Short Elucidating Note 124: Understanding the expected working of true sustainability markets and the optimal outcomes associated with them in the long-term using golden development paradigm theory.

By

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Abstract

We know that sustainability is about full inclusion and that sustainability markets are about full cost internalization, and hence they have the characteristics of golden paradigms, paradigms without abnormalities embedded in them. In other words, sustainability markets do not have sustainability gaps. Among the goals of this paper are a) to link golden development paradigm theory with true sustainability theory to highlight the expected working of true sustainability markets and the expected optimal outcomes associated with them in the long-term; and b) to indicate how the working of sustainability markets is affected by externality production neutrality assumptions and no externality production neutrality assumptions

Key concepts:

Golden paradigm, true sustainability paradigm, optimal outcome, optimal sustainability outcome, sustainability conditions, true sustainability conditions, true sustainability markets, externality production neutrality assumptions, no externality production neutrality assumptions, socio-environmental externality production neutrality assumptions, no socio-environmental externality production neutrality assumptions.

Introduction

a) The nature of the golden development paradigm loop

The structure of the golden development paradigm (GOP) loop and the optimal issues associated with it has been recently highlighted (Muñoz 2026) as indicted in Figure 1 below:

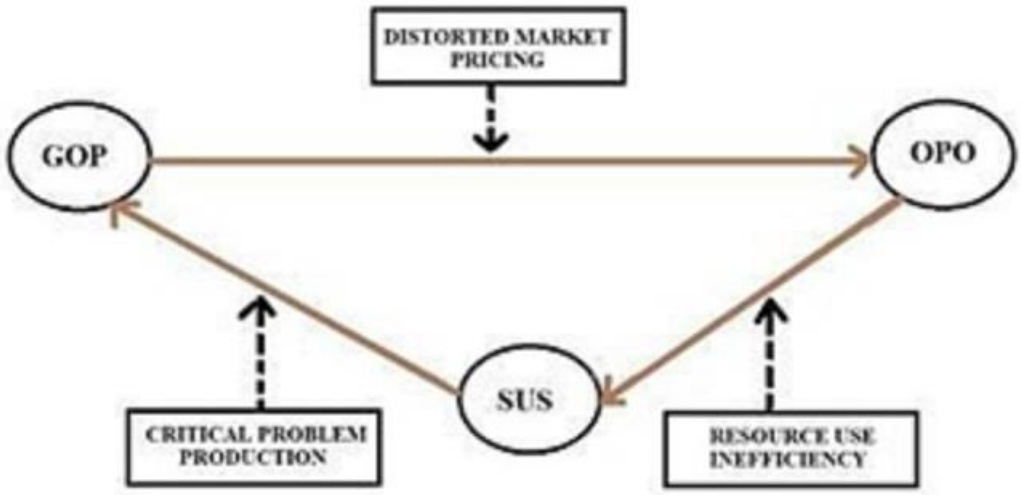

Figure 1 The expected golden paradigm development loop

Figure 1 above indicates the following aspects: a) That there is a positive loop golden paradigm (GOP), optimal outcomes (OPO), and sustainability conditions (SUS) and back to golden paradigms (GOP), where golden paradigms (GOP) create sustainability (SUS) conditions through time and are positively affected by the accumulation of these sustainability conditions; and b) that optimal market pricing drives the production of optimal outcomes, that these optimal outcomes flourish under resource use efficiency, and that the accumulation of sustainability conditions culminate without the production of critical problems, and this in turn affects positively the sustainability of the golden paradigm(GOP). In the long-term the working of this golden development paradigm (GOP) loop is expected to promote optimal pricing, resource use efficiency and a profit seeking world without producing critical problems, a world under fully responsible development. Applications of this golden paradigm theory loop have been linked to the idea behind the pointing out the flawed paradigm nature of traditional market thinking (Muñoz 2024a) a la Adam Smith(Smith 1776), to the idea behind golden Trojan paradigm theory (Muñoz 2024b), and to the idea behind the critical problem-solving possibility point theory (Muñoz 2025).

b) The need to understand the link golden development and the idea of true sustainability

We know that sustainability is about full inclusion and that sustainability markets are about full cost internalization, and hence they have the characteristics of golden paradigms, paradigms without abnormalities embedded in them. In other words, sustainability markets do not have sustainability gaps. Among the goals of this paper are a) to link golden development paradigm theory with true sustainability theory to highlight the expected working of true sustainability markets and the expected optimal outcomes associated with them in the long-term; and b) indicate how the working of sustainability markets is affected by externality production neutrality assumptions and no externality production neutrality assumptions.

