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REDUCING CARBON EMISSION THROUGH CARBON TAX POLICY IN MALAYSIA

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Abstract:

In accordance with the objective outlined in the 2016 Paris Agreement, there is a requirement to lower carbon dioxide (CO2) and other greenhouse gas emissions by a quarter by the year 2030. Climate policy packages that induce dramatic changes in production and consumption patterns will be required to achieve this. Despite the fact that many developed countries are proclaiming emission neutrality objectives by 2030, present practices are incompatible with these long-term ambitions. As a result, significantly stronger policy action is required. As we approach 2021, Malaysia has less than a decade to fulfill the global goal of halving carbon dioxide emissions by 2030. In the worldwide Climate Change Performance Index, Malaysia is near the bottom. To advance the sustainability objectives and address climate change concerns, Malaysia is contemplating the implementation of a carbon tax for upcoming investments. These adjustments, on the other hand, are dependent on legislators' knowledge and public demand. Hence, this study looks at how carbon tax policies were implemented in both successful and unsuccessful countries. The purpose of the study is to introduce the carbon tax policy in Malaysia. This study used secondary data to collect information on looking at the challenges and benefits of implementing a carbon tax. The finding from this study concludes that establishing a carbon tax policy has more economic and environmental benefits if the country has well-designed carbon pricing that influences consumer, business, and investor behavior while also stimulating technological innovation and earning revenue. The study recommends the government how to implement a carbon price policy framework while revising the Environmental Protection Act.

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Introduction

Elevated levels of greenhouse gases are responsible for driving alterations in the Earth's climate, leading to impacts on both weather patterns and broader climatic systems. The consequences encompass instances of severe weather, increases in ocean levels, changes in the distribution and environments of various animal species, and a diverse array of other outcomes, all stemming from shifts in the climate. As a result, greenhouse gas emissions have been linked to a slew of economic and environmental issues (Koach, 2021). The convolutions of global trade increase concerns about how countries should justly compensate others for their environmental effect. Carbon pricing, specifically in the form of a carbon tax, presents a method for tackling these fairness issues alongside the goal of decreasing worldwide carbon emissions. This strategy, as stated by Chow (2020), involves increasing expenses for fossil fuels, electricity, and various products used by consumers, all the while decreasing expenses for those engaged in fuel production. The main reason for this is that they are a proven strategy for meeting domestic emission reduction targets. (Parry, 2019). Carbon pricing that is well-designed can have a positive impact on consumer, business, and investor behavior while also reassuring technological innovation and generating revenue. The national carbon tax is presently placed in 27 nations throughout the world, including Canada, EU, Japan, Singapore, Argentina, and Ukraine among others. According to Heutel (2016), the most cost-effective way to resolve climate change is to impose a carbon tax. The tax could be the most politically acceptable policy response because it reduces greenhouse gas emissions at a modest cost. Hence, policies to combat climate change by lowering greenhouse gas emissions should be carefully crafted to achieve the objective at the lowest possible cost.

Research Background

In Asia, just a few countries have implemented carbon taxes, including South Korea, Japan, Kazakhstan, and Singapore. Despite the Malaysian government's pledge to decrease carbon emissions by 45 percent in 2030 as part of the 2016 Paris Climate Agreement, there was no immediate plan to impose a carbon price (Aziz, 2019). Instead, according to the 11th Malaysia Economic Development Plan, the government has raised approximately RM1.2 billion for the Green Technology Financing Scheme to focus more on developing and utilizing renewable energy sources. Despite the fact that the government has promoted increased investment in renewable energy technologies, adoption is still minuscule. This demonstrates that, despite its efforts, Malaysia is still profoundly dependent on fossil fuels for its energy needs. With so much momentum throughout the world, Malaysia's government policies have only lately begun to look into carbon pricing. As per Datuk Seri Zaini Ujang, the secretary-general of the Ministry of Environment and Water (KASA), Malaysia intends to address these issues through the utilization of current regulations such as the Environmental Quality Act of 1974, in addition to the recently established Climate Change Act. Consequently, the government is in the process of reassessing the Environmental Quality Act of 1974 to incorporate considerations related to climate change and the imperative for diminishing greenhouse gas emissions, as highlighted by Sim (2021).

