

## Possible Pathways to Sustainable Resource Utilisation



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The consequences of unsustainable and irresponsible consumption and production patterns are being felt by our current generation, manifesting as climate change, increased inequality, diminished natural resources and social injustice. While it is apparent that change needs to happen quickly in order to secure a sustainable future, questions of who changes first, why should

who change first and how to change the status-quo hamper the adaptation of sustainable consumption and production practices. Current trends in production and consumption are leaning towards an increased material footprint and food waste per capita resulting in more pollution, waste generation and pressure on precious resources.

A linear relation between economic growth and extraction of natural resources can be seen in some economies. Future increases in such trends of production may result in the depletion of natural resources. A myriad of solutions has been proposed, some have been successful, many remain to see the light of the day, but all the while the clock ticks, climate change impacts become more adverse while inequality and poverty increase.

We need pathways towards decoupling economic growth and natural resources, averting resource depletion and biodiversity loss, minimising pollution and waste generation while reflecting the assimilation of Environmental, Social and Corporate Governance (ESG) sustainability criteria by all stakeholders.

This paper reflects the voices of some consumers on how to rethink and tweak existing policies and reward systems so as to make change towards sustainable consumption and production more attractive. Possible pathways considered are policy-based actions such as commodity labelling, GDP normalisation against ESG, Producer ESG Levy and reward-based incentives including consumer sustainability rewards, mega popular sustainability media awards and incentives targeting sustainable consumption in Africa.

### Pathway 1: Policy-based actions

The International Energy Agency reported that in 2022 amid the global energy crisis, global energy-related CO<sub>2</sub> emissions rose by 1% which was less than anticipated. This was mainly attributed to the growth of renewable energy utilisation (i.e., solar and wind energy) and energy efficiency measures (i.e., heat pump utilisation) that depressed the negative impacts of using fossil fuels.

Be it a top-down or bottom-up approach towards climate action, or the proverbial ostrich vs phoenix approach to climate adaptation, power and policies seem to play a major role in altering the patterns of climate change. Although many agree that change is needed, policies that are directly command-and-control in nature are met with protests, whilst those leaning towards a slower bite-and-blow technique seem too slow to catch up with the adverse effects of the fastturning wheels of technology, consumption and production patterns.

While this paper in no way attempts to provide new policy instruments, it does suggest a rethinking of some top-bottom and bottom-up policies to make them more palatable to producers and consumers, contributing to the sea of existing policies that target responsible consumption and production.

### **(A) Inclusion of externalities in commodity labelling**

Mandatory labels are commonly presented on consumer goods to drive certain consumption patterns. For instance, many OECD countries have implemented mandatory labels of energy efficiency on household electronic appliances to promote the consumption of more energy efficient devices. This pathway proposes the introduction of mandatory labels on consumer commodities that provide brief information e.g., a fact sheet or rating of a commodities' footprint in terms of material intensity (such as percentage of mined minerals contained), CO<sub>2</sub>, other social and environmental impacts and handprints such as renewable energy and recycled materials used. This label could be present on consumer commodities like electronics, vehicles, machines, consumables etc. and should be based on accreditation and monitored for accuracy. This may increase consumer awareness, making the shadows of each commodity more visible and thus empowering their sustainability handprint by giving consumers the data need to prioritise and choose greener commodities (self–other trade-off). This may in turn spur more sustainable and responsible production practices.

### **(B) GDP normalised against ESG sustainability index**

It is the norm to measure economic performance in terms of Gross Domestic Product (GDP) that, by default, seems to be indicative of living standards. Although GDP is a clear and established tool for measuring economic growth, accepted worldwide, determining it does not incorporate ESG aspects of sustainable development. Externalities, such as the hidden cost to the environment due to resource depletion and pollution as well as social inequality, are not incorporated in GDP calculations.

These discrepancies have led to different initiatives seeking to adapt indicators that take sustainable growth and development into account. Such initiatives can largely be categorised as green/inclusive growth, post-growth or degrowth. Many alternative indicators to GDP, such as the Human Development Index, Social Progress Index, The Sustainable Development Goals (SDG) index, have been developed but, at present, none enjoy the popularity given to GDP. Tapping into the green/inclusive growth and post-growth categories, the normalisation of GDP against the E(environmental), S(social) impact and G(governance) of the ESG index could be targeted as transitional steps towards acceptable, more radical transformations.

Some studies suggest that for different economies, a positive correlation may exist between G (governance) and GDP growth, while a negative correlation may exist between E (environmental) impact and GDP growth. Therefore, developing and popularising GDPs normalised against the components of the E, S and G sustainability index may assist in visualising the invisible environmental and social footprints of economies that grow *via* unsustainable pathways. Existing efforts to normalise GDP ratings against greenhouse gas (GHG) emissions could provide a roadmap for how to approach this transformation.

