

GREEN TAXES POLICY IN AID TO SUSTAINABLE DEVELOPMENT & HUMAN HEALTH

Dr. Neeraj Sharma¹ and Dr. Amit Kumar Kashyap^{2*}

¹ Assistant Professor of Law, Institute of Law, Nirma University, Ahmedabad.

² Assistant Professor of Law, Head, Centre for Corporate Law Studies,
Institute of Law, Nirma University, Ahmedabad.

*Corresponding Author Email: amit1law@gmail.com

DOI: [10.5281/zenodo.12268427](https://doi.org/10.5281/zenodo.12268427)

Abstract

Sustainable development goals, brought out under Agenda 2030, list the exhaustive coverage of areas that require the attention of countries across the globe. SDG 3 is dedicated to the health of human beings across all ages. Target 3.9 of SDG 3 aims to reduce the number of deaths caused by air, water, and soil pollution. The Research paper suggests adopting fiscal measures as an essential step in reducing global pollution. The combustion of petroleum products has been responsible for the significant emission of particulate matter in the atmosphere. The overall study of the health hazards caused by pollution suggests an urgent need to control the widespread pollution. Apart from other available measures, the researcher suggests that the levy of Green Taxes can play a vital role in minimizing the health hazards due to pollution. Principle 16 of the Rio Declaration suggests fiscal policy measures that can assist in internalising the social costs due to pollution. The researcher proposes to study the health hazards caused by different kinds of pollution and aims to suggest a policy framework for Green Taxes that can assist governments across the globe in mitigating the adverse effects of pollution on human health.

Keywords: Sustainable Development Goal, Pollution, Human Health, Green Taxes, Agenda 2030.

INTRODUCTION

The pollution and its health hazards are well known. Pollution causes are anthropogenic activities (Ansari, Z. A., & Matondkar, S. G. P. 2014). Apart from the health hazards, close observation may lead us to infer that the emission of greenhouse gases, which can be termed pollutants, are equally responsible for climate change (Bostrom, A. et al. 1994). In its ordinary course, the greenhouse gas effect is beneficial for creating the optimum conditions for life on Earth. However, the excess release of greenhouse gases trapped within the Earth's atmosphere leads to heat-trapping. This leads to a rise in global temperature. Climate change has been proven to be real, and it is also leading to weather alterations on the planet Earth. The increased frequency of cyclones, floods, heat waves, storms, and forest fires has been understood to result from climate change.

This paper aims to examine the relationship between human development and environmental health. It investigates the impact of environmental governance on human health and sustainable development. It also explores the effects on health spending, gender development, crime, and human and economic welfare (Norouzi et al., 2022). This study investigates whether Green Tax policies contribute to a sustainable economy and accounts for the effect of Green Taxes on a comprehensive list of human health indicators.

By doing this, the research also intends to contribute to both fields, environmental and development works of literature, which unsurprisingly have a pretty separate track. The paper investigates whether all taxes are more harmful than other tax types by

regressing part of a comprehensive list of human health indicators on Green Taxes, representing the environmental policy part of the so-called "green tax reform".

LITERATURE REVIEW

The advocacy for inclusive green development is a highly discussed subject in global forums and is universally seen as a significant issue by all nations worldwide (Avis, W. R. (2018). Climate change poses a considerable risk to the gains made in development over many decades (Gupta, J., & Vegelin, C. (2016). In response, 196 nations ratified the Paris Agreement to achieve "net-zero" worldwide emissions by the middle of the century (Falkner, R. (2016). This would help to restrict global warming to a level far lower than 2 degrees Celsius relative to pre-industrial times (Okonkwo, Theodore. 2017).

Nevertheless, since greenhouse gas (GHG) emissions persistently rise, governments have not yet made sufficient progress. Although 68 explicit carbon pricing devices now cover 23% of global greenhouse gas (GHG) emissions, most carbon prices remain ineffective (World Bank, 2022). According to the OECD (2021), 60% of carbon emissions resulting from energy usage in 44 OECD and G20 nations are not subject to either fuel taxes or carbon pricing mechanisms (Parry, I., Mylonas, V., & Vernon, N. (2021). More recently, alternative policies to traditional pollution control have been approached to internalize the costs associated with pollution (Smith, S. (1992): government subsidies to develop new technologies, voluntary agreements, and Green Taxes (Xue et al., 2022). Green Taxes potentially reduce pollution emissions effectively by taxing the production, distribution, and final consumption of goods generating environmental damage (Shahzad, 2020). These taxes aim to improve the country's well-being, transferring taxation on harmful products or activities by encouraging more environmentally friendly consumption and production patterns supporting environmental and human health (Bashir et al.2021).

Consequently, this technology enables the government to implement and fulfil environmental policy objectives by identifying polluters, measuring pollution levels, and determining where resources should be allocated to minimize pollution (Oates, W. E. (1995). The logical reorganization of the tax system and the adoption of green taxes within the sustainable development framework allow for identifying particular tasks before fiscal intervention to improve market processes (Bell, R. G., & Russell, C. (2002). It is critical to give additional non-tax incentives to economic organizations to improve environmental management (Krass D. et. al., 2013) and to execute a series of tax reform initiatives to establish a Green Tax regime (Dahmani, 2024). The enormous influence of Green Taxes stems from their capacity to operate as potent economic incentive instruments and deliver concrete economic results (Doğan et al., 2022).

