IETA

B-PMI Whitepaper

November 2025

PRIVATE SECTOR PERSPECTIVES

EFFECTIVE CARBON PRICING AND MARKETS IN MALAYSIA

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BUSINESS PARTNERSHIP FOR MARKET IMPLEMENTATION


MAKING NET
ZERO POSSIBLE

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About IETA
In June 1999, a visionary group of international companies and business associations established IETA. IETA was the first international, multi-sectoral, purely business group devoted to pricing and trading greenhouse gas reductions. From the start, it had a strong focus on the Kyoto mechanisms and helped members using, hosting and investing in Clean Development Mechanism (CDM) and Joint Implementation (JI) projects by disseminating policy and market information and promoting development and reform. As markets developed, IETA expanded its work to cover the EU ETS, sub-national efforts in North America, China, Korea, New Zealand and emerging markets across Latin America. In more recent years, IETA has also developed working groups on digitisation, aviation, natural climate solutions, voluntary carbon markets, and carbon removals. Complementary to our core advocacy work, IETA runs special initiatives such as ICROA, which approves and endorses service providers and crediting programmes. The Climate Action Data Trust, a decentralised metadata platform that addresses issues with data fragmentation and accounting transparency. And the B-PMI, or Business Partnership for Market Implementation, which supports carbon pricing in developing markets through private sector capacity building and policy dialogues. Today, IETA represents 330+ members across countries and industries. IETA has remained true to its mission through highs and lows in market activity, and through political shifts and economic shocks. It continues to aim for excellence in harnessing market forces to deliver climate protection, to address climate challenges with market solutions and to make net zero possible.

About the B-PMI
The Business Partnership for Market Implementation (B-PMI) is an IETA initiative which supports emerging carbon markets in select countries. Currently, the B-PMI programme is active in Indonesia, Malaysia, Vietnam, Mexico, West Africa, and East Africa. The B-PMI seeks to complement the World Bank's Partnership for Market Implementation (PMI) programme, which helps governments develop carbon pricing instruments to meet their NDC targets and long-term decarbonisation strategies, engage with Article 6 and generate credits. However, private sector engagement in PMI jurisdictions is limited, which represents a challenge for the programme's political and operational viability. With the support and leadership of a steering committee of representatives from sponsor companies dedicated to supporting the expansion and implementation **of carbon pricing** instruments in developing countries, the B-PMI has been actively shaping policy outcomes in selected countries. Currently, B-PMI is supported by ACT Commodities, Chevron, Global Carbon Council, PETRONAS, S&P Global, Shell, South Pole, Verra, and Woodside Energy. IETA's B-PMI programme and the World Bank's PMI programme both build upon a decade of achievements and lessons from the Partnership for Market Readiness (PMR) and the B-PMR.

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01. INTRODUCTION

GLOBALLY, THERE IS A BROAD SCIENTIFIC CONSENSUS ON THE URGENT NEED TO REDUCE GREENHOUSE GAS EMISSIONS, ENHANCE CARBON SEQUESTRATION, AND PROTECT EXISTING CARBON SINKS. FOLLOWING COP21 IN 2015, 195 COUNTRIES FORMALLY RATIFIED THE PARIS AGREEMENT – REFLECTING A NEAR UNIVERSAL COMMITMENT TO KEEPING GLOBAL TEMPERATURE RISE THIS CENTURY TO WELL BELOW 2 DEGREES CELSIUS ABOVE PRE-INDUSTRIAL LEVELS AND TO PURSUE EFFORTS TO LIMIT THE TEMPERATURE INCREASE EVEN FURTHER TO 1.5 DEGREES CELSIUS.

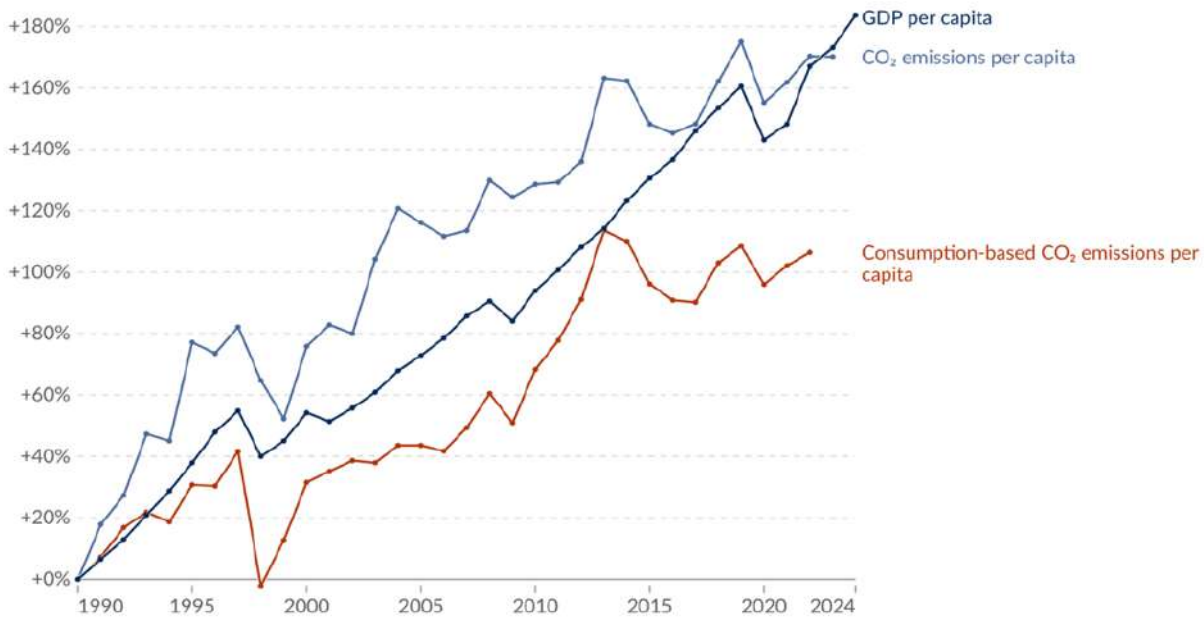
In a market-based global economy, carbon pricing is a practical approach to improving market efficiency by internalising the negative externalities of greenhouse gas emissions. This creates an incentive structure that rewards firms which have invested in lower-carbon technologies, thereby enhancing their relative cost competitiveness. Policymakers worldwide have gained practical insights into market-based mechanisms which incentivise emitters to reduce their emissions or face compliance costs. Early programs like the U.S. Acid Rain Program in the 1990s, the launch of the EU Emissions Trading System (ETS) in 2005, and carbon taxes introduced in countries such as Finland and Canada have demonstrated how market forces deliver emissions reductions. These experiences have contributed to our understanding of how carbon pricing works in the real world, the various design elements to consider, and their trade-offs. Industry perspectives on the opportunities and challenges which arise under a carbon pricing instrument (CPI) are also valuable in guiding the design of carbon taxes and ETS. Much of these insights and experiences have been accumulated by IETA's members, many of whom have been subject to CPIs in more than one jurisdiction.

