parties that organise exclusively to support their proposed agenda of government and are dismembered afterwards. Instead of propaganda, concrete and objective proposals for governance are presented by the contending political teams. This is about proscribing all propaganda and all private financing of the candidates' efforts to make their own government plans reach the citizenry. This is about preventing factual powers (extra parliamentary political powers) from tipping the scale in their favour, proscribing in this way mercantilism's corrupting power over politics. This is about providing political contenders equal opportunity to present their governmental offers to the sovereign Demos. This is about ejecting the corrosive power of capital and private interests from public matter. Lastly, this is about establishing a "level playing field" of democratic practice, capable of guaranteeing the full enjoyment of all rights for all members of society. Without a direct, comprehensive, and by consensus democracy it would be impossible to award preeminence to people and planet, establishing an ethos guaranteeing social justice with a healthy environment. As earlier noted, committing to gradually building an ethos of true democracy is not only an essential premiss, but a sine qua non condition, without which, going in pursuit of Geocratia: the ethos where planetary sustainability is achieved and all civic, political, economic, social, ecological and cultural rights are enjoyed under equal terms of participation, is absolutely unrealistic.

Population:

There is an additional critical factor that conditions the achievement of Geocratia, that must be addressed and that cannot be avoided if we are serious about achieving a holistically sustainable ethos. According to many scientist, the world is greatly overpopulated by our species. This is the most wrenching issue to address and resolve. In all certainty it carries the heaviest ethical weight for humanity, for it goes against our deepest essence and against the nature of all living things of Mother Earth. Nonetheless, as we are fully responsible for the Anthropocene, we must seriously consider a drastic degrowth of population. This does not mean a drastic decrease in the rate of population growth but an actual gradual decrease in the world's population. Despite its insurmountable ethical sensitivity, it is not a new topic in the quest for true sustainability. It has been addressed many times and continues to be addressed and debated passionately by many authors. Most authors do not endorse a Malthusian approach, which basically condemns helping the poor and implicitly suggests decreasing their population with a survival of the fittest undertone. In fact, Darwin took Malthus' arguments into consideration when he gradually put together his evolutionary thesis.

I do not think that in a truly democratic Geocratia, we can call for enforcing the drastic reduction of the population as part of its degrowth strategy. Yet, it is unquestionable that to achieve our ideal of a sustainable system, we need to reduce our population gradually but substantially. It is a matter of survival of our species, given the unrelenting impact of completely unsustainable anthropocentric activity on our planet. The first goal—because we are running out of time to bring about a truly effective solution—would be to stop the net growth of the population, ideally, within one generation (30 years); but then we need to continue implementing duly-democratic-endorsed-policies to reduce our population by the end of the century or at the most by mid next century, if we still have time; that is, if we still exist.

The unknown variable is of course whether the planet will grant us enough time to reach this goal so that we can achieve a sustainable equilibrium by transitioning into an eco-anthropocentric era replacing the Anthropocene. This would put the planet and humankind on equal terms. The planet would be healthy in the sense that it would be able to meet the conditions necessary for a sustainable population of our species to extract what they need to live with a level of dignity and comfort that can be sustained indefinitely. In drastic contrast with how we behave today, the eco-anthropocentric nature of Geocratia would be taking good care of the hand that feeds our mouth. The great challenge, however, is not knowing how much time we have. But scientist with global recognition keep sounding the alarm. Lonnie Thompson, an expert on the health of the world's ice sheets, asserts that a majority of scientists are now convinced that global warming poses *a clear and present danger to civilisation*.⁶⁹

The above notwithstanding, there are a number of questions that take us into a conundrum but that communities must democratically resolve. How are we going to take care of the growing mass of old people if we cut the size of the young segments? How are we going to feed the younger and the older segments if they keep growing in a planet with limited resources? How are we going to address the bioethical issue of our innate right to procreate if the planet cannot physically sustain us? There are of course proposals that call for a drastic drop of the population to bring it down to pre-industrial times. One calls for completely disregarding any ethical issues and cutting down the population through drastic policies, evidently undemocratic. This is the case of William Stanton who estimated that the optimum sustainable population for the United Kingdom in 2005 was two million, down from 60 million, and of 200 million for the world, down from 6,5 billion, which must be reached in the next 150 years because peak oil has been reached.⁷⁰ In his book: *The Rapid Growth of Human Populations 1750–2000*, he proposed a Darwinian plan for the UK including banning immigration; every woman can only raise one healthy child; abortion or infanticide is compulsory if the foetus or baby proves to be handicapped; Darwinian policies will weed out the unfit: the life of anyone who becomes more of a burden than a benefit to society—through old age, accident or disease—must be humanely ended. Voluntary euthanasia is legal and made easy; imprisonment is rare, replaced by corporal punishment for lesser offences and painless capital punishment for greater. Stanton believed that this should be carried out with no regard to sentimentalisms since the human race has been completely irresponsible by always assuming that there was no limit, and argued that the alternative would be letting nature take its course, which includes human nature to account for wars and nuclear war.⁷¹

Stanton's proposal is absolutely incompatible with Geocratia. However, we must internalise the idea that we need to reduce the world's population drastically in the next 100 years. How to go about it is something that we must come to terms with for simple ethical reasons. If we do nothing, those who survive in future generations will endure a terrible planet and then nature will take its course, including human nature, in a very Darwinian way. We cannot act by disregarding the entire spectrum of human rights, but, conversely, what would be the ethical justification to keep bringing more children into the world, if the vast majority will be condemned to a life of misery because they will not be able to enjoy most or any of these same human rights in a planet stifled with pollution, with thousands of species exterminated and great scarcity of many of the resources vital for life? Bringing children into a life of misery just because of our primeval instincts and religious and philosophical considerations would be a rather selfish and antithetical behaviour relative to our pledge to respect and protect human rights. Are we going to uphold the right to procreation of present generations over the right to a dignified life of future ones? Hence, we better start now to come to terms with the need to change our systems so that we can reach a sustainable footprint that can provide the necessities to live with dignity to as many people as possible indefinitely.

How many people is sustainable? From a strategy of degrowth perspective, Latouche claims that our ecological footprint crossed the threshold of no sustainability in the 1960s when the world population was three billion, based on the assessment of the availability of the biomass of renewable energies. According to this, even if we take into consideration a lower efficiency in energy production, a stable population of three billion would be realistically sustainable. Another reason is that the potential use of the soil available for agriculture would be far from being depleted because not all the land viable for agriculture is being used.⁷² Latouche reckons that it is possible to gradually reduce the population to bring it down to a steady state around three

⁶⁹ ↪ Greg M. Schwartz: Science and Politics Clash as Humanity Nears Climate Change Tipping Point, 13 March 2016, accessed on 16 May at: <http://ecowatch.com/2016/03/13/climate-change-tipping-point>

⁷⁰ ↪ William Stanton: Editorial: Fossil Fuel Depletion Will Reverse the Population Explosion, *Population Review* / Sociological Demography Press, Volume 44, No. 1, 2005, pp. 75-76 (article).

⁷¹ ↪ William Stanton: *The Rapid Growth of Human Populations 1750–2000: Histories, Consequences, Issues, Nation by Nation*, Multi Science Publishing Co Lt.s. 2003

⁷² ↪ In Silvia Pérez-Vitoria book, "The return of the peasants", 38% of land in the world is viable for farming but less than a third is actually used. See: Silvia Pérez-Vitoria: *Le paysan sont de retour*, Actes Sud, 2005.

billion. We do not really know if this is realistic or too high or too little. In Geocratia, we would need to perform a number of ad hoc and objective studies as part of the deliberations that each national community would need to undertake in order to address this utterly complex issue.

Such a conundrum can only be attempted to be resolved through strictly truly democratic public arenas. This must be carried out with the direct participation of expert analysts not controlled by the system to make a specific assessment of what would be the size of the world's population—in our best estimate—that can enjoy a sustainable life ecologically and worthy of human dignity, at a stationary state. Some of the key variables that need to be taken into account are the effects on the planet and our quality of life of the current completely unsustainable anthropological footprint; the growth of inequality and the emergence of hundreds of millions of *précariat*⁷³ in addition to the billions of dispossessed, which ensued from the lack of social justice and democracy across the world; and the available land for agriculture in line with a sustainable footprint. One sure premise for the steady-state stage is that births need to equal deaths. Moreover, from a national perspective, considering that in most countries there is both migration and immigration, then births plus immigrants must equal deaths plus migrants at whatever steady population level is defined as sustainable. This has to be the kind of truly democratic discussion that needs to be carried out to arrive at a consensus to tackle the population issue. It must be a truly collaborative and consensual decision. Many analysts increasingly agree that population controls cannot be imposed. They must be the product of collective choice that coevolves with a deepening of democratisation.⁷⁴ However, contrary to what some analysts suggest, this must be done in the context of the change of paradigm and design new duly consensual strategies to reduce the world's population.

It is clear that we cannot sustain our current footprint and that in order to drastically cut it in the shortest period of time the reduction of the world's population is of essence. But it is imperative that we understand that we need to do it gradually and by consensus instead of autocratically.

Lastly, below are the key components of Geocratia's truly democratic ethos succinctly described, followed by the redefinition of the key concepts of development, progress and sustainability in this paradigm. I should stress that these are only the basic components. Each national community will have to decide—through a process of duly democratic deliberation—exactly how to promulgate and implement each of them. To be sure, they can add more components or reject some or all, in which case the possibility of transitioning to the new paradigmatic ethos will not materialise. There are many cases where transitioning to a truly democratic ethos appears daunting, almost impossible, because of the cultural and political tenets that, through historical processes of many centuries, have become deeply ingrained in the identities of many nations. Some cases are the United States giving up its army, after practically its entire history waging wars all over the world, or China, giving up on its totalitarian regime, or Israel returning to Palestine all the territories that they have illegally annexed, or many nations allowing plebiscites in many parts of the world where smaller communities with their own national identities want to exercise their right to self determination and found new independent nations. If nations refuse to give up their armies, or repress communities that want to opt for their independence, or have the power to veto other nations, among many other issues that must end, we will never be able to materialise a dignified life for future generations and planetary reactions to the Anthropocene will continue and will put an end to our stupidity:

⁷³ ↪ *Précariat*: social group suffering multiple forms of insecurity formed by people suffering from precarity, which is a condition of existence without predictability or security, affecting material or psychological welfare. See: Guy Standing: *The Precariat – The New Dangerous Class*. Bloomsbury Academic, 2011.

⁷⁴ ↪ François Schneider [a,b,*](#), Giorgos Kallis [a,b,c](#), Joan Martínez-Alier: Crisis or opportunity? Economic degrowth for social equity and ecological sustainability. Introduction to this special issue, *Journal of Cleaner Production* 18 (2010) 511–518, ELSEVIER.

Table 1: Geocratia's key components of its democratic ethos

→ Direct Democracy:	No decision making is made without the direct and public deliberation with the Demos, regardless of whether actions are proposed by the government or by the Demos.
→ Public Agenda:	The Demos is always in control of the public agenda. Organised groups have the right to submit proposals for discussion and approval or rejection in conjunction with legislative branches. Similarly, legislators can put together initiatives up for approval or rejection in conjunction with the Demos. Proposals brought up by the Demos and approved for final vote are subject to plebiscites; if they are brought up by legislators or the executive branch and approved for final vote they are subject to a referendum.
→ Elections:	Temporary electoral parties are organised to compete under equal terms of participation—for all posts in the executive and legislative branches—and are dismembered after each electoral process. All judges in superior courts and in the highest courts of each nation are named through electoral processes and cannot be elected for life.
→ Electoral Confirmations:	The citizenry exercises its periodic right to confirm or revoke the positions of all holders of a public office elected by the people. This is done through temporary juries to be selected by a lottery, following Andrea Surbone's Filopony framework, formed by the people at all levels (local, municipal, provincial and national). Temporary juries are drawn among the entire population of a political jurisdiction to assess the performance of all electoral posts in line with the campaign proposals during the election. (Dunia Astrologo, Andrea Surbone, Pietro Terna: <i>Il Lavoro e il Valore all'epoca dei Robot</i> , Meltemi, 2019, P 101).
→ Human Rights:	The entire spectrum of human rights (civil, political, economic, social, ecological, cultural, gender, animal...) are upheld in a new and binding and universal declaration of human rights and closely protected.
→ Population:	Procreation is a fundamental human right, but communities will democratically decide if they want to commit to decreasing their population, by how much, how fast or if they refuse to do it, which is also their prerogative.
→ Multilateral organisations:	A new UN is created under equal terms of participation for all national communities, with no veto power and no privileges for any nation under the premiss of one vote for each member.
→ Self-determination:	Communities enjoy the right to self-determination. This provides the route for communities to become independent if they so choose through objective mechanism to execute plebiscites. In this way, communities, such as Kurds, Palestinians, Catalonians, Scots and many others can opt for their self-determination as independent national communities in their territories, based on the values and cultural identity that each community chooses.
→ Armed forces:	Military forces of any kind are permanently proscribed and cease to exist, as the fundamental step to achieve true peace worldwide.