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Carbon price-and-rebate (CPR) policies can help Malaysia achieve long-term sustainability, with little immediate costs and significant benefits in the medium to long term. Besides, carbon pricing can help to alleviate inequality indirectly by funding progressive tax policies. In addition, Malaysia has the opportunity to learn from 70 national and sub-national jurisdictions that currently use carbon pricing as a key tool in climate policymaking. When a carbon tax on power, transportation, and oil and gas cover more than 70% of yearly national emissions, it is ensuring that Malaysia will meet its climate goals.

Literature Review

Carbon taxes emerged as one of the initial policy measures to combat climate change by curbing emissions. Finland pioneered the adoption of carbon taxes as a climate change mitigation tool, implementing them in January 1990 when the country's contribution to global greenhouse gas emissions was a mere 0.3 percent (Aslani et al., 2013). Starting from the latter part of 2000, there has been an increasing fascination with the enactment of carbon levies. Subsequent to the establishment of the Swiss carbon tariff in 2008, several other European nations initiated the formulation and adoption of similar levies, a trend followed by developed countries including Australia and Japan. The encounters with carbon tariffs in recent years have yielded a varied and extensive foundation for the progression and execution of this strategy. These occurrences have demonstrated that carbon taxation is a flexible instrument capable of being tailored to a diverse array of domestic and political objectives, as highlighted by Sumner et al. (2009).

The economic impacts of carbon tax policies have been researched fairly considerably internationally. When researching the effects of emissions, the main emphasis lies in investigating particular sub-divisions. Green (2021) conducts an exhaustive meta-analysis of the outcomes of carbon pricing on emissions and uncovers a blend of evidence concerning their efficacy. Metcalf and Stock (2020) investigate the consequences of carbon pricing in the European Union and reveal slight reductions in emissions. Meanwhile, Haites (2018) evaluates the efficiency of carbon pricing approaches in terms of emission reduction and their economic viability. He discovers that in general, carbon levies in European countries have resulted in minor decreases, with reductions of 'up to 6.5% over several years'. He also observes that within the European Union, nations lacking a carbon tariff exhibited swifter emissions reduction compared to those with such a levy. In parallel, Rafaty et al. (2020) scrutinize the influence of carbon pricing (excluding the introduction of taxes) on emissions within a selection of OECD nations. They conclude that while carbon pricing restrained the growth of emissions, the present carbon price levels remain insufficient to achieve significant reductions in emissions.

Carbon taxes have been adopted in several countries, such as Sweden, Canada, and the United Kingdom. Each nation's implementation strategy varies, from taxing fossil fuels to taxing emissions directly. The scope of coverage also differs, with some taxes targeting specific sectors and others applying economy-wide. The diversity in implementation allows for valuable cross-comparisons of their impact on emission reduction. Empirical evidence indicates that carbon taxes have indeed played a significant role in curbing emissions. Sweden, for example, has successfully reduced emissions by approximately 25% since introducing its carbon tax in the early 1990s (Hammar and Akerfeldt, 2015). Similarly, British Columbia's carbon tax has led to a notable decline in per capita emissions while maintaining steady economic growth (Leving, 2021). However, experiences from various countries suggest that well-designed carbon tax systems can be implemented without detrimental effects on economic

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growth. Revenue recycling through tax cuts, rebates, or investments in green sectors can offset economic drawbacks and even lead to long-term economic benefits.

Research Gap in Implementing Carbon Tax Policy

As per a recent analysis conducted by the International Monetary Fund, the most efficient strategy for addressing global warming and minimizing air pollution is by raising the carbon expense (Newburger, 2019). Malaysia faces the difficult task of decarbonizing its economy as its population grows, and it must increase GDP in order to reduce significant poverty levels (Roser & Ortiz-Ospina, 2017). However, Malaysia is still looking into the carbon tax policy while reviewing the Environmental Quality Act of 1974.

Most Malaysians are unaware that environmental sustainability is a shared responsibility for achieving a low-carbon society (Lawrence et al., 2020). In addition, current carbon promises and policies fall short of what is required in terms of proactive policy action (Sim, 2021). Furthermore, the draft of a new Climate Change Act will be dependent on policymakers' understanding, stakeholders, and public demand (MIDA, 2020). As a result, the short- and long-term economic repercussions of implementing a carbon pricing system in Malaysia must be thoroughly investigated, with climate change externalities taken into account.