Malaysia is decidedly headed towards implementing a carbon tax in a rightful but reactive manner. We believe that the right way forward is to start with an interim carbon tax and then transition to an ETS. This paper outlines a roadmap for a phased implementation of a CPI in Malaysia, as well as recommendations for CPI design elements. The paper builds upon insights from the business community, gathered through interviews and stakeholder dialogues. IETA's recommendations for the implementation and choice of CPI and its design elements aim to promote the development of an effective carbon market which balances economic realities with climate ambition.

02. BACKGROUND

While carbon pricing has matured internationally, Malaysia is still in the early stages of developing a domestic carbon pricing framework. Understanding Malaysia's economic and emissions context is therefore crucial to determining the most suitable policy design. Since gaining independence in 1957, Malaysia's economy has undergone a significant transformation, resulting in a change in status, from being a low-income country to upper-middle-income country within a single generation, with the country expected to reach high-income status by 2030[1]. Worryingly, empirical findings by Raihan et al. (2022)[2] show that from 1990 to 2019, a 1% increase in economic growth was related to a 0.9% rise in CO2 emissions. Similarly, Figure 1 also suggests that economic growth is coupled with emissions at a per capita level. This urgent need to decouple economic growth from emissions growth has been recognised by the Malaysian government. At present, **Malaysia has committed to achieving net zero by 2050, and to reduce absolute emissions by 15–30 million tonnes of CO_2 equivalent from peak levels (estimated to happen between 2029 and 2034) by 2035**[3]. Some clarity on how Malaysia would meet these climate goals has been outlined in a few policy documents. The National Energy Transition Roadmap (NETR) calls for renewables to constitute 70% of installed power capacity by 2050. Within that same vein, the country has also committed to halving its coal power plants and retiring all by 2044[4]. The National Energy Policy (2022 – 2040) (DTN) lays the groundwork for a transformation in the energy landscape. The DTN's Low Carbon Nation Aspiration 2040 (LCNA 2040) emphasises low-carbon policy, including the restriction of the development of new coal power plants and driving energy efficiency.

Figure 1 – Correlation between emissions and GDP[5]

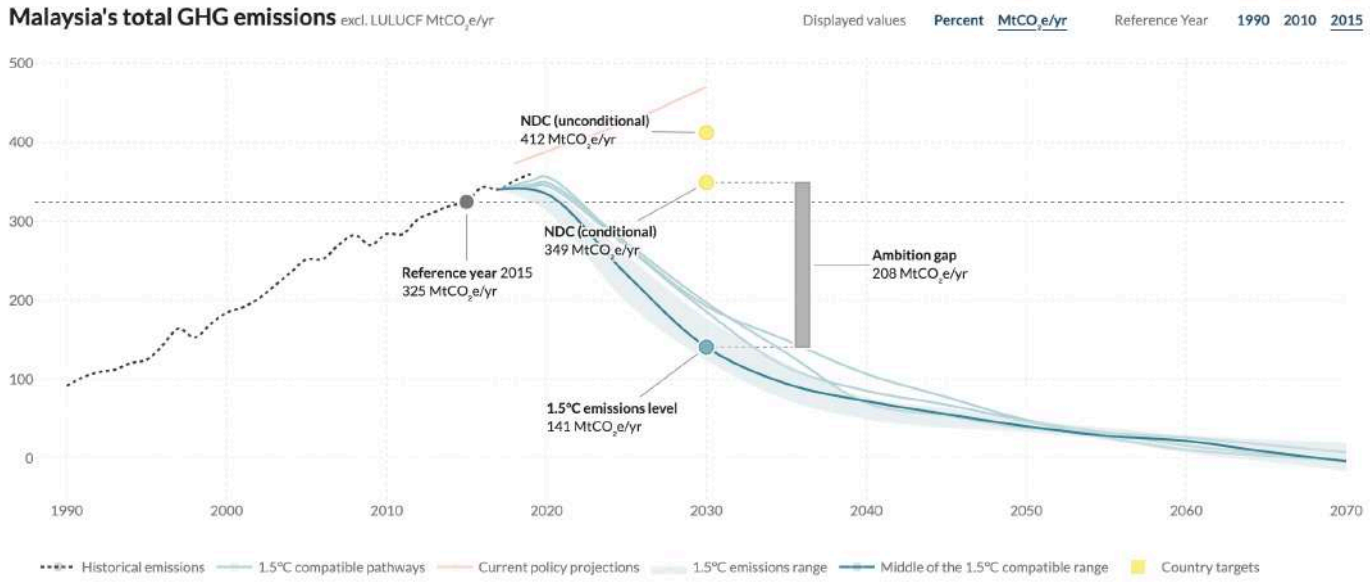


Data source: OECD, IMF, and World Bank (2025); Global Carbon Budget (2024)

GDP per capita is expressed in international-$ at 2021 prices*

While efforts have been taken to decarbonise the energy sector and the wider economy, a more ambitious NDC, supported by carbon pricing, is necessary to bridge the ambition gap (Figure 2) and put Malaysia on a 1.5-degree compatible pathway. According to a 2023 UOB report[6], Malaysia would require a cumulative investment of 435-1.85 trillion MYR to reach net zero by 2050. This investment can be spurred by carbon pricing, as businesses assess the trade-off between paying the compliance carbon price or investing in decarbonisation.