RESEARCH METHODOLOGY

This review utilizes a qualitative research design, incorporating doctrinal research to examine primary and secondary materials on green taxation, sustainable development, and human health. The literature collection will be guided by a systematic search using PubMed, Scopus, Web of Science, Heinonline, Jstor and Google Scholar databases. The search will include keywords such as "green tax," "sustainable development," and "human health." This review paper utilizes a doctrinal

research approach with an exploratory study using literature to examine the convergence of green tax policy, sustainable development, and human health. The doctrinal method thoroughly examines primary and secondary legal sources, such as statutes, regulations, and case law on green tax policy. This method enables a thorough comprehension of the legislative structures and ideas that regulate environmental taxation. Simultaneously, a comprehensive literature assessment is carried out to combine data from several fields of study, including environmental science, public health, and economics. This entails methodically examining academic articles, reports, and policy papers to assess the effects of green tax policies on sustainable development and human health. This methodology combines legal analysis with interdisciplinary perspectives to offer a comprehensive understanding of how green taxes might contribute to sustainability and enhance health outcomes. It attempts to emphasize exemplary approaches and pinpoint potential areas for future investigation.

RESULT & DISCUSSION

Health Hazards Due to Pollution

Various forms of pollution are becoming a health hazard for humans on the planet Earth (Chakraborty, I., & Maity, P. 2020). There is no denying that the initiator of the entire cycle is the mindless development, which had not been sustainable. Air pollution is caused due to the violation of the standards set out for industries and other sources of emissions (Wang L. et al., 2018). It has been well understood that the atmosphere is not a sponge that can take all the emissions without retribution.

The polluted air affects each individual's health if left unchecked. Unchecked air pollution can be the cause of respiratory diseases and heart problems and can even cause cancer (Manisalidis, I. et al. 2020). The vulnerable population includes individuals who are already suffering from diseases, children, and senior citizens (Li, W., et. al. 2020). Among all the air pollutants, particulate matter has been considered the most dangerous. PM 2.5 has the potential to go deep into the lungs and cause health problems. Particulate matter of 2.5 micrometres and Particulate matter of 10 micrometres have the potential to accumulate deep inside the respiratory systems of humans and thus can cause severe damage (Ali, M. U., et al. 2019).

Legal framework for pollution in India

The pollutants emitted from motor vehicles can have harmful effects (Bityukova, V. R., & Mozgunov, N. A. 2019). The study points out that diesel motor vehicles emit various nitrogen and particulate matter oxides, and motor vehicles running on petrol release carbon monoxide and hydrocarbons (Reşitoğlu, İ. A., et al. 2015).

Section 110(1) of the Motor Vehicles Act of 1988 grants authority to the central government to establish regulations for the establishment of emission standards for dangerous gases emitted by vehicles and to mitigate noise pollution caused by automobiles. (Misra, P. 2012).

The Air (Prevention and Control of Pollution) Act, 1981 provides for the definition of the "air pollutant" under section 2(a) as

"solid, liquid or gaseous substances (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living being creatures or plants or property or environment."

Including noise in the definition of air pollutants emphasizes the awareness of the legal language of the effect of different types of pollutants on the atmosphere.

The Water (Preservation and Control of Pollution) Act, 1974 defines “pollution” as

“Contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or any other liquid, gaseous or solid substances into water (whether directly or indirectly) as may, or is likely to create a nuisance or render such water harmful or injurious to public health or safety, or domestic, commercial, industrial, agriculture or other legitimate uses, or the life and health of animals or plants or aquatic organisms”.

Under section 2(b) of the Environment (Protection) Act, 1986, the term “environmental pollutant” has been defined as the presence of *“any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to the environment.”*

Section 7 of the Environment (Protection) Act, 1986, prescribes that the emission or discharge should not exceed the prescribed limit of permissible standards.

Section 15 of the Environment (Protection) Act, 1986 lays down the penalty for the contravention of the provisions of the Act. It states that contravening the act's provisions may lead to imprisonment, which may extend up to five years, or a fine of up to Rs. 1 lacs. If the infringement continues, an additional fine of Rs. 5000/- may be levied daily. Section 15(2) provides that in case of continued contravention beyond the first year starting from the date of conviction, the offender shall be liable for imprisonment, which may extend up to seven years.

Principle of Polluter Pays Principles

Anthropogenic activities have been responsible for disturbing the pristine nature of the environment (Taylor, K. G., & Owens, P. N. 2009). Human activities have to be governed by the rules and regulations set out by the state's legislatures. The polluter pays principle provides a guiding light to the legislature to incorporate the negative externalities released due to human action (Khan, M. R. 2015). The standards that have to be prescribed under the legislation can be based upon the polluter pays principle.

The principle envisages that the polluter should not be allowed to pollute the environment without facing the state's actions (Bleeker, A. 2009). The social costs are borne by the innocent public, who has to bear the brunt of the air pollution, despite not taking any action which contributes in addition to the environmental emissions (Patz, J. A., et al. 2007). The polluter needs to compensate for the harm caused by the polluter's actions (Tan, K. C. 2023). The emissions caused beyond the prescribed limits need urgent action from the governmental authorities (Stern, N. et al. 2022). If left unchecked, these externalities can cause society to bear the cost of the health hazards caused by pollution (McMullen, J. S., & Warnick, B. J. 2016). Carbon pricing is one of the essential fiscal instruments for controlling the rate of emissions in the environment (Wills, W. et al. 2022). This could be achieved in two ways. One is the direct levy of the environmental cost of the emission of greenhouse gases.

The tax can be imposed on selected activities significantly contributing to ecological pollution. The other way could be the cap-and-trade system. Under this mechanism, the government implements a policy wherein the different levels of the standards are set for various sectors (Stavins, R. N. 2008). If a particular unit emits less than the

prescribed limits, it can trade the credits earned due to the discipline in maintaining the emissions (MacKenzie, D. 2009). The units contributing beyond the prescribed limits must purchase the credits from those units that have earned them. In this way, there can be predictability regarding the overall emissions.

