# Carbon Pricing in the Philippines

## Legislative pathways for effective, efficient, and just climate action

IISD REPORT

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**Carbon Pricing in the Philippines: Legislative pathways for effective, efficient, and just climate action**

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# Executive Summary

In preparing this paper, the International Institute for Sustainable Development (IISD) reviewed the experiences of other governments and applied its own analysis of proposed carbon pricing and carbon market legislation filed in the Philippine House of Representatives under the 20th Congress. Specifically, this paper examines the texts of House Bills (HBs) 1817, 2055, 2481, 3685, 3820, 6407, and 6890, drawing on IISD's technical submissions to the House Committee on Climate Change and a broader review of related bills filed before the House adjourned on 3 June 2026.[1] The analysis considers factors that typically shape whether carbon pricing and carbon market frameworks work well in practice: whether they reduce emissions, encourage cost-effective decarbonization, remain administratively feasible, maintain support from businesses and the wider public, protect market integrity, and contribute to a just transition. This paper is intended as a practical resource for legislators, policy-makers, and stakeholders considering how the Philippines can design a carbon pricing framework that is environmentally credible, economically efficient, and socially just.

## HB 2055, HB 3685, and HB 3820

HBs 2055, 3685, and 3820 are substantially similar in operative design and are therefore analyzed together. The section numbers referred to in this paper are appropriate for reference to the text of either HB 2055, 3685, or 3820.

### Coverage of Sectors (Sec. 18)

The bills propose imposing the carbon pricing scheme on a wide range of economic sectors. In contrast, other governments have initially imposed carbon prices on a small set of economic sectors before expanding the coverage later.

### Decarbonization Plans (Sec. 22)

The bills require enterprises to prepare decarbonization plans that the Climate Change Commission (CCC) would use when allocating emission allowances. In other jurisdictions,

[1] HB 1817, 20th Cong., First Regular Session (2025), text as filed available at https://docs.congress.hrep.online/legisdocs/basic_20/HB01817.pdf;
HB 2055, 20th Cong., First Regular Session (2025), text as filed available at https://docs.congress.hrep.online/legisdocs/basic_20/HB02055.pdf.
HB 2481, 20th Cong. First Regular Session (2025), text as filed available at https://docs.congress.hrep.online/legisdocs/basic_20/HB02481.pdf.
HB 3685, 20th Cong., First Regular Session (2025), text as filed available at https://docs.congress.hrep.online/legisdocs/basic_20/HB03685.pdf.
HB 3820, 20th Cong., First Regular Session (2025), text as filed available at https://docs.congress.hrep.online/legisdocs/basic_20/HB03820.pdf.
HB 6407, 20th Cong., First Regular Session (2025), text as filed available at https://docs.congress.hrep.online/legisdocs/basic_20/HB06407.pdf.
HB 6890, 20th Cong., First Regular Session (2025), text as filed available at https://docs.congress.hrep.online/legisdocs/basic_20/HB06890.pdf.

In the Philippine Congress, bill numbers are unique only within each Congress and may be reused in subsequent Congresses; the year supplied in parentheses refers to the year of introduction in the 20th Congress.

this approach is generally avoided due to administrative complexity. The use of these plans could also give enterprises significant influence over their own allowance allocations, which could reduce the ambition of decarbonization efforts.

### Tax Incentives (Sec. 35)

The bills propose tax incentives for renewable energy. When appropriately used, such complementary policies can effectively support carbon pricing. However, since tax incentives often reduce government revenues, governments have learned to use incentives more efficiently by (i) assessing whether tax incentives are appropriate compared to other reforms, (ii) providing cost-based incentives rather than corporate income tax holidays, and (iii) setting an expiration date on incentives to eliminate those that are no longer required.