Figure 2: Malaysia 1.5°C compatible pathway and ambition gap[7]



Malaysia's intentions to implement carbon pricing have been highlighted in the 12th and 13th Malaysia Plans, and the NETR. During the 2025 and 2026[8] budget speeches, the government reaffirmed its intentions to implement a carbon tax in 2026, with a focus on iron, steel and energy sectors. The tax is to be aligned with the National Carbon Market Policy and the upcoming Climate Change Bill (RUUPIN). The RUUPIN, which is expected to be tabled in parliament in March 2026, will lay the foundation for a carbon pricing policy, as it provides legal grounds for the MRV and the collection of facility-level data. This also lays the foundation for Carbon Tax Bill, and National Carbon Market Policy (DPKK). The RUUPIN will provide the legal basis for an Emissions Trading System (ETS) to be developed after the carbon tax[9].

Market-based Instruments in Malaysia

While carbon pricing is an important market-based mechanism which provides businesses with the price signals needed to make investment decisions to decarbonise, the market for Verified Carbon Credits (VCCs)[10] or simply "carbon credits" is also key to influencing emissions in other sectors not covered by carbon pricing. This can be done through allowing compliance entities to offset part of their obligations by purchasing carbon credits. Of which there can be quantitative (how many % to offset) or qualitative limits (type of carbon credits allowed). The concept of carbon credit projects was first piloted in Malaysia in the 1990s[11,12]. Subsequently, Malaysia also played an active role in the Clean Development Mechanism (CDM) established by the UNFCCC under the Kyoto Protocol. According to Bursa Malaysia's VCM Handbook, there were 143 registered CDM projects in Malaysia. Many of the project types were energy (renewable/non-renewable) and waste handling and disposal. As one of the world's 17 megadiverse countries, with more than half of the land being covered by forests, there is also an imperative to leverage carbon markets to preserve the country's natural capital. Carbon markets help to drive investment into the preservation of existing carbon sinks and the reduction of emissions in sectors outside the bounds of the carbon pricing mechanism implemented.

Developments in the States of Sarawak and Sabah

Sabah and Sarawak together account for 68.4% of Malaysia's remaining forest cover, underscoring their critical role in the country's climate and conservation agenda. Between 2001 and 2023, 56% of Malaysia's total tree-cover loss occurred in Sarawak and Sabah, highlighting both the vulnerability and the opportunity for these regions to develop nature-based carbon projects. Both Sabah and Sarawak have been ahead of the national curve in developing carbon-market frameworks. In Sarawak, the Land Code (Amendment) Bill and Forests (Amendment) Bill, enacted in 2022, empower the state government to issue forest-carbon licences and regulate carbon-market activities. The first licence was granted to SaraCarbon, a subsidiary of Samling, for the Marudi Forest Conservation and Restoration Project in Miri. Developed in line with the VM0007 REDD+ methodology on reducing emissions from deforestation and forest degradation, the project is expected to generate 1.3–1.4 million carbon credits annually. In April 2025, the federal government announced plans to align forthcoming national carbon regulations with Sarawak's existing statutes—an important step toward policy coherence.

Sabah has also advanced its legislative framework for carbon-market development. Under the Forests (Amendment) Enactment Act 2025, all carbon-trading activities in the state must be licensed by the government. The complementary Climate Change and Carbon Governance Enactment 2025 establishes carbon rights as state-government property, creates the Sabah Climate Action Council, and sets up a Climate Fund financed through carbon-related fees. The enactment further mandates community participation and benefit-sharing in all carbon projects, embedding social and environmental safeguards into Sabah's carbon-governance model.

To ensure policy clarity and investor confidence, it is essential that federal regulations align with these state-level frameworks. Such coordination will prevent regulatory overlap and ensure that compliance entities are not subject to double carbon-pricing obligations at both federal and state levels.

03. INTRODUCTION TO CARBON PRICING DESIGN CONSIDERATIONS

As emissions continue to drive anthropogenic climate change, third parties bear the brunt of climate change through impacts including destroyed infrastructure, the spread of disease, and extreme weather events. These negative impacts on third parties, not accounted for in the price of goods, are referred to as *negative externalities*.

To control the volume of emissions generated within a country, policymakers generally choose between command-and-control, market-based policies, or a mix of both. Command and control policies typically limit the permissible volume of emissions or mandate the implementation of lower-carbon-emission processes or technologies. On the other hand, market-based mechanisms align the profit-maximising motive of businesses with the need to reduce emissions. Companies that emit more face higher compliance costs than companies that emit less. Market-based mechanisms are generally considered to be more efficient because they prioritise emissions reductions at lower abatement costs and create a consistent incentive to innovate and reduce emissions.[13] The two approaches to carbon pricing are carbon taxes and emissions trading systems (ETS).

3.1 SETTING AN OPTIMAL CARBON PRICE

The carbon price is determined directly by the government through a tax, or indirectly through the management of the demand and supply of allowances in an ETS. Often, there is little consensus on what the carbon price should be. However, there are three main approaches to determining the optimum carbon price.

a. Social Cost of Carbon (SCC)

The first approach is to align the carbon price with the Social Cost of Carbon (SCC)—the estimated monetary cost of the damages incurred by emitting one additional tonne of CO_2 into the atmosphere. In theory, setting the carbon price equal to the SCC internalises the externality, ensuring emitters pay for the full social and environmental cost of their emissions.

