

Shifting policy gears to effect global transition towards sustainable lifestyles



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Abstract

Fifty years since the Stockholm conference when the global community recognized the effects of human intervention on environmental degradation, the world continues to use resources and generate waste beyond our planet's capacity to sustain. In this paper, we argue that the resource-intensive lifestyles of the global rich and rising inequality underpin these issues, and that reimagining the way people consume and their lifestyles would be integral to solving this intricate problem of our times. A global shift to sustainable lifestyles would require building an overarching culture of sustainability and an underlying infrastructure of sustainable products and services. Based on a review of the literature, we propose three levers of change that can guide the transition to sustainable living – **nudging individuals** towards sustainable choices, **enabling markets** through green policies and **redefining social norms** to make sustainability aspirational. We discuss case studies that have worked in diverse geographies and also acknowledge the challenges and risks that could hinder the desired transition to sustainable living. An integrated approach to using the proposed levers across key lifestyle domains combined with international cooperation to share finance, technology and best practices, and leadership by countries with high lifestyle footprints would be essential to accelerate action at national and sub-national levels across the world.

BACKGROUND PAPER

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1. Reorienting the global environmental discourse towards sustainable lifestyles

The unprecedented economic growth that the world has witnessed over the past two centuries has significantly helped improve the quality of life for a vast section of the global population. The average global GDP per capita has grown by nearly 15 times between 1820 and 2018 (Roser, 2013)¹. However, this economic transition has been accompanied by the phenomenon of ‘global ecological overshoot’ since 1970, implying that the global demand on natural resources (ecological footprint) exceeds our ecosystems’ capacity to regenerate (biocapacity) (Global Footprint Network, n.d.).²

The United Nations Conference on the Human Environment held in Stockholm in 1972 recognized the effects of human intervention on environmental degradation. As part of the conference, for the first time in human history, it was accepted on a global platform that humans are responsible for irreversible and unprecedented change caused to the natural environment, faster than the scale at which Earth can regenerate itself. The declaration provided a framework of mutual dependency between humans and the planet while establishing that each human being has a right to dignity of life supported by a healthy environment. The Stockholm declaration laid out the principles for international cooperation on environmental issues, and paved the way for the emergence of a global agenda and institutions for sustainable development (Chasek, 2020).

The Limits to Growth, a manifesto published in 1972, was another benchmark, which defined the limits to human consumption in a finite world (Meadows et al., 1972). This was followed by the Rio Earth Summit in 1992, which stressed the importance of transition towards sustainable consumption and production (Akenji et al., 2015). Chapter 4 of *Agenda 21* (United Nations Conference on Environment and Development & Sitarz, 1993), a critical output of the summit, asserted that humankind must reimagine lifestyles, based on controlled resource use and newer definitions of wealth and prosperity (not based on consumerism). The World Summit for Sustainable Development in 2002 reaffirmed the need to focus on consumption to achieve sustainable goals (Von Schirnding, 2005). However, owing to gaps in implementation and accountability, the world has continued to use resources and generate waste beyond our planet’s capacity to sustain (Figure 1 - opposite).

Following the international focus on unchecked consumption, through this paper, we anchor the discourse on environmental degradation and climate change on lifestyles. We discuss three integrated ways in which transition to sustainable ways of living can be achieved, namely: nudging individuals to adopt sustainable choices; enabling markets to make alternate choices available, affordable and convenient; and redefining social norms to make sustainable choices aspirational. We conclude by discussing key risks and barriers to implementing these propositions.

The transition to sustainable lifestyles would have to be facilitated by a socio-technical shift to a world where sustainable choices are convenient, aspirational and embedded in the societal norms.

1. See Annexure 1 for graphic illustration of economic growth across major regions in the world.

2. Ecological Footprint, conceptualized by Dr William E. Rees, assesses the amount of ‘ecological assets that a given population or product requires to produce the natural resources it consumes (including plant-based food and fiber products, livestock and fish products, timber and other forest products, space for urban infrastructure) and to absorb its waste, especially carbon emissions’ (Global Footprint Network, n.d.). It is expressed in global hectares as well as the ‘Number of Earths’ needed to sustain human population for a given ecological footprint.

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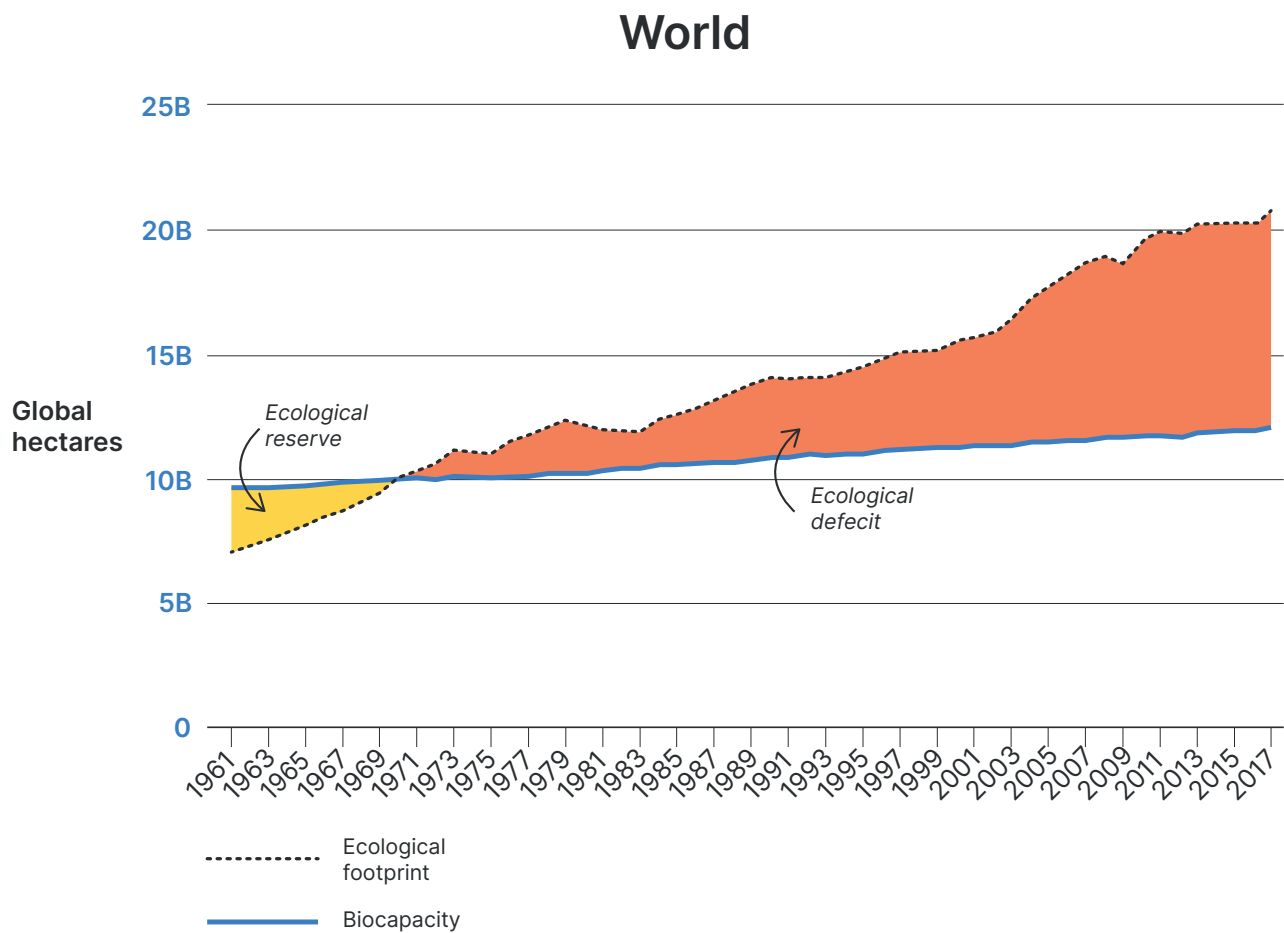


Figure 1. Global ecological footprint overshoot the earth's biocapacity in 1970 and since then has continued to rise.

Source: Global Footprint Network, York University, and Footprint Data Foundation (2021). Global Ecological Footprint data. Available at <https://data.footprintnetwork.org>



2. Rising inequality and resource-intensive lifestyles of the global rich underpin the problem of unsustainable resource use

The prevalent inequalities in income and quality of life across and within countries significantly contributes to and is aggravated by the problem of ecological overshoot. As of 2021, the top 10% of the world's population accounts for 76% of the global wealth, while only a meagre 10% of the wealth is distributed among the poorest 50% (Chancel et al., 2022). Figure 2 shows that the income gap between the top 10%, middle 40% and bottom 5% has persisted (and recently even increased) over the years. The inter-region comparison of the capture of national income is shown in Figure 3, where around the globe, the bottom 50% earn substantially less than the other categories.