Regarding the compliance options listed in Sec. 26, there are several points legislators may wish to consider:

- **spending from decarbonization funds or outside enterprise value chains (Sec. 26 (a) and (b))**. Enterprises could find the first two compliance options—spending their own decarbonization funds on projects within their own value chain or on another enterprise outside of it—particularly attractive. These options enable enterprises to decarbonize directly, rather than transferring funds to the government or purchasing allowances. However, authorities would have to carefully monitor the spending to ensure it achieves real decarbonization, and funds are not diverted to other business activities.
- **purchasing allowance from enterprises with surplus allowance (Sec. 26. (c) (ii))**. The fourth option would establish a domestic compliance market. As other governments have found, establishing a carbon market with sufficient trading and stable, effective carbon prices requires effort. The CCC price—used for the first three compliance options—would also shape how this market functions. If the market price rises above the CCC price, enterprises will likely choose one of the first three options, making the CCC price, in practice, a price ceiling. While this ceiling can shield enterprises from excessive prices, setting it too low may reduce incentives to decarbonize and sell surplus allowances.
- **carbon price determined by CCC (Sec. 24)**. The bills propose two components to guide how the CCC sets the carbon price. IISD interprets these as the **marginal abatement cost** and the **social cost of carbon**, which are commonly used measures to evaluate carbon prices. However, these indicators can be complex to measure accurately. Therefore, alongside these factors, legislators might also reference carbon tax rates and carbon market prices from other countries and observe how they have progressively increased over time.
- **offsets (Sec. 26)**. The bills allow enterprises to fully offset their emissions. Allowing enterprises to offset some of their emissions is standard practice in many carbon pricing schemes. However, it may be helpful to set a limit on this use. In several other schemes, this limit ranges from about 3%–6%.
- **Article 6 markets (Sec. 17 and 26)**. Connecting to international Article 6 markets established under the Paris Agreement is useful. However, mitigation activities and

emissions reductions arising from Article 6 transactions will not contribute to the Philippines' own nationally determined contribution (NDC). As other countries are finding, there is a risk that enterprises prioritize low-cost mitigation projects for the international market and leave high-cost projects for the domestic carbon pricing scheme. This could leave higher-cost mitigation options for domestic compliance, making it more difficult and expensive for the Philippines to meet its own NDC mitigation targets.

## HB 6407 and HB 6890

HBs 6407 and 6890 share identical operative provisions, aside from their Explanatory Notes or introductions. IISD, therefore, treated the bills as parallel vehicles for the same legislative design. The section numbers referred to in this paper are appropriate for reference to the text of either HBs 6407 or 6890.

Additionally, many provisions in these bills were similar to those in HBs 2055, 2481, and 3820. Comparison of the proposed bills revealed four additions as refinements to the propositions in HBs 2055, 2481, and 3820.

### International Trading

HBs 6407 and 6890 develop the legal basis for a carbon pricing scheme in the Philippines to connect with international markets such as Article 6 of the Paris Agreement and Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), the aviation carbon credit market.

### Allowance Allocation

The bills build on the approach taken by HBs 2055, 2481, and 3820 by aligning the emission cap with the Paris Agreement's collective goal of limiting global warming to 2°C while also ensuring allowance allocations adjust according to specific industry challenges. However, international practice suggests the statutory review of the emissions cap could occur more frequently than every 5 years or be supplemented by mid-cycle adjustment mechanisms.

### Financial Institutions

HBs 6407 and 6890 explicitly include financial institutions as covered enterprises. That can be helpful by adding liquidity to a carbon market. However, it will be important to carefully regulate these institutions to avoid market manipulation.

### Tax Incentives

Lastly, HBs 6407 and 6890 exempt income from carbon allowance and credit trades from all taxes. This measure can encourage greater trading that will help develop a carbon market in the Philippines, but examining risks to market manipulation, tax avoidance, and revenue loss may be useful.

## HB 2481

### Portion of Emission Allowances to Be Auctioned (Sec. 22–23)

The bill proposes that the Department of Environment and Natural Resources (DENR) initially allocate emission allowances for free and consecutively increase the share of auctioned allowances over the first 10 years of operations. Many other carbon pricing schemes do this, but few have such a rapid increase in this share. Most schemes provide enterprises with a more extended period of free allocation, allowing them and the authorities to develop their capacity to trade allowances before a cost is imposed.