However, estimating the SCC is inherently complex. It depends on a wide range of assumptions regarding climate sensitivity, economic growth trajectories, damage functions, and discount rates (which determine how future damages are valued today). Consequently, global SCC estimates vary widely. One estimate made this year places the global SCC at US$30-50/tCO2 in 2025 and $250-400/tCO2 by 2050 (Murakami et al., 2025).[14]

A recent journal article estimated the SCC in Malaysia to be US $23/tCO2, increasing to $152/tCO2, assuming that Malaysia doubles the Total Protected Area (TPA) of its forests from 10.2 million ha to 20.4 million ha by 2030 (Rao et al., 2025). The authors note that the current SCC is in the lower mid-range of global carbon prices. This means that a CPI based on the SCC would allow Malaysia to maintain export competitiveness while being able to market “low-carbon products” and minimise tariffs under CBAM.[15]

b. Abatement Targets & Marginal Abatement Costs

At each carbon price, firms will weigh the cost of paying the carbon price against the cost of investing in and implementing lower carbon technologies. The higher the carbon price, the more abatement technologies become financially feasible. Policy makers may assess marginal abatement costs in various firms and sectors, as well as the availability and cost of abatement technologies. Based on the mitigation target set by the government, combined with knowledge on marginal abatement costs and abatement technologies, an optimum carbon price can be determined – albeit subject to some level of uncertainty. A report published in 2017 states that a global price level consistent with Paris targets of limiting warming to well below 2ºC is at least US$40–80/tCO2 by 2020 and US$50–100/tCO2 by 2030 (Stiglitz and Stern 2017).[16] For the energy sector, estimates for required carbon prices by 2050 range from below USD50/tCO2 to over USD900/tCO2 (Brouwer et al. 2016; Rogelj et al. 2018a).[17] However, this level may not immediately be politically or economically feasible for developing economies.

c. Benchmark

This approach aims to set a carbon price similar to that of trading partners to maintain trade competitiveness. By ensuring that domestic environmental compliance costs are on par with those of trading partners, a country ensures that goods produced can be cost-competitive, thereby maintaining its export competitiveness. Another way to view the benchmarking approach is through the lens of international compliance costs – costs paid to foreign governments. In light of the imminent mandatory introduction of the EU CBAM, countries may seek to set a domestic carbon price at a level similar to that of the EU. This ensures that carbon pricing revenues are retained domestically, instead of being paid to the EU. As more countries are considering implementing their own CBAM, this approach to benchmarking may be increasingly relevant to local governments and export-heavy industries.

3.2 CARBON TAX

Under a carbon tax, the government sets a carbon price (tax rate), typically on large Scope 1 emitters whose emissions exceed a set threshold. In response to the carbon tax, profit-maximising firms will choose to invest in decarbonising their facilities if the tax rate is higher than the marginal abatement cost. A key feature of a carbon tax is that it provides certainty over the carbon price but generates uncertainty in the volume of emissions reductions.

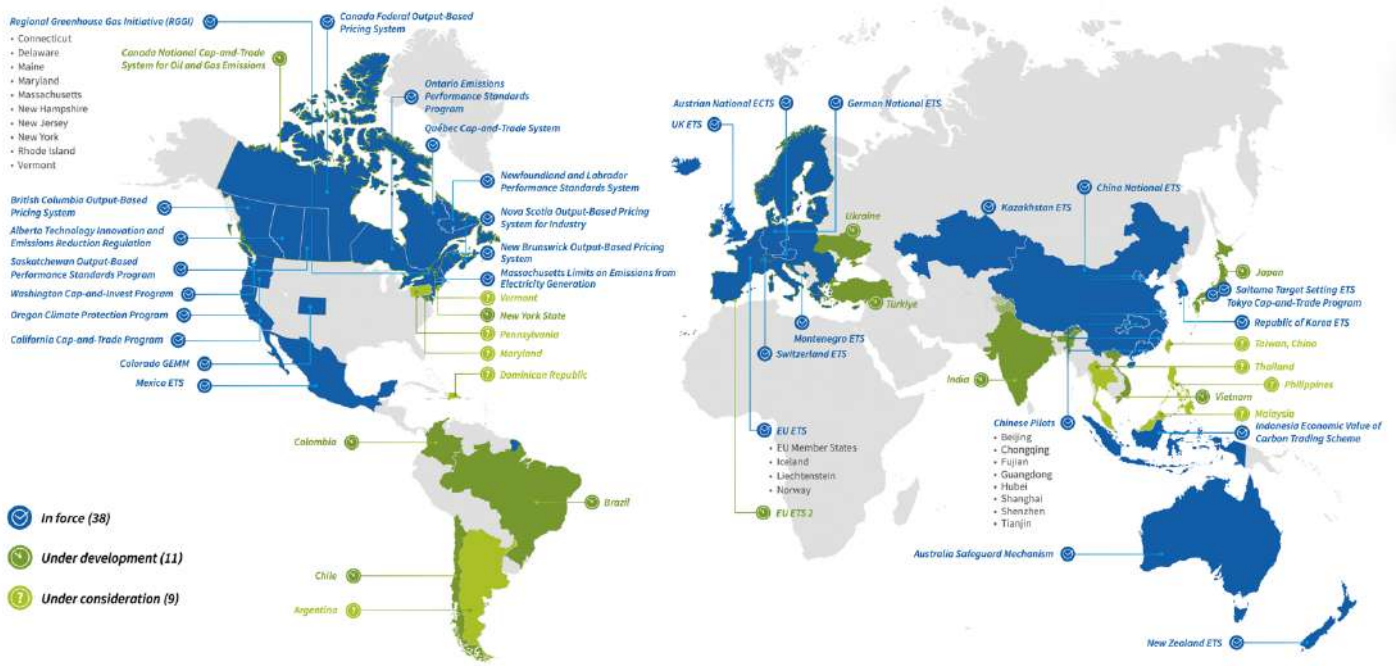
Carbon taxes can generally be structured in three main ways, depending on how the price per tonne of CO_2 is set and adjusted over time.