Goals of this paper

a) To expand the golden development paradigm theory and link it to true sustainability theory to describe the expected working of true sustainability markets and the expected optimal outcomes associated with them in the long-term; b) To place the true sustainability paradigm loop under externality neutrality and no externality neutrality assumptions and highlight the

implications in each case; and c) To highlight that true sustainability markets do not have external market failures, and hence, their expansions are optimal.

Methodology

1) The terminology and operational concepts are shared; 2) The golden development paradigm theory is expanded to state the structure of the true sustainability development loop and its implications; 3) The true sustainability development loop is placed under no externality production neutrality assumptions and stress the implications of this; 4) The true sustainability development loop is placed under externality production neutrality assumptions; 5) The structure of the true sustainability market in terms of supply and demand without socio-environmental sustainability gaps is shared to show the non-existence of external market failures; 6) The structure and implications of true sustainability market expansions is given to highlight the profits can be generated while reduction socio-environmental pollution production issues; and 7) Some food for thoughts and relevant conclusions are shared.

Terminology

GOP = Golden paradigm OPO = Optimal outcomes

SUS = Sustainability conditions TSP = True sustainability paradigm

TSUS = True sustainability conditions OPSO = Optimal sustainability outcomes

FCI = Full cost internalization FSECI = Full socio-environmental cost internalization

NRSP = Remaining sustainability problem

NRSESP = No remaining socio-environmental sustainability problems

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Operational concepts

i) Golden paradigm, *a world without abnormalities embedded in it.*

ii) Optimal outcomes, *those that take place under abnormality internalization, fully or partial.*

iii) Unsustainability conditions, *those that feed non-optimal development***.**

iv)True sustainability market paradigm, *a world without socio-environmental abnormalities embedded in it.*

v) Optimal sustainability outcomes, *the ones outside full socio-environmental externality neutrality assumptions as full socio-environmental cost internalization is the rule.*

vi) True sustainability conditions, *those which do not lead to the production of critical socio-environmental problems.*

vii) Full cost internalization, *all externality costs are accounted for in the pricing mechanism of market.*

viii) Full socio-environmental cost externalization, *all socio-environmental externality costs are accounted for in the pricing mechanism of the market.*

ix) True sustainability market paradigm, *the one without socio-environmental externalities embedded in it.*

x) True sustainability market price, *the one that clears the true sustainability market.*

The structure of the true sustainability paradigm loop and the absence of optimal pricing

If we make the golden paradigm(GOP) loop in Figure 1 above be the true sustainability paradigm (TSP) loop so that GOP = TSP, OPO = OPSO, and SUS = TSUS we arrive to the loop structure shown below:

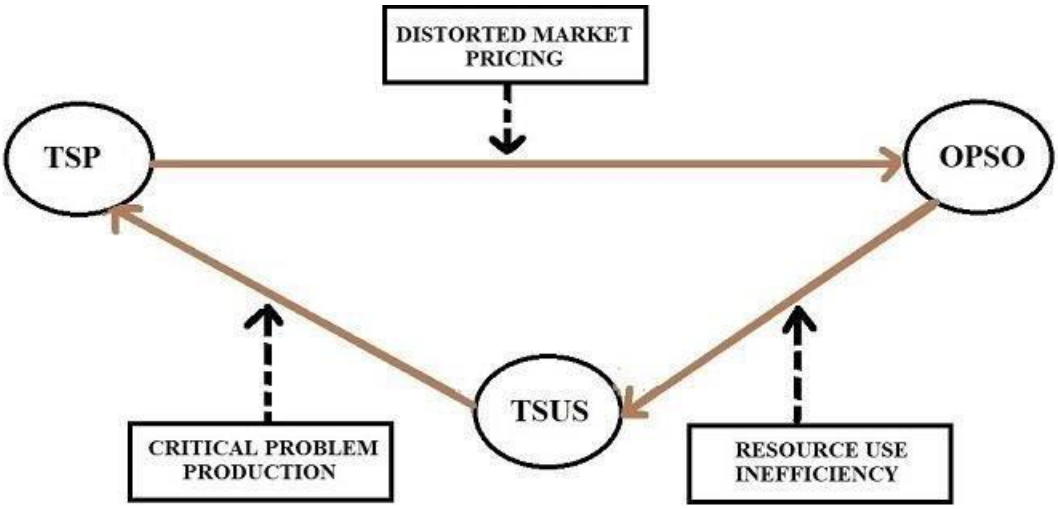

Figure 2 The expected true sustainability paradigm development loop(TSP) from the point of view of the absence of distorted market pricing