Development, Progress and Sustainability — re-conceptualising their meaning:

As should be expected with the change from marketocracy to Geocratia, fundamental concepts in the assessment of activity in the different forms of social organisation (nation, province, municipality, town, community...) are redefined as we transcend from capitalistic consumer societies to an ethos of sustainable democratic societies. These concepts are development, progress and sustainability and are closely connected and are interdependent. You cannot have development if you do not progress on your objective and, for the same reason, you cannot progress if you do not develop. Similarly, you cannot develop or progress if your trajectory is not sustainable through time.

Development and Progress are fundamental elements in our welfare, but evidently they need to be detached from capitalism and redefined in the same way that the only true sustainable development is development without growth. Development usually refers to a specified state of growth or advancement. In Geocratia, development implies always advancement, a better state than the present one; yet without requiring more growth, more reproduction, more consumption and more accumulation of resources, material and pecuniary. The same goes for progress. We progress when we get closer to our aspiration of a better quality of life not just for our species but for all living things with less consumption of resources. Thus, we achieve progress every time we advance in our goal to reach a general level of welfare that is truly sustainable in the long-term. In other words, progress must be directed at developing the state where we reach an equilibrium between a generalised level of welfare and a sustainable ecological footprint. We progress when we lower our consumption of resources but enhance the general level of welfare by increasing efficiencies, by in turn distributing far better the consumption of the resources required to achieve such a state. This will also allow us to concurrently achieve social justice. This would give a new meaning to development in Geocratia. True development and progress take place in perfect sync with the purpose of true democracy: The welfare of all ranks of society, and the planet, in a sustainable manner, regardless of private interests.

From this new perspective, the public good always has precedence over the individual's private good. We cannot pursue our individual private interest at the expense of the health of the planet and the general welfare of the population: the public interest. But what is the public interest? In the new paradigm, this can only mean the exercise of truly democratic actions—actions that we define as human communities—to accomplish the general and sustainable level of the welfare of people and planet. True development and progress are the development of human wellbeing—being able to enjoy our rights and comply with our responsibilities—and of a material quality of life in harmonious coexistence with a healthy environment, including preponderantly all living things, so that our global ecological footprint becomes sustainable at a stationary state much lower than at the present level of ecological impact.

Along the lines of social scientists who have been advocating an ethos of no growth (Latouche, Harribey⁷⁵, Custers, Stoll, et al), development would mean the democratically-balanced development of all members of society who would enjoy access to the opportunities and resources necessary to develop and use their own potentialities to benefit themselves and their communities. Communities embody all living things and all lifeless resources provided by Mother Earth. In Geocratia, societies establish a balanced culture of use of all natural and manmade resources to provide a high quality of life standard. For instance, efficiency and productivity will still have enormous value in developing processes that would provide the amount of electricity needed for a city to function adequately by consuming far less energy and contributing far less as well to global warming, deliberately avoiding the Jevons Paradox.⁷⁶ A city that functions adequately with far less energy consumption—both at its input and output—by definition generates a far smaller ecological footprint, which, concurrently, can be sustained. This would be achieved by changing energy consumption habits, the technology used to generate the required electricity from less energy as well as the use of more renewable and less non-renewable sources of energy, until we eventually reduce to its minimum the use of any energy that pollutes the environment and contributes clearly to global warming, namely: the complete obsolescence of fossil fuels. Nonetheless, this does not mean producing more so-called “green growth,” which, through increased efficiencies, would be bound to produce more consumption and consumerism, as in the Jevons paradox. We must increase our efficiencies to produce

⁷⁵ ↪ Serge Latouche: Why less should be so much more?, *Le Monde Diplomatique*, November 2004, and Jean Marie Harribey, Do we really want development? Growth, the world's hard drug, *Le Monde Diplomatique*, August 2004.

⁷⁶ ↪ The Jevons Paradox materialises when new technologies increase efficiency and—under a market logic—increase demand due to a rebound in consumption levels.

the energy levels necessary to enjoy high-quality-of-life standards, but such standards must be clearly detached from the consumeristic expectations of the current marketocratic paradigm. Thus, once again, the high-quality standard would be the level set by all stakeholders—through true democratic interaction—that provides the maximum level of fulfilment of true societal needs. To determine what are true societal needs, Michael Dawson poses four questions of true ecological sustainability for any product that is produced: 1. *Material Intake: How much and what types of material does making the product extract from the environment?* 2. *Material Output: How does the product end up putting materials back into the environment, in the form of manufacturing, product operation, and garbage/recycling wastes?* 3. *Energy Use: How much total energy does manufacture, use, and recycling of the product require?* 4. *Alternatives: How does the product in question perform in the above three areas versus available alternative means of performing the same type of work facilitated by the product in question?*⁷⁷ If they do not answer the four questions—especially the fourth question—in a way that they indisputably meet the criteria of true sustainability, then they are rendered superfluous, are unsustainable and embody the opposite of development and progress. Furthermore, if a product is sustainable because it complies with all four questions, but is frivolous, because it fulfils an artificially created need, then it should be rendered unsustainable, because it inexorably carries its own footprint, which would contribute to increase a community's overall footprint, making it harder to achieve sustainability for the sake of an unnecessary need.

This high quality of life standard is inextricably linked to the consumption of energy in a way that produces a truly sustainable ecological footprint. This is done in such a way that the right equilibrium is achieved when non-renewable energy resources—that have already been depleted or rendered obsolete—are replaced with renewable energy resources that provide the energy required to fulfil the needs for the adequate functioning of the previously determined high level of life standard, and this is done in a way that secures long-term sustainability to all stakeholders of the community. To be sure, some non-renewable energy sources, such as oil,⁷⁸ inevitably will be depleted in the future. But, under Geocratia, these resources would be depleted rationally, which means they would gradually be replaced by renewable resources that are used with maximum efficiency in their intrinsic value and in their long-term sustainability, with no regard for the then already redundant expectations of financial markets that will no longer play a role. Moreover, the use of renewable resources (solar, wind, water, geothermal...) would be used in a way that their ecological footprints are technologically reduced very meaningfully to the levels that guarantee their long-term use sustainably.

As for Sustainability, in Geocratia it must provide a high-quality standard of existence to the economic, social and environmental dimensions. This entails that there must be balance in each of these dimensions so that its participants—human beings, nature and the planet as a whole—can enjoy a high-quality level of life and a balanced use of both animate as well as inanimate resources (water, sunlight, wind, metals and many other chemical elements and compounds). Balance requires that no participants thrive at the expense of others; a condition that automatically makes redundant the logic of the capitalist market. It follows that if sustainability is anchored on the balance of each dimension, true sustainability cannot be achieved only by eliminating capitalism's economic injustice, by lifting people out of material poverty and incorporating them into the market as literally billions of new alienated consumers who would then have the power to consume from thousands of products and services of which they are currently deprived. Instead we must increase the footprints of the dispossessed to dignified levels and drastically decrease the footprint of the rest, so that we reach a sustainable global ecological footprint. To be sure, we do not want to live like in the US, consuming five planets a year, and with inequality growing rapidly; nor like in India, consuming 0,72 planets a year, but with hundreds of millions of paupers always in peril of falling into famine conditions. We need to live with a global ecological footprint of less than one planet, but that by changing our life systems we would distribute far better the resources to allow everyone to live with dignity. It follows that true sustainability would be in itself a new paradigm that must entail not only replacing capitalism with a system that is socially equitable, but it will need, at its very core, to replace its DNA, with a new culture with an ethos that allows people to develop their own capacities to contribute to and take from their communities in an equitable and environmentally-balanced way, and not based on today's completely irrational and unsustainable consumption of our planet and its sources of energy. Similar to what Ozzie Zehner rightly asserts, the world does not have an energy crisis but a consumption crisis.⁷⁹

⁷⁷ ↪ Michael Dawson: [Electric Evasion](#), Counterpunch, 15 October 2010.

⁷⁸ ↪ Robert L. Hirsch, Roger Bezdek, Robert Wendling, Peaking of World Oil Production: Impacts, Mitigation, and Risk Management, National Energy Technology Laboratory of the Department of Energy, February de 2005.

⁷⁹ ↪ Ozzie Zehner: *Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism (Our Sustainable Future)*, University of Nebraska Press, 2012, Pp positions on e-book 667 and 675.

● *Social Justice*: Putting an end to the completely unsustainable dictatorship of the market to build Geocratia represents a rather challenging conundrum. How can we reconcile the inherent *raison d'être* of democracy, which is social justice, and build its edifice in such a way that we produce new and permanently sustainable ecological footprints? If we want to

The remuneration people earn for their contribution is of a living sort that enables people to fulfil all of their basic necessities and the other inputs necessary to enjoy a dignified quality of life standard, but frugally and sustainably.

build a new ethos of social justice, we need to drastically reduce inequality. This in turn requires providing greater consumption of resources to billions of dispossessed people around the world so that they can enjoy a dignified material life standard. However, this moves in the opposite direction of our urgent need to drastically reduce the ecological footprint of the human species. It follows that we must achieve both premisses: social justice and ecological sustainability. The

trick is to make Geocratia fulfil both premisses by striking the right balance.

Let us envision how this balance can be accomplished. In Geocratia capitalism has ceased to exist, but we still function as societies that work and continue to consume a plethora of natural resources for our functioning. However, we no longer have the capital-labour relationship with the inherent surplus value and the customary and systematic exploitation of labour in favour of the shareholder value of capitalism, nor do we generate unsustainable levels of consumption. In the new paradigm, people work under completely different organisational and production arrangements and earn a remuneration for their work, as part of their contribution to the well-being of the community and its ecological systems. The remuneration people earn for their contribution is of a living sort, of a dignified nature, that enables people to fulfil all of their basic necessities for food, housing, clothing, energy, water, transportation and all the other inputs necessary to enjoy a dignified quality of life standard, but frugally and sustainably. It follows that the concept of the living wage becomes a moot point. People will have a basic income plus a remuneration for their community work, whatever it may be, and, additionally, far more personal time to be used for leisure, community work, cultural activities, aesthetics and so on. People will also have the right to free education and healthcare as well as social services, such as childcare, when needed. All of this, once it is implemented across nations, would lift billions of dispossessed people out of poverty permanently. It follows that their consumption levels and ecological footprint will increase to a very substantial degree, sometimes manyfold what they were under capitalism. The question is how do we accomplish this by concurrently achieving sustainable levels of consumption of resources under such a proposition? The only way is to radically change our cultural values, patterns and concepts determining our consumeristic lifestyles. This entails a complete change of culture and rethinking of our forms of social organisation. As earlier noted, we do not have an energy crisis but a consumerism crisis infused by capitalism because that is the sole underlying cause of the metabolic rift that is driving us to the brink of falling into our final cliff of self annihilation.

In Geocratia, the remunerations for the work of people guarantee, from the lowest level upwards, a high quality of life standard that secures a sustainable life worthy of human dignity. Yet, currently, the perception for a “high quality of life standard worthy of human dignity” is greatly influenced by the expectations of a consumerist culture by contemporary commercialism. To transcend the market and build Geocratia, such a perception must be transformed—in sync with the ecologically-sustainable standards of the new paradigm—to detach it from the excesses associated with consumerism. In this sense, because economic development and wealth no longer have the capitalistic meaning, they translate into new indicators that measure increments in the level of sustainability—by reducing our ecological footprint in all aspects on the life of people—to assess whether we are progressing in our new development goals. Daly asserts that growth is more of the same stuff, whilst development is the same amount of better stuff.⁸⁰ It follows that to cut our footprint, better

⁸⁰ ↪ Herman E. Daly: A Steady-State Economy: Sustainable Development Commission, UK (24 April, 2008)

stuff must be much less stuff instead of the same, and it must be truly necessary and fairly distributed. These indicators would measure the development of human capacities anchored on the premise of solidarity and true sustainability. The vision with greater emphasis on the sustainability of a future global society is embodied by the concept of progress without growth and much less consumption or, as many proponents increasingly defined it: a degrowth economy,⁸¹ until we arrive at a sustainable stationary state where the vast majority of the population lives in an ethos of deliberate and balanced equity.

This is about a post-capitalist economy that only consumes what is necessary to sustain a high level of welfare for all, where GDP growth is meaningless. True progress is then weighed through indicators that assess the quality of human life

Mansholt warned back in 1971 that we—humankind—were bound to suffer a great debacle if we did not change our philosophy and its system. With great foresight, Mansholt asserted that the “Great Crisis” would start around 1985-1990 and reach its climax around 2020.

and the size of its footprint on the environment. This does not mean recession or depression. The aforementioned economic concepts of growth, development and progress are detached from the illusionary and unsustainable market-driven ethos and recast with new meanings and concepts that reflect Geocratia’s ethos. The measure of high progress is a high human development standard with an

environmental footprint far below the current one, just enough to have a dignified level of comfort; not consumerist, not hedonist, not individualist, but with ideal health, nutrition, education, clothing, housing, leisure and community responsibility standards and anchored on the consumption of renewable energy sources instead of fossil energy. Human work is driven by the generation of welfare for people under completely new criteria defining society’s high-quality of life standards worthy of human dignity.