Approach	Feature	Example
Static	A fixed or static carbon tax applies a constant, unchanging rate on emissions. This approach is simple, predictable, and easy to administer, but it risks being ineffective if the rate is set too low or becomes outdated as abatement costs, inflation, or climate targets shift. A carbon tax may remain statis due to political/business pressure against increasing the rate.	Chile, Japan[18]
Escalating	An escalating or gradually increasing carbon tax instead starts at a lower level and follows a predetermined schedule of increases. This design provides long-term price certainty, giving businesses time to adjust while sending a clear investment signal for low-carbon alternatives.	Singapore, South Africa, Sweden[19]
Dynamic	A dynamic or responsive carbon tax adjusts automatically based on outcomes, such as whether emissions are falling fast enough, whether inflation is eroding the signal, or whether climate targets are being met. This approach aligns the tax more closely with environmental objectives and avoids becoming outdated, but it is more complex to administer and less predictable for businesses, which may face uncertainty about future costs.	Not typically applied to downstream carbon taxes

3.3 EMISSIONS TRADING SYSTEMS (ETS)

An ETS is a market-based instrument that can be used to reduce greenhouse gas (GHG) emissions. ETSs provide certainty over the quantity through limits on the volume of emissions permissible (absolute cap), or the emissions intensity of production for selected sectors (intensity-based limit). The government issues allowances according to this limit. Firms receive carbon allowances, which act as “licenses to pollute”, for free from the government (free allocation) or buy them through auctions organised by the government. Once allowances have been issued, they can be traded in the secondary market – companies that “overachieve” can sell excess allowances, while companies that need more allowances can buy extra allowances from the overachieving companies. Compliance entities need to surrender allowances equal to their emissions volume at the end of the compliance period, or face penalties. In theory, market forces will drive the price of carbon to its optimal level. The larger the supply of allowances, the lower the price of carbon, and vice versa.

Figure 3: Emissions Trading Worldwide[20]



ETS Approach	Features	Examples
Absolute cap	A cap is placed on total emissions, and number of allowances in circulation is equal to the cap. This guarantees emissions reductions and alignment with climate targets. However, absolute caps are best suited for mature economies such as the EU without rapid fluctuations. Rapid economic/output growth can lead to a sudden increase in allowance cost and high abatement pressure. Meanwhile, slowing of economic growth can cause low allowance prices and a lack of abatement pressure.	EU, California, Quebec, RGGI, Kazakhstan, South Korea, New Zealand
Intensity based	In an intensity-based ETS, a national GHG target is determined and used to create sector-specific carbon intensity goals. Credits are freely distributed to entities as per the specific carbon intensity target. The use of carbon intensity targets rather than an absolute cap encourages carbon efficiency improvements regardless of net output. The system prevents carbon leakage since carbon-intensive industries are not excessively burdened if a reasonable intensity target is set. However, the primary disadvantage of an intensity-based ETS system is that it does not ensure absolute emissions reductions, even if intensity targets are met.	China, Indonesia, Canada Output-Based Pricing System (OBPS)

d. Allowance Allocation Methods

Broadly, there are two main ways of distributing allowances in an ETS – free allocation and auction. There are several methodologies for free allocation, which include output-based, grandfathering, and benchmarking. Each one reveals different preferences around environmental integrity and affordability. The table below summarises the main allowance distribution mechanisms.

Allocation Method	Features	Examples
Free Allocation by Grandfathering	Companies receive free allowances based on their historical emissions. This method is simple to implement but may not provide adequate incentive to reduce emissions. Hence, it is mostly used at an early stage to help industry transition to an ETS.	EU (Phases 1 and 2, 2005-2012)
Free Allocation by Benchmarking	Companies receive free allowances based on emissions intensity benchmarks. Benchmarks may be fixed at the average performance level, at the best practice level, or a value in between (e.g., the average of the top 10% best performers). Benchmarks may address fairness concerns and reward early decarbonisation. However, it requires high quality data on emissions intensity.	California (about half of the allowances, primarily for utilities), EU (Phase 3 onwards, currently 43% of allowances – primarily sectors at risk of carbon leakage)
Free Allocation through Output-Based Approach	This method is similar to benchmarking but is based on actual output rather than an estimation drawn from historical output. This provides stronger protection against carbon leakage risk and rewards early decarbonisation. However, this can come at the cost of diminished incentives to find ways to reduce emissions.	China, Indonesia
Auctioning	Allowances are sold by the government through auction. This generates additional revenue for the government and minimises the possibility of lobbying for preferential treatment. However, auctioning imposes a higher cost on producers and hence is often phased in gradually at a later stage of an ETS.	California (most non-utility entities, about half of allowances) and the EU (started with power sector in Phase 2, progressively applying to all covered sectors)

STATE OF CARBON PRICING IN ASIA

Today, carbon taxes and ETSs cover almost one quarter of global emissions. Historically, much of the expansion of carbon pricing, especially ETS, was driven by the West. Today, much of the growth in carbon pricing is concentrated in the APAC region, where we are witnessing not only the adoption of new carbon pricing mechanisms but also the expansion of existing ETS, and a rising price of carbon.[21]

The countries in the region with active ETSs are Indonesia, China, South Korea, and Kazakhstan. Kazakhstan's ETS was launched in 2013 and is the oldest in Asia, but the market price of carbon is low (~$1/tCO2e). South Korea's ETS was established in 2015 and has generated over $1 billion in revenue. China's ETS is the world's largest carbon market and now regulates about 8 billion tCO2e/year, adding up to 60% of the country's total emissions. Indonesia's ETS is the newest in the region and currently covers coal and gas-fired power plants alone.[22]

04. RECOMMENDATIONS FOR EFFECTIVE CARBON PRICING IN MALAYSIA

Through closed-door dialogues and interviews, IETA has engaged with numerous stakeholders from Malaysia's high-emitting sectors, covering steel, energy, power, chemicals, palm oil production, and more. Leveraging practical insights gathered from Malaysian industry players and the expertise of the IETA B-PMI Steering Committee members, who have extensive and long-standing experience with carbon pricing instruments, **IETA aims to provide a sensible view on carbon pricing design, balancing economic and environmental needs**. IETA also draws upon international case studies to learn from the best practices and shortfalls of CPI implementation in other jurisdictions.