Figure 2 above tells us that the true sustainability paradigm (TSP) loop produces optimal sustainability outcomes (OPSO), which in turn leads to true sustainability conditions (TSUS) that are positively linked to the working of the true sustainability paradigm (TSP). Figure 2 above shows by means of broken black arrows that the true sustainability paradigm (TSP) loop does not uses distorted market prices, do not create resource use inefficiencies, and therefore it does not lead to critical problem production issues like critical socio-environmental sustainability problems (SESP) or socio-environmental pollution production problems (SEPOPP). Hence Figure 2 summarizes a positively feeding true sustainability loop from the absence of distorted market pricing or the absence of optimal market pricing point of view.

Implication 1:

The true sustainability paradigm loop is linked to the absence of distorted market pricing, the absence of resource use inefficiency and the absence of critical externality production problems.

The structure of the true sustainability paradigm loop and the presence of optimal pricing

We can transform the true sustainability paradigm(TSP) loop in Figure 2 above as indicated in Figure 3 below if we express in terms of the presence of optimal market pricing:

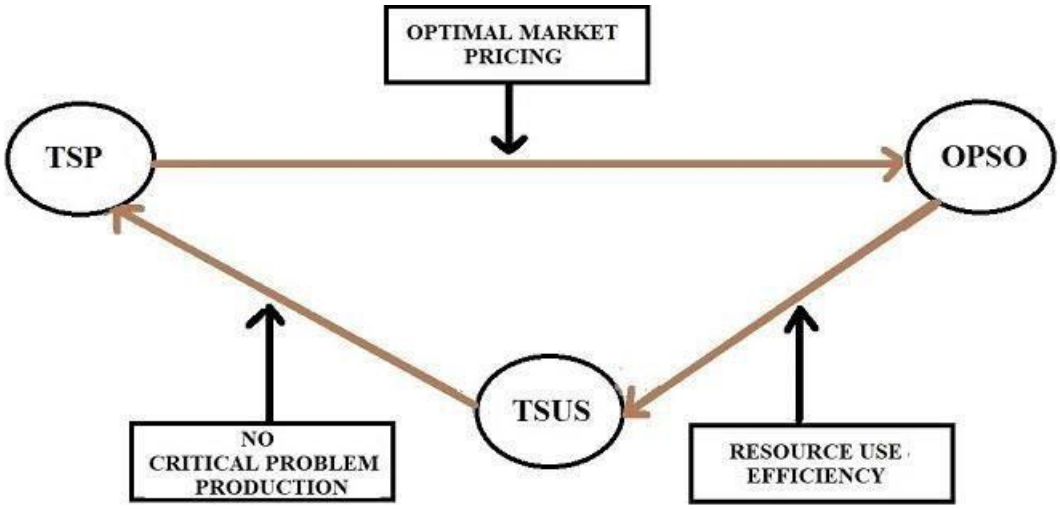

Figure 3 The expected true sustainability paradigm development loop(TSP) from the point of view of the presence of optimal market pricing

Again, Figure 3 above highlights that the true sustainability paradigm (TSP) loop leads to optimal sustainability outcomes (OPSO), which in turn produce true sustainability conditions (TSUS) that are positively linked to the working of the true sustainability paradigm (TSP). But now Figure 3 above indicates by means of continuous black arrows that the true sustainability paradigm (TSP) loop does use optimal market prices, which drive resource use efficiencies, and hence, again it does not lead to critical problem production issues like critical socio-environmental sustainability problems (SESP) or socio-environmental pollution production problems (SEPOPP). Hence Figure 3 summarizes a positively feeding true sustainability loop from the presence of optimal market pricing or the absent of distorted market pricing point of view.

Implication 2:

The true sustainability paradigm loop is linked to the presence of optimal market pricing, to the presence of resource use efficiency and to the presence of no critical externality production problems.