### Climate Reinvestment Fund (Sec. 23 and Sec. 37)

The bill proposes a Climate Reinvestment Fund to support just transition and community resilience programs. While similar funds exist in other carbon pricing schemes, they seldom allocate all resources to these programs. Instead, allocating some funds to energy and industrial sectors, such as for grid upgrades that are hard to finance privately, may enhance the scheme's efficiency and effectiveness. In turn, accelerating the energy sector's shift to low-carbon technologies could also help lower energy costs, limiting the impact on local communities.

## HB 1817

HB 1817, or the proposed **Carbon Rights Act of 2025**, differs from the other bills because it does not establish a domestic carbon pricing regime for covered emitters. Instead, it provides the legal infrastructure for carbon markets by defining carbon rights, identifying who may own and transfer carbon credits, and setting rules for benefit sharing, voluntary market transactions, and Article 6 participation. In that sense, it is better characterized as a carbon market-enabling measure that could complement the carbon pricing schemes proposed in the other bills. It is still relevant to include in this paper because it helps situate carbon pricing within the broader legal architecture being proposed for carbon markets in the Philippines.

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# Abbreviations and Acronyms

| | |
|---|---|
| **CBAM** | Carbon Border Adjustment Mechanism |
| **CCC** | Climate Change Commission |
| **CORSIA** | Carbon Offsetting and Reduction Scheme for International Aviation |
| **DENR** | Department of Environment and Natural Resources |
| **DOE** | Department of Energy |
| **ETS** | emissions trading system |
| **GHG** | greenhouse gas |
| **ICAP** | International Carbon Action Partnership |
| **NDC** | nationally determined contribution |
| **OBPS** | Output Based Pricing System |

# Glossary

| | |
|---|---|
| **Article 6 of the Paris Agreement** | Provisions under the Paris Agreement that enable voluntary international cooperation through the transfer of mitigation outcomes between countries. |
| **border carbon adjustment** | A trade-related instrument that applies a carbon charge on imported goods based on their embedded emissions, adjusted for any carbon price paid in the exporting jurisdiction. |
| **carbon credit** | A certificate or instrument representing the reduction, avoidance, or removal of 1 metric ton of carbon dioxide equivalent from the atmosphere, generated through verified carbon reduction or sequestration activities. |
| **carbon rights** | Legal entitlements to the benefits derived from carbon avoidance, reduction, or removal activities, including ownership, transfer, and trading of carbon credits resulting from these activities. |
| **Carbon Border Adjustment Mechanism** | Border carbon adjustment system designed to mitigate carbon leakage by pricing emissions embodied in certain imported goods. |
| **Climate Change Commission** | The Philippines' lead interagency body mandated to coordinate, monitor, and evaluate climate change policies and programs. |
| **Carbon Offsetting and Reduction Scheme for International Aviation** | A global market-based mechanism developed by the International Civil Aviation Organization to offset carbon emissions from international aviation. |
| **Department of Environment and Natural Resources** | The Philippine government agency responsible for environmental management, natural resource conservation, and administration of certain climate funds and programs. |
| **Department of Energy** | The Philippine government agency responsible for energy policy, planning, and regulation, including guidance on carbon credits in the energy sector. |
| **Department of Finance** | The Philippine government agency responsible for fiscal policy, revenue administration, and public financial management. |
| **emissions trading system** | A market-based carbon pricing mechanism in which regulated entities must hold and may trade emission allowances equivalent to their GHG emissions. |

| | |
|---|---|
| **greenhouse gas** | A gaseous constituent of the atmosphere, both natural and anthropogenic, that absorbs and emits radiation at specific wavelengths within the spectrum of radiation emitted by the Earth's surface, by the atmosphere itself, and by clouds (Intergovernmental Panel on Climate Change, 2021). |
| **International Carbon Action Partnership** | An international forum of governments and public authorities that facilitates cooperation on emissions trading and carbon market design. |
| **International Civil Aviation Organization** | A specialized agency of the United Nations responsible for setting international aviation standards, including CORSIA. |
| **just transition** | An approach to climate and energy policy that seeks to ensure fairness and social protection for workers and communities affected by the transition to a low-carbon economy. |
| **measurement, reporting, and verification** | The framework used to quantify, report, and independently verify GHG emissions and mitigation outcomes. |
| **nationally determined contribution** | A country's climate action plan submitted under the Paris Agreement outlining targets for GHG mitigation and adaptation. |
| **Output Based Pricing System** | A carbon pricing approach that applies emissions benchmarks per unit of output, allowing trading or payments for emissions exceeding benchmark levels. |
| **voluntary carbon market** | A market where carbon credits are traded voluntarily, allowing private entities, organizations, and individuals to purchase credits from verified projects that reduce or sequester GHG emissions. |