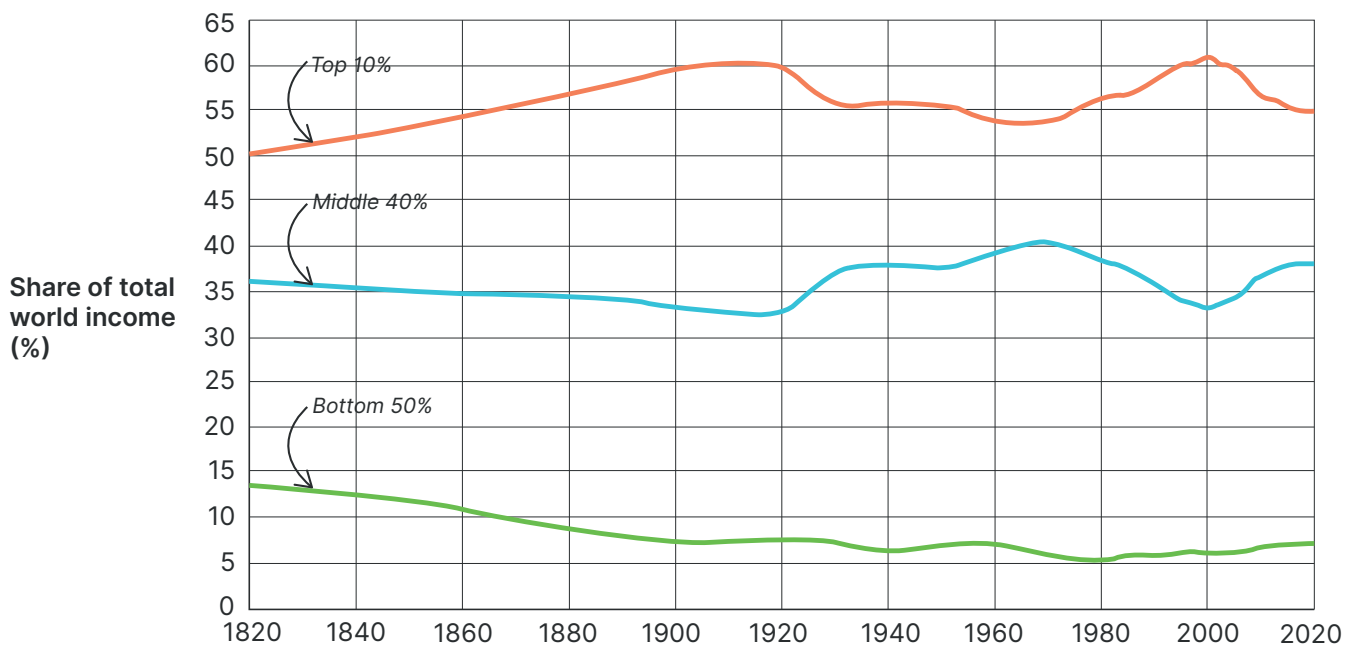


Figure 2. Global Income Inequality, 1820–2020. In 1820, the global rich (top 10%) accounted for half of the global wealth, while the share of the bottom 50% was less than 15%. Since then, global inequality has increased further, albeit marginally.

Source: World Inequality Report (2022), Harvard University Press. Available at <https://wir2022.wid.world/>

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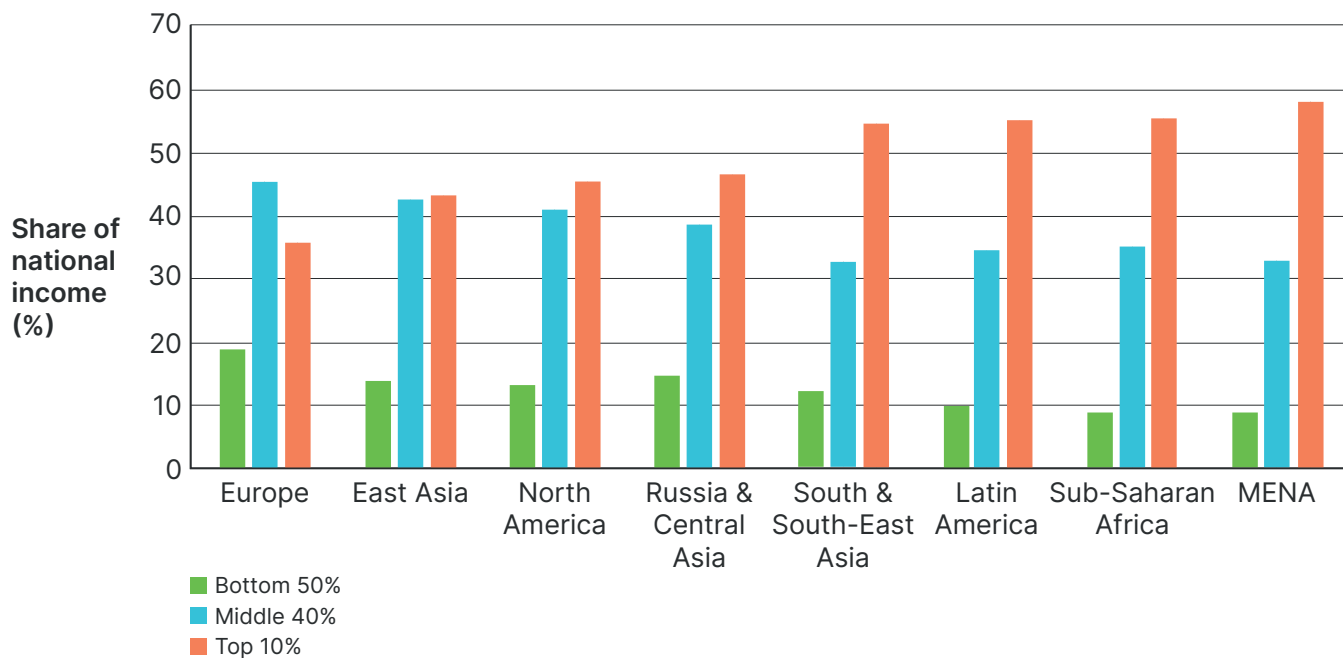


Figure 3. Inter-region comparison of income shares around the world in 2021. The income gap between the poor and the rich persists in varying measures around the world.

Source: World Inequality Report (2022), Harvard University Press. Available at <https://wir2022.wid.world/>

This inequality in incomes is reflected in consumption patterns and waste generation. For instance, besides accounting for a majority of the global wealth, the richest 10% of the global population were also responsible for emitting more than half of the total carbon emissions during the period from 1990 to 2015 (Karthi et al., 2020). At the country level, countries with a high human development index (HDI) (greater than 0.8) have very high ecological footprints (Figure 4)³. This correlation holds true within countries and among individuals, on average. For example, in India the top 20% of households emitted seven times the emissions of poor households (those who spend less than USD1.9 per day) in 2021 (Lee et al., 2021).

4. HDI is an index used to measure human development across the three key dimensions of good health, access to knowledge and standards of living, respectively measured through parameters of life expectancy, years of schooling and per capita income.

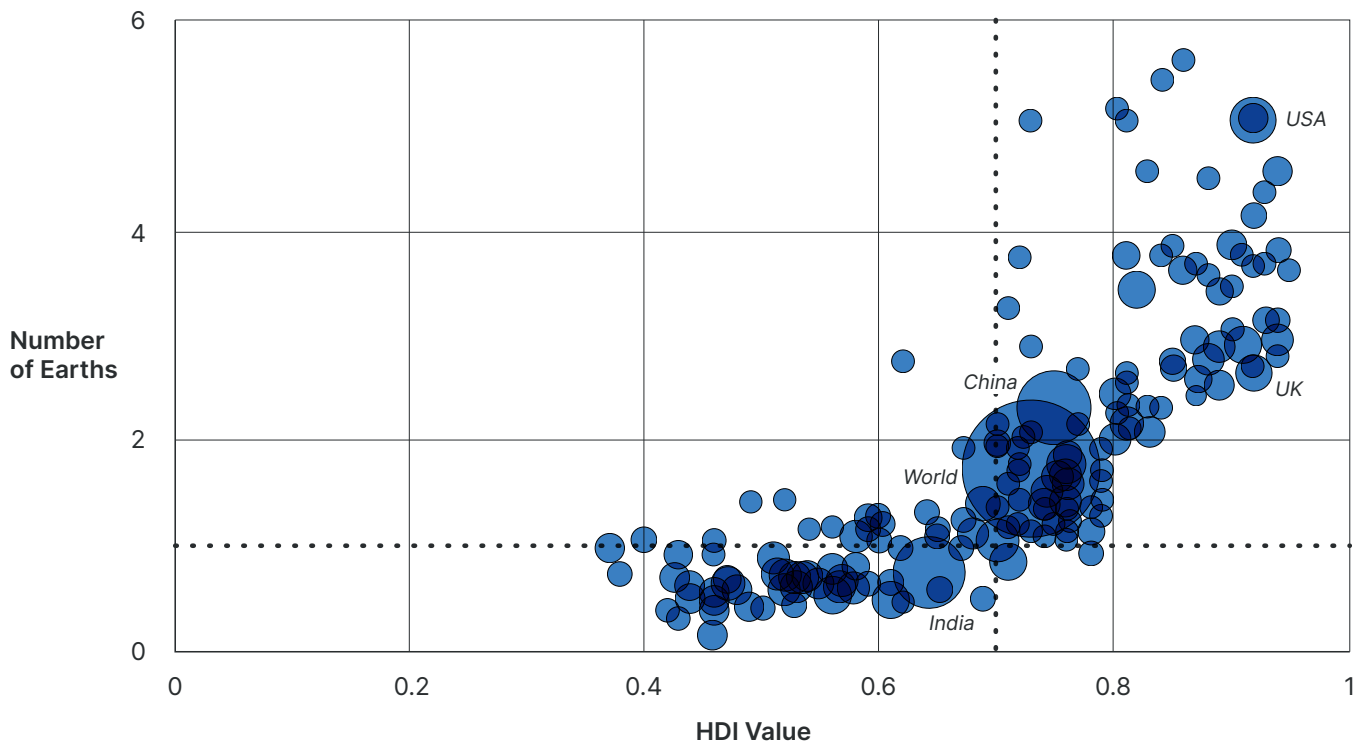


Figure 4. Human Development Index (HDI) versus the Ecological Footprint (2017). Countries with a high HDI typically have higher ecological footprint.