Green Taxation

Green Taxes are widely characterized as charges based on environmental factors (Zhang et al., 2022). They are typically classified into two types: one is based on waste, pollutants, or environmental hazards and is charged on the release, emissions, or adverse byproducts generated (Qamruzzaman et al., 2024); the other is based on the use of the environment for its resources, resulting in a temporary or permanent depletion of environmental assets, and is imposed on the use of natural resources, land, forests, and the like (Semenova, 2021). The primary goal of these taxes is income creation or, in certain circumstances, discouraging specific activities by making them more expensive (Rybak et al., 2022). Occasionally, these taxes result in an optimum resource allocation, known as Pareto efficiency. More commonly, their substantial influence is from urging consumers and producers to adopt eco-friendly activities, or at least those with less negative consequences for which they are held responsible. These taxes boost the prices of consumer items and company activities that contribute to increased environmental degradation, promoting changes in consumer and producer behaviour.

Environmental taxes benefit the environment in three ways above command and control.

- Sources are incentivized to decrease as long as the damage cost exceeds the marginal cost of abatement, but command instruments do not encourage cleaner technology investment.
- Taxes increase industry flexibility. The polluter chooses its preferred abatement amount based on costs and taxes. The polluter might base its competitive position on production or cleaner output depending on the initial filthy production.
- Regardless of total abatement cost, the government obtains steady returns on its spending. Pollution taxes are harsh since it's hard to evaluate environmental harm. Polluters oppose environmental taxes because they will lose market supremacy.

Green Tax Policy in various jurisdictions across the globe

Burning fossil fuels generates greenhouse gases, with severe environmental consequences and negative health impacts because combustion processes do not release only CO₂ but also particulate matter and NO_x, whose main effects are asthma attacks and the death of children. Transportation, mainly cars, is one of the primary sources of air pollution caused by the same pollutants. So, a good policy is to raise the cost of using cars in some specific activities that negatively affect public health and the environment.

As an instrument of fiscal policy, taxes are generally used to generate revenue to finance government programs and alter the relative price of goods and services so that the distribution of resources can be shifted in a direction considered favourable by the government. In 1920, Pigou demonstrated that taxes can be used to correct externalities. He proposed a tax based on marginal environmental damage instead of using taxes to generate revenue. Such taxes were later known as Pigouvian taxes. It

was argued that by imposing Pigouvian taxes, the private marginal benefit from polluting would be decreased and equal to the social marginal benefit.

Consequently, the production of polluted goods that are too large can be prevented, and the negative externalities of pollution can be internalized. Thus, Pigouvian taxes can be used as efficient instruments to correct externality problems. The fundamental purpose of implementing an environmental tax policy is to control and decrease environmental pollution. To achieve this purpose, ecological tax policies also aim to stimulate firms and consumers to utilize environmentally friendly production techniques and products.

The Organisation for Economic Cooperation and Development (OECD) has worked on analysing the Green Tax policy concerning internalising negative externalities in the environment. The general principle of polluter pays ensures that the environmental costs due to emissions should be accounted for in the output cost of the products manufactured in the major economies across the globe.

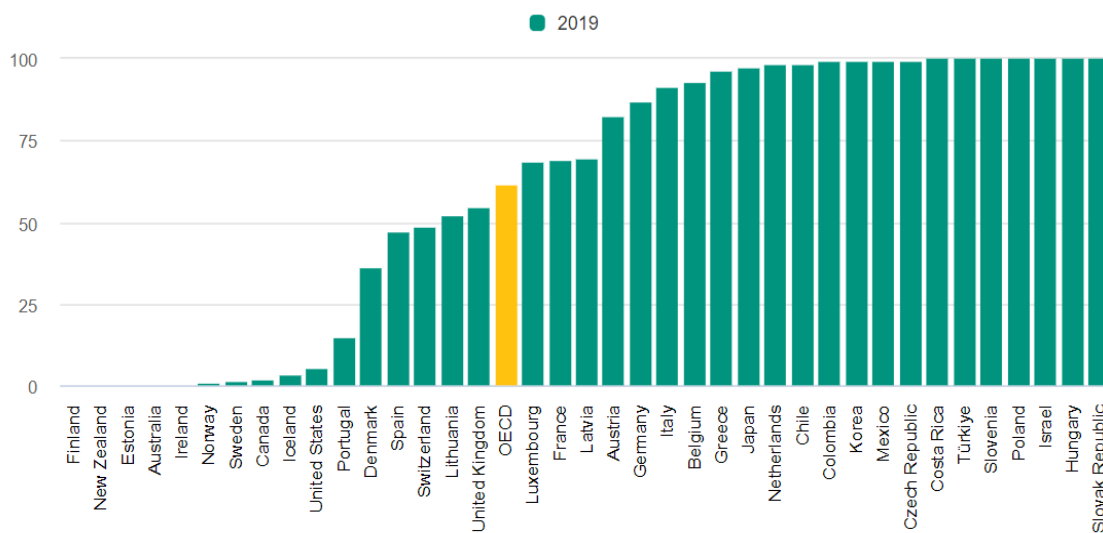


Figure 1: Percentage of population exposed to PM 2.5 in the OECD countries

Source: OECD

The figure depicts the percentage of population exposure in the OECD countries in 2019. Finland, New Zealand, Estonia, Australia, and Ireland are amongst the countries with the most minor exposure to PM 2.5 amongst the OECD countries. On the other hand, Turkey, Slovenia, Poland, Israel, Hungary, and the Slovak Republic are the countries with the highest percentage of population exposure to PM 2.5.

