

# **Sustainability thoughts 195: Understanding the road from sustainable development thinking to green market paradigm shift avoidance 1987-2022: What are the implications of this?**

**By**

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## **Abstract**

The fact that the Brundtland Commission did not set a clear priority path for sustainable development thinking to be used to transition from a world under socio-environmental sustainability problems they had in 1987 to a world without them created a free for all development environment where different schools of thoughts with even conflicting goals enter into action at the same time advancing their core values acting like islands unconnected with other islands; and unconnected with the general goal of world free of all sustainability issues. Then towards 2012 the world finally decided to move away from a world without sustainability priorities to a world with environmental sustainability priorities, a decision that led to two interesting periods, a science based period that culminated in 2012 with the push towards green markets, followed by a non-science based period with a push away from green markets and towards dwarf green markets. The author calls these two periods, the shift to green market period 1987-2012 and the period of green market paradigm shift avoidance 2012-2022, and links them to the end of the sustainable development period a la Brundtland Commission. As the move towards dwarf green markets after 2012 to avoid implementing green markets took place under academic silence not much is written about the science and policy implications of green paradigm shift avoidance and the confusion it creates, and how this confusion opens the door to issues such as green Marxism threats, greenwashing threats, and the circular economic thinking threats. Hence, the need to understand these threats fed by the green market vs. dwarf green market confusion attached to the green market paradigm shift avoidance period from the science point of view makes the following research topic and question relevant: Understanding the road from sustainable development thinking to green market paradigm shift avoidance 1987-2022: What are the implications of this? Among the goals of this paper is to provide answers to those questions.

## **Key concepts**

Green market, Dwarf green market, Traditional market, Paradigm shift, Paradigm shift avoidance, Sustainable development, Sustainability, Academic discourse, Academic silence, green market paradigm shift, green market paradigm shift avoidance.

## Introduction

### 1) The world under sustainable development thinking

The multi-goal sustainable development framework where competing school of thought are acting in development at the same time given to us by the Brundtland Commission in 1987 has been recently pointed out (Muñoz 2024a) as summarized in Figure 1 below:

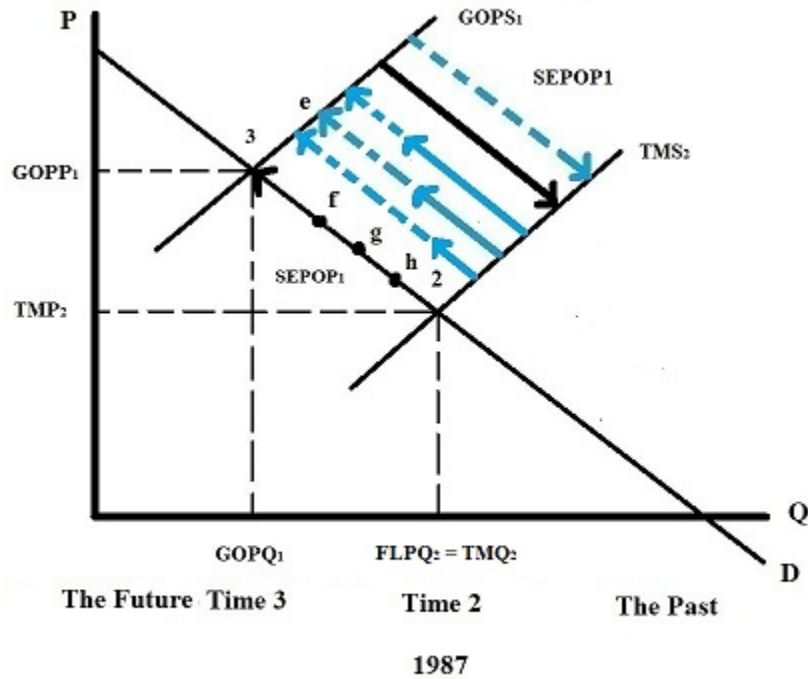


Figure 1 The multi-goal structure of the sustainable development framework given to use by the Brundtland Commission in 1987 with no priority goals