The idea of completely rethinking our forms of social organisation to replace capitalism is not new whatsoever. In the early 1970s Sicco Mansholt, at the time President of the Commission of the European Common Market, who pretended to reorganise an “inhuman plan for Europe’s agriculture,” unexpectedly and radically changed his posture and advocated a truly visionary systemic change. In an interview he said that *suddenly I realised that we needed to radically change the whole of our system; the humane Europe, with zero growth, must abolish the concept of gross national product to promote the gross national happiness*. Mansholt warned back in 1971 that we—humankind—were bound to suffer a great debacle if we did not change our philosophy and its system. With great foresight, Mansholt asserted that the “Great Crisis” would start around 1985-1990 and reach its climax around “2020”. He considered that the first victims would be the peoples of the developing world, but soon after it would encompass the whole of humanity. Mansholt argued that all of this becomes so evident using simple algebraic calculus—without the help of computers—that he could not understand why the governments did not show much concern. Hence *I am convinced that we must completely and rapidly modify not just our policies but also our behaviour*. He said that given the limits that we have to face long term—in the production of energy, food, iron, zinc, etcetera—thirty years from now, when we double our population to more than seven billion, achieving zero growth would not be sufficient to cope with the problem. That is, we would need to replace our material growth for other growth anchored on culture, happiness and wellbeing.⁸² Mansholt’s perception shows that concluding that our present situation and its driving system is unsustainable, is not of the exclusive purview of scientists of our time, because it is so blatantly evident, and all the more so fifty years later, that it has become basic common sense. Indeed, in the XIX Century, one of the first economists to think about the concept of SSE was John Stuart

⁸¹ ↪ Serge Latouche, Degrowth economics. Why less should be so much more?, Le Monde Diplomatique, November 2004, and Jean Marie Harribey, Do we really want development? Growth, the world’s hard drug, Le Monde Diplomatique, August 2004.

⁸² ↪ Josette Alia, The Path to happiness, Revista Triunfo: Num 508, published 24 June 1972. Accessed on 26 April 2016 on <http://www.triunfodigital.com/mostradom.php?a%F1o=XXVII&num=508&imagen=11&fecha=1972-06-24>

Mill. He devoted an entire chapter to it. He wrote: *It must always have been seen, more or less distinctly, by political economists, that the increase of wealth is not boundless : that at the end of what they term the progressive state lies the stationary state, that all progress in wealth is but a postponement of this, and that each step in advance is an approach to it.*⁸³ Consistent with his socially-sensitive ethics, he thought about the SSE as a positive and ideal state. *But the best state for human nature is that in which, while no one is poor, no one desires to be richer, nor has any reason to fear being*

The goal must be to transform pervasive poverty into dignified levels of welfare, with a global ecological footprint that would have to gradually diminish over the next decades, but that would need to relatively increase in the strata stricken by poverty, until they reach dignified levels of welfare.

*thrust back by the efforts of others to push themselves forward.*⁸⁴ The fact is that, parting from the unquestionable realisation that we are part of a planet with limited resources, we are forced to drastically cut our consumption of resources until we reach a state where we can sustain our ecological footprint; ergo, until we reach a state where we—

and all other species—consume no more energy than what the planet can replenish in the same span of time. This would be the moment where we reach a sustainable SSE after many generations of a consistent decrease of our energy consumption.

The balancing act of concurrently addressing environmental health and social justice in Geocratia requires true sustainable human development with radically different levels of consumption. Thus, relative to the urgent need to materialise the social demands of one billion people who live in dire poverty—and also to lift from poverty at least another 2,6 billion people who endure relative poverty deliberately ignored in the assessments of multilateral organisations—development policies affecting the entire population must be anchored on wealth redistribution and not on any kind of growth as an end in itself. Today, if there were a reasonable degree of social justice, there would not be poverty keeping the same level of material and energy consumption currently recorded, albeit our footprint would still be unsustainable. Surely, the world would not have opulent societies but fair societies with a good quality of life. True democracy does not pretend opulence but just and sustainable levels of welfare. This implies, in practical terms, that we could have years of progress with no GDP growth, if the GINI index of inequality and the Human Development Index were to gradually improve while concurrently we increase efficiency in our energy consumption to decrease our ecological footprint. Certainly, as in the case of Keynesian economics, we need to aggregate demand in the pockets of the dispossessed, but not with the goal of putting net consumption per capita at par with those of the middle and upper classes of the world. The goal must be to transform pervasive poverty into dignified levels of welfare, with a global ecological footprint that would have to gradually diminish over the next decades, but that would need to relatively increase in the strata stricken by poverty, until they reach dignified levels of welfare.

In Geocratia, at the same concurrent lapse that we increase consumption and, inevitably, the footprint of the dispossessed, the social strata with an unsustainable ecological footprint will have to drastically reduce it. The ecological footprint in 2016—the relationship between ecological impact and biocapacity, measured in hectares, recorded a deficit of 1,1 hectares per capita, equivalent to 69% of the world's biocapacity (chart 1).⁸⁵ In the U.S, the deficit was of 4,5 hectares per capita or 125% of its biocapacity, and China had a deficit of 2,7 hectares per capita or 270% of its biocapacity. These constitute two of the worst footprints in the world because their consumption of resources is far greater than their capacity to sustain them. In contrast, Bolivia, Brazil, New Zealand, Australia and Canada recorded some of the best ecological reserves in the world, (12,6, 5,9, 4,6, 5,6 and 7,4 hectares per capita respectively),

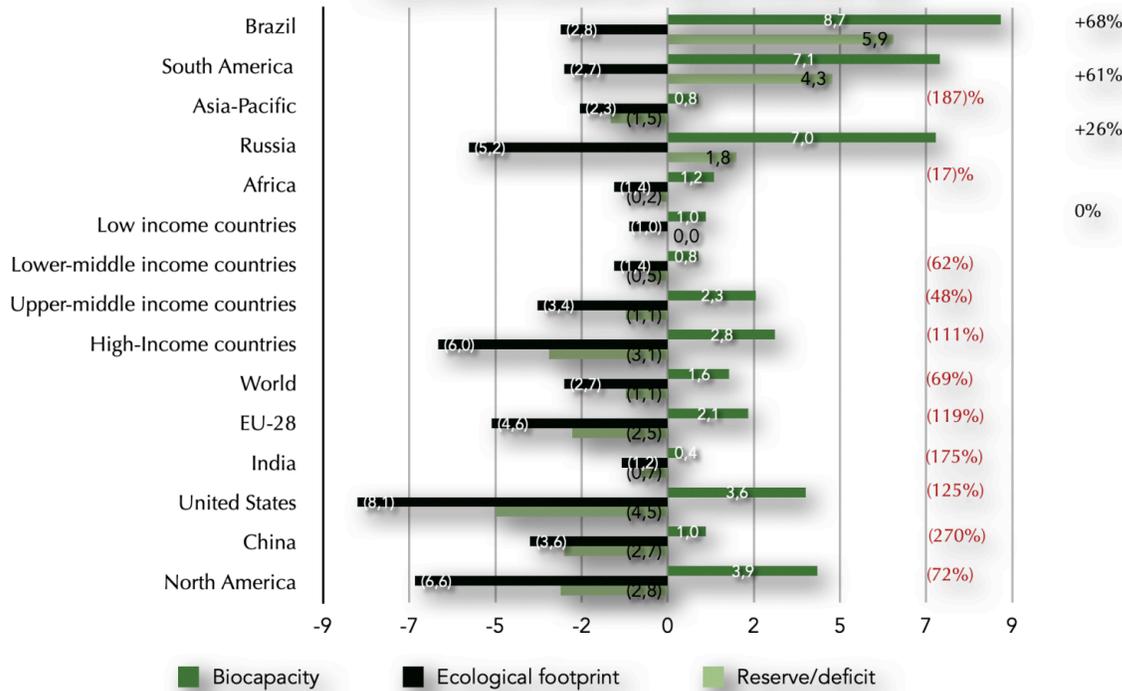
⁸³ ↪ John Stuart Mill: Principles of Political Economy, August M. Kelley Publishers, p. 746.

⁸⁴ ↪ *ibid*, p. 748.

⁸⁵ ↪ [Global Footprint Network. 2019 Edition National Footprint and Biocapacity Accounts \(data year 2016\)](#) (NFA 2019 Public Data Package_v3).

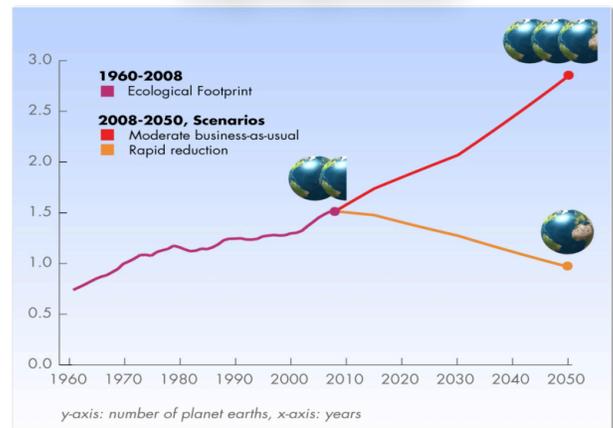
tantamount to 80%, 68%, 49%, 46% and 49% of their biocapacity respectively.⁸⁶ Ecological deficits are prevalent in practically all of Asia, Europe, North and Central America and the Caribbean. Only South America and Oceania have good ecological reserves while Africa had a small deficit.

Chart 1: 2016 Ecological Footprint and Biocapacity
 – surplus/deficit in hectares and % (global hectares per capita)



We are running a very dangerous ecological overdrive that depletes ecological reserves and renders unsustainable footprints that turn resources into waste faster than they can be turned back into resources. It follows that to build new life systems that can produce sustainable levels of social justice, the world must focus on the development of a wealth redistribution model with a long-term tendency towards much lower energy consumption levels than at this time. This does not entail a proportional reduction in the quality of the welfare of well-off strata per se, but a new conception of quality of well-being with a drastic reduction of materials and energy consumption (chart 2), increasing efficiencies and replacing fossil energy use with renewable energy sources and exponentially consuming more recyclable materials that generate a rather small ecological footprint vis-a-vis the original materials. It entails as well a drastic change in consumer values and habits, eliminating an enormous amount of artificially created needs and frivolous appetites for possessing hedonistic things and services that are completely unnecessary for new and desirable standards of living. Moreover, our civil responsibilities must take

Chart 2: 1960 - 2008 Ecological Footprint and 2008 - 2050 Ecological Footprint Scenarios



⁸⁶ ↪ [Global Footprint Network. 2019 Edition National Footprint and Biocapacity Accounts \(data year 2016\) \(NFA 2019 Public Data Package_v3\).](#)

precedence over our consumption habits, culturally transforming our values scale and concept of material well-being. As Stiglitz, Sen and Fittoussi asserted over a decade ago, the time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people's well-being.⁸⁷ Hence, GDP in Geocratia becomes a relic of the capitalistic mode of production, to be replaced by indicators of human development and ecological sustainability.

In Geocratia our consumption carries both rights and responsibilities. Thus, we ought to change our habits to make them compatible with adequate norms for sustainable consumption; from eating, cleaning and clothing habits to leisure and transportation habits. Norms that inevitably will also change the supply of goods and services offered by an, unequivocally, closely-regulated market. Consumer choices, consequently, must deliver far less hedonism and far more citizen efficiency and responsibility, in our role as socially and environmentally responsible consumers. Chart 2 provides a clear perspective on the challenge that we are facing under the current market-driven paradigm. The Global Footprint Network rightly asserts: *Today (2008) humanity uses the equivalent of 1,5 planets [1,75 planets in 2019] to provide the resources we use and absorb our waste. This means it now takes the Earth one year and six months [nine months in 2019] to regenerate what we use in a year. Moderate UN scenarios suggest that if current population and consumption trends continue, by the 2030s, we will need the equivalent of two Earths to support us.*⁸⁸ *And of course, we only have one. Turning resources into waste faster than waste can be turned back into resources puts us in global ecological overshoot, depleting the very resources on which human life and biodiversity depend. The result is collapsing fisheries, diminishing forest cover, depletion of fresh water systems, and the build up of carbon dioxide emissions, which creates problems like global climate change. These are just a few of the most noticeable effects of overshoot. Overshoot also contributes to resource conflicts and wars, mass migrations, famine, disease and other human tragedies—and tends to have a disproportionate impact on the poor, who cannot buy their way out of the problem by getting resources from somewhere else. To end the overshoot, the Earth provides all that we need to live and thrive. So what will it take for humanity to live within the means of one planet? Individuals and institutions worldwide must begin to recognise ecological limits. We must begin to make ecological limits central to our decision-making and use human ingenuity to find new ways to live, within the Earth's bounds. This means investing in technology and infrastructure that will allow us to operate in a resource-constrained world.*⁸⁹ It means taking individual action, and organising to force a new binding contract between humanity and our home.

Many observers believe that we must cut our ecological footprint by one-third by 2050 at the latest, if not much earlier.⁹⁰ A universal basic income and work remunerations that secure dignified standards of living for the dispossessed, if followed by drastically-reduced consumption and waste by the affluent, would bend the curve of unsustainable consumption toward a sustainable trajectory. Chart 3 illustrates—paralleling the rapid reduction scenario of the Global Footprint Network that advocates the need to cut our energy consumption by about one third by 2050—how this trend might diminish our global footprint while achieving the equity outcome a living remuneration represents by 2060.⁹¹ To accomplish this, the affluent would need to cut their per capita hectare consumption by about three-fifths whilst poor people would increase it by about threefold.