Source: Global Footprint Network, York University, and Footprint Data Foundation (2021). Global Ecological Footprint data. Available at <https://data.footprintnetwork.org>

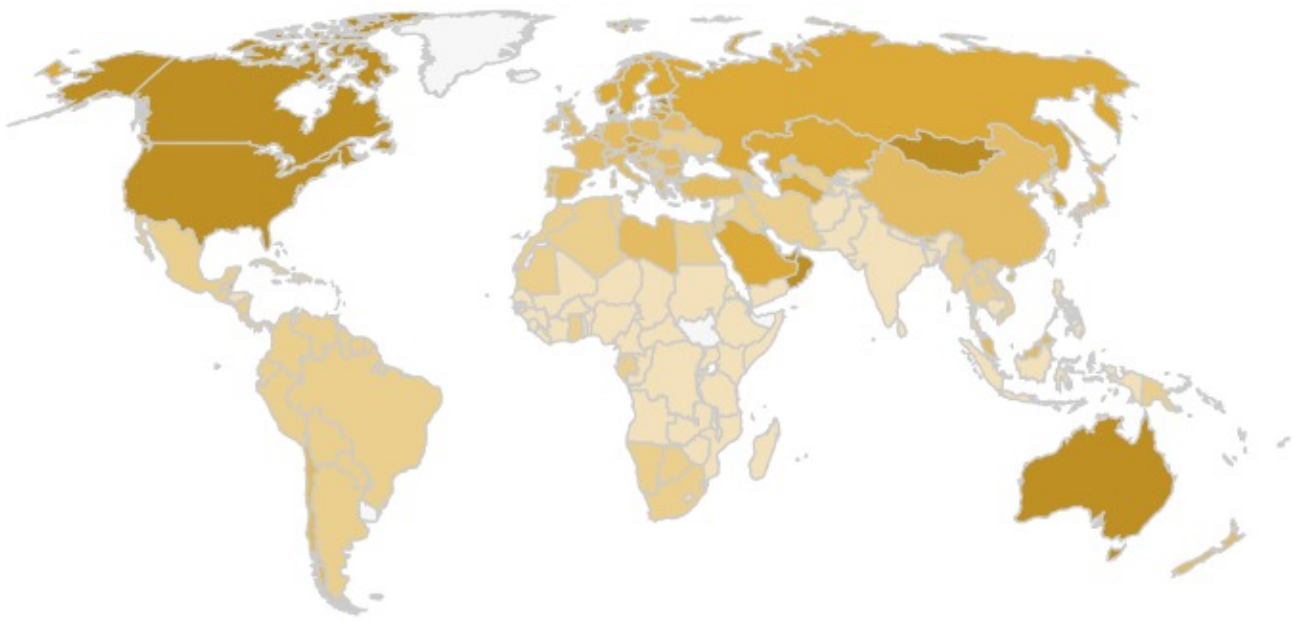
Rising inequality not only contributes to ecological misuse but is also aggravated by it. Regional differences in the distribution of natural resources, historical drain of capital by more powerful populations, population pressure and gaps in institutional capacities have ensured that specific populations have limited access to means of development. The deteriorating natural environment affects the world's poor disproportionately, including limiting their access to basic needs for life, such as clean air and water. A majority of the world's nations already have an ecological deficit, demonstrating the urgent need to reduce this deficit (Figures 5a and 5b). This would be especially challenging for developing countries, which house the majority of the world's poor and would need significant resources to improve quality of life for their people.

Figure 5a (opposite). Average ecological footprint of countries in the Global North is significantly higher than the sustainable limits (1.7 global hectares).

Figure 5b (opposite): Globally, most countries have a higher than sustainable total ecological footprint leading to significant ecological deficits.

Source: Global Footprint Network, York University, and Footprint Data Foundation (2021). Global Ecological Footprint data. Available at <https://data.footprintnetwork.org>

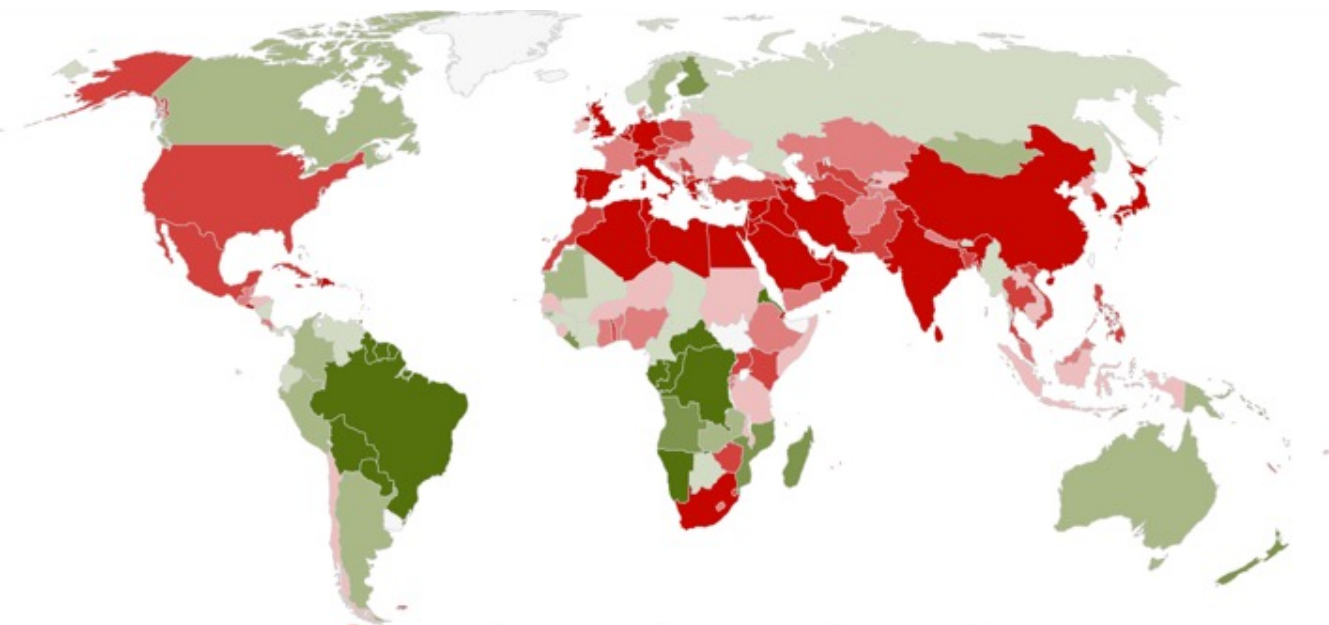
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ECOLOGICAL FOOTPRINT PER PERSON OF COUNTRY'S POPULATION (in global hectares)



Figure 5a.

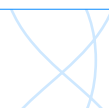


BIOCAPACITY CREDITORS
BIOCAPACITY GREATER THAN FOOTPRINT

BIOCAPACITY DEBTORS
FOOTPRINT GREATER THAN BIOCAPACITY



Figure 5b.





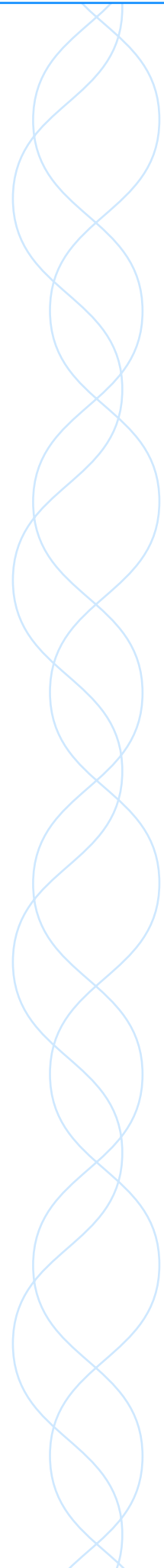
While the richer populations continue to increase their consumption and resource footprint, a ripple effect is experienced around the world, raising benchmarks for living conditions. Globalization and enhanced interconnectivity proliferate ideals of high and unsustainable consumption. The question then arises, how do we counter dominant standards of growth and make sustainable lifestyle choices desirable, while upholding freedom to choose for everyone?