Method

The study looked at how carbon tax policies were implemented in nations that succeeded as well as countries that failed. It also focused on policies that have been successful in adopting them as examples, while also taking into account the factors that have contributed to the failure in other countries. The study gathered secondary information on carbon tax policies and practices. Based on the secondary data findings, this study recommends policymakers review the Environmental Quality Act of 1974 by including carbon tax policy as part of the practice in order to reduce carbon emissions to achieve economic growth in long terms sustainability.

Analysis of Countries with High Carbon Emission

The world's wealthy nations are responsible for the majority of carbon emissions. These began to rise during the Industrial Revolution (especially after the year 1850), implying that richer countries, such as The United States contributes disproportionately to the current climate impacts due to its early transition to an economic system heavily reliant on fossil fuels. Although a significant number of European Union member states exhibit some of the globe's elevated per-person carbon emission levels, the majority have been at the forefront of transitioning to renewable and environmentally-friendly energy sources. The convenience of acquiring carbon-emitting items like automobiles and the widespread use of plastics also play a role in placing Canada and the United States among the countries with the highest household-based pollution levels, alongside Saudi Arabia.Statistics in diagram 1 show the wealthy nation’s lead per-capita emissions. Among those countries, Saudi Arabia and the U.S have 17.6 metric tons per capita, followed by Canada at 15.7 and Australia at 14.9 metric tons per capita respectively. The US has released more than 400 billion metric tonnes of carbon dioxide since 1750. According to data obtained from the World Bank, China was responsible for 30.64 percent of global carbon dioxide (CO2) emissions, making it the largest emitter of the gas. China currently emits the most CO2 annually, but over the past three centuries, it has produced far fewer emissions than the US. Due to their rapid modernization, China now ranks among one of the most polluting countries on the planet (Willem, 2021).

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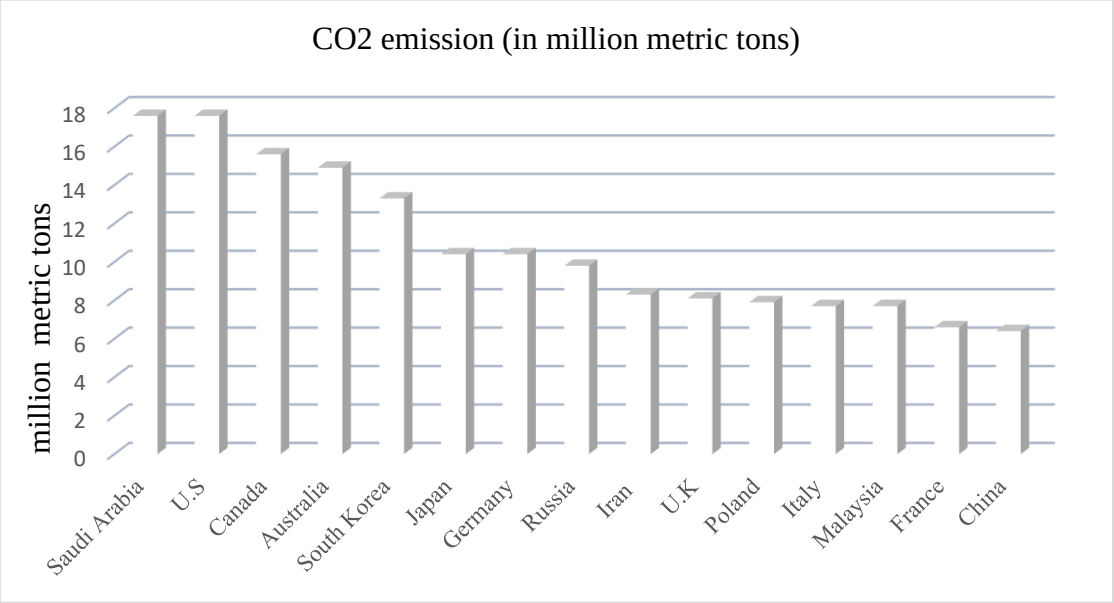
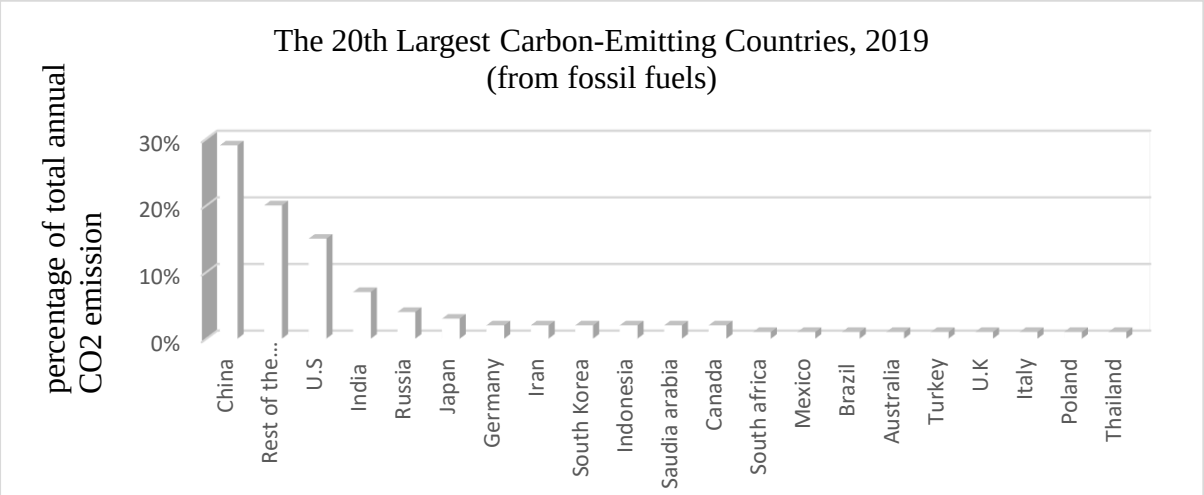
Diagram 1. Wealthy Nations Lead Per-Capita Emissions