### **(C) Producer ESG Levy**

In a bid to encourage companies to decarbonise production processes, stakeholders such as the European Union are adopting a carbon border adjustment mechanism which requires the payment of a certain carbon levy for imported goods from regions with less ambitious GHG emissions rules. The implementation of such a levy discourages industries from basing themselves in countries with less strict GHG emissions rules.

A similar approach can be applied to encourage industries that utilise natural resources to adopt responsible resource extraction and utilisation. Based on ESG sustainability criteria, different weights can be assigned to clusters of unsustainable production practices. Taking into account the cradle-to-grave cycle of production in an industry, an unsustainability levy (relative to preset weight) could then be applied to a production company engaging in unsustainable production practices. The collected levy creates a pool of revenue that can be channelled towards sustainability projects, climate change mitigation and adaptation initiatives or compensating local people affected. In addition, sustainability rewards points for small-, medium- and large-scale enterprises could be used to increase a company's green visibility and chances of being financed by a bank promoting ESG sustainability. Below is a sample list of sustainable and unsustainable practices that can be targeted for rewards or levies.

PRODUCTION COMPANIES		
Rating	Rewarded Sustainable Practices	Levied Unsustainable Practices
1	<ul style="list-style-type: none"> <li>- Adopting and applying science-based targets</li> <li>- Cyclical economy-based production</li> <li>- Decoupled natural resource-product production processes</li> <li>- Net zero carbon emission production</li> </ul>	<ul style="list-style-type: none"> <li>- Operating mainly where environmental regulations are lenient</li> <li>- Prioritising short-term profit over long-term benefit</li> <li>- Fossil energy-based production</li> <li>- Socially unjust production processes (life-cycle)</li> </ul>
2	<ul style="list-style-type: none"> <li>- Submitting to external parties` audits</li> <li>- ESG-related impact considerations</li> </ul>	<ul style="list-style-type: none"> <li>- Donating to political actors that work against sustainability policies</li> <li>- Deforestation practices</li> <li>- Disregarding regulations</li> <li>- Shifting production to take advantage of social inequality (such as low wages, hazardous labour conditions, lack of accounting for local communities` rights)</li> </ul>
3	<ul style="list-style-type: none"> <li>- Building networks across borders and with companies in other regions (especially within the Global South)</li> <li>- Accounting for externalities of production</li> <li>- Creating long-lived, repairable products</li> <li>- Improving community livelihoods</li> <li>- Supporting environmental and conservation programmes</li> <li>- Supporting reforestation and nature conservation initiatives</li> </ul>	<ul style="list-style-type: none"> <li>- Greenwashing marketing campaigns</li> <li>- Non-circular production, producing short lived and unrepairable goods</li> <li>- Generation of avoidable waste</li> <li>- Non-transparent supply chains</li> <li>- Energy inefficient production systems</li> </ul>

## Pathway 2: Incentives for consumers and producers

### (A) Consumer Sustainability Rewards

This approach foresees giving small but measurable sustainability rewards to consumers in the form of payback points or indexes as incentives towards the adaptation of sustainable and responsible consumption practices.

An independent foundation can be used to provide clear and concise information on which sustainable practices would be more impactful and feasible to different categories of consumers, based on their income. The foundation can then provide a platform where consumers voluntarily sign-up and earn sustainability payback points, based on their consumption patterns. The earned points can then be redeemed in various forms valuable to the consumer. Below is a table depicting some possible sustainable consumer practice clusters and their possible weighting.

CONSUMERS	
Reward	Rewarded Sustainable Practices
1	<ul style="list-style-type: none"> <li>- Increased handprint in resource and product sharing</li> <li>- 5Rs or 10Rs of waste management</li> <li>- Renewable energy utilisation</li> <li>- Reduced footprint in consumption of carbon-intensive products e.g., fossil-based products</li> </ul>
2	<ul style="list-style-type: none"> <li>- Purchasing environmentally and socially friendly products (see commodity labelling under point 1.A.)</li> <li>- Reduced energy consumption (heating and cooling)</li> </ul>
3	<ul style="list-style-type: none"> <li>- Using sustainable modes of transport when possible (public transport and bicycles)</li> <li>- Reduced emission-heavy travel (flights, cars)</li> </ul>
4	<ul style="list-style-type: none"> <li>- Acting as a sustainable multiplier, educating peers</li> <li>- Taking or supporting political action to reduce inequality and strengthen conversation efforts</li> </ul>

### (B) Usage of visual communication in media spaces

Using visual communication in media can be intensified to lock-in positive emotions towards sustainable consumption. This is already being implemented and should be done more prominently to change consumption patterns.

One possible pathway would be to establish a similar sustainability award that is broadly advertised and connected to an attractive reward. This may incorporate existing sustainability awards such as the 'Sustainability Innovation Awards or European Green Award' and give more visibility to

sustainability in small, medium and large-scale enterprises. Such an award can also be used to popularise a sustainability slogan that captivates youth and is easily reflected in movies, songs and other artistic outputs.