The global community needs to rethink future pathways for improving quality of life in an ecologically sustainable manner, while in parallel redefining lifestyles that could be construed as aspirational. The negative externalities associated with dominant lifestyles, particularly those of the global rich, have enormous implications for people's health, productivity and well-being. A global switch to sustainable lifestyle pathways would be fundamental to arrest the rate of climate change and ecological degradation while ensuring a good quality of life for all.

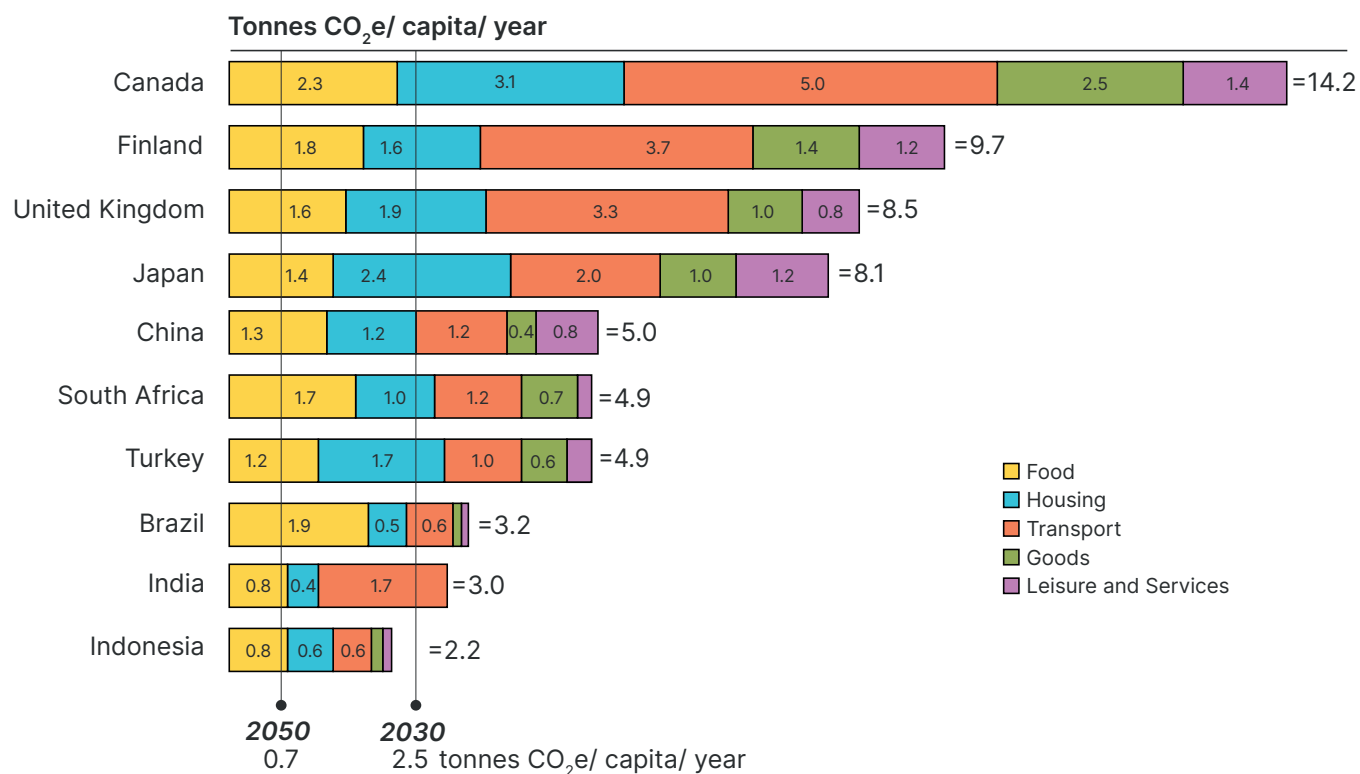
3. Unpacking lifestyles and their impact on carbon emissions

As per the planetary boundaries framework, first proposed by Rockström et al (2009), exceeding the limits to nine critical Earth-system processes could result in catastrophic events and destabilize planetary processes (Rockström et al., 2009). For instance, exceeding the global CO₂ threshold levels of 350 parts per million by volume above pre-industrial levels would cause sudden and irreversible climate change with multifarious effects on forest and agriculture systems (Schelle & Pokorny, 2021). But global CO₂ levels have already exceeded 412.5 parts per million (Lindsey, 2020) and given the current rate of emissions the world is headed for 970 ppm CO₂ levels by 2100 (Albritton et al., 2001).

Globally, there have been multiple attempts at conceptualizing and redefining the cause of (and in turn the solution to) climate change and degradation of natural resources. Recently, lifestyles have emerged as a focal point to situate the issue, and an anchor to tackle the problem at multiple levels of society. Using consumption-based accounting, Akenji et al. (2021) analyse the per capita lifestyle carbon footprint for 10 selected countries. They compare these current levels with the globally unified targets aligned with the 1.5 degree scenario (Akenji et al., 2021). The study shows how the per capita emissions embedded in prevailing lifestyles vary between countries and key lifestyle domains, underscoring the need for diverse approaches to bring about lifestyle changes (Figure 6).



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Globally unified targets for the lifestyle carbon footprints

Figure 6. In most countries, transport, housing and food account for the largest share of lifestyle emissions.

Source: 1.5-Degree Lifestyles: Towards a Fair Consumption Space for All, Hot or Cool Institute. Available at: <https://hotorcool.org/1-5-degree-lifestyles/>

Large living spaces combined with high energy consumption (from non-renewable sources) account for the high footprint of the housing domain among high-income countries. As regards transport, the predominance of car use and air travel contribute the most to the high transport footprint of high-income countries. Sustainability in housing and transport, which account for more than 50% of lifestyle emissions in most countries, would not only require a transition to renewable energy sources and efficiency in building design and energy use, but also a shift away from individual/ social aspirations for owning a large house, a car and travelling by air. Food choices form another critical lifestyle domain with a significant emissions footprint in countries with a high consumption of meat and dairy products. The low carbon footprint of food in India associated with a predominantly vegetarian diet demonstrates vegetarianism as one of the sustainable lifestyle choices that other countries could emulate in part or full (Akenji et al., 2021). High consumption of consumer goods, positively associated with income levels, is another area of concern that would require active lifestyle changes, including avoidance of consumption, switching to sustainable goods, and resource reuse and recycling.

In brief, transition to a sustainable and just world requires a rethinking of the way in which people live, interact, socialize, consume, dress, house, travel and organize their daily lives (UNEP, 2010). But what approaches could help change lifestyles at scale?



4. Defining sustainable lifestyles and levers of change

Lifestyles can be understood as a combination of practices, resource consumption and attitudes, which are constantly evolving (Cebula, 2016). Figure 7 depicts how lifestyles are a reflection of individual needs and desires, which in turn are shaped by the socio-economic context of individuals and the broader socio-technical system and natural environment that people inhabit (Faiers et al., 2007). The physical infrastructure, market dynamics, product and technology options, and social and cultural norms (further shaped by media and market) together constrain/enable individual choices (Gilby et al., 2019).