Source: Willem (2021)

Study found that wealthier countries hold prominent positions in terms of both historical and current per capita emissions. Conversely, low- and middle-income nations exhibit lower levels of per capita emissions, both in the past and currently. Even within nations, the vast majority of carbon emissions are caused by the relatively affluent. Based on a statistical analysis of the world's energy in 2020, the three nations with the highest carbon emissions are China, the United States, and India. According to research, China is responsible for 29% of the world's carbon emissions, while the United States is responsible for 14%. Russia makes up 5%, Japan makes up 3%, and India makes up 7%. The carbon emissions from Germany, South Korea, Iran, Indonesia, and Canada total 2% each, while Saudi Arabia, South Mexico, Africa, Brazil, Australia, Turvey, the United Kingdom, Italy, France, Poland, and Thailand, account for 1%. The rest of the world accounts for 21%. Diagram 2 shows the 20th largest carbon-emitting country in 2019.

Diagram 2: 20th largest carbon-Emitting Countries in 2019.



Source: Ellerbeck (2020)

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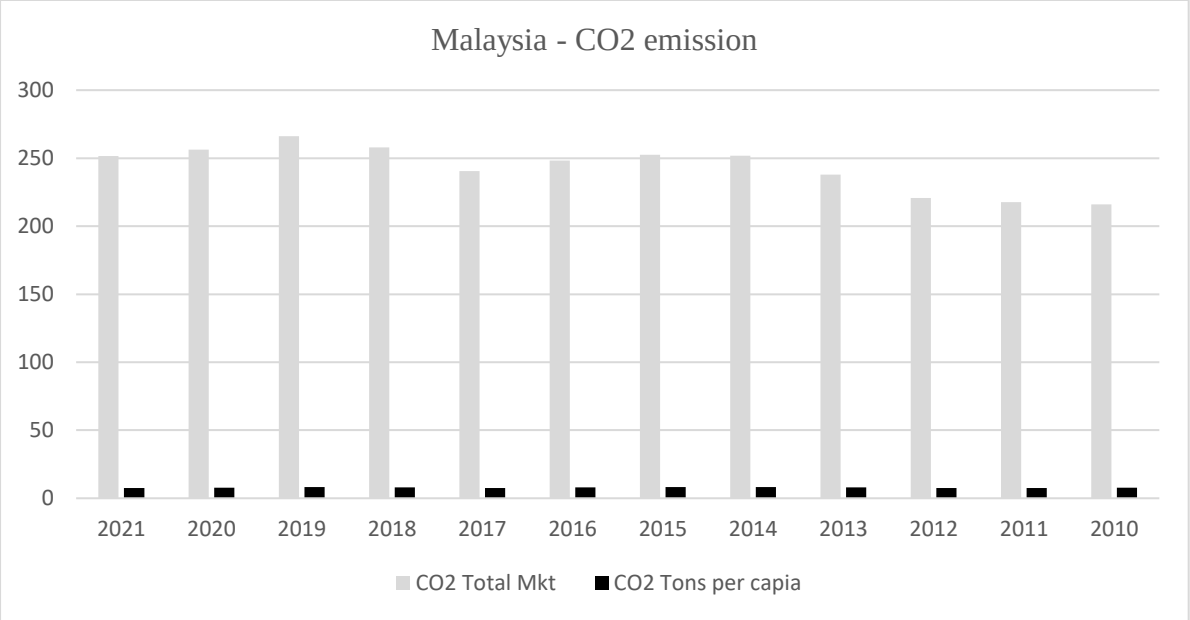
In the year 2021, Malaysia's carbon dioxide emissions per individual stood at 7.56 metric tonnes. This figure exhibited an escalation from 1.3 metric tonnes of CO2 per capita back in 1972, reaching the level of 7.56 metric tonnes per person by 2021. This increase occurred at an average yearly growth rate of 3.80%. The provided carbon dioxide emissions data encompass activities such as cement production and the burning of fossil fuels, while emissions originating from land use changes, like deforestation, are not accounted for. Comparatively, both oil and coal result in nearly twice the amount of carbon dioxide emissions in comparison to natural gas. Malaysia's CO2 emissions in 2010 to 2021 are shown in Diagram 3. Malaysia's CO2 emissions grew from 216.047 KT in 2010 to 252.611 KT in 2015. Whereas as in following years, carbon emissions decreased from 248.297KT in 2016 to 240.513KT in 2017. However, carbon emissions returned to growth later in 2018, going from 257.804 KT to 266.215 KT in 2019. Again, back in 2020 and 2021, carbon emissions decreased to 256.191 KT and 251.555 KT, respectively.

Diagram 3 – Malaysia – CO2 Emission from 2010 to 2021



Source: Climate Watch (2022)