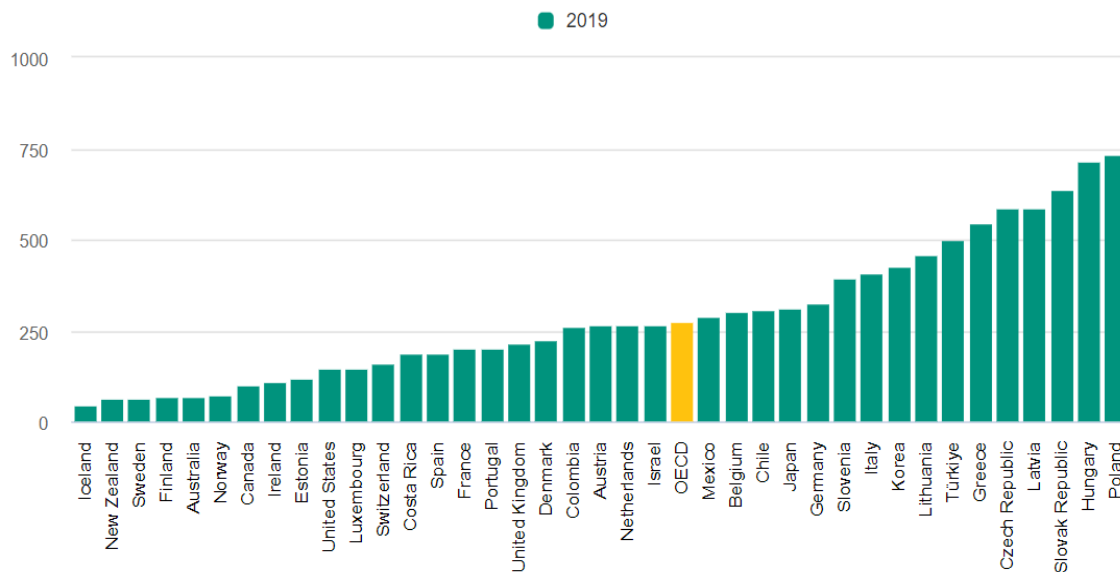


Figure 2: Data on mortality due to exposure to PM 2.5 in the OECD Countries

Source: OECD

The figure provides data on countries with mortality rates due to PM 2.5 in 2019. Iceland has the lowest number of deaths due to exposure to PM 2.5 among the OECD countries. On the other hand, Hungary and Poland are the countries with the highest number of deaths due to exposure to PM 2.5.

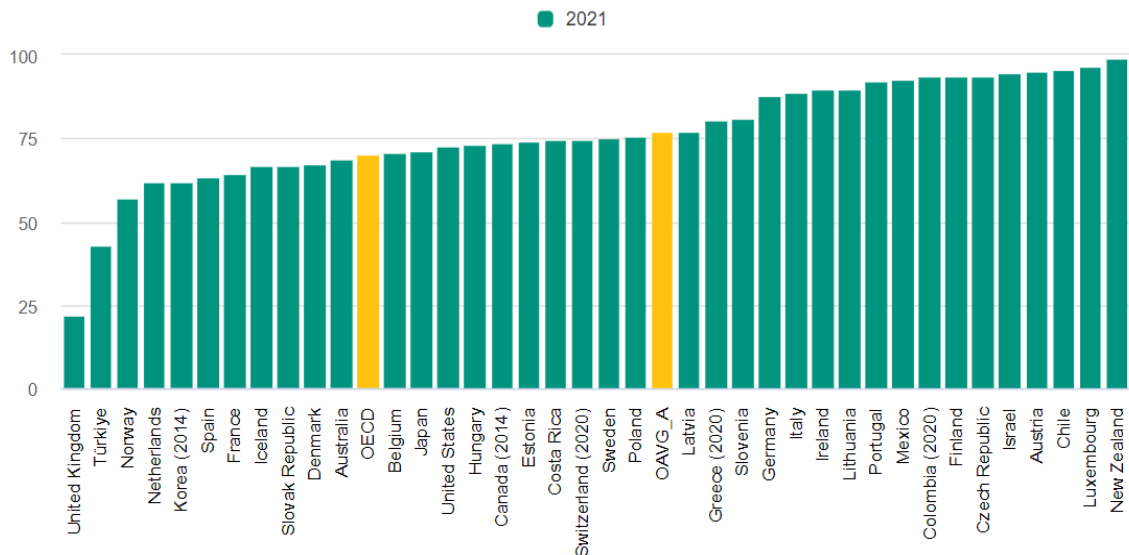


Figure 3: Tax revenue generated due to the taxes related to air pollution in OECD Countries.

Source: OECD

The figure above depicts the percentage of tax revenue generated due to the imposition of taxes on the sources of air pollution in the OECD Countries concerning the total revenue generated due to the environmentally related tax revenue in 2021. In terms of generating revenue from sources of air pollution, the United Kingdom has

been a laggard. Chile, Luxembourg, and New Zealand have been leading with the highest percentages of income from taxes on sources of air pollutants.

Green Tax & Sustainable Development

Environmental levies are crucial in promoting several Sustainable Development Goals (SDGs). These budgetary strategies have advantages beyond only reducing the impact of climate change. For example, imposing excise fees on fossil fuels or carbon emissions may significantly reduce the usage of these fuels, resulting in a considerable reduction in local air pollution. This is in line with SDG3, which prioritizes promoting good health and well-being, and SDG15, which specifically addresses the preservation and sustainable use of terrestrial ecosystems.

Furthermore, fuel taxes have shown efficacy in controlling the growth of motorized transportation. By doing this, they reduce traffic congestion and limit accidents, thereby contributing to SDG11, which seeks to create inclusive, safe, resilient, and sustainable cities.

In addition to their environmental advantages, such levies also have an economic function. They can generate government money more effectively than some conventional methods of taxes. By transitioning from payroll taxes to carbon and fuel taxes, it is possible to reduce the size of the informal sector and enhance the development of formal jobs. This, in turn, supports SDG8, which aims to achieve sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for everyone.