4.1 GUIDING PRINCIPLES AND CONSIDERATIONS

The design of Malaysia's carbon pricing framework should be guided by a set of core principles that ensure environmental integrity, economic resilience, social equity, and long-term policy stability. These principles reflect international best practice while being adapted to Malaysia's national circumstances.

Environmental integrity: The CPI should deliver real emissions reductions, enabling Malaysia to achieve — and potentially exceed — its NDC targets: peaking emissions by 2030 and reducing absolute emissions by 15–30 million tonnes of CO_2 equivalent from peak levels by 2035. The instrument should send a strong and predictable price signal to influence firm behaviour, encourage innovation, and incentivise direct decarbonisation investments. Beyond emission reductions, the CPI should contribute to the preservation of Malaysia's biodiversity and forest cover through the integration of high-integrity offsets.

Economic resilience: The CPI should be aligned with Malaysia's economic growth targets, while also not undermining export competitiveness. Mechanisms must be established to mitigate cost-push inflation. Gradual carbon price escalation, transitional free allocations, and reinvestment of revenues into reducing marginal abatement costs will support the firm's ability to adapt to the new carbon price environment. Properly designed, the CPI can help position Malaysia as a leader in low-carbon exports, drive technological upgrades and productivity.

Just transition: A just transition requires that the CPI avoid disproportionately impacting low-income and vulnerable households. This can be achieved through gradual implementation, recycling of revenues to support targeted cash transfers or electricity rebates for low-income and vulnerable households (such as cash transfers or electricity rebates). A portion of carbon revenues could also be earmarked for workforce upskilling and the creation of quality green jobs across the energy transition space, supporting inclusive economic growth and the development of a low-carbon economy.

Data integrity: A credible CPI depends on robust monitoring, reporting, and verification (MRV) systems, consistent enforcement, and transparent governance. Firms must operate under uniform standards to prevent competitive distortions arising from weak compliance or inconsistent methodologies. The government should prioritise the inclusion of sectors with mature MRV frameworks and engage technical focus groups to refine sector-specific methodologies. Strong enforcement—applied fairly and uniformly—will enhance policy credibility and build long-term confidence among investors and participants.

Predictability and adaptability: Businesses require certainty to make long-term investments. Announcements regarding the thresholds set, sectors included, and MRV should be made in advance. The CPI should therefore establish a clear, multi-year roadmap for carbon price progression, sectoral coverage, and transition milestones (e.g. transition from carbon tax to an ETS). Policy reviews should occur at regular intervals but follow transparent, pre-defined criteria to prevent ad hoc adjustments. This predictability will support corporate planning, strengthen investor confidence.

National alignment: Effective coordination between federal and state authorities, particularly Sabah and Sarawak, is essential for Malaysia's CPI. National and subnational policies should complement each other to ensure consistency and prevent regulatory overlap or double carbon pricing. To balance state autonomy, the CPI can be designed to allow separate but interoperable systems, with common MRV standards, governance frameworks, sectors included, etc.

Design with linkage in mind: International linkage considerations should be integral from the outset. Regional linkage with ASEAN countries can unlock benefits such as increased market access, improved liquidity, reduced carbon leakage, and accelerated low-carbon investments. Linkage with the EU ETS, for instance, can also reduce CBAM compliance costs if exemption from EU CBAM is granted, such as in the case of the EU-UK ETS linkage. Learning from the experiences of the internationally linked markets such as the California – Quebec, and EU-UK linkage, Malaysia can continue to explore how the CPI should be designed, with mechanisms such as a common offset eligibility pool, aligned MRV standards, sectors, prices etc.

Private sector engagement capacity building: Policymakers should engage with the industry actively and in a timely and transparent manner. Securing industry input at the early stages of policy development will ensure that industry views are taken into consideration, and that industry support is secured. As many Malaysian firms will be first-time participants in a compliance carbon market, government-led capacity-building efforts are essential. These programmes may be developed in partnership with multilateral development banks (MDBs), NGOs, and industry associations like IETA, which can bring in international experiences and learnings. The government may consider subsidising training and certification programmes through local universities or technical institutes to build a green talent pool.

Revenue neutrality & transparency: We recommend that the government adopt a revenue-neutral approach in managing funds collected through the CPI, whereby revenue collected is reinvested in supporting decarbonisation in the covered sectors. Recent studies have found that revenue neutrality minimises the negative economic impact arising from carbon pricing (Hildingsson and Åsa 2022; Steckel et al. 2021).[23] While revenue neutrality means that the CPI does not increase government tax revenues, it may still be reasonable to have a small portion of the funds diverted to helping the government cover the administrative costs incurred. To build trust and secure political acceptance, it is essential that revenues are used transparently and in ways that clearly support Malaysia's climate objectives, rather than being channelled into general budgetary spending. A legislated framework for revenue use, with reporting requirements, provides visibility to both industry and the public on how revenues are spent. International experience underscores the importance of transparency and reinvestment. In the European Union, for instance, ETS revenues are legally earmarked for climate purposes. In 2023, member states directed over €33 billion to climate action, while additional funds supported innovation in green technologies and energy system modernisation.[24] This demonstrates how clear rules on revenue use can enhance credibility, drive decarbonisation, and reinforce industry and societal support. The government may also play a key role in catalysing innovation and the implementation of relatively nascent decarbonisation technologies. Learning from the successful private-public partnership in Norway: The first full-scale value chain for carbon capture and storage (CCS) was launched in June 2025, thanks to strong support from the government through investment and grants for construction and operation[25]. Among Malaysian stakeholders, there is a broad consensus that CPI revenues should be reinvested into mitigation and adaptation activities. However, further dialogue will be required to determine how revenues should be recycled in a manner which is fair, and effective in supporting decarbonisation.