Since the start of the Industrial Revolution, there has been a dramatic increase in global CO2 emissions, which reached a new high in 2019. In the past, major occurrences like wars and recessions have resulted in a decrease in emission levels. COVID-19 reduced emissions in 2020 and 2021 as governments imposed strict lockdowns. Travel bans around the world resulted in significant emission reductions in the transportation sector. As governments imposed strict lockdowns in 2020 and 2021, COVID-19 decreased emissions. Worldwide travel restrictions led to a significant decrease in transportation-related emissions.

Finding on Nations That Implement Carbon Taxes

A carbon tax is imposed on the carbon emissions produced during the manufacturing of products and provision of services. This tax, determined based on the emissions' capacity to contribute to worldwide warming, can also encompass other greenhouse gases like methane or nitrogen oxides, although it generally pertains primarily to CO2 emissions (Ellerbeck, 2022). As of June 2022, the World Bank reported a total of 68 direct carbon pricing mechanisms across 46 different national jurisdictions. This includes 32 emissions trading systems and 36

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carbon tax frameworks in total (ETS). These are systems that regulate emissions of greenhouse gases through tradable permits. Businesses and other organisations can buy and sell emission units. Climate change may be the most difficult public policy issue the world has ever faced. It is more global and uncertain than most other policy concerns. Economists have highlighted that setting up the carbon tax will reduce carbon emissions. However, the practice is not as simple as theory indeed. While many countries have a variety of policies in place to decrease carbon emissions, increasing carbon pricing is necessary to meet environmental goals. According to legislators, the relative administrative ease of charging and collecting tax revenue is the key selling point of a carbon price. The United Nations (UN), European Union (EU), Intergovernmental Panel on Climate Change (IPCC), Development (OECD) and Organization for Economic Co-operation have all suggested strategies and administrative reforms to decrease CO2 emissions and greenhouse gas. These comprise environmental-related taxes, carbon tax, emission standards, energy transformation, and emission trading (OECD, 2015).