⁸⁷ ↪ Joseph E. Stiglitz, Chair, Amartya Sen, Jean-Paul Fitoussi, Report by the Commission on the Measurement of Economic Performance and Social Progress, The Commission on the Measurement of Economic Performance and Social Progress" (CMEPSP) 2009.

⁸⁸ ↪ Planet equivalent(s): Every individual and country's Ecological Footprint has a corresponding planet equivalent, or the number of Earths it would take to support humanity's Footprint if everyone lived like that individual or residents of a given country. It is the ratio of an individual's (or country's per capita) Footprint to the per capita biological capacity available on Earth (1.6 gha in 2019). In 2019, the world average Ecological Footprint of 2,7 gha equals 1,75 planet equivalents. See: <http://www.footprintnetwork.org/en/index.php/GFN/page/glossary/#overshoot>

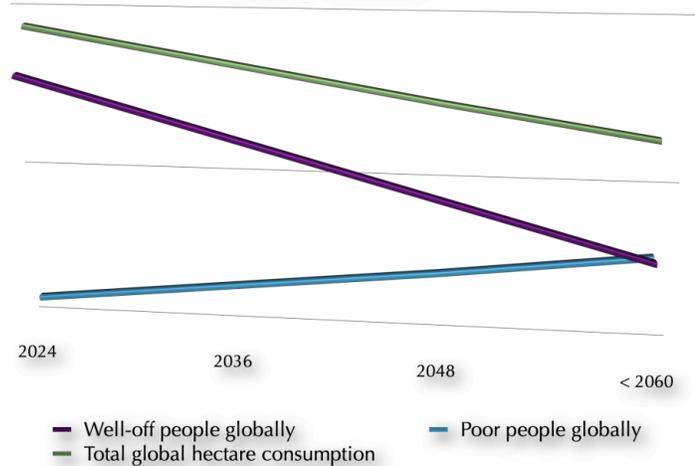
⁸⁹ ↪ Global Footprint Network : World Footprint, 2010.

⁹⁰ ↪ Many environmental scientists consider that our footprint needs to be reduced substantially at a faster pace than by 2050. See David S. Wood and Margaret Pennoc, *Journey to Planet Earth – Plan B: Mobilising to Save Civilisation, Educators Guide*. (Washington, DC: Screenscope, 2010).

⁹¹ ↪ Global Footprint Network, World Footprint, accessed on January 9, 2014, http://www.footprintnetwork.org/en/index.php/GFNpage/world_footprint/.

Evidently, this could only be realistic if we radically change from capitalism to Geocratia with a completely different consumer and energy use culture and agree to gradually reduce our population. This does not mean, whatsoever, that well-off people would cut their standard of living by three-fifths, but it means that they would need to drastically cut their energy use and their production of waste by three-fifths by radically changing their consumer habits. Concurrently, poor people would increase their energy use and, irremediably, their production of waste, because they would be lifted out of poverty, by working in local communitarian projects or contributing as stakeholders to the goals of the socially and environmentally balanced enterprises of the new paradigm, as previously discussed. Yet, their consumer and energy use habits would also be radically different from those prevalent today. The strategy proposed in chart 3 would be anchored on degrowth economic policies, not as an

Chart 3: Hectare consumption per capita
2024 - < 2060



end in themselves but as a means to achieve sustainability and then keep “steady-state” stationary economies with no growth in our per capita and global footprints. The end result would be that the total global energy consumption footprint would decrease by about 40%. As a whole, consumer behaviour must be fully socially and environmentally conscious. Hence lifestyles and their standards of living would, accordingly, be dramatically different.

● *A Healthy Environment:*

Making the transition to sustainable healthy ecosystems requires rescuing as much as possible the conditions that prevailed before the Anthropocene produced the metabolic rift between the planet and humankind, which in practice can be measured effectively using the ecological footprint of human activity on each ecosystem. Our measurable goal is to return to recover our ecological systems to a point where we would no longer be crossing any of the nine planetary boundaries, discussed in the section “Trespassing the Threshold of no Return and Rectification”. Parting from the fact that the underlying factor of our sustainability crisis is consumption, the ecological footprint refers to the footprint of consumption. It represents a measure of the amount of biologically productive land and water required to meet the consumption needs of an individual, community or a specific activity as well as the capacity to absorb the waste generated, in the context of today’s technologies.⁹² It follows that, because it determines the amount of land necessary, it is measured in global hectares, but it may also include sea surface used by any kind of human activity.

As previously explained, the only way to radically drop our footprint is by drastically reducing our consumption of the Earth’s resources, including energy. In an axiomatic sense, we can only aspire to do that by radically changing our life systems and living standards. This will enable us to drop our consumption of resources and the energy required to produce much of what we consume, from food to clothing, electricity, appliances, public infrastructure and transportation. We must also transcend from the predominant use of fossil to renewable energies. Nonetheless, as earlier explained, the use of renewable energies is not by any means the same as clean energies. Renewable energies such as solar, wind, biomass and water carry a very meaningful ecological footprint, and sometimes, as in the case of biomass and biofuels, produce very damaging and unsustainable footprints to the point that in some cases they may be as bad as

⁹² ↪ Global Footprint Network, [Glossary](#), accessed in May 2020.

those of fossil energies.⁹³ And this does not take into account the increasing diversion of food crops to biofuel production in a socially constructed scarcity of food imposed by marketocracy.⁹⁴ Hence, we must become cognisant about the illusions of the “green energy”, “green business” and “green new deal” deceptions because there is no magical solution that can solve our damaging impact to the planet by using so-called “clean energies”.

Although there is no perfect solution, there is a sustainable approach to reduce our footprint by relying on renewable energies using technologies and systems that allow us to closely regulate their use in a balanced manner, to achieve maximum efficiency to reduce their footprint and sustain their reproduction. Furthermore, although technologies should seek to increase energy efficiency, they should not seek to increase energy demand. As a central element in the balancing act of managing our use of energies, we must become distinctively aware that technologies should not envision efficiency as a means to increase our energy demand so that, subsequently, as individuals, we increase our use of more devices that will consume energy more efficiently.⁹⁵ This would put us completely in line with the Jevons Paradox, where if we increase our consumption of energy we would entirely disrupt all plans to cut our footprint and would take us right back to where we started. Investing millions in wind, solar, geothermal, biofuels or water would do little to rescue our planet if we do not end capitalism’s inherent need to grow. It follows, once again, that the only way to drastically reduce our footprint and build a healthy environment is by cutting our consumption. Correspondingly, the only way to do it is by detaching the management and production of all energies from the profit motive, which will only be possible if we build Geocratia to replace capitalism. It follows that if we cut consumption we cut our footprint and in turn move to a state where we would not cross any planetary boundaries. This would produce a healthy planetary environment.

by saving our home we save ourselves

At the core of Geocratia is the transition into a new culture of husbandry of our planet. This requires building new lifestyles in a way that people embrace them with conviction “to take care of our home”, and clearly understand them as directly and very tangibly benefiting us in the present and as a bequest for our future generations. Because by saving our home we save ourselves, all the components of Geocratia’s new life systems are organised and are interconnected to achieve a truly sustainable environmental health. It follows that we need to imagine new sustainable lifestyles radically different from the current ones marred in enormously damaging footprints. This paper does not pretend whatsoever to determine exactly how the new lifestyles should be. This is only possible through an ongoing working effort that will be defined by communities through democratic consensus and will produce many different versions of truly sustainable systems. Herein we are only advancing some of the fundamental features of the new forms of social organisation from an ecological-economic perspective anchored on truly democratic tenets. In all certainty, to change our life systems, there are many barriers that must be overcome. These are the political, economic and social structures that emanate directly from monopoly capital and that are encroaching on the so-called democratic institutions of society. The first steps to replace them is covered in the last section of this work. Table 2 presents a non-exhausting list of the core components that need to be incorporated into Geocratia and its new life systems to achieve a healthy and sustainable ecology. It follows that humanity is only part of this ecology, but with the ability to raise it according to natural laws and not to conquer and violate them. Essentially we need to use renewable energies sustainably to feed new lifestyles and a political economy that consumes a lot less and abandons completely any adherence to a culture of material growth. It goes without saying that these components are envisioned in the context of the new Social Contract that the peoples of the world would strike between humankind and our planet at the heart of the Geocratian paradigm.

⁹³ ↪ Ozzie Zehner: Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism (Our Sustainable Future) U. of Nebraska Press, 2012, p. 334.

⁹⁴ ↪ Okbazghi Yohannes: The Biofuels Deception — Going Hungry on the green Carbon Diet, Monthly Review Press, 2018, Pp. 96.

⁹⁵ ↪ When new technologies increase efficiencies, they typically reduce prices of the commodities in question. This in turn increases their demand, resulting in the Jevons Paradox. This elicits the greater use of the technology, resulting at the end in the greater use of the same resource than what was used with the previous version of the technology.

Table 2: Core Components of a Planetary Sustainable Ecology

<p>→ Energy</p>	<p>There is a gradual but fast transition to renewable energies from fossil energies. This must be made in a balanced manner in order to achieve sustainability. Technology will play a key role in incrementally making the production of renewable energies more efficient. All human activity that requires energy will also bank on technology to increase efficiency exponentially at the end use side of the process. Yet the key factor in achieving sustainability will be the drastic reduction of energy consumption by society at all levels, as a direct result of a radical cultural change in our forms of social organisation and individual lifestyles. Regulati</p>
<p>→ Economy</p>	<p>The economy is anchored on systems of production designed to fulfil the demands of goods and services consumed by the frugal but dignified standards of living deemed by the communities to achieve sustainable ecological footprints. It is an economy of collaboration, sharing and redistribution. The core indicators to measure economic progress and development are the ecological footprint, human development and equality/ inequality indices. Indicators such as GDP, GNP, income, inflation, exchange rates, etcetera, from the marketocratic paradigm, will no longer serve a purpose.</p>
<p>→ Currency:</p>	<p>Geocratia lacks a monetisation concept based on accumulation. Instead, it uses a concept developed by Andrea Surbone in his “Filopony”, denominated as “Social Esteem Certificates” (SECs). Goods and services available in the market will be exchanged using these currency units. Instead of being based on competition for accumulation, the SECs are anchored on a culture of collaboration, making money a virtual form of exchange that makes financial markets, lending, debt and interests redundant. The SECs are used as units for the remuneration of work for the community. The SECs can be managed by a software application, have a fixed value and are personal, because they can only be used by the holder, and are ephemeral because they are cancelled once spent. The essence of the SECs is the representation of the social esteem awarded to a member for its contributions to the community. (Dunia Astrologo, Andrea Surbone, Pietro Terna: Il Lavoro e il Valore all'epoca dei Robot, Meltemi, 2019, Pp 111-113). Work is the main activity rewarded with SECs, but the entire spectrum of human labour/activity to be esteemed by the community has no limits as long as it is deemed to be a sustainable contribution to the sustainable enjoyment of life, be it strictly utilitarian or philosophical.</p>
<p>→ Taxes:</p>	<p>In line with Geocratia’s intrinsic nature, of being a paradigm of cooperation to achieve a holistic sustainability, there should not be monetary taxes. People support the structures and institutions of society through societal contributions by means of the work they perform. Human labour is at the centre of the entire existence of humanity, without which, no economic system would exist. Capitalism is the result of labour organised in a specific manner. Likewise, labour in a system of cooperation is the contribution that we all make to provide us with all the material resources and services necessary for the functioning of society, be them streets roads, hospitals, schools, administrative offices... For example, if the community needs a new school, a hospital, a bridge, a field of solar panels, a dam, the cooperative enterprises that specialise in these projects (construction, cement, steel, wiring, plumbing, solar panels, equipment...) would take charge of the project, design the engineering and architectural plans and build the new resource. All workers involved are already earning a living and sustainable remuneration; the construction materials such as cement, stones, bricks and steel beams are provided by the co-op enterprises that do this work at no monetary cost to the community. This contribution is tantamount to paying a tax through all the human labour that is provided to complete the project at no monetary cost to the communities involved. In this way, all the human labour used to fulfil a real and sustainable need of the communities is provided by the communities themselves in the form of human labour and materials, making the need for taxes irrelevant and anachronic in a society of cooperation.</p>
<p>→ Degrowth and Steady State</p>	<p>Degrowth and Steady-State economies are complimentary. They are both part of the same idea to achieve a sustainable economic, social and ecological ethos. First, we need to drastically decrease our completely unsustainable ecological footprint. This would be stage one. But many decades later—perhaps more than half a century later if Mother Earth grants us the time—once we descend to the desired plateau that is scientifically deemed to be sustainable, we move into a SSE, namely a zero-growth economy. This would be stage two and the final one.</p>