Imagine a lively urban area where the air is purer, traffic is less crowded, and there is a more substantial presence of vegetation, all due to the deliberate use of environmental fees. These taxes have the dual purpose of discouraging harmful emissions and generating more revenue for the government, which may be used to support more sustainable programs. The comprehensive approach to taxes highlights the diverse role that fiscal policies may have in attaining a sustainable future for everyone.

Countries leading these programs are realizing that environmental taxes may generate substantial money in the long run. These taxes improve economic efficiency by including society's costs in commodity prices, therefore using market forces to address these problems. Recent studies indicate that environmental taxes have a comparatively less effect on output and employment when compared to conventional taxes, with this tendency being especially evident in emerging countries. Moreover, the interplay between tax policy and government expenditure is crucial. The growing environmental issues are increasing the need for more public spending. Although it is necessary to engage in environmental restoration, relying too much on public money to pay social costs might exacerbate the strain on already limited fiscal resources and intensify the need to raise regular taxes. Environmental levies are crucial in encouraging private sector involvement in resolving these expenses. Environmental taxes have three distinct advantages for fiscal policy: they create income, enhance the tax system's efficiency, and reduce the need for traditional taxes to finance public services addressing similar social problems.

Within the framework of SDGs, environmental taxes are a potent instrument for nations to support their sustainable development objectives financially. They reduce reliance on foreign assistance and facilitate debt management, enhancing the ability

to withstand external economic upheavals. By harmonizing tax systems with the SDGs, nations may promote sustainable economic policies and shape behaviours towards desired results, such as taking action on climate change and improving overall well-being (United Nations Development Programme, 2023). In addition, environmental taxes may make a significant contribution to numerous SDGs by effectively lowering the use of fossil fuels. This reduction in turn leads to a decrease in local air pollution, therefore supporting objectives such as Good Health and Well-Being and Life on Land (World Bank Group, 2022).

In lower-income nations, environmental fiscal changes have the potential to benefit people with low incomes and promote equality, as outlined in SDGs 1 and 10. Firstly, wealthier urban families often have lifestyles requiring higher energy consumption. Secondly, environmental levies may lead to changes in the economy that raise the work needed in manufacturing, thereby making labour more valuable. Enhancing access to fundamental infrastructure may be further reinforced by allocating revenues, notably assisting impoverished people in rural areas.

Health Impacts of Green Taxes

Economies aiming at recovering from crises and stimulating development simultaneously must use all options provided by economic branches, including taxation. Taxation policy usually faces the problem of choosing the 'best' and, when applying these to environmental responsibility, it has always been an immense problem of whether different ways of stimulating investments and reducing the negative influence of the production environment could be combined in a single taxation system. Today's challenges related to countries' desire to survive and develop their economy have again put on the table issues of Green Taxation and other tax roles in the environmental and health spheres.

The quality of the environment somewhat influences human health. The connection between health and environmental quality may be briefly stated as follows: People require a certain threshold of environmental quality to maintain good health. The relationship between economic development and environmental quality has a significant influence on our material living standards. However, it is equally, if not more essential, to recognize the significance of the environment in maintaining physical health, particularly in terms of air quality, water quality, and sanitation. Simultaneously, physical health issues are sufficiently severe to impact one's ability to work and individual output. Enhancing the environment improves health conditions and boosts the accumulation of human capital, hence raising the overall resources accessible to society.

While the revenue implications and the regressivity issue are often used to discuss the desirability of Green Taxes, the potential benefits of improved human health or sustainable development are rarely addressed.

The primary obstacle is to guarantee that these levies efficiently reduce the release of greenhouse gases, therefore promoting environmental sustainability and public health.

At the same time, empirical evidence suggests that a revised tax structure can make essential contributions to human well-being, and the costs of green taxes are often much lower than generally believed. General equilibrium models with explicit specifications of health impacts can provide initial estimates of the consequences of

green taxes on human health. This includes both mortality and the incidence of acute and chronic morbidity and how these are distributed among different population subgroups. These estimates can help redefine the social benefits of green taxes and support the argument that more of them will improve the efficiency with which human well-being increases.

In essence, green tax reduces air pollution, water pollution, energy consumption, environmental waste, and CO₂ emissions, ultimately improving human health. In sum, environmental tax will likely mitigate environmental pollution and thus improve human health (Guo et al.2022).

Case Studies on Green Tax & Human Health

China Case Study: China's green tax policy, officially enacted on January 1, 2018, represents a pivotal shift in the nation's approach to environmental regulation. For the first time, the policy introduced an environmental protection tax, succeeding the previous pollutant discharge fee system and enhancing the framework for environmental taxation (Zhang, D. 2024). This policy expansion also encompasses a broader spectrum of pollutants. The policy's efficacy in mitigating air and water pollution is rigorously analysed using regional panel data methods, focusing on varying pollution levels across different areas. The policy's implementation strength and methods determine its impact on public health.

Sweden Case Study: Sweden has effectively implemented a green tax policy, namely a carbon tax. This policy is beneficial in decreasing energy use, enhancing energy efficiency, and encouraging the adoption of renewable energy sources (Ahmad M.N. et al. 2024). This has reduced greenhouse gas emissions, which is advantageous for the environment and public health.

OECD Case Study: The influence of eco-innovation, environmental taxation, and renewable energy usage on environmental performance was studied in selected OECD nations via research (Kafeel, K. et al. 2024). Implementing the carbon price, with emerging energy technology and a limitation on greenhouse gas emissions, has facilitated this environmental advancement.

Indian Case Study: Research examining the efficacy of India's green tax found that these tariffs, imposed on releasing detrimental gases such as carbon dioxide, are intended to mitigate pollution (Vinutha, P., & Ajay, R. 2022).