While the notion of carbon pricing has been present in Europe for an extended period, tracing back to 1990, it's only in recent times that it has gained renewed momentum. An illustration of this is the UK government's action in 2019 when it amended the Climate Change Act, shifting its commitment from an 80% decrease in emissions by 2050 to now striving for net zero emissions by the same year, 2050.To achieve net zero, the government has implemented a number of policy initiatives (Dray, 2021). In addition to carbon pricing penalizing emissions from burning fossil fuels, the U.K government has also concentrated its efforts to promote renewable energy adoption in the electrical sector, where the most cost-effective technologies are available. The government is also encouraging the installation of smart metres in every home in the UK, which will help consumers reduce their energy use by increasing customer awareness of how much energy they are using and how much it costs (Energy & climate intelligence unit, 2021). In their policy study focusing on the effects of a carbon tax in the United Kingdom, Burke et al. (2020) determined that enhancing energy efficiency should be employed as a strategy to effectively address the distributional consequences of carbon pricing. Carbon pricing holds essential importance for impactful climate mitigation, serving as a robust economic tool that prompts reductions in emissions.

Sweden was the first country to implement a carbon tax policy in 1991. Erstwhile the establishment of the carbon tax, Sweden had a long history of taxing energy goods, which was considered as a complement to the new carbon tax rather than a separate environmental fee. Over the last 30 years, these two taxes have had an impact on Sweden's environmental policies. Ever since the implementation of the carbon pricing mechanism in Sweden three decades ago, the nation has succeeded in decreasing carbon emissions while simultaneously sustaining robust economic growth, as outlined by the OECD in 2005. Furthermore, spanning the period from 1990 to 2018, Sweden managed to achieve a 27% reduction in its greenhouse gas emissions. Sweden's reliance on clean energy sources is largely to blame for the nation's low emission levels. The majority of Sweden's power is generated by hydroelectric, nuclear, and wind power. Renewable energy now accounts for more than 66 percent of Sweden's electricity generation (Ian, 2022). However, Sweden's relatively high carbon tax rate may have resulted in exemptions for industries that are sensitive to international competition but are also considered major polluters, reducing the carbon tax's ability to cut emissions. Much like Sweden, Finland also has implemented the carbon tax and provides several exclusions for different industries. In contrast, Canada's carbon tax, one of the most recent carbon pricing schemes, went into effect in 2019. the Canadian government imposes a price on pollution;

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approximately 90% of direct proceeds from carbon pollution pricing are returned to province residents via Climate Action Incentive (CAI) payments. Pollution pricing is not only one of the most effective ways to battle climate change, but it is also one of many actions being taken by the Canadian government to assist Canadians who are struggling with rising living costs. Farmers, small businesses, Indigenous groups, schools, universities, and municipalities receive the remaining 10%. None of the funds collected are retained by the federal government. The carbon dividend system in Canada serves as a notable illustration of effectively addressing the economic and distributional impacts associated with carbon pricing, as highlighted by Jonsson et al. (2020).

Although the majority of the 27 nations who adopted the carbon tax have effectively implemented it, there are still some countries that have held on to the carbon tax policy implications because they considered it to be unfavourable to their economies. In 2011, the Australian government introduced a carbon pricing plan, often referred to as a "carbon tax," through the implementation of the Clean Energy Act. The initiative aimed to lower emissions while simultaneously fostering economic advancement within the nation by fostering the creation of clean energy alternatives. Although it did lead to a reduction in carbon emissions, it also resulted in increased energy costs for households and businesses, which ultimately led to its repeal in 2014. Carbon pricing and other green initiatives accounted for up to 30% of small and medium-sized businesses' electrical expenses. Manufacturing plant closures have also been reported as a result of rising costs, resulting in job losses (Centre for public impact, 2017). Despite this, it was anticipated that the programme would result in the largest annual reduction in carbon emissions in records going back 24 years—nearly 17 million tonnes. Additionally, it was discovered that the carbon tax had no impact on economic activity, as shown by the negligible difference between the average annual GDP growth rates for 2012, 2013, and 2014 and the remaining years of the 1990–2017 period, which was 3.07 percent (Earth.org, 2020).