Table 2: Core Components of a Planetary Sustainable Ecology

<p>→ Enterprise:</p>	<p>Enterprises are owned and operated by the community under the format of cooperatives but not by the state. Their purpose is to generate the people’s welfare in a sustainable manner. Consequently, the means of production are organised in enterprises that operate as cooperatives owned by communities at all levels, from local to national. They are democratically managed and are dedicated to the production of goods and services approved to operate with a sustainable footprint for their activity. Their market supply and demand is limited by the jointly-agreed (governments and communities) ecological footprint, by the sum of all the footprints, of everything that is produced together, locally and globally, and which must maintain a balance so that its sum does not exceed the sustainable threshold. For example, a household appliance can be in great demand, but it can only be gradually fulfilled because all production will have a maximum quota, which can be reviewed quarterly, biannually, yearly or by whatever time lapse determined by the communities. Transnational enterprise will be dismembered through a process of transition from marketocracy to Geocratia that will take decades. Private ownership of existing enterprises will also be gradually transferred to the communities. Not all work will take place in cooperatives or in the community’s government. Autonomous workers can work performing their own economic activity. This allows private ownership of small family enterprises, such as bakeries, restaurants, plumbing or carpentry services and farmers among many others. In this case all the family members own the means of production,. If they need extra labour, they would need to set-up small cooperatives under the same principle of co-op ownership and joint decision making. Many other autonomous activities are allowed by consensus, such as those requiring a university degree: lawyers, accountants, physicians, therapists, architects or art professionals creating a variety of art forms (painting, sculpture, music, theatre, film, dance, and other performing arts, as well as literature, among others). The underlying regulating principle is the sustainable ecological footprint. Thus, all activities are subject to a maximum footprint for each individual, including that produced by his/her professional activity as well as by his/her consumption to live. Autonomous work can set a remuneration for the work performed; a painter can set a remuneration for a piece of art, but the total SECs that he or she will receive is commensurate with the ecological footprint allowed per person to be sustainable. This means that the highest amount of remuneration in SECs currency that an autonomous person can earn, cannot be higher than the maximum footprint allowed for the highest sustainable standard of living approved by the community.</p>
<p>→ Work and Labour Rights:</p>	<p>People are free to choose their work activity. Correspondingly, they enjoy equal opportunities by having full access to the education that will allow them to develop the capacities they choose according to the way they want to live and the material standard they desire, in the context of sustainability. It is a society of solidarity, cooperation, sharing and contribution for the benefit of all. It follows that there is no longer need for trade unions. People can work as members of a cooperative, work for the governing body of the community or become autonomous workers. If they choose the former, they enjoy equal right of participation and decision making for all relevant decisions that determine the long-term functioning of the cooperative. For the day to day operation, they are subject to performing their specific work responsibilities in accordance with the organisational structure and operational hierarchy designed and approved by all the community members. The remuneration in SECs currency units is determined and approved by all the co-op members for each specific position. With new technologies, artificial intelligence and an emphasis in more personal time in Geocratia, all co-op workers will be entitled to a maximum number of hours of work per week, that will be clearly less than today, around 32 hours or less per week. If they work for the governing body of the community, they are also entitled to the same rights and responsibilities as those members of cooperatives. If they are autonomous, they are free to organise their activity and the time spent working in their independent profession and time devoted to personal time. In the case of co-op and community workers, they are all entitled to remunerations in SECs currency units that guarantee the enjoyment of a dignified standard of living for them and their families. In all three cases, their remuneration is subject to a maximum limit deemed to be ecologically sustainable and takes into the account the SECs remunerations of all members of a household and the maximum per capita footprint allowed in a year. All co-op and community members are entitled to vacation, sick leave, maternity, sabbatical and any other entitlement approved by the community. As described in the human rights and well-being section, all members of the community are entitled to their right to universal healthcare, education, basic income, housing and a dignified retirement pension.</p>

Table 2: Core Components of a Planetary Sustainable Ecology

<p>→ Markets:</p>	<p>In Geocratia there is no capitalistic concept of supply and demand. The core indicator determining the size of markets is the per capita/ecological footprint, from the global to the small community perspectives. Some approved production/consumption processes in a community will surely exceed their sustainable per capita footprints but the real yardstick is the total footprint for the entire consumption activity of the local, national and global communities. This cannot be exceeded in order to sustain our life systems. Correspondingly, the products and services offered must be determined by the goods and services that are approved to be part of the sustainable standard of living. People will have access to them based on their contribution to the tenets and measurable goals of Geocratia. Their contribution is measured on the time devoted to work for their communities. The maximum ceiling for the highest standard of living will likely be a frugal dwelling (house or apartment) with the number of spaces determined to be sustainable and inhabited by those who have met the contributions necessary to access them. Conversely, there will be people who aspire to more frugal spaces requiring smaller contributions. The products approved as having sustainable footprints would receive supply quotas, based on closely regulated demand for them, always anchored on their ecological footprints as part of the total combined footprint allowed for all the goods and services consumed by a community in a year. Planned obsolescence would be completely eliminated from any production process. Each community should have a predetermined maximum sustainable footprint based on a per capita footprint for the entire human population. All technologies are considered public goods and shared extensively. Trade within and between national communities is limited to what is absolutely necessary to fulfil real needs to enjoy their sustainable life systems. Communities will strive to be self-sufficient, particularly in food and energy, as much as possible. Goods that are genuinely necessary and have sustainable footprints but are impossible to produce in a community, will be requested from other communities that have a surplus or that can produce additional stocks when requested. The additional ecological footprint generated by the additional production is transferred (including all costs of transportation) to the footprint metric of the importing community. There is no fiduciary exchange. The supplying community will supply in the form of a collaboration. All communities support other communities and exchange goods and services when they are genuinely necessary and sustainable in the form of cooperation, in line with the Geocratia's societal ethos of solidarity, cooperation, sharing and contribution for the benefit of all.</p>
<p>→ Human Rights, Well-Being and Responsibilities:</p>	<p>The entire spectrum of economic, social and cultural rights are legally upheld within the predetermined standard deemed sustainable: access to universal healthcare and education, universal basic income, housing, a dignified retirement and everything necessary to enjoy a simple and dignified life. Conversely, everyone has an inherent responsibility to contribute to the well-being of the community in a sustainable manner, making their choice to use their skills and talents. It is a free choice. You can aspire to be a scientific person or a carpenter. You can choose a university education or just a basic one and learn a trade. It depends on your aspirations and ambitions in the context of sustainability. But the essential thing is that every individual will enjoy equal opportunities because everyone will have access to education and healthcare that will allow them to develop the skills they choose, not according to a marketocratic logic but according to the way you want to live according to any of the standards of living deemed sustainable and deigned for everyone to collaboratively participate to achieve it. It is a society of solidarity, cooperation, sharing and contribution for the benefit of all. Conversely, individualism must be eradicated in Geocratia's cultural framework. For example, individual vehicles of motorised transportation must cease to be used as means of transportation for being the epitome of individualism (and producing very large footprints) and in lieu use mass and ecological forms of transportation.</p>

Table 2: Core Components of a Planetary Sustainable Ecology

<p>→ Private Property:</p>	<p>Private property is a basic human right, which includes housing, clothing, furniture, books, food, bicycles (or other means of transportation for people living in rural or remote areas) and devices to facilitate life. Families have one dwelling as their place of residence. The place of dwelling constitutes the households' property as long as a family or individual user lives in it. If people own more than one property, they will have to gradually transfer it through a democratic process to the community. If homes have an unsustainable footprint, they would need to be retrofitted by the community to make them sustainable. If they cannot be made ecologically sustainable, they would need to be used for purposes other than dwelling or, if still unsustainable, be destroyed if their annual footprint is greater than the footprint produced by their demolition and recycling of materials. By default, there is no private ownership of the means of production.</p>
<p>→ High Quality of Life Standards:</p>	<p>All decision-making and conceptual solutions must be anchored on the ecological footprint determined as the "sustainable footprint". This will give us the standards of living. These standards will have different degrees or layers that will depend on our freedom of choice and on our contributions, but whose maximum limit, the highest standard of living, for the person and the family remains frugal, dignified and sustainable, while the lowest level is also frugal, dignified and sustainable. Together, they all form the standards of living predetermined by society through a democratic process based on scientific research that guarantees that they do not exceed the sustainable ecological footprint. Therefore, everyone will enjoy sustainable housing and respect for their human dignity. The gap between the highest and lowest dignified standards of living should be not more than three times to drastically reduce inequality and achieve sustainability in our consumption of goods and services, securing sustainable ecological footprints.</p> <p>Our new lifestyles are bound by the sustainable footprint levels but they also provide ample freedom to chose how we live as long as we do not cross the predetermined sustainability boundaries. For instance, a community determines that each household may have—among other items—one TV set, one computer, one washer, one dryer and one-week vacation trip by train per year. However, a household may decide to choose not having a washer and dryer in lieu of extending their annual vacation trip to two weeks, because the trade-off, measured in footprints, between the consumption of a washer and dryer in a year and the consumption of a household of four members in a two-week trip by train keeps their footprint within predetermined sustainability parameters.</p>
<p>→ A Culture of Frugality:</p>	<p>Within the parameters to attain the ecological sustainability of our footprints, living a culture of frugality is quintessential. This does not mean, however, that our new lifestyles will be dull and that there would be an undesirable trade-off between living ecologically and socially sustainable and living happy and enticing lives. Changing our culture by transforming our values system from Darwinian competition to sharing, collaboration and redistribution is inherent in the transformational process to build Geocratia. There is no other way to do it. But instead of preaching a change of moral principles to change our lifestyles, we can build systems that reward the embracing of new sustainable frugal habits and penalise the refusal to adopt new lifestyles. Social pressure exerted from the community would increase or decrease our social esteem depending on our contribution and our adoption of new habits for food, clothing, the use of appliances and materials for everyday life that reduce our footprint and increase the sustainability of our community. If we embrace new frugal lifestyles, we can receive bonuses in SECs that we can freely use in many ways creatively and that do not increase our per capita consumption footprint above sustainable thresholds. For instance, the annual remunerations of a household in SECs allows a family to live frugally in the lower end scale of the community's sustainable lifestyles, and its ecological footprint is significantly below the maximum allowed sustainability threshold. However, the family in question is used to a daily diet of red meat. If the household reduces red meat to twice a week, it would receive a bonus that would allow it to add additional sustainable items to its lifestyle that it currently lacks (a coffee brewing machine, or a laptop computer, or a bicycle, or a vacation...). The more that we embrace and adopt new lifestyles, the more social esteem rewards that we receive within our sustainability parameters to freely choose the traits and habits of our lifestyle. <i>In the area of lifestyle change, human behaviour responds to incentives, much more than to moral principles and reasons</i> (Ingrid Robeyns: Freedom and Responsibility - Sustainable Prosperity through a Capabilities Lens, The Jus Semper Global Alliance, March 2020).</p>

Table 2: Core Components of a Planetary Sustainable Ecology

<p>→ Poverty:</p>	<p>The entire spectrum of human rights (civil, political, economic, social, cultural, ecological, cultural, gender, animal...) are upheld in a new, binding and a closely protected universal declaration of human rights. Poverty is gradually eradicated as Geocratia is implemented. This will materialise in a relatively short span of time, much sooner than the completion of the long process of consolidation of Geocratia and its Steady-State economy. Once the new Social Contract between humankind is sanctioned by national communities, the universal basic income would be one of the first entitlements to be implemented, making the eradication of poverty occurring much sooner than the rest of paradigm.</p>
<p>→ Population:</p>	<p>Procreation is a fundamental human right, but communities will democratically decide if they want to commit to decreasing their population, by how much, how fast or if they refuse to do it, which is also their prerogative. Drastically reducing our global footprint to sustainable levels is contingent on replacing our culture of consumerism and concurrently reducing our population in the shortest period of time possible. But it is imperative to do it gradually and by consensus instead of autocratically. Each community will know the amount of consumption footprint that needs to be reduced and the size of the population required to be sustainable. Thus, communities will know whether they need to reduce their population or not. Because Geocratia is anchored on a truly democratic ethos, they will be free to determine whether they want to reduce their population, by how much, how fast and through what policies, or not.</p>
<p>→ Food and Land Use:</p>	<p>In Geocratia's agribusiness as well as inhumane factory farms producing industrial amounts of animal products for human consumption are replaced by ecological agriculture and animal husbandry that restore soil fertility. The reduction in the human consumption of animal products is encouraged, for both health and environmental reasons. Animal products have a huge impact on the environment. A study published in Science Journal, based on 40.000 farms in 119 countries, found that more than 83% of farmland is used for livestock but it produces just 18% of food calories and 37% of protein. It also produces 58% of greenhouse gases, 57% of water pollution, 56% of air pollution and 33% of fresh water withdrawals. (J. Poore* and T. Nemecek: Reducing food's environmental impacts through producers and consumers, Science 01 Jun 2018: Vol. 360, Issue 6392, pp. 987-992). The greatest finding is that we can stop being a predatory pest, and that is by changing our diets and abstaining from eating dairy products and meat. If we do it, we can reduce global farmland use—<i>an area equivalent to the U.S, China, European Union and Australia combined—and still feed the world</i>. According to the authors of the study, <i>A vegan diet is probably the single biggest way to reduce your impact on planet Earth, not just greenhouse gases, but global acidification, eutrophication, land use and water use. It is far bigger than cutting down on your flights or buying an electric car,</i>". (Damian Carrington: Avoiding meat and dairy is 'single biggest way' to reduce your impact on Earth, The Guardian, 31 May 2018.</p>