# 1.0 Introduction

This paper reviews proposed carbon pricing and carbon market bills filed in the 20th Congress and referred to the Philippine House of Representatives Committee on Climate Change before the House adjourned on June 3, 2026. Together, these bills contribute to the legislative groundwork for the Philippine carbon pricing scheme and carbon market architecture. They aim to operationalize the country's commitments under the Paris Agreement—particularly its nationally determined contribution (NDC)—while balancing climate ambition with energy security, economic competitiveness, market integrity, and just transition considerations. The bills build on earlier legislative efforts in previous Congresses, such as the Low Carbon Economy Bill (HB 11375) filed during the 19th Congress and align with the government's ongoing efforts, including the greenhouse gas (GHG) inventories (HBs 2055, 3685, and 3820 Art. 2), national climate action plan, and emissions monitoring (HB 2055, 3685, and 3820 Art. 3).

A carbon price makes the cost of GHG emissions visible in economic decision making. By requiring large emitters to bear a cost for their emissions, it creates an incentive to reduce pollution, invest in cleaner technologies, and identify least-cost abatement opportunities. If well designed, carbon pricing can deliver cost-effective emissions reductions and generate public revenues to support affected workers and communities, strengthen energy and industrial transition investments, and help maintain public support for climate action.

This paper builds on technical analysis prepared by the International Institute for Sustainable Development (IISD) at the request of the House Committee on Climate Change. HBs 2055, 2481, 3685, and 6407 were formally transmitted to IISD for review and informed IISD's position papers submitted to the Committee in relation to its December 2025 deliberations. To provide a more comprehensive and updated review of related bills filed in the 20th Congress, this paper also considers other relevant bills referred to the Committee before the June 3, 2026 adjournment, including HBs 1817, 3820 and 6890.

The analysis first considers HBs 2055, 3685, and 3820, which are substantially similar in operative design, focusing on scheme coverage, the role of decarbonization plans in allowance allocation, compliance options, the Climate Change Commission (CCC)-determined carbon price, offsets, Article 6 risks, and proposed tax incentives. It then assesses HBs 6407 and 6890, which build on earlier proposals while adding refinements on international carbon markets, allowance allocation, financial institutions, and tax incentives. HB 2481 is discussed separately because it proposes a framework closer to a conventional cap-and-trade scheme, particularly through its auctioning schedule and Climate Reinvestment Fund. HB 1817 is discussed separately because it addresses the legal status, ownership, transfer, and benefit sharing of carbon credits rather than the design of a domestic carbon pricing obligation for covered emitters. The paper also reviews international and regional developments in carbon pricing to draw practical lessons for Philippine legislative design.

HB 1817 was filed on July 14, 2025; HB 2055 on July 17, 2025; HB 2481 on July 29, 2025; HB 3685 on August 13, 2025; HB 3820 on August 18, 2025; HB 6407 on November 26, 2025; and HB 6890 on December 15, 2025. Primary referral for all bills was to the House Committee on Climate Change.

# 2.0 Discussion on Proposed Bills

This section draws on international experiences in carbon pricing to identify points and topics which legislators can focus on to strengthen the proposed frameworks outlined in the analyzed bills.

HBs 2055, 3685, and 3820 share the same core carbon pricing architecture and are therefore analyzed together, while noting minor textual and enforcement-related differences among the bills. For the same reasons, HBs 6407 and 6890 were analyzed together because they share identical operative text and refine several elements of the earlier proposals, while presenting four substantial differences: international credit markets, allowance allocation, financial institutions, and tax incentives. HB 2481 is discussed separately because it proposes a system closer to a conventional cap-and-trade scheme. HB 1817 is also discussed separately because it is not a principal carbon pricing bill; rather it proposes a legal framework for carbon rights, ownership, transfer, benefit sharing, voluntary carbon market transactions, and Article 6 participation.