The true sustainability paradigm loop under externality production neutrality assumptions

If we place the true sustainability paradigm (TSP) loop under the externality production neutrality assumption such as the socio-environmental externality production neutrality assumption, we should expect no changes in the structure of the loop as the true sustainability market paradigm(TSP) does not produces externalities as externality issues are now here endogenous issues, a situation depicted in Figure 4 below:

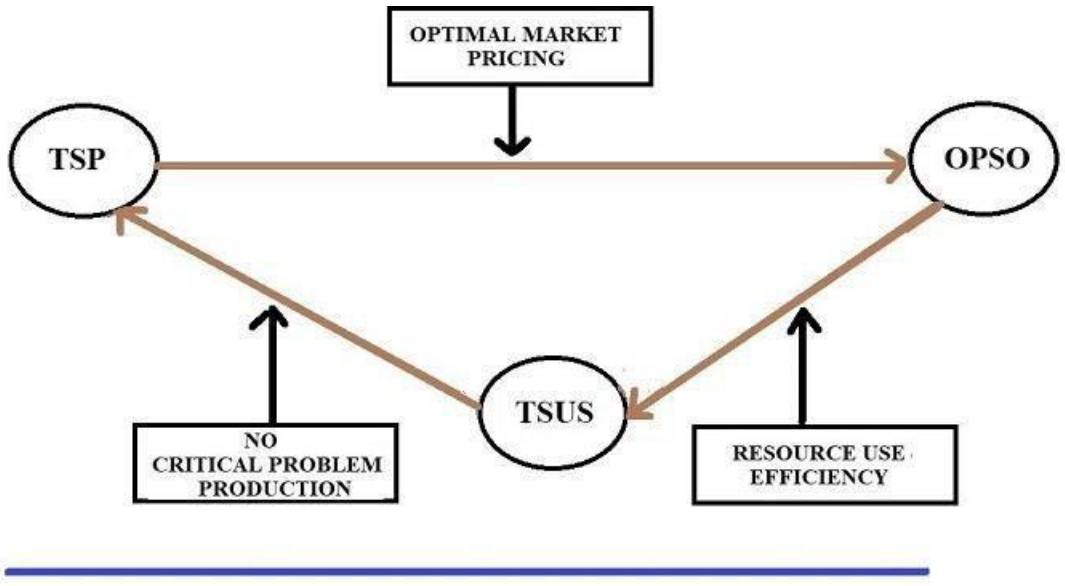

Figure 4 Placing the true sustainability paradimg development loop under externality production neutrality assumptions leaves the loop the same as there are no externalities here.

Figure 4 above highlights that externality production neutrality assumptions do not affect the structure of a paradigm that does not have abnormalities embedded in it as externality issues are fully internalized in true sustainability markets, and hence the true sustainability loop under these assumptions will lead to resource use efficiency and to a world without externality problems as optimal market pricing is at work.

Implication 3:

The true sustainability market paradigm loop is not affected by externality neutrality assumptions as here externality issues are endogenous issues so no externalities are produced in true sustainability paradigms due to full externality internalization.

The true sustainability paradigm loop under no externality production neutrality assumptions

Moreover, if we place the true sustainability paradigm (TSP) loop under the NO externality production neutrality assumption such as the NO socio-environmental externality production neutrality assumption, we should expect again no changes in the structure of the loop as the true sustainability market paradigm (TSP) does not lead to externalities as externality problems are again endogenous issues in this paradigm, a situation summarized in Figure 5 below:

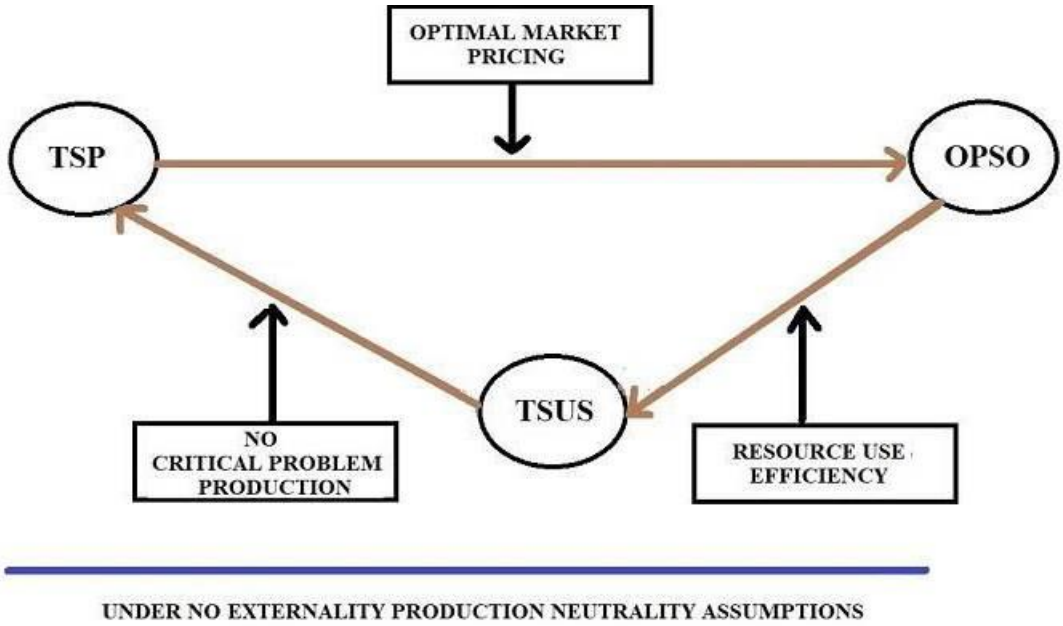

Figure 5 Placing the true sustainability paradimg development loop under no externality production neutrality assumptions leaves the loop the same as there are no externalities here.

Therefore, Figure 5 above points out that also the no externality production neutrality assumptions does not affect the structure of a paradigm as it does not have abnormalities embedded in it since externality issues are fully internalized, so the true sustainability loop under these assumptions will again lead to resource use efficiency and to a world without externality problems as again optimal market pricing is at work.

Implication 4:

The true sustainability market paradigm loop is not affected by the no externality neutrality assumptions as no externalities are produced while it is at work.

The structure of the true sustainability market in terms of supply and demand

In terms of supply and demand, the true sustainability market (TSM) clearing at the true sustainability market price (TSMP) can be stated as shown below:

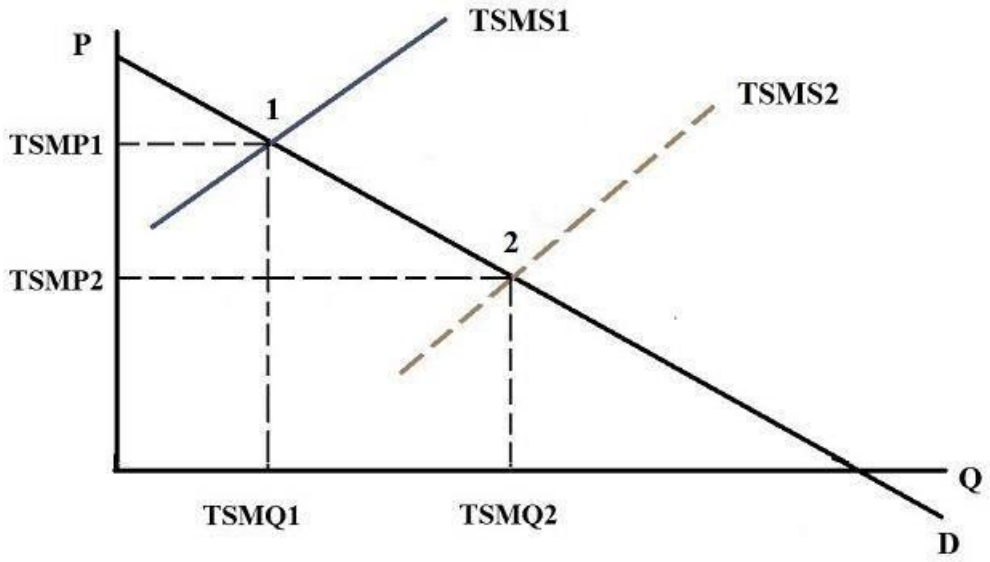

Figure 6 The structure of the true sustainability market (TSM) in supply and demand terms

Figure 6 above displays the structure of the true sustainability market placed at point 1: i) The market at point 1 is cleared at the true sustainability market price TSMP1 and the optimal true sustainability quantity produced and consumed is TSMQ1; ii) at point 1 there is optimal market pricing, there is resource use efficiency, and no pollution production issues are created as the point is optimal; and iii) there is not an external market failure at point 1 as no externalities are produced.

Implication 5:

The true sustainability market is cleared by optimal pricing a la true sustainability market price, and this determines the amount of true sustainability based good and services to be produced and consumed.