The Forest Conservation Act of 1980 mandates that any entity engaged in the conversion of forest property for non-forest activities shall provide financial compensation for the establishment of forests in areas that are not already forested or are in a degraded state. The Compensatory Afforestation Fund Act, of 2016 focuses on mitigating the environmental repercussions of deforestation by addressing the impact of converting forest land for non-forest use. In 2002, the Supreme Court mandated the creation of a Compensatory Afforestation Fund (CAF) to manage the money that was collected (Narain, D., & Maron, M. 2018).

India has established a range of regional "ecotaxes". An example of this is the clean energy tax implemented by the Indian government in 2010, which specifically focuses on coal, peat, and lignite (Chaturvedi, I. 2016). The Gujarat Green Cess, which is now being legally contested, is a levy imposed on energy use from 2011 (Mandal, K., et. al. 2013). In 2004, Himachal Pradesh implemented a car entry tax (Batta, R. N., et. al.2008). Sikkim put a fee on non-biodegradable chemicals in 2005 (Thakur, A., et. al.

2021), while Goa adopted the Goa Green Cess in 2013 (Verma, R., & Verma, R. 2021). Recently, Six Indian states have implemented a fee on older automobiles to mitigate their ecological footprint (Singh, S., et. al. 2022).

Among the 34 members of the OECD and five partner economies, India has the fourth lowest environmentally related tax collection (Yasmeen, R., et. al 2023). India's energy tax accounts for 50% of its income relating to the environment, whereas other nations have an average of 70% (Rajagopal, D. 2023). This emphasizes the considerable opportunity to improve eco-taxation policy in India's ecologically vulnerable areas.

CONCLUSION

Green Taxes can play a significant role in enabling better human health. Fiscal policy tools cannot be effective in isolation. There needs to be coordinated efforts by the policymakers in utilising the fiscal policy tool to deter the polluters from discharging pollutants in any form beyond the prescribed limits. There is a need to draft better legal frameworks to implement the polluter pays principle to deliver the desired results. The target of achieving SDG 3 in reducing the mortality due to air pollution is well within reach if the Green Taxation regime and other policy tools can work in tandem. Though the analysis of the data OECD in terms of the generation of revenue from the imposition of taxes on air polluting activities and the percentage of premature deaths due to particulate matter doesn't look promising, it points out that there are gaps in the existing legal framework which needs to be plugged. The results from the data analysis from British Columbia look promising, with significant emission reduction after the implementation of carbon tax compared with the other provinces in Canada. The segregated efforts in the fiscal policy regime need a well-laid foundation for consolidation to yield better results.

References

- 1) Ahmad, M.N., Zhou, X., Muhammad, S., & Shabbir, M.S. (2024). Does green tax theory affect the environmental sustainability and protection? *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-024-04601-w>
- 2) Ali, M. U., Liu, G., Yousaf, B., Ullah, H., Abbas, Q., & Munir, M. A. M. (2019). A systematic review on global pollution status of particulate matter-associated potential toxic elements and health perspectives in urban environment. *Environmental geochemistry and health*, 41, 1131-1162. <https://link.springer.com/article/10.1007/s10653-018-0203-z>
- 3) Ansari, Z. A., & Matondkar, S. G. P. (2014). Anthropogenic activities including pollution and contamination of coastal marine environment. *Journal of Ecophysiology and Occupational Health*, 14(1/2), 71.
- 4) Avis, W. R. (2018). Inclusive green growth in developing countries. K4D Helpdesk Report. Brighton, UK: Institute of Development Studies. https://assets.publishing.service.gov.uk/media/5af9702340f0b622dd7aa2c8/Inclusive_green_growth_in_developing_countries.pdf
- 5) Bashir, M. F., Benjiang, M. A., Shahbaz, M., Shahzad, U., & Vo, X. V. (2021). Unveiling the heterogeneous impacts of Green Taxes on energy consumption and energy intensity: empirical evidence from OECD countries. *Energy*, 226, 120366. <https://doi.org/10.1016/j.energy.2021.120366>
- 6) Batta, R. N., Pathak, R. D., & Smith, R. F. I. (2008). Road transport in Himachal Pradesh: policy options for sustainable transportation. *South Asian Journal of Management*, 15(1), 98-117. sajm-amdisa.org/sajm_journals/SAJM_15.1.pdf#page=96