The use of high-integrity offsets: Policymakers should allow compliance entities to offset their obligations through the purchase of high-integrity carbon credits. This would enable firms to reduce their compliance costs through sourcing carbon credits (which cost less than the compliance carbon price). Offsets will also drive financing to decarbonisation measures in sectors and/or geographies not covered by the CPI. This is especially important in Malaysia, where there is a strong imperative to preserve forest cover, in line with the pledge made at the Rio Earth Summit in 1992 to maintain at least 50 per cent of the country's land mass under forest and tree cover[26]. We recommend that Malaysia allow the use of a range of offsets from various programmes and methodologies: domestic (e.g. Malaysia Forest Fund), independent (e.g. Verra, Global Carbon Council), and international (Paris Agreement Crediting Mechanism, PACM); The Integrity Council for the Voluntary Carbon Market (ICVCM) is an independent body that certifies crediting programs as Core Carbon Principles (CCP) certified if they satisfy a set of standards covering governance, emissions impact, and sustainable development. ICVCM can help simplify decisions about which crediting methodologies to allow in Malaysia's offsetting program.

The figures below summarise the criteria for offset usage in some CPIs.

Carbon Pricing Instrument (CPI)	Type of Offsets Eligible	Quantitative Limit	Qualitative Restrictions (non-exhaustive)
Brazil SBCE	Not determined yet. While there is no list of approved crediting programmes of methodologies yet, a set of integrity principles is likely to become public in the short to mid-term. Only non-covered entities will be able to generate offsets (*CRVEs - Certificado de Redução /Remoção Verificada de Emissões*).	Quantitative limits have not been determined yet, but is expected to be around 10-20%.	Vintage restrictions are expected to be in place, but not yet determined.
China National ETS	Only credits issued by the China Certified Emission Reduction (CCER) scheme. 6 CCER methodologies have been approved, with an additional 6 undergoing public consultation.	5%	Offsets cannot be from projects within the ETS sectors.[27]
California ETS	Only offsets issued according to protocols developed by California's Air Resources Board (CARB) and Québec's Ministry of Environment.	4% until 2025; 6% thereafter	At least half of offsets must provide environmental benefit within California.[28]
Chile's Green Tax Emissions Compensation System (SCE)	Credits generated domestically are eligible. Eligible programmes include: • Verra • Gold Standard • CDM • Cercarbono • BioCarbon	5%	Credits must be additional, measurable, verifiable and permanent. Project owners must demonstrate to the government how their crediting project aligns with the country's NDC. Compliance entities can offset their GHG emissions with credits corresponding to the same type of GHG. There cannot be a difference of more than 3 years between the year where emissions are generated, and the year which the crediting project mitigates it.

Colombia Carbon Tax	Credits generated domestically are eligible. While there is no positive list of crediting programmes, many standards are eligible. The most commonly used standards are Cercarbono, Verra, Biocarbon, CDM, Colcx, Gold Standard, CSA.	Initially 100% of tax obligations could be offset – this has been lowered to 50%.	Credits must have a vintage within five years of the emissions being offset and be verified by recognized third parties
EU ETS	Offsetting is not allowed in current Phase 4 (2021-2030). From 2005 to 2020, Clean Development Mechanism (CDM) and Joint Implementation (JI) credits was allowed.[29]	Percentage was determined individually by member states; total quantity of offsets available was set at 50% of reduction target.[30]	Credits from nuclear energy, afforestation and reforestation, and destruction of industrial gases were not allowed.[31]
Indonesia ETS	Only domestic credits (SPE GRK) registered in the National Registry System can be used.[32]	No quantitative limit.	Offsets must be from the same sector, e.g. an energy company can only use offsets from the energy sector.[33]
Mexico ETS	Credits generated domestically by international and domestic crediting programmes are expected to be eligible.	10% (expected to be higher in the operational phase)	To be defined
Oregon ETS	Only credits issued by approved Community Climate Investment (CCI) entities.	15%	None
Québec ETS	Offsets must be issued by California or Québec.	8%	Offsets must be additional, quantifiable, permanent, verifiable, and unique.[34]
Singapore Carbon Tax	Eligible International Carbon Credits (ICCS) may be used.	5%	Must be Article 6 eligible and meet Singapore's eligibility criteria – includes principles on additionality, permanence, and leakage.[35]
South Korea ETS	Domestic and international credits can be used.	5%, up to half of credits used may be international.	International offsets must be from projects with a minimum of 20% owned/funded by South Korean firms.[36]

4.2 IMPLEMENTATION ROADMAPS

In line with Malaysia's plan to introduce a carbon tax in 2026, this section outlines how Malaysia can strategically sequence its carbon pricing instruments (CPIs) to ensure both economic resilience and environmental integrity. We recommend viewing the carbon tax not as an endpoint but as a foundation for progressively developing a full-fledged emissions trading system (ETS). Accordingly, Malaysia could pursue one of three potential pathways:

i. Permanent carbon tax
ii. Carbon Tax → Intensity-Based ETS → Absolute Cap ETS
iii. Carbon Tax → Absolute Cap ETS