Figure 1 above shows the following: i) There are 3 types of sustainable development active at the same time, a socially friendly sustainable development (SFSD) point at point “h”, an environmentally friendly sustainable development (EFSD) point at point “g”, and a socially and environmentally friendly sustainable development (SEFSD) point at point “f”; ii) each point has a sustainable development based sustainability gap as indicated by the broken blue arrows pointing to the left as all of them are partial social, environmental or socio-environmental solutions to the socio-environmental pollution problem working at the same time; and iii) The Brundtland Commission did not recommend a full solution that is found at point “e” or point 3 in Figure 1 above as to do that they needed to come up with full development priorities. In other words, the sustainable development framework (SD) can be looked as an environment where several different markets reflecting different core responsibilities, social, environmental, and socio-environmental, respectively, coexist at the same time without affecting each other goals and with no clear link on how each of them will one day transition to a world without socio-environmental problems, given the feeling of sustainable development for ever while sustainable development based sustainability gaps are still active and polluting. Hence, the world commission on environment and development (WCED 1987) did not set any clear priority on what part of the socio-environmental problem should get specific priority action to be addressed partially or fully so a multi-goal approach took shape.

## **2) The need for environmental priorities**

The need to make the environment the priority led to the United Nations Commission on Sustainable Development(UNCSD) process that culminated in 2012 Rio + 20, where addressing the environmental issue head on was may the central development issue(UNCSD 2012a; UNCSD 2012b), which led to two interesting situations: a) a true science based push towards internalization of full environmental responsibility that leads to a green market; and b) a following non-science based push in silence after agreements had been made towards green market paradigm shift avoidance focused on the management the environmental consequences of distorted market prices using dwarf green market thinking instead of correcting traditional market prices fully to reflect the environmental cost associated with production. Indicating that the way to go was green markets in 2012, but going dwarf green markets created the green market paradigm shift avoidance period 2012-2022, and doing this has led to confusion which allows academics, businesses, and governments to use two different concepts, green markets and dwarf green markets, knowingly or not, as the same to advance their development objectives.

## **3) The need to understand the road from sustainable development thinking to green market paradigm shift avoidance**

Consistent with the discussion above, the fact that the Brundtland Commission(WCED 1987) did not set a clear priority path for sustainable development thinking to be used to transition from a world under socio-environmental sustainability problems they had in 1987, a problem created by the assumed perfect nature of traditional economic thinking(Smith 1776) when it was not, to a world without them created a free for all development environment where different schools of thoughts with even conflicting goals enter into action at the same time advancing their core values acting like islands unconnected with other islands; and unconnected too with the general goal of world free of all sustainability issues. Then towards 2012 the world finally decided to move away from a world without sustainability priorities to a world with environmental sustainability priorities(UNCSD 2012a; UNCSD 2012b), a decision that lead to two interesting periods, a science based period 1987-2012 with general consensus and support(UNDESA 2012; WB 2012; UNIDO 2015; UNDESA 2016) that culminated in 2012 with the push towards green markets, a move consistent with Thomas Kuhn's paradigm evolution loop(Kuhn 1970) as it aims at removing environmental abnormalities from traditional market thinking(Muñoz 2022), followed later by a non-science based period with a push away from green market thinking and towards dwarf green markets a la environmental externality management(GOC 2017; GOC 2018). The author calls these two periods, the shift to green market period 1987-2012; and the period of green market paradigm shift avoidance 2012-2022, and links them to the end of the sustainable development period a la Brundtland Commission. As the move towards dwarf green markets after 2012 to avoid implementing green markets took place under academic silence not much is written about the science and policy implications of green paradigm shift avoidance, creating an environment of confusion, which opens the door to issues such as green Marxism threats, greenwashing threats, and the circular economic thinking threats to creep in, even without being noticed, which undermines the success, overthrow the thinking model or set aside dwarf green market based capitalism ideas all together, respectively.