The optimal structure of true sustainability market expansions in terms of supply and demand as they do not create critical problems

Since optimal pricing leads to optimal expansions that are fully conjunctural states then expansions go from optimal point to optimal point as true sustainability markets tend to produce at the lowest sustainability market price possible, which means that it is possible to make money while reducing pollution production, a situation indicated in Figure 7 below:

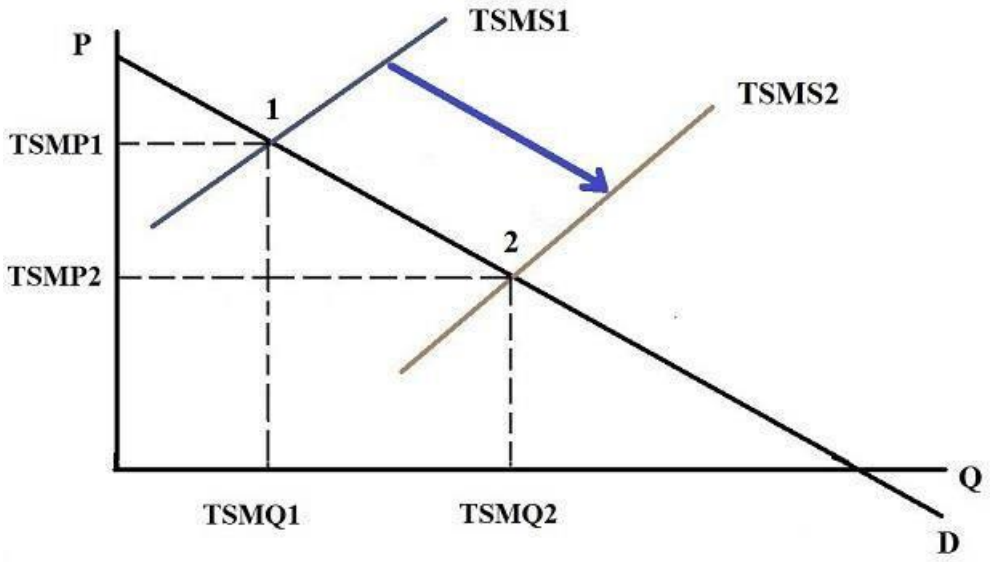

Figure 7 Expansions in true sustainability markets are optimal expansions, more sustainability based production and consumption at a lower sustainability market price takes place as TSMP2 < TSMP1 without expanding sustainability gaps

Figure 7 above show the structure of optimal expansions, a move from point 1 to point 2 where more true sustainability based production and consumption takes place (since TSMQ2 > TSMQ1) at a lower true sustainability market price (since TSMP2 < TSMP1), and expansion that does not produces externality problems as expansions are optimal. Hence, a move from point 1 to point 2 means that true sustainability based profits can be increased through market expansions like the one from point 1 to point 2 without producing externality problems as externality problems are now fully internalized.

Implication 6:

Optimal pricing leads true sustainability market expansions in a profit generation process that does not create externality problems.

Food for thoughts

1) Do golden development paradigms tend to produce at the lowest golden market price possible? I think Yes, what do you think?; 2) Do true sustainability markets have remaining sustainability gap problems? I think No, what do you think?; 3) Is socio-environmental pollution reduction a good business opportunity under perfect true sustainability market thinking? I think Yes, what do you think?; and 4) Do golden development paradigms have external market failures? I think No, what do you think?

Conclusions

First, it was shown that the golden development paradigm theory can be expanded and link to true sustainability based paradigm theory. Second, it was pointed out that when distorted market pricing like socio-environmentally distorted market pricing is absence the true sustainability loop creates resource use efficiency trends without producing externality producing problems. Third, it was indicated that when optimal pricing is presence we create true sustainability conditions that drive resource use efficiency without creating critical problems, and these optimal conditions feedback positively to the true sustainability paradigm and its market. Fourth, it was shown that when under externality neutrality assumptions the true sustainability loop under optimal pricing is not affected as no externalities are created during the working of true sustainability markets. Fifth, it was highlighted that when under no externality neutrality assumptions again the structure of the true sustainability loop and its optimal consequences does not change as full externality internalization here leads to no critical externality problem creation. Sixth, it was said that when stated in terms of supply and demand, the true sustainability market is the one cleared by the true sustainability market price. Seventh, it was demonstrated that true sustainability market expansions are optimal expansions; and hence, they do not create externality production problems as we produce and consume more sustainability market based goods and services at lower and lower sustainability market prices driving up sustainability based profits while reducing socio-environmental pollution production at the same time.

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