Table 2: Core Components of a Planetary Sustainable Ecology

<p>→ Transportation:</p>	<p>Except for bicycles, individual vehicles of transportation must be phased out except for people living in rural or remote areas where there are no public means of transportation. Mass transportation in cities and intra cities should be the main means of transportation to be used by society (metro, trains and busses). Air transportation is reduced to long distances, transcontinental and coast to coast, whilst trains cover shorter distances. Although electrical vehicles are by no means green, using electrical power for mass transportation is the most efficient and less dirty mode. Fossil fuels are phased out as the source of energy for both vehicles of mass transportation and smaller vehicles, such as cars, vans and motorcycles. The bicycle should be the main vehicle for transportation in the cities for short distances. Contrary to what is being promoted by capitalism, electrical vehicles for individual transportation have a huge ecological footprint that offsets the fact that they indeed do not produce CO₂. So they are clean in that sense but are quite dirty in the sense of the entire industrial process to produce them, from raw materials to the manufacturing and the waste they leave at the end of their lifecycle. Michael Dawson ponders that there are a number of issues that would need to be considered for these vehicles to be regarded as truly green: <i>1. Sharply reduce both the overall amount of materials and the level of non-renewable materials presently going into the making and use of personal transportation machinery; 2. Sharply reduce both the overall amount of materials and the level of toxic materials coming out of the making and use of personal transportation machinery (such as batteries); 3. Sharply reduce the overall amount of energy required to make, use, and eventually trash personal transportation machinery; and 4. Score better in all of the above areas than alternative forms of personal transportation machinery would, if given the chance</i> (Michael Dawson: Electric Evasion, Counterpunch, 15 October 2010). It follows that alternative forms are walking, bicycling and the aforementioned mass transportation systems, which have much smaller footprints. Also, individual vehicles for personal transportation are incompatible with Geocratia’s cultural tenet of cooperation, sharing and collaboration. In the same way that growth is antithetical to sustainability, so is individualism, a core attribute of capitalism and its consumer society.</p>
<p>→ Housing:</p>	<p>Housing in the current paradigm is completely unsustainable ecologically and socially, with one of the greatest degrees of inequality and exclusion, and is designed to expect unlimited supplies of energy and water. In Geocratia, housing needs to be completely re-conceptualised to provide levels of comfort efficiently and sustainably. New housing is designed in line with the tenets of ecological sustainability and justice to provide frugal but dignified accommodations for families of any size and individuals, using the most durable and sustainable materials and sources of energy to operate them. Frugality in this sense is that homes include the rooms that are only strictly necessary and nothing extra (living/dining room, kitchen, bathroom, bedrooms, cleaning and storage), but sustainably equipped and comfortable. Old homes are retrofitted to make them sustainable. Ownership of second homes is gradually phased out. Older homes are gradually replaced after many decades by modern structures that fully meet the standards of frugality, comfort and long-term sustainability. Single-family homes are gradually replaced by multifamily structures and condominium buildings. Communities work to stop any further expansion of suburban life and encourage a recovery of life in the cities, not using new space. Population decrease is the single most important factor in stopping the expansion of land use to house families and to provide comfortable and dignified places of dwelling. Homes are private property and constitute the homeowner’s property as long as they live in them. Prices of houses are set by the community and are directly linked to the level of comfort. Housing is planned to offer a variety of comfort standards, all within the predetermined standards of sustainability, in such a way that every family would be guaranteed having access to affordable and comfortable housing, from the lowest to the highest approved standard. If there are ten levels of comfort, there are ten prices. There is no speculative housing market based on supply and demand. Homes are sold when a family moves to another area or wants to upgrade to a higher standard, but they would be sold at a fixed price set for that specific dwelling standard. Loans are redundant for access is immediate. Families pay a monthly price in line with their capacity to cover it in SECs. This could be confused with a rent, but there is no landlord. You own the home that you can afford with your level of remuneration. If you move, you transfer ownership to the new occupants and move to another home of the same, higher or lower standard depending on your situation and choice, but you always have the guarantee of access to a dignified dwelling in line with your remuneration and family size. If your household has only two members you obviously cannot move to a house designed for a family of four.</p>

Table 2: Core Components of a Planetary Sustainable Ecology

<p>→ Locality:</p>	<p>Closely linked to Geocratia’s housing vision and its emphasis on urban as opposed to suburban life and on mass transportation and bicycles as opposed to individual electrical vehicles of transportation, is the concept of locality. If families live close to their place of work and their societal activity, transportation becomes much more efficient and sustainable. Social life as well. It follows that in the new paradigm, communities organise their lives to keep all of us travelling much less and spending the vast majority of our time in the area belonging to our local community.</p>
<p>→ Technology:</p>	<p>Technology will play a major role in increasing efficiencies to achieve a holistic sustainability. Technology will be instrumental in the systems that produce the energy required to meet our standards of living with incremental levels of efficiency that gradually reduce the ecological footprints of our sources of energy. Technology will also increase the efficiency in the way we live and work. For instance, it will enable us to drastically reduce the need to use air or land travel to work-related meetings and conferences. Virtual meetings and events will become the standard. The COVID-19 pandemic has already shown that many of the activities that we normally perform physically can be performed virtually, from our home. This also includes leisure activities. Instead of going to a gym, which increases our footprint, we can take a live yoga class from our home. Physicians can perform many consultations with their patients on line and have physical appointments only when necessary. Many courses can be taken on line as well. This way, air and land travel will diminish significantly, making a major contribution to decreasing pollution, global warming, climate change and our entire ecological footprint. Technology will also contribute significantly to end the logic of capitalism and develop the logic of contribution and sharing. Paul Mason argues that <i>the real danger inherent in robotisation is something bigger than mass unemployment, it is the exhaustion of capitalism’s 250-year-old tendency to create new markets where old ones are worn out</i>, and points out another major obstacle for capitalism in today’s information based economy: property rights. Mason uses Karl Marx’s “law of value”, where the price of everything is derived from the amount of labour used. Yet, in an information based economy, <i>Information goods exist in potentially unlimited quantities and, when that is the case, their true marginal production cost is zero</i>. A digital video or music audio have no supply limits and no human labour and production cost. In Geocratia’s economic culture of sharing, technology will make a major contribution to transition (Paul Mason. “Postcapitalism”, Farrat, Strauss and Giroux, 2015, Pp 163, 164 and 175.) Because there is no system of reproduction and accumulation and in lieu you have basic income and a guaranteed dignified standard of living for your contribution to the well-being of your community, robots do not eliminate jobs, they free personal time that we can spend aesthetically, socially, helping our community, doing sports or whatever we enjoy doing. Furthermore, all technologies are considered public goods and shared.</p> <p>Artificial intelligence (AI) will also make a major contribution to reducing human work and increasing personal time for leisure, cultural and community activities. It is closely regulated to replace human work that brings no satisfaction to the human being but requires energy, dexterity and precision, as well as in activities that normally require human intelligence, such as visual perception, speech recognition, decision-making and language translation. It is applied in fields such as healthcare, education, manufacturing and traffic controlling, but not in the military or advertising that have no place in Geocratia. AI in Geocratia is used without crossing ethical boundaries that transgress our right to privacy and that pointedly block any practice likened to “Big Brother” behaviour. It is also controlled in a way that it only assists humans but does not become autonomous, to makes its own decisions, out-think humans and harm them.</p>

Building Geocratia's New Paradigm — First Steps

I have shown in considerable detail that we are currently moving at high speed on the trajectory of doom as the direct result of the physically unsustainable societal structures that we have developed, particularly in the last two centuries. It follows that to successfully transition to a truly sustainable paradigm, it should be glaringly evident that we must replace capitalism as the underlying cause of all the unsustainable symptoms that we are enduring and replace it with the new structures of Geocratia: true democracy, social justice and environmental health, with all the aforementioned structural components organised around a sustainable planetary system. Paul Burkett points at a very veritable irony; at the turn of the century, apologist of unfettered capitalism, such as Francis Fukuyama, were proclaiming the end of history. They claimed that capitalism had completely triumphed and was here to stay eternally. But Burkett points at the irony that this is happening not in the way they meant: *the system of fossil-fuelled neoliberal capitalism is indeed moving toward an end of history, but only in the sense of the end of any historical advance of humanity as a productive, political, and cultural species due to the increasingly barbaric socio-economic and environmental conditions the system creates.*⁹⁶

After decades experiencing a growing number of social, economic and environmental crisis that appear to have reached a new climax with the COVID-19 pandemic, it becomes patently evident that the capitalist system is beginning to crumble at an increasingly fast pace. However, it is certain that this process will not be completed without much unnecessary hostility and suffering among humankind, all living things and the planet as a whole. It goes without saying that the breaking down of capitalism will not take place without much conflict and struggle triggered by the owners of the system, their agents in the halls of governments and their apologists, who will invest all of their energy to “save it” and prevail, including unleashing as much social repression as they deem necessary to crush all attempts not only to

we need to organise to act politically, but outside of these structures, to peacefully force a new contract with the planet to save our home, humankind and all living things. Accomplishing this is a daunting endeavour; yet realistic when considering the growing signs of the crumbling of the current structures that vast sectors of society are already perceiving, thus eliciting many questions, a sense of growing uneasiness and a quest for answers and solutions.

replace the system but even to modify its most predatory structures. The scenario of the barbarisation of humanity included in the GTI-2002 paradigm paper, where capitalist forces spin out of control and drive us to the abyss, moving us to an autocratic ethos of “Fortress World” using military force to protect a privileged minority from the dispossessed majority, who are sent to apartheid, is a very realistic scenario already showing clear signs with the increasing polarisation and the emergence of autocrats leading governments both North

and South. Hence we must organise, with a sense of urgency, to peacefully force a new Eco-Social Contract between us and our home.

How do we build the structures of Geocratia? This paper does not pretend to propose the entire process of building it. As earlier noted, this is only possible through an ongoing working effort that will be defined by communities through democratic consensus and will produce many different versions of truly sustainable Geocratic systems. Nonetheless, to even aspire to materialise our dream, we need to organise and, by reaching consensus, coalesce into a global movement capable of transcending the status quo. Hence, I propose in this last section the first steps to “planetise the movement”, as in the topic recently discussed in the GTI forum.

⁹⁶ ↪ Paul Burkett: [An Eco-Revolutionary Tipping Point? — Global Warming, the Two Climate Denials, and the Environmental Proletariat](#), The Jus Semper Global Alliance, April 2020, P. 2.

The first goal in our roadmap is the aforementioned Eco-Social Contract that the citizenry of each nation must strike. It follows that given that the owners of the system and their agents will oppose the change of paradigm, we cannot work politically within the current structures of marketocracy. Thus, we need to organise to act politically, but outside of these structures, to peacefully force a new contract with the planet to save our home, humankind and all living things. Accomplishing this is a daunting endeavour; yet realistic when considering the growing signs of the crumbling of the current structures that vast sectors of society are already perceiving, thus eliciting many questions, a sense of growing uneasiness and a quest for answers and solutions. This makes the current climate ripe for the Demos to seek arenas where their questions are discussed in hope of not only answers but real solutions. Nonetheless, as realistic as forcing a new contract may appear, we will never be able to materialise it unless we are able to create a critical mass of people large enough to organise to force a new pact with the planet.

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politically within the current structures of marketocracy. Thus, we need to organise to act politically, but outside of these structures, to peacefully force a new contract with the planet to save our home, humankind and all living things. Accomplishing this is a daunting endeavour; yet realistic when

How do we accomplish this? The very first step to create a critical mass must be to provoke critical thinking to raise awareness about the impending peril that we cannot bequest a future to coming generations unless we rectify immediately by organising locally to gradually create local, national and then global critical masses of citizens in pursuit of a new paradigm like Geocratia. It must be patently evident that we cannot attempt to materialise our dream unless we break the alienation that the vast majority of people are immersed in, as they struggle every day to survive in a system that deliberately coerces, misinforms and neutralises them through corporate media, consumerism/individualism and the deliberate and unrelenting threat of losing their already precarious existence.

— Citizen Cells and Geocratia

How do we break the alienation and provoke critical thinking? We work to create a network of people that starts locally and grows exponentially through positive pollination in our sphere of influence and confidence until we “planetise the movement”, once we reach a critical mass. We need millions of small units of citizens who gradually converge to form local, regional and national assemblies. Once the movement is consolidated, then we can work to organise a global movement through national assemblies. The World Social Forum could be transformed—or a new one to be created—if we coalesce in enough numbers to redefine its mission to the very concrete goal of saving our home, by establishing the new Eco-Social Contract proposed in Geocratia. The smallest unit of people can be best described as a citizen cell (CC). This is where we all start the entire process of de-alienation and catalytic conversion to produce critical thinking about the impending need to transition to a new paradigm truly sustainable for our planet, people and all forms of life. This must take place both in the Global North and the Global South. The Global South in particular would take a preeminent role, given its decades-long struggle to organise against the extreme exploitation and precarisation of their lives and depredation of their ecosystems that have forced it to endure the eco-social chasm imposed by the development of the global commodity supply chains and resource extraction processes for the benefit of global monopoly capital. Indeed, Ian Angus rightly points at their situation and the role it must play in the creation of the new paradigm: *The most oppressed elements of human society, the poor and indigenous peoples, must take full part in the ecosocialist revolution in order to revitalise ecologically sustainable traditions and give voice to those whom the capitalist system cannot hear. Because the peoples of the Global South and the poor in general are the first victims of capitalist destruction, their struggles and demands will help define the contours of the ecologically and economically sustainable society in creation.*⁹⁷

⁹⁷ ↪ Ian Angus's Facing the Anthropocene, Monthly Review Press, 2016, p. 206.