For example, the confusion created by green market paradigm shift avoidance can be used in the following ways: i) it allow some to benefit from green washing as they can price higher by pretending to be concerned or be addressing environmental issues, when they are not; ii) it can be used by others to advance green, red, or yellow Marxism threats against dwarf green capitalism calling for its destruction while confusing it as green capitalism. How these different Marxism threats can penetrate and flip capitalism has been described recently (Muñoz 2024b); and iii) it gives cover to others to double down deeper into the status quo traditional market thinking to bring it back into relevance by repackaging in a better sounding way without correcting what made linear traditional market socially and environmentally unfriendly in the first place. Traditional circular thinking aims at addressing the socio-environmental problem created by traditional market thinking without correcting the distortions that creates socio-environmental externalities in the first place and expects it to be better, perfect. For example, some governments (EC 2020) think that they can make traditional market socially and environmentally friendly just by defining it circular, but we know that you cannot define your problems away. Hence, the need to understand these threats fed by the green market-dwarf green market confusion attached to the green market paradigm shift avoidance period from the science point of view makes the following research topic and question relevant: Understanding the road from sustainable development thinking to green market paradigm shift avoidance 1987-2022: What are the implications of this? Among the goals of this paper is to provide answers to those questions.

## **Goal of this paper**

i) To point out the structure of the green market paradigm shift period 1987-2012 and its development implications, and ii) To highlight the structure of the green market paradigm shift avoidance period 2012-2022 and its development implications.

## **Methodology**

First, the terminology used in this paper and operational concepts are given. Second, the structure and implications of the shift towards green market paradigm period 1987-2012 are highlighted. Third, the structure and implications of the green market paradigm shift avoidance period 2012-2022 are pointed out. Fourth, the consequences of living in a world under green market paradigm shift avoidance are stressed. And finally, fifth, some food for thoughts and conclusions are provided.

## **Terminology**

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SD = Sustainable development      TM = Traditional market

GOP = Golden paradigm                      FLP = Flawed paradigm  
GM = Green market                          CTM = Circular traditional market  
DM = Dwarf market                          DGM = Dwarf green market  
P = Price    D = Demand  
Q = Quantity                                  TMS = Traditional market supply  
GMS = Green market supply              EPOP = Environmental pollution problem  
GOPS = Golden paradigm supply      ESG = Environmental sustainability gap  
SFSD = Socially friendly sustainable development  
EFSD = Environmentally friendly sustainable development  
SEFSD = Socio-environmentally friendly sustainable development  
SD = Sustainable development

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### **Operational concepts**

- i) Optimal development**, the one displayed by golden market paradigms.
- ii) Flawed development**, the one displayed by flawed market paradigms.
- iii) The traditional market**, the flawed market paradigm behind the creation of socio-environmental problems, linearity is at work because of perfect market assumptions.
- iv) Optimal green development**, the one displayed by perfect green market paradigms.
- v) Flawed green development**, the one displayed by flawed dwarf green market paradigms.
- vi) The circular traditional market**, the flawed circular market paradigm behind the continuation of socio-environmental problems, circularity is at work here because the perfect market assumption is known to be broken, but it is still not fixed.
- vii) Sustainable development**, the thinking that is aimed at bringing the world away from traditional market thinking through development that is socially and/or environmentally friendly.
- viii) Sustainability**, the thinking that aims at shifting traditional market thinking to higher level market thinking such as red markets, green markets, and sustainability markets through social, environmental, and socio-environmental cost internalization, respectively.
- ix) Full solution**, the one that fixes the sustainability problem by internalizing the source of unsustainability.
- x) Partial solution**, one that only patches the source of unsustainability.

**xi) Distorted traditional market prices**, the traditional market tool behind socio-environmental problems.

**xii) Green market**, the thinking where green market prices clear the free green market.

**xiii) Dwarf green market**, the thinking where only a portion of the environmental cost associated with economic activity is reflected in the dwarf green market price.

**xiv) Environmental sustainability gap**, the difference between green market prices and dwarf green market prices.

**xv) Full green solution**, the one that fixes the environmental sustainability problem by internalizing the source of environmental unsustainability.

**xvi) Partial green solution**, one that only patches environmental unsustainability problem through environmental externality management.