The Energy Innovation and Carbon Dividend Act 2019 was presented by the US House of Representatives (H.R.) in January 2019. It permits the imposition of a carbon tax on fuels that release greenhouse gases into the atmosphere. While a carbon tax may lower emissions and benefit society, it will almost certainly result in higher gasoline or electricity prices as businesses pass the additional cost on to consumers. Another issue is that carbon prices would make US companies that generate or rely on fossil fuels less competitive in the global market. US H.R. proposed creating a Carbon Dividend Trust Fund, into which income from carbon levies would be invested and given as dividends to US citizens and lawful permanent residents, in order to allay these worries (Bolle, 2019). While the strategy doesn't explicitly refer to carbon pricing, the present Biden administration has unveiled a more extensive scheme aimed at reducing greenhouse gas emissions by 50% by 2030. This initiative involves a proposed expenditure of $555 billion to address climate change. The included methane fee in the legislation would incentivize oil and gas enterprises to curtail their methane emissions. Nonetheless, the discussion surrounding the adoption of carbon prices in the United States has revolved around the concern that it could result in heightened electricity and heating expenses for individual consumers, as noted by Doniger (2021).

In 2012, Japan introduced a nationwide carbon tax, which features one of the world's lowest tax rates for carbon pricing. Although some have asserted that Japan has applied significant carbon pricing through diverse energy levies, its overall carbon pricing remains below the

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average effective carbon rates observed in the OECD (OECD, 2016). Similar to numerous European nations, Japan has established well-crafted methods for revenue recycling, coupled with appropriate carbon pricing, as these components are predicted to play a crucial role in successfully transitioning toward decarbonization (Kojima and Asakawa, 2021). In 2019, Singapore became the pioneering Southeast Asian country to implement a carbon tax. In order to maintain a transparent, equitable, and consistent pricing signal throughout the economy, Singapore applied a carbon tax equitably to all sectors, with a focus on energy-intensive and trade-exposed industries. Carbon taxes are also a component of mitigation strategies that aim to reduce emissions, encourage green growth, and make the transition to a low-carbon economy (National climate change secretariat, 2021). In recent times, the government has unveiled its intention to undertake an assessment of the carbon tax, with the process set to involve collaboration with industry representatives and expert organizations (Mohan, 2021). The opinion of the managing director of the Monetary Authority of Singapore emphasizes that a substantial carbon price holds significant importance in ensuring the smooth progression toward an environmentally sustainable economy (MIDA, 2020).

Numerous countries have been actively engaged in establishing regulations and targets to control and minimize greenhouse gas (GHG) emissions. The most substantial reductions in GHG emissions from 1990 onwards have been achieved by the EU-27 (22.1%), Russia (30.9%), and the United Kingdom (40.9%). The leading factors driving emissions reduction in the United Kingdom and the European Union included the transition to cleaner energy sources, heightened energy efficiency measures, and transformations in the economic structure. These shifts relocated energy-intensive industries to emerging markets while enhancing the contribution of service-based sectors to the GDP. Due to the unrelenting economic crisis of the 1990s, which forced industries to shut down or drastically cut production, GHG emissions in Russia decreased. By the beginning of the 2000s, emissions had decreased by more than 40%. The UK and Brazil are the clear leaders when comparing current emissions to levels in 2005 because both countries were able to reduce emissions by 30%. Since 2005, the European Union's emissions have decreased by 16%, while Russian emissions have increased by 23%.

The UK, the EU-27, and Australia have the most belligerent emission reduction targets for the year 2030, followed by Brazil and the United States. In accordance with its most recent report, Indonesia could cut emissions by up to 18% if given international support. In the fiscal year that ended in March 2020, CO2 emissions in India decreased for the first time in forty years. In 2020, the average global CO2 emissions per person dropped significantly to 4.47 metric tonnes (Knoema, 2021).

Policy Recommendation

The objective of the paper is to examine not only how other nations have effectively adopted carbon tax policies that have benefited their economies and the environment, but also to identify the faults and traps that other countries have fallen into. If Malaysia wants to meet its climate goals, it can look to nations that have succeeded in implementing carbon price policies as models, while also being mindful of the elements that contributed to the failure in other countries. Carbon taxes are considerably more likely to be accepted as a nationwide policy if policies are well-designed and articulated. Following is the recommendation to Malaysian policymakers in implementing the carbon tax policy in Malaysia.