How do we create our citizen cells? We start by all of us creating our CC of three or more members. We do it—taking advantage of social media and other online networks—by convening people in our sphere of influence and confidence who exhibit some disposition to discuss the current state of societal relations and the potential solutions to their own sense of an unsustainable reality. We seek to connect with like-minded individuals in a mimesis (*the deliberate imitation of the behaviour of one group of people by another group as a factor in social change*)⁹⁸ to create our CC. Therefore, we invite people that we perceive to be uneasy with the current situation and are looking for answers in need of potential solutions to their own existential predicaments, and we propose that each person replicates the same endeavour to propagate the movement (to make it viral). Henceforth, each member of the cell commits to creating their own cell, so that a critical mass of individuals in pursuit of Geocratia gradually emerges in our localities, municipalities, provinces, countries and so on, as the citizen cells multiply and connect permanently in a global movement. This is where the catalytic action spins off. This is where the mimesis materialises. If each of us commits to pollinate our social sphere by creating our own CC, the process of materialising a critical mass accelerates and becomes realistic.

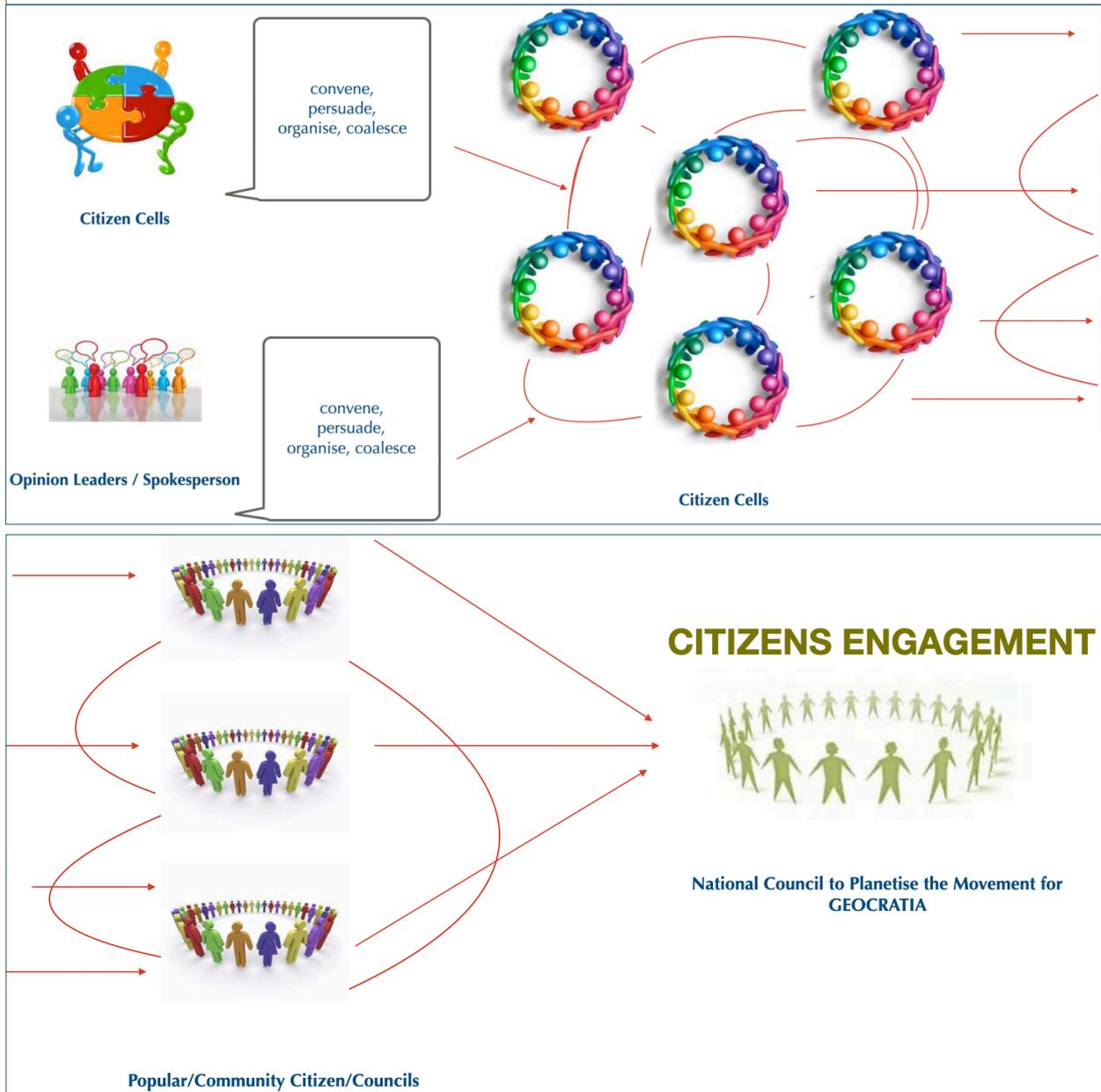
The small local communities of CCs organise to create more cells convinced about building Geocratia. These CCs commit to exercise direct democratic practice in a predominantly horizontal network of local, regional, national and global CCs whose only purpose is to care for the wellbeing of people and planet. Trade unions also organise to form their own CCs. They all nominate their own delegates to represent them in their community's assemblies. In Geocratia there will no longer be a need for unions, for they will be a relic of the capital-labour relationship that will become extinct. CCs work through direct intervention in the creation of all the economic, social, ecological and cultural activities defined by their own citizen networks. This evolves into the creation of a new life for every group of concerned and committed individuals. Figure 2 illustrates the creation, interaction and proliferation of the citizen cells until they converge into national assemblies. It starts with people, common citizens who have never been active but that their sense of uneasiness pushes them to take the initiative and convene their closest friends with like-minded concerns to gather. Networks of activism, both formal (NGOs) and informal, that may already have opinion leaders, would naturally convene with their closest peers in their own networks of activism to do the same, producing a growing interaction and connection that gradually turns into local, regional and national critical masses. The critical factor at this stage is achieving cohesiveness in terms of analysis, principles, vision, mission and goals, and the roadmap to materialise it. The CCs are not created just to organise to force the Eco-Social Contract, but also to develop permanent forms of community activity as the first steps for our cultural structural change.

We do this through a process of education that works in all directions. We must not assume that when we hold our first citizen cell get-together we will have all the questions, answers and solutions. This is a permanent educational process where we all learn, design and refine our program to planetise Geocratia. And citizen cells are the amalgam and catalytic converter that give cohesion to the diversity of claims, disputes and citizen opposition against the established order by unifying them into a common aim that is to confront the underlying causes of our unsustainability by building our new paradigm. Bellamy Foster asks *How will the necessary revolutionary transition come about?* And he asserts that he is convinced that *objective forces today are progressively erasing previous distinctions between workplace exploitation and environmental degradation—as capitalism universally undermines all real-material conditions of production.*⁹⁹ Indeed, a transformational—or revolutionary—movement for Geocratia will be the result of the convergence of movements that confront the exploitation and ecological depredation of the capitalist system in its latest and more predatory form of monopoly capital.

⁹⁸ ↪ From the Oxford Dictionary: Mimesis is the deliberate imitation of the behaviour of one group of people by another group as a factor in social change: *culture is organised in terms of mimesis and desire.*

⁹⁹ ↪ John Bellamy Foster: [The Epochal Crisis](#), Monthly Review, October 2013, 10.

Figure 2. Creation, interaction and convergence of citizen cells



Once more, all of this takes place outside of the customary political structures of party systems and legislative bodies, and it must be conducive to start our cultural change. As soon as the CCs are created, they incorporate a number of activities and actions that will help them gain cohesiveness and structure and that immediately increase their quality of life, their identity and their sense of belonging. Table 3 illustrates schematically four fundamental areas of work and activity conducive to the successful formation and cohesion of the CCs: 1) Awareness, education and planning workshops, 2) fundraising, 3) community development and 4) systemic boycotts.

— Forcing the Eco-Social Contract

The Eco-Social Contract that would set the political structures to replace capitalism can only come to fruition outside the political structures of meritocracy for evidently their agents will never agree to change the structures that have benefited them for generations. The only way to do it peacefully and legally is by following the logic of the market. This specific endeavour constitutes the organisation of the common citizenry as a global movement to act in a peaceful, legitimate and strategic manner to dismantle the system by actions of not cooperation, namely to boycott marketocracy, which—by

the CCs practice what they preach and begin to develop micro-economic focal points that work to replace as much as possible the goods and services for their sustainability with the work and production of their own members in the form of cooperatives and autonomous suppliers of many items of their craft.

applying the market's logic—is centred on the boycott of the capitalist economy. To be sure, the citizenry is the party most interested in reconstituting markets to serve the higher purposes of justice, democratic control and ecological resilience. A peaceful, transnational mobilisation of citizens—using social media and other online networks to convene, communicate and

coordinate—would serve as the catalyst for repurposing our forms of social organisation to meet the tenets of Geocratia: true democracy, social justice and a healthy environment to produce a sustainable planetary paradigm. As shown in table 3, this requires a critical mass of committed citizen cells that prepare themselves to carry out the specific actions to organise a National Boycott or National General Strike to demand the new contract. For the movement to be successful we need to go through a whole process of education and pollination. The CCs organise and start creating their own local assemblies that subsequently connect and meet with assemblies in other regions until they are ready to convene in national assemblies. At each stage, the CCs form their local councils that designate a delegate to represent them regionally and nationally. The CCs work to educate and train their constituents and raise funds to support their efforts. Concurrently, they practice what they preach and begin to develop micro-economic focal points that work to replace as much as possible the goods and services for their sustainability with the work and production of their own members in the form of cooperatives and autonomous suppliers of many goods of their craft. Farmers, carpenters, plumbers, electricians, engineers, physicians, teachers, technicians of all kinds... work to develop their own circuits to supply truly

Howe do we materialise the Eco-Social Contract? by unleashing the power of the market.... National strikes customarily last one single day. But the COVID-19 pandemic is showing us that people can resiliently survive without working more than three or more months... if instead of demonstrations and violence we follow the market's logic and organise to boycott the unrelenting depredations for the reproduction and accumulation of profit, the only factor that the system cares about, we can change the structures in a peaceful and legal way, because in so-called democratic societies people have the right to stay at home instead of going about their regular business.

necessary goods and services in their communities that otherwise would be acquired in the mainstream economy. Under the principle of "I consume what you produce and I produce what you consume", people barter, supporting their micro-economy and reducing their ecological footprint. People also learn to consume less and to detach themselves from their previous consumerist habits; developing in this way a culture of responsible and sustainable consumption of only what is truly necessary to enjoy a frugal but dignified quality of life. Eventually, we all convene in truly democratic citizen assemblies, where each cell sends a delegate to propose, discuss and reconcile our ideas in pursuit of a shared agenda and a Global Plan for the new

paradigm, from the local level to eventually global assemblies of citizen cell delegates representing millions of individuals across the world.

Table 3. Citizen Cells’ development and areas of activity and operation

Citizen Awareness Workshops	Fundraising and / or resource program
Cultural, political, social, economic and ecological approach in the context of Socially and Ecologically Responsible Citizens (SERCs)	Development of fundraising programs
Analysis, diagnosis and solutions from the perspective of True Democracy	Cell, councils and National Council funds
Paradigmatic change to Geocratia: Well-being of the People and the Planet and NOT the market	Defraying of operating expenses: assemblies, transportation, communication, office equipment, premises
Workshop on how to build Geocratia	Campaigns to raise donations in money or in kind
Planning workshops for the local, regional and national Assemblies	Fund raising from community economy networks (SCARs)
Community Economy Network Development (SERC)	Development of Consumer Boycott Campaigns and National Economic Boycott (SERC)
Cultural conversion to an ethos of socially and environmentally responsible citizens (SERCs)	Cultural conversion of consumer behaviour to develop a culture of social and ecological responsibility in consumption (SERC)
New habits for responsibility in consumption: ethical, critical, supportive and sustainable	Analysis and planning of specific boycott campaigns
Replacement of supermarkets by neighbourhood stores supplied by community vendors and wholesalers (SERC)	Scheduled execution of incremental boycotts
Development of micro-economic focal points: “I consume what you produce, I produce what you consume”	Development and collection of experiences, encouraging the emergence of a Critical Mass for a National Economic Boycott
Rational / sustainable use of basic resources: water, electricity, gas	Organization and planning of National Economic Boycott = Labour + Students + Consumption

How do we materialise the Eco-Social Contract? The CCs force the new Eco-Social Contract by unleashing the power of the market. It starts by organising permanent consumer boycotts that target specific products and services and companies that exhibit the lowest regard for truly social and environmental sustainability. Once people are well versed in the organisation and execution of consumer boycotts and the national assemblies have agreed that the indispensable tipping point of a critical mass of citizens has been reached, a national boycott is organised to demand the organisation of a Constitutional National Assembly of the citizenry to write a new constitution for a new Eco-Social Contract between people and the planet. This involves a labour, student and consumer strike. People do not go out to demonstrate in the streets. This cancels any possibility of the government unleashing any kind of repression. People stay at home, do not go to work, to school and to stores, until the government agrees to celebrate the Constitutional Assembly. National strikes must be organised to last as long as necessary to force national governments to agree to a Constitutional Assembly. Roughly every week of a calendar is equivalent to 1,92% of a country’s GDP and one month equivalent to 8,3%. If the movement strike has a critical mass of 25% of the population and lasts one month, it would be equivalent to 2,1% of GDP, which would constitute an enormous pressure on the system. This may appear completely unrealistic. General national strikes customarily last one single day. But the Covid-19 pandemic is showing us that people can resiliently survive, albeit precariously, without working more than three or more months. If one month is not enough, national strikes can last several months; a pressure that governments would not be able to withstand. Indeed, if instead of demonstrations and violence we follow the market’s logic and organise to boycott the unrelenting deprecations for the

In a caring economy we strip ourselves of the individualistic selfishness inherent in capitalism and act in the context of communities where we all care for all its members, not just human beings but for all living things that share this planet.

reproduction and accumulation of profit—the only factor that the system cares about— we can change the structures in a peaceful and legal way, because in so-called democratic societies people have the right to stay at home instead of going about their regular business. This evidently requires an enormous effort, with many sacrifices and organisation, but the purpose (saving humankind by saving our home) is more than justified.