Regardless of the chosen pathway, a phased implementation strategy should guide the process—featuring a gradual increase in carbon prices, progressive expansion of sectoral coverage, rising climate ambition, and a structured phase-out of free allocations. The following subsections evaluate the suitability and long-term viability of each pathway in supporting Malaysia's decarbonisation and economic transition objectives.

a. Carbon Tax

A permanent carbon tax is best suited to jurisdictions with relatively few direct (Scope 1) emitters, such as Singapore or British Columbia. It is administratively straightforward and provides a clear, predictable price signal for low-carbon investment. Ideally, the carbon tax should rise gradually—in line with the social cost of carbon, the marginal abatement cost curve (MACC)—to achieve the desired emissions reductions, or peer benchmarks. In Malaysia's context, the initial implementation phase should focus on data collection and capacity building. The carbon tax should therefore begin at a reasonable, nominal rate while the government strengthens its legislative and institutional MRV framework. This stage allows firms to build compliance capabilities and ensures that enforcement mechanisms are credible and consistent. Maintaining a low introductory rate is particularly important if MRV systems remain uneven across sectors, to prevent competitive distortions. Newly covered sectors should similarly face low rates until their MRV frameworks mature. Over time, as data accuracy improves and administrative systems solidify, the carbon tax rate can be gradually increased. Increases in the carbon tax rate should follow a pre-determined pathway, so that the carbon price is sufficiently high to achieve the desired environmental outcomes, while giving businesses sufficient time to adapt as well.

b. Intensity Based ETS

Once robust MRV systems and institutional capacity are in place, Malaysia could transition to an intensity-based ETS. This approach is suitable in the short to medium term, given Malaysia's relatively high GDP volatility compared with mature economies such as the EU. In an absolute cap system, allowance prices are strongly influenced by economic growth and production levels, making them vulnerable to cyclical fluctuations. An intensity-based system, by contrast, caps emissions per unit of output, effectively decoupling carbon prices from uncertain growth dynamics. An intensity-based ETS would still deliver a clear decarbonisation signal while providing flexibility during periods of rapid or uneven growth. The government could also begin introducing limited allowance auctioning, generating revenue to reinvest in mitigation, adaptation, and innovation initiatives. This stage would help Malaysia gain experience with market mechanisms and build a foundation for transitioning to an absolute cap ETS in the future.

c. Absolute Cap ETS

In the long term, Malaysia should advance toward an absolute cap ETS to provide certainty over emissions outcomes and reinforce the credibility of its decarbonisation commitments. While Malaysia's earlier NDCs were framed in terms of emissions intensity, its NDC3.0 introduces absolute reduction targets for 2035. Transitioning to an absolute cap ETS therefore represents a natural evolution in Malaysia's carbon pricing architecture—aligning domestic policy with the new absolute targets and international best practices. Moreover, an absolute cap ETS is better suited to link with other ETSs or be aligned with the EU's CBAM, helping ensure that carbon revenues are retained within Malaysia's economy. As institutional and technical capacity matures, the ETS can be expanded to include additional sectors, with free allocations gradually phased out in favour of auctioning. To account for Malaysia's federal structure and the autonomy of Sabah and Sarawak, the design could allow for separately administered but interoperable ETSs, creating a cohesive national carbon market over time.

Transitioning directly from a carbon tax to an absolute cap ETS within a few years offers several advantages. It ensures environmental integrity by guaranteeing measurable emissions reductions aligned with Malaysia's NDCs, avoids the administrative complexity of sector-by-sector intensity caps, and enhances international alignment with established markets such as the EU and China. Malaysia's Bursa Carbon Exchange (BCX) already provides a strong institutional foundation for such a market.

As mentioned earlier, one of the disadvantages of an absolute cap system is that the allowance price may vary dramatically due to changes in economic growth. This risk can be mitigated through market stability mechanisms such as the EU's Market Stability Reserve (MSR). Through the MSR, when the total number of allowances (TNAC) in circulation exceeds a pre-determined threshold, allowances are withdrawn from subsequent auctions. Likewise, when the TNAC falls below a threshold, additional allowances are released through auction.

05. CONCLUSION

Malaysia stands at a critical juncture in its climate and economic trajectory. The country's commitment to achieve net zero by 2050 and to peak emissions by 2030 underscores the urgency of adopting an effective and credible carbon pricing framework. The choice and design of CPI will determine not only the environmental outcomes but also the competitiveness, resilience, and equity of Malaysia's economic transition. We reiterate our strong suggestion that Malaysia move towards the adoption of an ETS, with the carbon tax acting as a potential interim measure. There are three main reasons why an ETS approach is better suited for Malaysia: it creates an incentive for **green investments**, enables **regional carbon market integration**, and creates **green finance flows**. A carbon tax is purely a punitive measure, whereas an ETS would be able to provide greater incentives for innovation and decarbonisation.

Within the region, Indonesia already has an ETS, while Thailand, Vietnam, and the Philippines are poised to fully implement an ETS in the short to medium term. As Chair of ASEAN in 2025, Malaysia has proposed the ASEAN Common Carbon Framework to align carbon markets across the region. If Malaysia were to introduce an ETS, it could pursue linkage with other systems to improve liquidity and reduce mitigation costs, as is seen in the examples of California-Québec and UK-EU. An ETS would create a secondary market of financial derivatives that could attract domestic and international investors and generate revenue for climate mitigation and adaptation.

In conclusion, while a carbon tax is an appropriate starting point for Malaysia's carbon pricing journey, the end goal should be the establishment of a robust, transparent, and market-linked ETS. The transition from a carbon tax to an ETS offers the most efficient, equitable, and forward-looking pathway to achieving Malaysia's climate targets while sustaining economic growth. By designing its carbon pricing framework with predictability, adaptability, and private sector participation in mind, Malaysia can harness market forces to drive deep decarbonisation and establish itself as a regional leader in low-carbon development.

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