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- Strengthen carbon mitigation while encouraging a green economy by revising the Environmental Quality Act of 1974, which does not legally guarantee carbon emission reduction.
- Address the carbon policy of Malaysia uniquely as carbon tax policies of developing countries should be likely to differ from those of wealthy ones due to their considerably different economic structures and activities.
- Raising public knowledge about carbon taxes is one of the most effective strategies for incentivizing carbon reduction and supporting the use of tax revenue to reduce the tax burden on low-income families.
- Provide extensive information to the public on how greenhouse gas reductions can be achieved, as well as local co-benefits such as reduced traffic and enhanced air quality.
- Increase industry knowledge on the importance of creating low-carbon by providing proof of how the manufacturing industry in industrialized countries has reduced emissions while increasing productivity.
- Continuous collaboration with industry representatives and stakeholders to understand and share a vision for lower emissions.
- Before and after the introduction of carbon taxes, use information-sharing and communication technology to increase acceptance.
- Carbon tax rate should gradually increase it over several years to the desired rate so as not to burden and obtain political and public approval.
- Implement well-design carbon pricing that can influence consumer, corporate, and investment behavior while also promoting technological innovation and producing income that can be put to good use.

Conclusion

Despite the fact that Australia was the first developed country to repeal its carbon tax, several other developing economies, including as Brazil, South Africa, and China, are investigating the use of carbon taxes due to the dual benefits they could provide. If Malaysia is serious about fulfilling the Paris Agreement (COP17) emissions target, it must improve its political and financial measures by establishing a regular review process to avoid the perception of policy inconsistency and ambiguity. One issue that needs to be investigated right away is coming up with a set of relevant and practical carbon tax choices for Malaysia. Hence, Malaysia's energy policy must be aligned with its climate change policy. Overall, a strong government commitment to a clear, transparent, and consistent system of price incentives and non-price constraints is required to send a strong economic signal to adequate technology development and a diverse portfolio of low-carbon solutions.

Limitation and Benefits

More nations are making carbon pricing the centrepiece of their mitigation plans as they prepare to prevent a climate disaster by keeping global warming to 1.5 to 2 degrees Celsius. Depending on their unique situation and goals, countries are selecting various approaches to carbon pricing. The decision between carbon taxes and emissions trading programmes is crucial (ETS). Carbon taxes possess a practical allure due to their ability to provide foresight into forthcoming emissions costs, which subsequently stimulates investments in environmentally friendly ventures and enhanced energy efficiency. Emissions trading schemes, encompassing strategies like setting minimum prices and auctioning allowances, are structured to replicate several advantages akin to those offered by taxes. Due to the complexity of the design, implementation, and administration, many nations will find it difficult to develop ETSs. The two approaches have much in common which is both efficiently encourage the use of more

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ecologically friendly energy sources and cut back on emissions-producing activities (Black et al., 2022).

The fact that the price of carbon is currently too low to effectively reduce emissions has been a major criticism of existing carbon pricing systems. The World Bank Carbon Pricing Dashboard indicates that costs in various systems vary greatly. Many EU members have their own carbon taxes in place. As an example, in Sweden, enterprises are subject to a combined cost of approximately $200 for each ton of carbon emissions. In regions beyond Europe, where carbon costs are generally higher, the majority of carbon pricing mechanisms impose fees of under $20 per ton of carbon, with numerous systems charging as low as $5. Consequently, the determination of the "appropriate" carbon price is a focal point (Nicker, 2021).

According to Sterner and Kohlin (2015), there are many challenges to why countries have not implemented carbon taxes. First, fossil fuel stakeholders have been actively lobbying; second, public opposition due to tax increases; third, the costs of regulations are much less transparent; and fourth, many people believe that taxes have a negative impact on welfare and increase unemployment (Paterson 2012). Similarly, if we were to implement a carbon tax in Malaysia, challenges could include coordinating the ETS and carbon tax policies, developing carbon pricing specialists, raising public awareness of the carbon tax in relation to the global climate change agenda, public transportation systems, and developing the best assistance programs for the general public and impacted businesses (Muhammad, 2021).

Even while putting in place a carbon price has a number of drawbacks, those drawbacks are outweighed by the advantages. The carbon price is, by far, the most direct and efficient strategy for combating climate change. Second, the imposition of tariffs might drive governments and particular companies to improve their environmental regulations. Third, it increases businesses' ability to compete by preparing them for global technology shifts in the future (Nicker, 2021).

A price on carbon emissions can also foster innovation, encourage effective emission reductions, and give people, businesses, and families the freedom to choose how to reduce emissions. By generating new sources of community funding, carbon pricing initiatives could allow government funds in crucial public priorities like infrastructure, healthcare, and education (Mountford and McGregor, 2018)

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