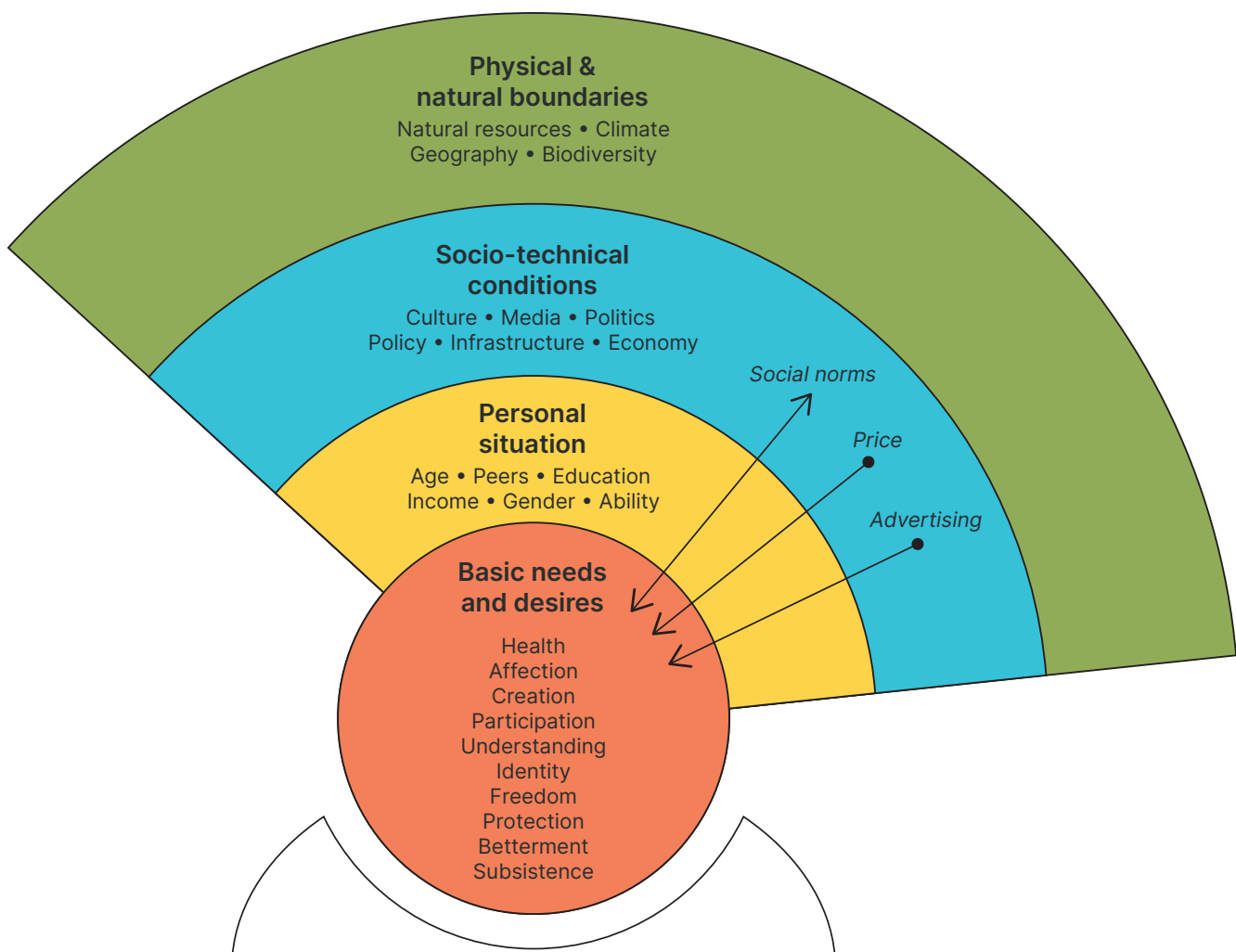


Figure 7.
Lifestyles are a reflection of individual needs and desires being shaped by multitude of factors.

Source: Faiers et al., 2007

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Given the multitude of influencers and shapers, Gilby et al. (2019) define *sustainable lifestyles* as:

A cluster of habits and patterns of behaviour embedded in a society and facilitated by **institutions, norms and infrastructures** that frame individual choice, in order to ensure that the use of natural resources and generation of wastes are within the regenerative and assimilative capacities of ecosystems, while supporting fairness and prosperity for all.

The variations in individual and socio-technical contexts between countries also imply that diverse yet context-specific approaches will be required to help individuals break out of the consumption and lifestyle patterns that they are currently locked into or aspire to, while also ensuring adequate access to basic resources and services for a decent living.

We propose **three key levers of change** to mainstream transition to sustainable lifestyles at scale:



Figure 8. Levers of Change for scalable transition to sustainable lifestyle.

4.1 Nudging individuals towards sustainable actions

Green nudges can be an effective policy tool to encourage people towards certain sustainable lifestyle choices. Nudging, a behavioural science approach, can help reduce the 'value-action gap' between good intentions and sustainable behaviour by making the latter more visible through facilitation, signalling and positive reinforcement⁵. Many countries have recognized the importance of nudging in reconfiguring the 'choice architecture', where the basic choice remains with the consumers but the policymakers reorganize the context within which these choices are made (Alemanno, 2012).

Figure 8 illustrates different nudging techniques available to obtain desirable behaviour. Interventions to provide simplified and timely information about an action or product's sustainability, making sustainable products accessible and linking these with social norms could lead to their greater adoption. Box 1 illustrates the use of nudges to promote water conservation.

5. Nudges are based on behavioural economics which state that human beings follow path-dependency and their decisions are grounded in personal relationships and social norms. This is in direct contrast to the previously upheld rational choice theory, which asserted that human beings are 'rational' and unemotional while decision-making.



Nudges

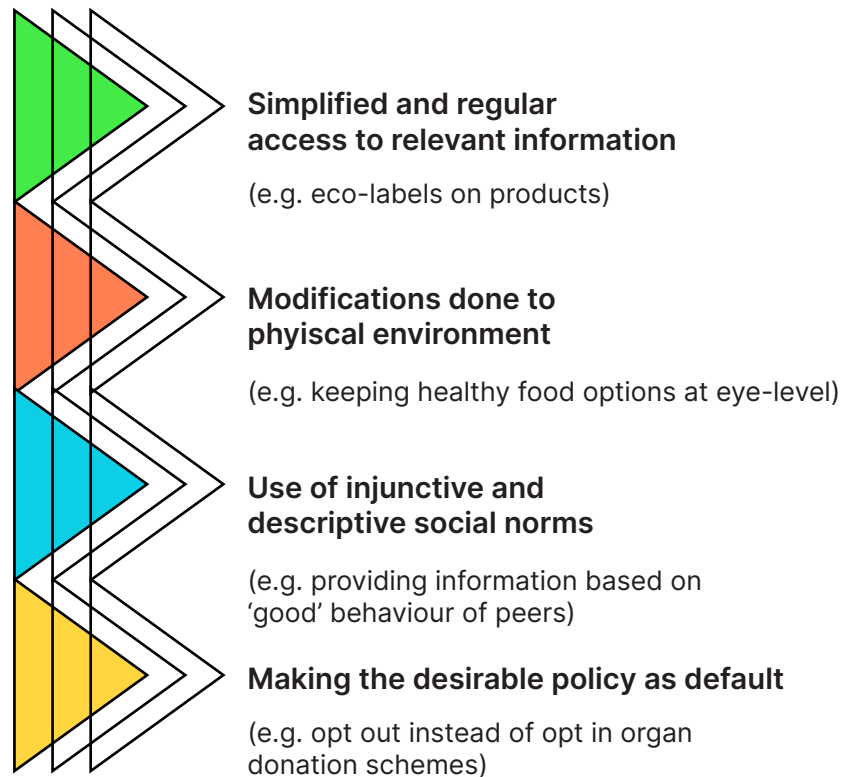


Figure 9.
Different approaches could be employed to nudge individuals towards sustainable choices.

Source: Lehner et al (2016)

Box 1.

Nudging for water conservation in Cape Town, South Africa.

A study done in Cape Town, South Africa used green nudges to promote residential water conservation. The study employed a randomized controlled trial to test the effectiveness of a variety of interventions (based on providing simple and relevant information, or on social norms). The information package quantified water consumption for users and provided them with price brackets relative to the consumption. This treatment was targeted at making water usage, which is generally unobservable and unquantifiable, a conscious cognitive decision. The social norm messages, on the other hand, aimed to promote conservation via social incentives and invocation of public good. The nudges were delivered to households as inserts in their monthly utility bills.

The experiment witnessed positive results in reducing household consumption of water, while the social recognition (making public the names of consumers who successfully managed to bring down their consumption) and public good treatments showed the best results.⁶ Moreover, social incentives were the primary drivers of change when it came to wealthier households.

Source: Brick et al. (2017)

6. The water conservation experiment could only work in households which had metered water supply, and hence measuring infrastructure (water meters in this case) needs to be developed simultaneously for consumers to become aware of their consumption.

4.2 Shaping markets through green policies and regulations

To enable a systemic transition to sustainable choices, the role of government policies and instruments in creating an enabling ecosystem where sustainable choices are both convenient and affordable assumes significance. For instance, promotion of sustainable mobility through use of public transport requires, foremost, the presence of a cost-effective and safe public transport system which is accessible, comfortable and cost-attractive to varied sections of society. Governments can assist in enabling sustainable choices (and regulate the unsustainable choices) through four broad approaches discussed below (Kinzig et al., 2013).

- 1. Regulations and standards** to 'edit out' unsustainable products through minimum benchmarks for service provision (e.g. efficiency/emissions standards for electrical appliances, buildings and vehicles) or an outright ban of undesirable products (e.g. of single-use plastics) (Assadourian, 2010). By limiting the availability of unsustainable products, such instruments can help encourage the use of sustainable options and reduce the impact of consumption choices.
- 2. Financial incentives** like subsidies and low-cost loans for pro-environmental technologies and infrastructure could help increase their adoption by addressing economic and behavioural barriers. For instance, through policy incentives like direct subsidies, support for charging infrastructure and removal of road tax and registration fees, governments in India are aiming to switch people to electric vehicles (away from diesel/petrol-based vehicles) (Tiwari, 2021). Box 3 contains a unique example of price instruments used to influence user and producer behaviour.
- 3. Taxes** can also be effectively used to raise the cost of using unsustainable consumption choices, thus making them less attractive, while raising resources in parallel to support sustainable options. For instance, progressive vehicle registration fees (rising for every additional purchase), road tax (rising with size) and parking fees (rising with time) could significantly influence a mass transition towards other modes of transport. Taxes directly address market failure and enable markets to take into consideration environmental impacts. Proceeds from 'green' or 'carbon' taxes could then be used for provision of public infrastructure.
- 4. Public spending on social infrastructure anchored on sustainability principles** would be critical to build cities which are resilient to climate change. For example, an integrated approach to transport with pedestrian and cycle friendly roads and mass-transit systems make for an inclusive transition towards sustainability. Public-private partnerships to build sustainable infrastructure (with consideration for equal distribution of services) can be utilized as important tools to not only create an environmentally friendly infrastructure system but also bolster the green economy (Adetola et al., 2011).