The Constitutional Assembly is carried out strictly among the citizenry, because the goal is to establish a truly democratic ethos, members of parliaments or legislatures can participate strictly as delegates of local councils of citizen cells and not as representative of their parties. Each local council sends a delegate and can send proposals for each of the topics approved in the National Assembly to enter into an organised process of proposal, debate, consensus and approval. Once the process is completed, the citizenry should expect the immediate implementation of the new Constitution and a process to elect a new government under the tenets and rules outlined by the new Carta Magna.

Once we succeed in striking a new social contract, the CCs commit to permanently exercise direct democracy by getting directly involved in all the areas of the public matter. They prepare and propose new legislation and subject every new legislative proposal—coming directly from the citizenry or from their legislative bodies—to plebiscites or referenda. They also get permanently involved in the periodical assessment of the performance of all elected public servants, so that they get confirmed or replaced. In essence, they commit to take care of their communities by taking care of the public matter to ensure that we build an economy of caring of the planet, people and all living things. A caring economy requires a paradigmatic shift in our understanding of our purpose in life. It requires that we strip ourselves of the individualistic selfishness inherent in capitalism and that we think and act permanently in the context of communities where we all care for all its members, not just of our peer human beings but of all living things that share this planet. We also move from being passive “citizens” who only act when we are called to do so, to active and responsible citizens, who take control of Geocratia’s driver’s seat so that we permanently take control of the public agenda. We transcend the current paradigm to move from being consumer societies to being sustainable societies. Thus, we no longer embody individual consumer units but truly socially and environmentally responsible and collaborative citizens who consume only what is necessary to enjoy the sustainable and dignified standards of living of Geocratia.

This is the basic outline of what we need to do as the first step to planetise Geocratia: create a critical mass of like-minded individuals in pursuit of a common vision to build a truly sustainable and democratic paradigm for future generations. In congruence with the truly democratic ethos that we want to build, the cellular movement would be the only entity legitimately empowered to craft the entire plan.

Conclusions

Contrary to what we have been led to believe for generations, we do not live in democratic societies but in the marketocratic societies of capitalism. This has produced the geological era of the Anthropocene, the sheer exploitation of human work and the dramatic depredation of natural resources, with particular brutality in the Global South, that has driven our forms of social organisation to their complete unsustainability. In 2019 humankind consumed in one year the equivalent of 1,75 planets. It follows that we must reduce our consumption to the equivalent of less than one planet a year. Essentially, we must cut our ecological footprint radically in the shortest time before we cross more planetary boundaries or it becomes too late to rectify.

This puts humankind in a situation where we have no other alternative but to organise with the utmost sense of urgency to build a radically different paradigm that changes our trajectory of doom. Geocratia is the paradigm that goes in

pursuit of the welfare of people and planet, centring it on developing new forms of social organisation designed to save our ecosystems by drastically reducing the ecological footprints of all human activity to sustainable levels. And it does not matter how much technology is developed to control our consumption, for natural law cannot be changed or conquered. Thus there is no other way to rescue our home and sustain it but by drastically cutting our ecological footprint by reducing our consumption. This requires transitioning from our capitalist consumerist lifestyles to new frugal standards of living that are dignified, comfortable and sustainable. We do not have an energy crisis but a consumption crisis. Replacing our consumerist standards requires developing a new economy that, instead of going in pursuit of wealth and its accumulation by striving to compete and win at the expense of other participants, we strive to collaborate and work for the benefit of our communities locally, nationally and globally. This includes transitioning from fossil fuels to renewable sources of energy, but managed with a sense of balance and true sustainability instead of applying the customary criteria of reproduction and accumulation used under the guise of the so-called “Green Economy” advanced by capitalism. Our transition to Geocratia must also address the issue of population. To achieve sustainability, which requires drastically cutting our ecological footprint by reducing our consumption of resources, we need to reduce the size of humankind’s population. If the peoples of the world refuse to do it, is their right, but they should become cognisant that not doing it would make it infinitely harder to save our planet, and thus humanity.

Geocratia encompasses the core tenets and components of the paradigmatic idea to build the new, truly sustainable and democratic ethos for the XXII century. For a successful transition we need to organise and replace the current marketocratic structures with new structures designed to achieve planetary sustainability in an ethos of true democracy, social justice and a healthy environment. This endeavour requires establishing a new contract between humankind and the planet: an Eco-Social Contract for the welfare and sustainability of people and planet. But because the apologists of marketocracy would never allow a change of paradigm, we must organise to act peacefully outside of the current institutions that are designed to exert social control and block any effort to replace marketocracy. This is only possible through an ongoing working effort that will be defined by communities through democratic consensus and will produce many different versions of sustainable Geocratic systems. However, it all starts from the ground level up by creating small citizen cells that serve as the basis and catalytic convertor for creating a critical mass of citizens with enough power to force governments to democratically allow the citizenry of every nation to hold Constitutional Assemblies. These assemblies make up the truly democratic Agora to strike the new Eco-Social Contracts designed to bequest dignified qualities of life to future generations, not just of our species but of all living things. Thus, creating the citizen cells is the critical factor to break the social alienation that a majority of people are immersed in, raise awareness and mobilise the citizenry locally to gradually build a global movement.

To be sure, many will regard this essay as outlandish and utopian. Yet many realities were previously regarded as utopian. Others will see it as a catastrophic view of life in our planet and the effects of the Anthropocene. But abundant evidence provided by natural science research and a myriad of environmental evidence about the reactions of our planet to our activity, perceived by the common citizenry across the world show that we are moving on a trajectory of doom at full speed. The fact is that if, wielding any argument, those in power refuse to strike a new deal between people and planet proposed by Geocratia to save our home, and instead opt for repressing their communities or, conversely, not enough people commit to organising to replace the status quo, we will never be able to transition to the new ethos and bequest a dignified life to future generations. If this were to take place, with all certainty, planetary reactions to the Anthropocene will continue and will put an end to our utter stupidity. It follows that, as a matter of survival, we better start now.

Bibliography:

- Samir Amin: Modern Imperialism, Monopoly Capital and Marx's Law of Value - Monthly Review Press - New York, 2018.
- Samir Amin: The Long Revolution of the Global South - Toward a New Anti-Imperialist International - Monthly Review Press - New York, 2019.
- Ian Angus: A Redder Shade of Green - Intersections of Science and Socialism - Monthly Review Press - New York, 2017.
- Ian Angus; Facing the Anthropocene - Fossil Capitalism and the Crisis of the Earth System - Monthly Review Press - New York, 2016.
- Dunia Astrologo, Andrea Surbone, Pietro Terna: Il Lavoro e il Valore all'epoca dei Robot, Meltemi, Milano, 2019.
- Zygmunt Bauman: Liquid Modernity - Polity - Cambridge, 2002.
- Zygmunt Bauman: La Sociedad Sitiada - Fondo de Cultura Económica - Ciudad de México- Buenos Aires, 2002.
- Zygmunt Bauman: A Chronicle of Crisis - Social Europe Edition, London, 2017.
- John Bellamy Foster: The Theory of Monopoly Capital - An Elaboration of Marxian Political Economy - Monthly Review Press - New York, 2014.
- John Bellamy Foster: The Ecological Revolution - Making Peace with the Planet - Monthly Review Press - New York, 2009.
- John Bellamy Foster, Brett Clark, and Richard York - The Ecological Rift - Capitalism's War on the Earth - Monthly Review Press, 2010.
- John Bellamy Foster and Brett Clark - The Robbery of Nature -Capitalism and the Ecological Rift - Monthly Review Press, New York, 2020.
- Cornelius Castoriadis: The Imaginary Institution of Society - The MIT Press, Cambridge Massachusetts, 1998.
- Seth Donnelly: The Life of Global Prosperity - How Neoliberals Distort Data to Mask Poverty and Exploitation - Monthly Review Press - New York, 2019.
- Erich Fromm: To have or to be? - Harper & Row - New York, 1976.
- Nicholas Georgescu-Roegen - The Entropy Law and the Economic Process - Harvard University Press - Cambridge, Massachusetts, 1971
- Naomi Klein: This changes Everything - Capitalism vs The Climate - Simon and Schuster - New York, 2014.
- Andreas Malm: Fossil Capital - The Rise of Steam Power and the Roots of Global Warming - Verso, London - New York, 2016.
- Paul Mason. -Postcapitalism - A Guide to Our Future - Farrar, Strauss and Giroux - New York, 2015
- István Mészáros: The Structural Crisis of Capital - Monthly Review Press - New York, 2010.
- Leo Panitch and Greg Albo, editors: Beyond Market Dystopia - New Ways of Living - The Merlin Press - London, 2019.
- Philippe Van Parijs: Basic Income and the Left - Social Europe Edition, London, 2018.
- Thomas Piketty: Capital in the Twenty-First Century - The Belknap Press of Harvard University Press - Cambridge, Massachusetts, 2014.
- Paul Raskin et al: Great Transition: The Promise and Lure of the Times Ahead, Stockholm Environment Institute - Boston, 2002.
- Kohei Saito: Karl Marx's Ecosocialism - Capital, Nature and the Unfinished Critique of Political Economy - Monthly Review Press - New York, 2017.
- Ernesto Screpanti: Global Imperialism and the Great Crisis - The Uncertain Future of Capitalism - Monthly Review Press - New York, 2014.
- Guy Standing: The Precariat - The New Dangerous Class - Bloomsbury Revelations - London, 2016.
- William Stanton: The Rapid Growth of Human Populations 1750–2000 - Histories, Consequences, Issues, Nation by Nation, Multi Science Publishing Co. - United Kingdom, 2003
- John Stuart Mill: Principles of Political Economy - August M. Kelly Publishers -Fairfield, New Jersey, 1987.
- Intan Suwandi: Value Chains - The New Economic Imperialism - Monthly Review Press - New York, 2019.
- Alejandro Teitelbaum: La Armadura del Capitalismo - El Poder de las Sociedades Transnacionales en el Mundo Contemporáneo - Icaria, Barcelona, 2010.
- Alejandro Teitelbaum: El Papel Desempeñado por las Ideas y Culturas Dominantes en la Preservación del Orden Vigente - Editorial Dunken - Buenos Aires, 2015.
- Michael D. Yates: Can the Working Class Change the World? - Monthly Review Press - New York, 2018.
- Okbazghi Yohannes: The Biofuels Deception — Going Hungry on the green Carbon Diet, Monthly Review Press - New York, 2018.
- Ozzie Zehner: Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism (Our Sustainable Future), University of Nebraska Press, 2012.

Useful links:

- The Jus Semper Global Alliance
- John Bellamy Foster: [The Long Ecological Revolution](#)
- John Bellamy Foster: [The Anthropocene Crisis](#)
- John Bellamy Foster: [Marxism and Ecology](#)
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- Paul Burkett: [An Eco-Revolutionary Tipping Point?](#)
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- Alejandro Teitelbaum: [The Progressively Accelerated Degradation of the Environment](#)
- Adolfo Gilly & Rhina Roux: [Capitals, Technologies and the Realms of Lifes](#)

❖ **About Jus Semper:** The Jus Semper Global Alliance aims to contribute to achieving a sustainable ethos of social justice in the world, where all communities live in truly democratic environments that provide full enjoyment of human rights and sustainable living standards in accordance with human dignity. To accomplish this, it contributes to the liberalisation of the democratic institutions of society that have been captured by the owners of the market. With that purpose, it is devoted to research and analysis to provoke the awareness and critical thinking to generate ideas for a transformative vision to materialise the truly democratic and sustainable paradigm of People and Planet and NOT of the market.

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