- 7) BELL, R. G., & RUSSELL, C. (2002). Environmental Policy for Developing Countries. *Issues in Science and Technology*, 18(3), 63–70. <http://www.jstor.org/stable/43314167>
- 8) Bityukova, V. R., & Mozgunov, N. A. (2019). Spatial features transformation of emission from motor vehicles in Moscow. *Geography, environment, sustainability*, 12(4), 57-73. <https://ges.rgo.ru/jour/article/view/902>
- 9) Bleeker, A. (2009). Does the polluter pay? The polluter-pays principle in the case law of the European Court of Justice. *European Energy and environmental law review*, 18(6). <https://doi.org/10.54648/eelr2009024>
- 10) Bostrom, A., Morgan, M. G., Fischhoff, B., & Read, D. (1994). What do people know about global climate change? 1. Mental models. *Risk Analysis*, 14(6), 959-970.
- 11) Chakraborty, I., & Maity, P. (2020). COVID-19 outbreak: Migration, effects on society, global environment and prevention. *Science of the total environment*, 728, 138882. <https://doi.org/10.1016/j.scitotenv.2020.138882>
- 12) Chaturvedi, I. (2016). The Carbon Tax Package: An Appraisal of Its Efficiency in India's Clean Energy Future. *CCLR*, 10, 194.
- 13) Dahmani, M. (2024). Environmental quality and sustainability: Exploring the role of Green Taxes, environment-related technologies, and R&D expenditure. *Environmental Economics and Policy Studies*. <https://hal.science/hal-04374168/document>
- 14) Doğan, B., Chu, L. K., Ghosh, S., Truong, H. H. D., & Balsalobre-Lorente, D. (2022). How Green Taxes and carbon emissions are related in the G7 economies?. *Renewable Energy*, 187, 645-656. [sciencedirect.com. https://doi.org/10.1016/j.renene.2022.01.077](https://doi.org/10.1016/j.renene.2022.01.077)
- 15) Falkner, R. (2016). The Paris Agreement and the new logic of international climate politics. *International Affairs*, 92(5), 1107-1125. <https://doi.org/10.1111/1468-2346.12708>
- 16) Guo, B., Wang, Y., Feng, Y., Liang, C., Tang, L., Yao, X., & Hu, F. (2022). The effects of environmental tax reform on urban air pollution: A quasi-natural experiment based on the Environmental Protection Tax Law. *Frontiers in Public Health*, 10, 967524. <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2022.967524/pdf>
- 17) Gupta, J., & Vegelin, C. (2016). Sustainable development goals and inclusive development. *International environmental agreements: Politics, law and economics*, 16, 433-448.. <https://doi.org/10.1007/s10784-016-9323-z>
- 18) Kafeel, K., Zhou, J., Phetkhammai, M., & et al. (2024). Green innovation and environmental quality in OECD countries: the mediating role of renewable energy and carbon taxes. *Environmental Science and Pollution Research*, 31, 2214–2227. <https://doi.org/10.1007/s11356-023-31111-5>
- 19) Khan, M. R. (2015). Polluter-pays-principle: The cardinal instrument for addressing climate change. *Laws*, 4(3), 638-653. <https://www.mdpi.com/2075-471X/4/3/638>
- 20) Krass, D., Nedorezov, T., & Ovchinnikov, A. (2013). Environmental taxes and the choice of green technology. *Production and operations management*, 22(5), 1035-1055. <https://doi.org/10.1111/poms.12023>
- 21) Li, W., Yang, Y., Liu, Z. H., Zhao, Y. J., Zhang, Q., Zhang, L., ... & Xiang, Y. T. (2020). Progression of mental health services during the COVID-19 outbreak in China. *International journal of biological sciences*, 16(10), 1732. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7098037/>
- 22) MacKenzie, D. (2009). Making things the same: Gases, emission rights and the politics of carbon markets. *Accounting, organizations and society*, 34(3-4), 440-455. <https://doi.org/10.1016/j.aos.2008.02.004>
- 23) Mandal, K., Rangarajan, R., & BANDYOPADHYAY, C. (2013). Fiscal instruments for environment and climate change: Experience from Indian States. *Eldis*. ifmrlead.org/wp-content/uploads/2015/01/Report_1.pdf
- 24) Manisalidis, I., Stavropoulou, E., Stavropoulos, A., & Bezirtzoglou, E. (2020). Environmental and health impacts of air pollution: a review. *Frontiers in public health*, 8, 505570. <https://doi.org/10.3389/fpubh.2020.00014>

- 25) McMullen, J. S., & Warnick, B. J. (2016). Should we require every new venture to be a hybrid organization?. *Journal of Management Studies*, 53(4), 630-662. <https://doi.org/10.1111/joms.12150>
- 26) Misra, P. (2012). Right to health and vehicular pollution in urban society-with special reference to the motor vehicles act, 1988. *The Social ION*, 1(1and2), 72-84. <https://www.indianjournals.com/ijor.aspx?target=ijor:tsi&volume=1&issue=1and2&article=005>
- 27) Narain, D., & Maron, M. (2018). Cost shifting and other perverse incentives in biodiversity offsetting in India. *Conservation biology*, 32(4), 782-788. <https://www.jstor.org/stable/44973916>
- 28) Norouzi, N., Fani, M., & Talebi, S. (2022). Green tax as a path to greener economy: A game theory approach on energy and final goods in Iran. *Renewable and Sustainable Energy Reviews*. <https://doi.org/10.1016/j.rser.2021.111968>
- 29) Oates, W. E. (1995). Green Taxes: Can We Protect the Environment and Improve the Tax System at the Same Time? *Southern Economic Journal*, 61(4), 915–922. <https://doi.org/10.2307/1060731>
- 30) OECD. (2021). Effective Carbon Rates 2021: Pricing Carbon Emissions through Taxes and Emissions Trading. Retrieved from https://www.oecd-ilibrary.org/taxation/effective-carbon-rates-2021_0e8e24f5-en
- 31) OECD. (2023). Air quality and health: Exposure to PM2.5 fine particles - countries and regions. OECD Environment Statistics. <https://doi.org/10.1787/96171c76-en>
- 32) OECD. (2023). Air quality and health: Mortality and welfare cost from exposure to air pollution. OECD Environment Statistics. <https://doi.org/10.1787/c14fb169-en>
- 33) OECD. (2023). Environmental policy: Environmentally related tax revenue. Retrieved from <https://doi.org/10.1787/df563d69-en>
- 34) Okonkwo, Theodore. (2017). Reshaping the global climate change regime through the paris agreement. *Christ University Law Journal*, 6(2), 1-32. <https://heinonline.org/HOL/P?h=hein.journals/chulj6&i=137>
- 35) Parry, I., Mylonas, V., & Vernon, N. (2021). Mitigation policies for the Paris Agreement: An assessment for G20 countries. *Journal of the Association of Environmental and Resource Economists*, 8(4), 797-823. <https://www.journals.uchicago.edu/doi/abs/10.1086/713147>
- 36) Patz, J. A., Gibbs, H. K., Foley, J. A., Rogers, J. V., & Smith, K. R. (2007). Climate change and global health: quantifying a growing ethical crisis. *EcoHealth*, 4, 397-405. <https://doi.org/10.1007/s10393-007-0141-1>
- 37) Qamruzzaman, M., Karim, S., & Kor, S. (2024). Nexus between Innovation–Openness–Natural Resources–Environmental Quality in N-11 Countries: What Is the Role of Green Tax?. *Sustainability*. <https://www.mdpi.com/2071-1050/16/10/3889/pdf>
- 38) Rajagopal, D. (2023). Implications of the energy transition for government revenues, energy imports and employment: The case of electric vehicles in India. *Energy Policy*, 175, 113466. <https://www.sciencedirect.com/science/article/pii/S0301421523000514>
- 39) Reşitoğlu, İ. A., Altinişik, K., & Keskin, A. (2015). The pollutant emissions from diesel-engine vehicles and exhaust aftertreatment systems. *Clean Technologies and Environmental Policy*, 17, 15-27. <https://doi.org/10.1007/s10098-014-0793-9>
- 40) Rybak, A., Joostberens, J., Manowska, A., & Pielot, J. (2022). The impact of Green Taxes on the level of greenhouse gas emissions in Poland and Sweden. *Energies*. <https://www.mdpi.com/1996-1073/15/12/4465/pdf>
- 41) Semenova, G. (2021). Ways to improve Green Taxation in Russia. *E3S Web of Conferences*. https://www.e3s-conferences.org/articles/e3sconf/pdf/2021/20/e3sconf_emmft2020_10032.pdf
- 42) Shahzad, U. (2020). Green Taxes, energy consumption, and environmental quality: Theoretical survey with policy implications. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-020-08349-4>