Policies and regulations to create enabling market conditions for a systemic shift towards sustainability are crucial, but these are often difficult to implement. The political economy of a country with a strong counter-lobby generally prevents the government from creating environmentally friendly fiscal and regulatory policies. Further, the cost of editing out cheaper but unsustainable options and incentivizing sustainable technologies/solutions could be prohibitive in a developing country context, where fiscal resources are limited and income levels low, which in turn could lead to higher political and economic inertia to change.





Multilateral and bilateral efforts aimed at co-developing innovative technology solutions, extending financial support (grants and loans), and sharing of best practices and regulatory frameworks would be essential to accelerate action at national and sub-national levels in developing countries. These could be used to embed the concept of sustainability within the broader developmental paradigm. This would help developing countries leapfrog to create sustainable infrastructure, be it electricity, transport, housing or industries, and avoid lock-ins into resource-intensive development pathways.

Box 2: Green Funds Scheme in Netherlands.

The Dutch Green Funds Scheme operating in Netherlands since 1995 is an innovative approach taken by the government to increase environmentally friendly businesses by the following means.

- Providing cheaper loans to businesses contributing to green market products and methods.
- Offering an option to consumers to invest in green businesses at lower interest rates. The consumers are compensated by a tax incentive.

As a complementary exercise, the government also created a set of standards for ecological assessment of the businesses benefitting from loans and a legal framework for banks. All the businesses applying for loans under this scheme have to showcase an immediate benefit to the environment through their activities, which can include technological innovations as well as restoration of natural habitats. The scheme has utilized the notion of a cyclical market economy to encourage both investment and production. The scheme has funded various projects related to green products, organic farming and energy efficient technologies. By 2010, the Green Funds Scheme had 'facilitated more than 6000 projects with almost €12 billion (US\$ 17 billion)' (Scholtens, 2011).

Source: Scholtens (2011)

4.3 Redefining social norms to make sustainability aspirational

As discussed above, regulatory and policy efforts to make sustainable choices convenient, affordable and visible for consumers would certainly be essential to support the global shift to sustainable lifestyles. However, the extent of transition required to bring lifestyle footprints within the ecological limits (see section 3) would require a complete rethinking of our way of living, and a shift in social norms and values that drive human behaviour (UNEP, 2010). From the dominant narratives of consumption driven by rising affluence, consumerism, product marketing and access to credit (Ahlström et al., 2020), the world needs to move towards a sustainable future where consuming less and consuming responsibly are considered aspirational.



Consumption habits are embedded in multiple layers of social, political, economic and governance structures and guided by often multifarious and conflicting social norms. Behaviour and lifestyle choices emerging from this combination are context-specific and difficult to predict. An example is international travel: although the ill effects of air travel on the environment have been well established, people can find it difficult to give up, partly because it is aspirational and partly because it is perceived as being integral to the prevalent economic culture and norms. The only way to tackle such a lifestyle problem is to redefine the social norms around it. For instance, the disruption to regional and international mobility caused by the Covid-19 pandemic created opportunities to collaborate and interact even with limited travel. This in turn has shifted the social acceptance and norms around workplace interactions and expectations. So, the question is, how can we redefine social norms in a constructive manner?

Interventions based on changing social norms go beyond providing knowledge and motivation and rather work on bringing about holistic change which targets social transformation at a large scale, enough to induce changes in norms. We discuss two approaches to influence social norms.

- 1. Using collective action to shift social norms.** ‘The collective is one means by which norms and values can be shifted, as people tend to adopt the attitudes of those around them, and also tend to be more psychologically involved in activities that they feel they have ownership of’ (Gilby et al., 2019). We need to create community spaces where people can get a first-hand experience of sustainable living and its various tangible and intangible benefits. For instance, the Raahgiri day – a citizen initiative in New Delhi and Gurgaon, India – aims to motivate people away from the use of personal cars to curb air pollution and promote public health (Bhatt & Bhatt, 2018). Similarly, many community efforts are being tried out across different parts of the world, including a car-free day in Marrakesh and Zero Waste Month in the Philippines, which try to shift norms and values towards sustainable lifestyles (Gilby et al., 2019).
- 2. Creating new social identities which could provide an alternate set of norms from which people can derive meaning.** A large-scale example of the shift seen in lifestyles is through the ideology of minimalism, mostly practised in the US and Japan. The idea of minimalism is to shift focus from consumerism and accumulation to being satisfied with owning less. The aspirational value is derived not from higher consumption (which is often not indicative of psychological satisfaction levels⁷), but overall well-being and happiness. Similarly, vegetarianism, underpinned by traditional and religious ethos and practised by a large section of the population in India, contributes greatly to the low carbon footprint of food choices in the country. The successful uptake of these ideologies in large populations has shown that decision-making is influenced to a high degree by social networks. However, these identities – limited to choices concerning food or consumer goods – are insufficient to ensure low environmental impact. Thus, efforts to create a new social identity anchored around sustainable living through collective action at multiple levels would be needed to make sustainability aspirational (see Box 3 and 4). Study of past movements leading to successful shift at scale could guide potential pathways on this front.

7. Gross National Happiness is computed by taking into consideration non-economic aspects of living as compared to Gross Domestic Product.





The key to scaling efforts to shift social norms would be creation of the right conditions for collective action to 'emerge, spread and persist'. However, shifting social norms is easier said than done. Social norms are difficult to change because they are shared and integrated into the cultural fabric. Any intervention to change a social norm can be targeted at one practice which is situated in the local context, but sustainable living comprises multiple sustainable habits.

Box 3: Spatial norms define dwelling size.

Housing is seen as a big contributor to greenhouse gas emissions, and a study done to analyse norms surrounding the size of dwellings in Finland shows that the proportions of the living space are informed by spatial norms. The study focuses on a 'sufficient' (changing consumption behaviours and patterns) approach to achieving sustainability in housing, rather than an 'efficient' (focus on green technologies to increase energy efficiency) approach. The study explores downsizing through the lens of spatial norms, which according to the authors are embedded in specific cultural contexts. The authors realized that size of housing is negotiated between voluntary choices informed by avoidance of unnecessary space and a trend towards simplicity, and involuntary choices necessitated by financial or spatial issues. Policy efforts to reduce the environmental impact of housing in Finland currently focus on improving the energy efficiency of buildings. These should be complemented with regulations and initiatives that aim to advance downsizing, by framing small-sized dwellings as 'environmentally sustainable housing'. When complemented by policy action (such as relaxing regulations on minimum dwelling size), this could help house owners make a sustainable choice.

Source: Sandberg (2017)

We must note that **an integrated approach, combining nudges, green policy interventions and changing social norms would be needed to make sustainable lifestyle choices aspirational, convenient and affordable**. Consumption choices (of groups and individuals) are complex in nature and engrained in a multitude of factors including infrastructure, cost implications and societal norms. Hence, stand-alone interventions focusing on a few factors influencing individual behaviour are unlikely to yield results. Below, we demonstrate how the proposed levers would need to be used together in the case of two lifestyle domains.

- Achieving an effective shift towards sustainable mobility choices would require a suite of interventions such as energy service regulations for motorized vehicles, financial incentives for low-carbon vehicles, taxes and fees designed to deter private ownership and promote use of public vehicles, social spending on mass-transit systems, and nudges to individuals at critical decision points (e.g. vehicle purchase, booking a cab or refuelling).
- Supporting a transition to sustainable housing would require a combination of mandatory standards and regulations for building efficient appliances, financial incentives for building sustainable buildings, green retrofits and obtaining green certifications, progressive property taxes and energy tariffs, and embedding sustainability principles in urban planning and social housing schemes.



5. Risks and barriers

Given the scale at which the transition to sustainable lifestyles is warranted, the path to achieving this goal would be strewn with challenges. Below, we discuss five major barriers and risks that need to be addressed as we shift gears for a global transition towards sustainable lifestyles.