### **The shift towards green market paradigm period 1987-2012**

As the environmental crisis continued to deteriorate despite sustainable development action starting in 1987, the United Nation Commission on Sustainable development(UNCSD) was established to deal with the environmental crisis head on as the priority so as to ensure markets take full environmental responsibilities, bringing together academics, corporations, universities, environmentalists, governments, non-governmental organizations, and so on at the 2012 Rio +20 Conference as the world was going to go from traditional markets, traditional economies, and traditional economic growth to green markets, green economies, and green growth, a 1987-2012 transition in thinking as expressed in Figure 2 below:

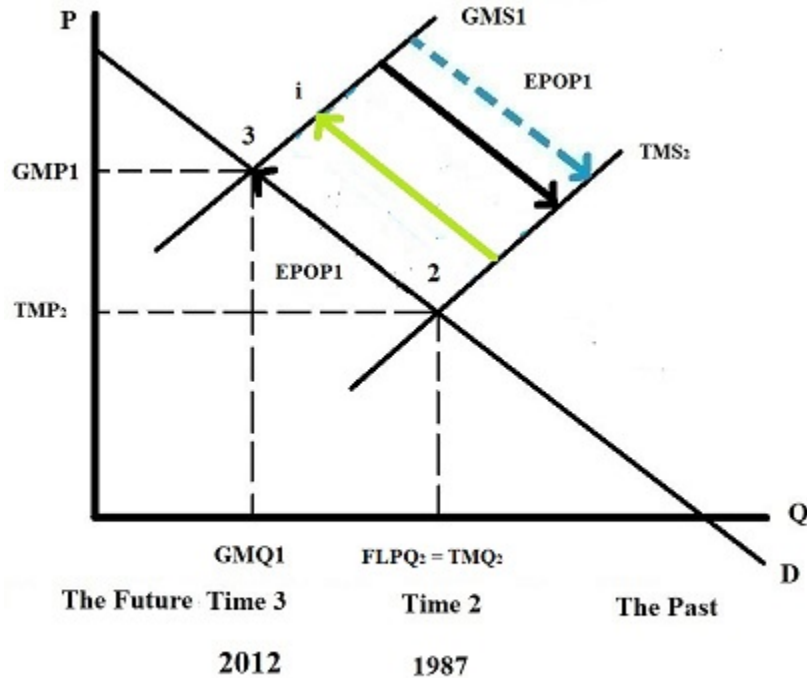


Figure 2 The shift from traditional market thinking(TM) to green market thinking (GM) that never took place since 2012

We can appreciate based on Figure 2 above the following: i) There is a traditional market TM at point 2 at work since 1987 and there is a green market GM at point 3/2012; ii) if you internalized the pollution production problem EPOP1 in the pricing mechanism of the traditional market you shift the traditional market from point 2/1987 to point 3/2012; and at point 3/2012, traditional market thinking no longer works, you need then new thinking or updated traditional economic thinking to deal with green market issues. In other words, at point 3/2012 you need green microeconomics and green macroeconomics to guide the setting up, implementation and monitoring of perfect green market thinking; iii) the green market price GMP1 is higher than the traditional market price TMP2 ( $GMP1 > TMP2$ ), which means that production and consumption in green markets GMQ1 is lower than that in traditional markets FLPQ2 ( $GMPQ1 < FLPQ2$ ); and iv) After the green market GM is set at point 3/2012, it behaves as an environmental pollution reduction market (EPORM) where pollution reduction becomes a good business opportunity as the lower the environmental pollution cost gets the lower the green market price GMP is, then the more the green market will expand to the right, which means we can produce and consume more and more green products at increasingly lower green market prices through time as green market innovations take place. Finally, it is important to notice based on Figure 2 above that green markets GM are markets without environmental sustainability gaps ( $ESG = EPOP1 = 0$ ) as the closing of the environmental sustainability gap flips the traditional market fully from point 2 towards the green markets at point 3.