- 43) Singh, S., Jindel, J., Tikkiwal, V. A., Verma, M., Gupta, A., Negi, A., & Jain, A. (2022). Electric vehicles for low-emission urban mobility: current status and policy review for India. *International Journal of Sustainable Energy*, 41(9), 1323-1359. *Transportation in Developing Countries: Greenhouse Gas Scenarios for Delhi, India* (escholarship.org)
- 44) SMITH, S. (1992). Taxation and the Environment: A Survey. *Fiscal Studies*, 13(4), 21–57. <http://www.jstor.org/stable/24437264>
- 45) Stavins, R. N. (2008). Addressing climate change with a comprehensive US cap-and-trade system. *Oxford Review of Economic Policy*, 24(2), 298–321. <http://www.jstor.org/stable/23606646>
- 46) Stern, N., Stiglitz, J., & Taylor, C. (2022). The economics of immense risk, urgent action and radical change: towards new approaches to the economics of climate change. *Journal of Economic Methodology*, 29(3), 181-216. <https://doi.org/10.1080/1350178X.2022.2040740>
- 47) Tan, K. C. (2023). Climate reparations: Why the polluter pays principle is neither unfair nor unreasonable. *Wiley Interdisciplinary Reviews: Climate Change*, 14(4), e827. <https://doi.org/10.1002/wcc.827>
- 48) Taylor, K. G., & Owens, P. N. (2009). Sediments in urban river basins: a review of sediment–contaminant dynamics in an environmental system conditioned by human activities. *Journal of Soils and Sediments*, 9, 281-303. <https://doi.org/10.1007/s11368-009-0103-z>
- 49) Thakur, A., Kumari, S., Sinai Borker, S., Prashant, S. P., Kumar, A., & Kumar, R. (2021). Solid waste management in Indian Himalayan region: current scenario, resource recovery, and way forward for sustainable development. *Frontiers in Energy Research*, 9, 609229. <https://www.frontiersin.org/articles/10.3389/fenrg.2021.609229/full>
- 50) Verma, R., & Verma, R. (2021). Environmental Regulations in India. *Fiscal Control of Pollution: Application of Ecotaxes in India*, 75-129. https://link.springer.com/chapter/10.1007/978-981-16-3037-8_3
- 51) Vinutha, P., & Ajay, R. (2022). A Study on Green Tax in India - Its Effectiveness and Challenges. *Seybold Report*, 15(7), 13. <https://doi.org/10.0618/Seybold.2022863879>
- 52) Wang, L., Zhang, F., Pilot, E., Yu, J., Nie, C., Holdaway, J., ... & Krafft, T. (2018). Taking action on air pollution control in the Beijing-Tianjin-Hebei (BTH) region: progress, challenges and opportunities. *International journal of environmental research and public health*, 15(2), 306. <https://www.mdpi.com/1660-4601/15/2/306>
- 53) Wills, W., La Rovere, E.L., Grottera, C., Naspolini, G.F., Le Treut, G., Gherzi, F., Lefèvre, J. and Dubeux, C.B.S. (2022). Economic and social effectiveness of carbon pricing schemes to meet Brazilian NDC targets. *Climate Policy*, 22(1), 48-63. <https://doi.org/10.1080/14693062.2021.1981212>
- 54) World Bank. (2022). *State and Trends of Carbon Pricing 2022*. Washington, DC: World Bank. Retrieved from <https://openknowledge.worldbank.org/handle/10986/37455>
- 55) Xue, J., Zhu, D., Zhao, L., & Li, L. (2022). Designing tax levy scenarios for Green Taxes in China. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2021.130036>
- 56) Yasmeen, R., Zhang, X., Tao, R., & Shah, W. U. H. (2023). The impact of green technology, environmental tax and natural resources on energy efficiency and productivity: Perspective of OECD Rule of Law. *Energy Reports*, 9, 1308-1319. <https://www.sciencedirect.com/science/article/pii/S2352484722026671>
- 57) Zhang, D. (2024). Eco-friendly revenues for healthcare: assessing the relationship between green taxation, public health expenditures, and life expectancy in China. *Front. Public Health*, 12. <https://doi.org/10.3389/fpubh.2024.1358730>
- 58) Zhang, Y., Khan, I., & Zafar, M. W. (2022). Assessing environmental quality through natural resources, energy resources, and tax revenues. *Environmental Science and Pollution Research*, 29(59), 89029-89044. <http://dx.doi.org/10.1007/s11356-022-22005-z>