- **The dominant anthropocentric world view that is locking us into unsustainable lifestyles.** A common thread across most sustainability philosophies/movements is the reorientation of our world view (from nature for humans to humans for nature) and redefining our relationship with nature. However, attempts to bring about this shift could be perceived as an affront to principles of freedom of expression and democratic rights. Ensuring an inclusive and transparent process driving the global discourse on sustainability would be critical to alleviate this risk.
- **A narrow definition of sustainable lifestyles could pose significant risks to local cultures, habits and economies.** Popularization of a certain definition of sustainability and pathways to achieve it are often detrimental or entirely leave out local communities and disregard their knowledge and cultural practices. More often than not, these already marginalized communities face the risk posed by unjust and non-inclusive conceptualization of sustainability. An example can be seen in food habits and markets: if eating a certain type of food/product is defined as unsustainable, the local communities deriving their sustenance from the supply chain of that product would be economically disadvantaged. A limiting definition of forest conservation leaves out communities who are dependent on forest and forest produce. This could limit a just transition and risk sidelining local knowledge and practices which could prove to be important tools to furthering sustainability. Thus, any proposed transition would have to be 'just' and implemented through building comprehensive acceptance for the proposed change.
- **Addition of 'sustainability' to the current aspirational lifestyle may itself give rise to a neo-consumerism trend which may not be sustainable.** For instance, a call to go sustainable may translate into an exercise of consuming more green products or green technology, rather than addressing the problem of rising resource consumption. An empirical study of 357 participants in California suggests that 'increasing consumers' environmental and ethical concerns alone might not be an effective way to lead them towards a more sustainable lifestyle' (Touchette & Nepomuceno, 2020). This is because even environmentally conscious consumers may have a significant environmental impact. This can be seen in the adoption of eco-conscious products with a high water footprint (Melody Voith, 2008) or significant carbon emissions due to supply-chain logistics.
- **Political and economic inertia associated with established interests.** To inspire a significant change in individual choices, governments around the world would need to facilitate and even drive the much-needed change. However, the political executive often lacks the incentive to act because sustainability it is not always an electoral issue. An example is rising air pollution in India. Even while India harbours the majority of the world's most polluted cities, solutions that can address this problem are yet to receive mainstream attention. Similarly, economic inertia linked to monetary interests of industrial groups and lobbies would pose a hindrance to a shift away from consumerism. Tackling such inertia would require reimagining the current growth paradigm.





- **Risk of greenwashing.** Even as the discourse on corporate responsibility for environmental protection is gaining currency across geographies, the instances of corporates creating a mirage of environmental performance for governments and consumers are also rising. Delmas et al. (2011) define greenwashing as the phenomenon of firms engaging in ‘poor environmental performance and positive communication about environmental performance’, thus leading to a false perception around their products and processes. An example is eco-labels, where firms often do not disclose or are ambiguous about negative information about the product. The unchecked rise of greenwashing could lead to green scepticism, and would therefore require robust yet nimble regulatory mechanisms (de Freitas Netto et al., 2020).

Conclusion

Even though the effects of human activity on the environment have been documented and discussed since 1972, there continues to be an increase in emissions and degradation of the natural environment. A reimagining of how people consume is an important and integral solution to the problem which can no longer be ignored. It is important to make sustainable choices easy and desirable to make for the vast majority of society. Shifting consumers to sustainable lifestyles at scale would require building an overarching culture of sustainability and an underlying infrastructure of sustainable products and services. We discuss three key policy levers available within the current political–economic paradigm to change consumption patterns.

- Redefining the choice architecture within which consumers make choices and nudging them to opt for sustainable decisions.
- Leveraging suites of policies and regulations for shaping ‘greener’ markets and products/services accessible to consumers.
- Reflecting on existing social norms and redefining them to make sustainable living attractive and aspirational.

We need to make use of all tools and strategies to create an enabling ecosystem with supportive norms and values in order to promote a transition to sustainable lifestyles, although the approaches would have to vary with context. Nations with higher lifestyle footprints need to take drastic and radical measures to bring down their footprints within a ‘fair consumption space’ – crucial for efforts to redefine aspirational lifestyles, which are constantly being shaped by the Global North. In addition, the global community needs to redefine economic growth and prosperity. Current economic growth is premised on using resources for human development without acknowledging their finite capacity. In order to induce change in the normative framework within which people make everyday consumption choices, the concept of human progress and prosperity has to be linked with ecological considerations.



Annexures

Annexure 1: GDP per capita, 1820 to 2018

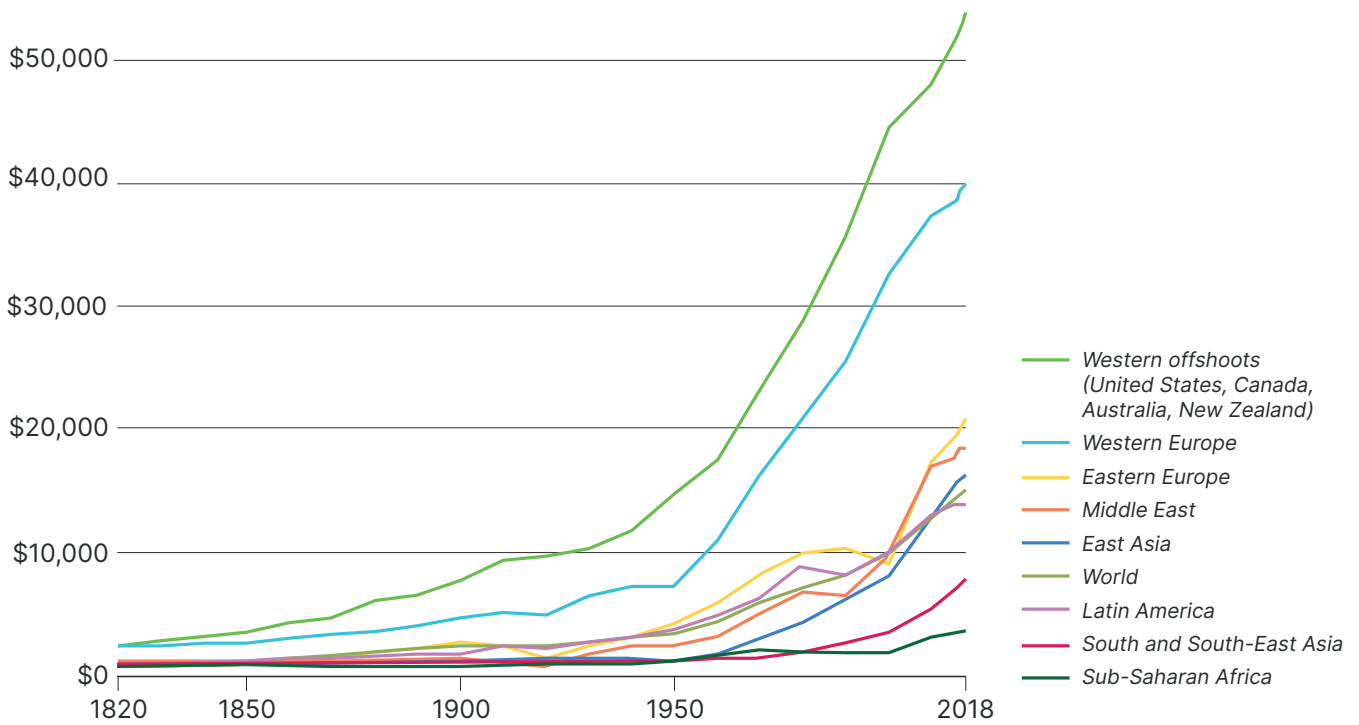


Figure 10.
GDP per capita adjusted for price changes over time (inflation) and price differences between countries - it is measured in international \$ in 2011 prices.

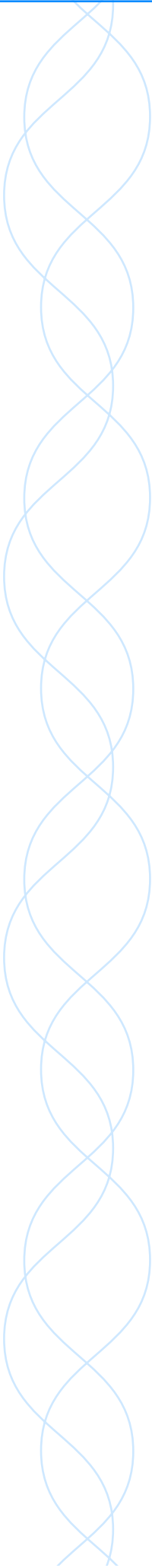
Source: Maddison Project Database 2020 (Bolt and van Zanden, 2020), <https://ourworldindata.org/economic-growth> • CC BY