## 2.1 HB 2055, HB 3685, and HB 3820

HBs 2055, 3685, and 3820 describe a scheme that combines a variety of elements found in other cap-and-trade and cap-and-invest schemes. It differs from the cap-and-invest schemes in, for example, Washington State or California, which rely on allowance auctions and reinvestment proceeds. In contrast, HBs 2055, 3685, and 3820 require enterprises to invest an amount based on a carbon price determined by the CCC—either in their own operations or in domestic mitigation projects, or by purchasing allowances from domestic or international markets.

**Analysis of HBs 2055, 3685, and 3820 has led to the identification of five areas on which legislators might wish to focus.**

### 2.1.1 Carbon Price Coverage Could Be Focused on a Set of High-Emitting Sectors and Large Enterprises.

The coverage of the proposed carbon pricing scheme is defined by both the economic sectors it includes and the size of the enterprises subject to compliance.

#### Sectoral Coverage

The bills specify a wide range of sectors that the scheme would cover (Sec. 18). This contrasts with the approach taken in several other emissions trading systems (ETSs) worldwide, particularly in Southeast Asia. For example, carbon markets in Japan (International Carbon Action Partnership [ICAP], 2023a), China (ICAP, 2025e), Indonesia (ICAP, 2023b), and Kazakhstan (ICAP, 2022a) initially covered only the power sector but expanded or plan to expand to other heavy industries. Similarly, the Regional Greenhouse Gas Initiative (RGGI) (Burtraw & Litz, 2025), European Union (EU) and United Kingdom (UK) ETSs (ICAP, 2025d, 2025f), and Vietnam's ETS pilot phase include only the power, cement, and steel

sectors (ICAP, 2025b). Typically, governments start with a smaller set of sectors to test design and administration before expanding carbon pricing to a larger share of the economy.

### Size of Covered Enterprises

In addition to sectoral scope, the bills specify that coverage applies to "large and medium-sized enterprises," without defining a quantitative threshold for inclusion (Sec. 3c). Specifying a threshold would limit compliance costs to only those enterprises that are large enough to bear them. For comparison, in Canada, coverage thresholds range from 10,000 to 100,000 tons of $CO_2e$ per year, depending on the jurisdiction and industrial structure. Some jurisdictions allow entities below these thresholds to voluntarily opt in to the scheme (Wang et al., 2026).

## 2.1.2 The Use of Decarbonization Plans Could Be Administratively Costly and Result in an Unambitious Allocation of Allowances.

The bills propose two elements for how the CCC would allocate emission allowances: (i) applying an intensity-based cap and (ii) using consolidated data from enterprises' decarbonization plans to inform allocation decisions (Sec. 22).

The first element, the intensity cap, limits emissions per unit of output. In contrast, an absolute cap fixes the total emissions allowed, as proposed under HB 2481 (Sec. 24). This approach is common when new ETSs are launched. China, Vietnam, Indonesia, and some Canadian systems use intensity-based caps. India and Thailand are also considering this approach for their compliance markets. However, while an intensity-based cap offers flexibility during early implementation, many jurisdictions, such as China and Japan, are now considering a shift toward absolute caps to ensure total emissions decline even as production increases ("China's Carbon Market to Introduce," 2025).

The second element is the requirement for enterprises to submit decarbonization plans, which the CCC will use to determine the allowance allocations. This practice is uncommon among existing ETSs. Most systems rely on emissions reporting—data on actual emissions—rather than forward-looking decarbonization plans. In comparison, the EU ETS requires large emitters (top fifth in emissions) to prepare decarbonization plans, but these are used for strategic monitoring, not for determining allowance allocation (European Court of Auditors, 2023).

There are two considerations when using decarbonization plans to inform allowance allocations. First, reviewing and consolidating these plans could create a significant administrative burden for the CCC, given the likely high number of covered enterprises. Second, this structure risks allowing enterprises to influence allocation decisions by submitting unambitious plans. When aggregated, these could lead to sectoral decarbonization pathways falling short of desired ambition levels.