***Notice that in a world under perfect green markets, the environmental responsibility falls on the green producer and green consumer, and only when there is green market failure the government is to intervene and be responsive to green policy failure and social activism's rights.***

## The green market paradigm shift avoidance period 2012-2023

Figure 2 above shows then what it should have been had the United Nations Conference on Sustainable development(UNCSD) and the world followed Thomas Kuhn's scientific paradigm evolution loop as the consensus for paradigm change that existed in 2012 Rio +20 to correct the traditional market thinking of the day once and for all and implement it world wide, but no green market was ever set up, and instead the world moved slowly and quietly after 2012 towards implementing partial environmental solutions or dwarf green markets, markets that have the structure pointed out in Figure 3 below:

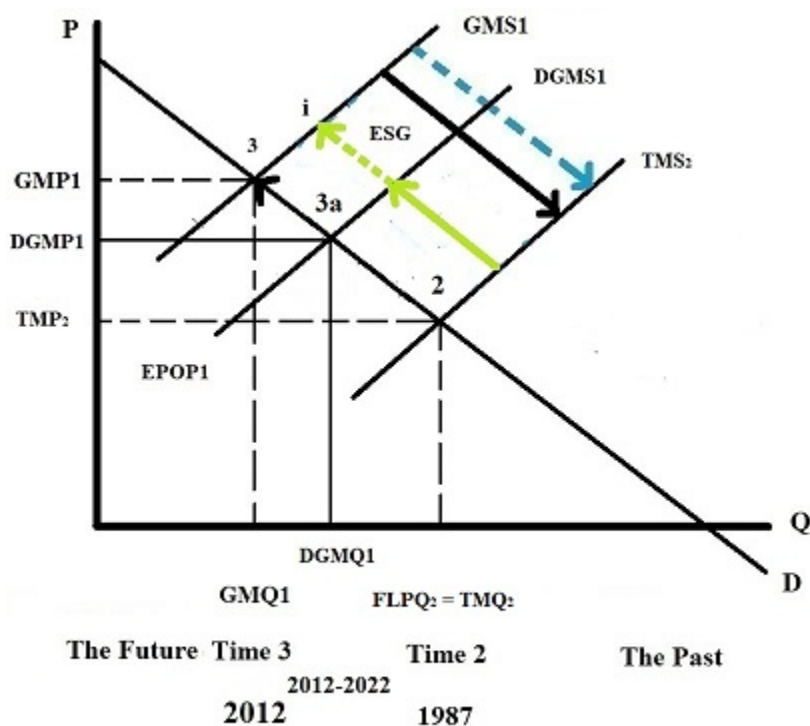


Figure 3 The structure of green market paradigm shift avoidance and the world of dwarf green markets

Figure 3 above is a general representation of the green market paradigm shift avoidance period 2012-2022 as instead of green markets at point 3 the world set up dwarf green markets at point 3a since 2012, which have been in place since: Instead of fully correcting the environmental distortion embedded in the traditional market at point 2 using perfect green market thinking decision makers used a partial correction a la dwarf green markets such as the one at point 3a creating a world still under environmental sustainability gaps(ESG) pressures as indicated by the broken section of the green arrow from point 3a to point 3. We can also use Figure 3 above to state that any market placed between the traditional market point 2 and the green market point 3 is a dwarf green market, such as the one at point 3a, and that any dwarf green market has an environmental sustainability gap ESG associated with it, which undermines its stability.



Moreover, the following observation can be made based on Figure 3 above: i) The dwarf green market price DGMP1 is lower than the green market price GMP1, but higher than the traditional market price so that  $GMP1 > DGMP1 > TMP2$ ; ii) the dwarf green market quantity produced and consumed DGMQ1 is higher than the green market quantity produced and consumed GMQ1 and lower than the traditional market quantity produced and consumed FLPQ2 so that  $GMQ1 < DGMQ1 < FLPQ2$ ; iii) all this means that dwarf green markets are partial solutions based on environmental externality management at work at point 3a; and there is an environmental sustainability gap(ESG ) from point 3a to point 3 as indicated by the broken green arrow so that  $ESG > 0$ , which affects the working of the dwarf green market at point 3a as environmental pollution is still taken place while environmental pollution management takes place.