References

- Adetola, A., Goulding, J., & Liyanage, C. (2011). Collaborative Engagement Approaches For Delivering Sustainable Infrastructure Projects In The AEC Sector: A Review. *International Journal of Construction Supply Chain Management*.
- Afif, Z. (2017, October 25). "Nudge units" – where they came from and what they can do. *World Bank Blogs*. <https://blogs.worldbank.org/developmenttalk/nudge-units-where-they-came-and-what-they-can-do>
- Ahlström, R., Gärling, T., & Thøgersen, J. (2020). Affluence and unsustainable consumption levels: The role of consumer credit. *Cleaner and Responsible Consumption*, 1, 100003. <https://doi.org/10.1016/j.clrc.2020.100003>
- Akenji, L., Bengtsson, M., Toivio, V., & Lettenmeier, M. (2021). 1.5-Degree Lifestyles: Towards A Fair Consumption Space for All. Hot or Cool Institute, Berlin.
- Alemanno, A. (2012). Nudging Smokers The Behavioural Turn of Tobacco Risk Regulation. *European Journal of Risk Regulation*. <http://www.jstor.org/stable/24323124>
- Assadourian, E. (2010). Transforming Cultures: From Consumerism to Sustainability. *Journal of Macromarketing*, 30(2), 186-191. <https://journals.sagepub.com/doi/10.1177/0276146710361932>
- Bhatt, A., & Bhatt, S. P. (2018). 3 Reasons Raahgiri Has Become India's Urban Movement. *The City Fox*. <https://thecityfix.com/blog/3-reasons-raahgiri-become-indias-urban-movement-amit-bhatt-sarika-panda/>
- Brick, K., DeMartino, S., & Visser, M. (2017). Behavioural Nudges for Water Conservation: Experimental Evidence from Cape Town. <https://doi.org/10.13140/RG.2.2.25430.75848>
- Cebula, M. (2016). Theoretical and Methodological Challenges of Lifestyle Research: From Psychographics to Poststructuralist Analysis. *Marketing i Zarządzanie*. <https://doi.org/10.18276/miz.2016.44-10>.
- Chasek, P. (2020). Stockholm and the Birth of Environmental Diplomacy. *International Institute for Sustainable Development*. https://www.iisd.org/system/files/2020-09/still-one-earth-stockholm-diplomacy_0.pdf
- Daniel L. Albritton, Barker, T., & Bashmakov, I. A. (2001). *Climate Change 2001: Synthesis Report*. University of Cambridge.
- de Freitas Netto, S. V., Sobral, M. F. F., Ribeiro, A. R. B., & Soares, G. R. da L. (2020). Concepts and forms of greenwashing: A systematic review. *Environmental Sciences Europe*, 32(1), 19. <https://doi.org/10.1186/s12302-020-0300-3>
- Faiers, A., Cook, M., & Neame, C. (2007). Towards a contemporary approach for understanding consumer behaviour in the context of domestic energy use. *Energy Policy*, 35(8), 4381–4390. <https://doi.org/10.1016/j.enpol.2007.01.003>
- Gilby, S., Mao, C., Koide, R., Watabe, A., Hengesbaugh, M., Appleby, D., Nugroho, S. B., Kamei, M., Liu, C., Chepelianskaia, O., & Vadovics, E. (2019). *Sustainable Lifestyles Policy and Practice: Challenges and Way Forward*. Institute for Global Environmental Strategies. <https://www.iges.or.jp/en/pub/sustainablelifestylespolicyandpractice/en>

21 Valuing nature as individuals and communities

- Global Footprint Network. (n.d.). Ecological Footprint. Retrieved January 31, 2022, from <https://www.footprintnetwork.org/our-work/ecological-footprint/>
- Kartha, S., Kemp-Benedict, E., Ghosh, E., Nazareth, A., & Gore, T. (2020). The Carbon Inequality Era: An assessment of the global distribution of consumption emissions among individuals from 1990 to 2015 and beyond. Oxfam, Stockholm Environment Institute. <https://doi.org/10.21201/2020.6492>
- Kinzig, A. P., Ehrlich, P. R., Alston, L. J., Arrow, K., Barrett, S., Buchman, T. G., Daily, G. C., Levin, B., Levin, S., Oppenheimer, M., Ostrom, E., & Saari, D. (2013). Social Norms and Global Environmental Challenges: The Complex Interaction of Behaviors, Values, and Policy. *Bioscience*, 63(3), 164–175. <https://doi.org/10.1525/bio.2013.63.3.5>
- Lee, J., Taherzadeh, O., & Kanemoto, K. (2021). The scale and drivers of carbon footprints in households, cities and regions across India. *Global Environmental Change*, 66, 102205. <https://doi.org/10.1016/j.gloenvcha.2020.102205>
- Lewis Akenji, Magnus Bengtsson, Emily Briggs, & Anthony Chiu. (2015). Sustainable Consumption and Production Global edition. A Handbook for Policymakers. <https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=1951&menu=35>
- Lindsey, R. (2020, August 14). Climate Change: Atmospheric Carbon Dioxide. <https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide>
- Chancel, L., Piketty, T., Saez, E., Zucman, G. et al. World Inequality Report 2022, World Inequality Lab
- Meadows, D. H., Meadows, D. L., Randers, J., & Ill, W. W. B. (1972). The Limits to Growth—Club of Rome. <https://www.clubofrome.org/publication/the-limits-to-growth/>
- Melody Voith. (2008, October 6). Everyday Products Carry A Hidden Global Cost. *Chemical & Engineering News*. <https://cen.acs.org/articles/86/i40/Everyday-Products-Carry-Hidden-Global.html>
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin III, F. S., Lambin, E. F., Lenton, T. M., Scheffer, M., Folke, C., Schellnhuber, H. J., Nykvist, B., de Wit, C. A., Hughes, T., van der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P. K., Costanza, R., Svedin, U., ... Foley, J. A. (2009). A safe operating space for humanity. *Nature*, 461, 472.
- Roser, M. (2013). Economic Growth. *Our World in Data*. <https://ourworldindata.org/economic-growth>
- Sandberg, M. (2017). Downsizing of Housing: Negotiating Sufficiency and Spatial Norms. *Journal of Macromarketing*. <https://doi.org/10.1177/0276146717748355>
- Schelle, C., & Pokorny, B. (2021). How Inclusive Is Inclusive? A Critical Analysis of an Agribusiness Initiative in Kenya. *Sustainability*, 13(9), 10937.
- Scholtens, B. (2011). The sustainability of green funds. *Natural Resources Forum*, 35, 223–232. <https://doi.org/10.1111/j.1477-8947.2011.01387.x>
- UNEP (2010). Taskforce on Sustainable Lifestyles. United Nations Environment Programme (UNEP). <https://www.oneplanetnetwork.org/knowledge-centre/resources/task-force-sustainable-lifestyles>
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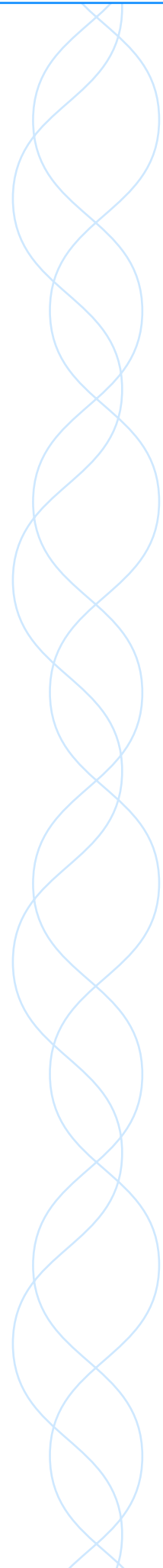


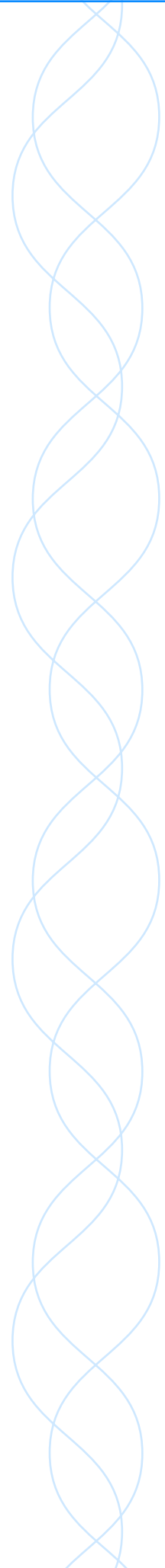
Tiwari, A. (2021, March 21). Explained: Delhi's ambitious plan to switch to electric vehicles and the infrastructure needed. *The Indian Express*. <https://indianexpress.com/article/explained/delhi-electric-vehicles-policy-infrastructure-explained-7236831/>

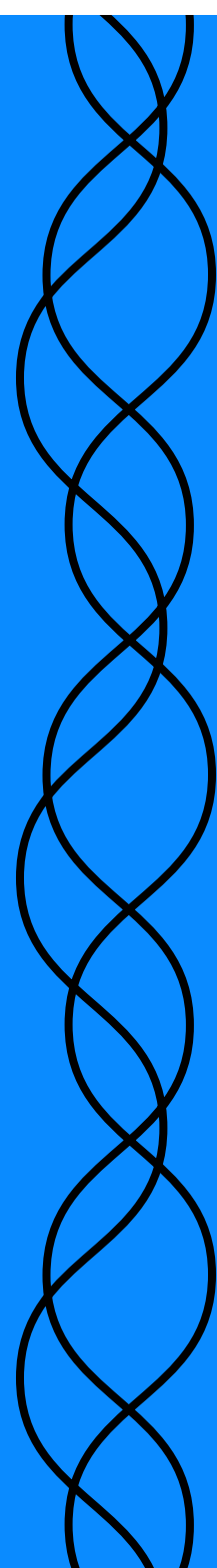
Touchette, L., & Nepomuceno, M. V. (2020). The Environmental Impact of Consumption Lifestyles: Ethically Minded Consumption vs. Tightwads. *Sustainability*, 12(23), 9954. <https://doi.org/10.3390/su12239954>

United Nations Conference on Environment and Development, & Dan Sitarz. (1993). *Agenda 21: The Earth Summit Strategy to Save Our Planet*. EarthPress.

Von Schirnding, Y. (2005). The World Summit on Sustainable Development: Reaffirming the centrality of health. *Globalization and Health*, 1(1), 8. <https://doi.org/10.1186/1744-8603-1-8>







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