*Notice that in a world under dwarf green markets, the environmental responsibility falls on the government, not on dwarf producer and dwarf consumer, and hence, even when there is dwarf market failure you should not expect the government to intervene to prosecute itself, raising a real issue of conflict of interest when facing dwarf green market policy failure and social activism's rights.*

### **The consequences of green market paradigm shift avoidance**

Being in a world under dwarf green markets, but presented as under green markets since 2012 as shown in Figure 3 above creates confusion, and this confusion in the mind of the author has negative consequences as i) it provides a good opportunity for bad business behavior such as greenwashing; ii) it is a good opportunity for making Marxism claims against capitalism as we know it such as green, red and yellow Marxism claims; and iii) it is a good opportunity for the promotion and implementation of environmentally backward development paradigms aimed solely at maintaining the status quo thinking such as circular traditional economic thinking, and the nature of each of these negative consequences should be expected to thrive under confusion is summarized in Figure 4 below:

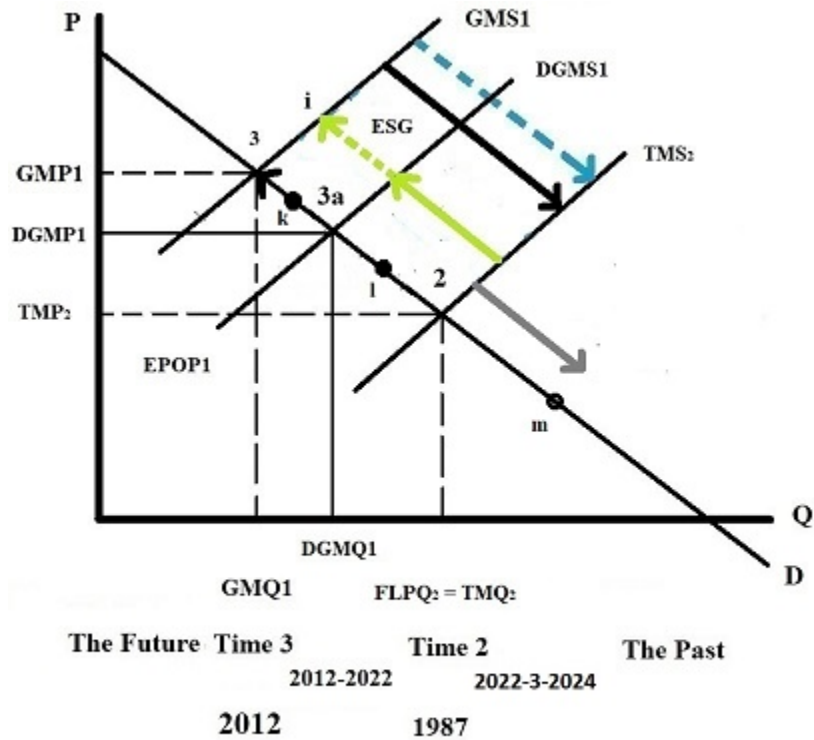


Figure 4 The consequences of the confusion created by the green market paradigm shift avoidance period 2012-2022

Figure 4 above can be used to point out the consequences of the confusing development situation that arises under green market paradigm shift avoidance 2012-2022 one by one as follows:

### i) Confusion and greenwashing

There are many players benefiting from the confusion created by green market paradigm shift avoidance in terms of green washing as shown in Figure 4 above. For example, greenwashing can be done by traditional market based businesses such as those operating at point 2 or operating at extreme points such as point “m” in Figure 4 above, which can claim to be partially or fully environmentally friendly when they are not, and charge higher prices than traditional market prices for traditional products and services. Greenwashing can be done by dwarf green market based businesses such as those operating at point 3a in Figure 4 above, which can claim to be more environmentally friendly or even claim to be green markets when they are not, and charge prices higher than the dwarf green market prices for dwarf green market products and services. Greenwashing accusations against businesses operating in the confusion zone are known phenomena that affect the reputation of the companies when true (Pellegrino 2023). And greenwashing can be done by governments too when selling the dwarf green markets at point 3a as if they were the green markets at point 3, when advertizing dwarf green market policies as green market policies, or when passing dwarf green market jobs as green market jobs, and so on or when providing advice on the nature of green goods and services. For example, there are no green markets and hence there are no green market products available, yet green guides are produced to help non-green consumers (FTC 20224) or the greening of

economies is encouraged without changing what was wrong with the old economy in the first place leading to the environmental problem, and expecting it to bring us into green markets (GOC 2024).

In other words, the confusion created by green market paradigm shift avoidance allows environmentally unfriendly businesses or dwarf green market business or governments to benefit from greenwashing in different ways.

## **ii) Confusion and Marxism claims against capitalism**

The confusion that comes from whether we have a green market at point 3 or a dwarf green market at point 3a or a traditional market at point 2 or a circular traditional market at point “m” in Figure 4 above can be taken and sold 1) as socially destructive actions by social activists calling for a world under red Marxism, 2) as environmentally destructive actions by environmental activists calling for green Marxism, and 3) as socially and environmentally destructive actions by socio-environmental activists calling for a model under yellow Marxism, all advocating the destruction of capitalism. In other words, the confusion created by green market paradigm shift avoidance can be used by anti-capitalism activist to justify destroying dwarf green capitalism, traditional capitalism or circular capitalism in the name of protecting society and/or the environment from their reach and destruction. The different market point of entry of these treats has been recently stressed in detail (Muñoz 2024b).

## **iii) Confusion and status quo paradigm double down**

There are many players benefiting from the confusion created by green market paradigm shift avoidance in terms of status quo paradigm double down to maintain the status quo paradigm, to saving the traditional market thinking, as it has always been, socially and environmentally distorted and keep it without correction. For example, the confusion can be used by pro-status quo academics and governments to double down on implementing the now known social and environmental unfriendly traditional market thinking as now social and environmentally friendly by just defining it circular economic thinking as it is happening 2023-2024 without fixing the sources of social and/or environmental unfriendliness embedded too in this thinking, just as the European Union is doing (EC 2020), a situation found at point “m” in Figure 4 above. Notice that at point “m” the socio-environmental pollution problem (SEPOP1) is even worse as it expands to the right from point 2 to point “m” as circular traditional markets, like linear traditional markets are pollution production markets (Muñoz 2023).

In summary, we can appreciate based on Figure 4 above that the consequence of green market paradigm shift avoidance in terms of confusion is that it leaves the door open for the flourishing of threat situations affecting environmental sustainability dynamics such as greenwashing threats, green Marxism threats, and backward paradigm move double down threats aimed only at maintaining the status quo economic paradigm like the current move towards circular economic thinking 37 years after the World Commission on Environment and Development (WCED 1987) told us to leave it behind found and move away to the right of point 2, but instead they move to point “m” in Figure 4 above. All of these threats undermine the working of dwarf green markets and undermine the future implementation of green markets.

## Food for thoughts

i) Is government intervention always needed under perfect green market thinking? I think No, what do you think?; ii) Can dwarf green markets exist without government intervention? I think No, what do you think?; and iii) Is the current circular economic thinking push a move towards socio-environmental unsustainability? I think Yes, what do you think?

## Conclusions

First, it was pointed out that the need to make the environment the priority issue towards 2012 led to the green market paradigm shift period 1987-2012 that culminated in Rio +20. Second, it was highlighted that instead of setting up and implementing green markets, soon after the conference was over the world moved to set up and implement dwarf green markets, leading to the green market paradigm shift avoidance period 2012-2022. And third, it was stressed that the confusion created by green market paradigm shift avoidance can be used: i) by environmentally unfriendly traditional businesses or dwarf green market business or governments to benefit from greenwashing; ii) by anti-capitalism activist to justify destroying dwarf green capitalism or pure capitalism or circular capitalism in the name of protecting society and/or the environment from its reach; and iii) by pro-status quo academics and governments to double down on implementing the known social and environmental unfriendly traditional market thinking by just defining it circular economic thinking as it is happening 2023-2024 without fixing the sources of social and/or environmental unfriendliness embedded in it.

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