### 2.1.3 Provide Tax Incentives on Costs not Income and Only After Cost-Benefit Analyses.

To create an enabling environment for carbon pricing, the bills propose income tax holidays and other tax incentives for enterprises investing in low-carbon technologies (Sec. 35). Considering a wider set of policy instruments to support effective carbon pricing is recommended. However, since tax incentives are costly for the government, these supporting measures must be efficient. IISD research (Mataba, 2025) identifies three lessons from other countries:

**First**, authorities conduct cost-benefit analyses before introducing fiscal incentives, rather than granting them automatically. Such analyses look beyond the fiscal system to other factors. Often, barriers to renewable energy investment stem from energy regulation, energy pricing, and state company management, not taxation.

**Second**, if these analyses confirm that a tax incentive is required, income tax holidays may not be the most effective way to spur early-stage investment. Because renewable energy projects face high upfront costs, it is more efficient to link tax incentives to expenses—such as development costs, capital equipment, or production inputs—than to profits. Examples include accelerated depreciation for renewable energy equipment or refundable tax credits tied to verified emissions reductions, ensuring that fiscal support both encourages investments and achieves measurable climate outcomes.

**Third**, whatever incentives are adopted, they benefit from being time-bound, regularly reviewed, transparently reported, and phased out once they are no longer needed.

### 2.1.4 Reconsider the Compliance Options Available When Emissions Exceed Allowances.

The fourth area concerns the choices available to enterprises if their emissions exceed their allocated allowances. If an enterprise emits more than its allowance in a year, it has five compliance options (sec. 26). The first three involve a **carbon price** set by the CCC, which determines how much an enterprise contributes to a **decarbonization fund**.

- **Option 1**. Spend its own decarbonization funds to reduce emissions within the enterprise's own value chain.
- **Option 2**. Spend the funds in another enterprise outside its value chain.
- **Option 3**. Pay the funds to the government to support decarbonization and climate resilience programs. This option is economically equivalent to a carbon tax.
- **Option 4**. Purchase allowances from enterprises with surplus allowances, creating a domestic compliance market.
- **Option 5**. Buy offsets from projects implemented in the Philippines. Other sections of the bills refer to international markets.

At this stage of developing the legislation, this broad design gives legislators flexibility in designing their scheme as the legislative process evolves.

**Despite this flexibility, there are four issues for legislators to consider.**

## Options 1 and 2 could be attractive to enterprises, but they can create compliance risks.

The first two options are likely attractive for enterprises compared to a more traditional carbon market or carbon tax system. Option 1 allows an enterprise to invest in its own operations, potentially reducing future carbon price payments. Option 2 may also appeal to enterprises, especially if they can invest in a related-party entity and generate joint returns.

A comparable example is Alberta's Technology Innovation and Emissions Reduction (TIER) Regulation, which allows enterprises to contribute to a common fund that invests in emission reduction projects rather than pay a direct carbon tax (Wang et al., 2026). The key difference is that the TIER Fund is centrally managed; contributors do not decide how their payments are spent.

This distinction creates two compliance risks:

**First**, authorities will need to ensure that enterprises spend their decarbonization funds on eligible projects or technologies that deliver verified emissions reduction. They will be able to use the proposed decarbonization taxonomy (Sec. 27) as a guide, but such verification could become expensive.

**Second**, an enterprise could use its decarbonization funds to purchase technology from another enterprise with which it shares a common ownership, often referred to as a **related party**. In essence, the enterprise would purchase the technology from the same corporate group.

The corporate group would benefit if the enterprise were to pay for this technology at a price higher than it would in a standard transaction with an unrelated party. This would allow the enterprise to comply with Options 1 and 2 and still purchase according to the decarbonization taxonomy, but result in limited real decarbonization. Consequently, the enterprise could spend its entire decarbonization fund to purchase at inflated prices from related parties.

This practice could create two national-level costs: (i) less effective spending on decarbonization efforts, and (ii) less corporate income tax revenue, since the same related-party transactions would allow enterprises to reduce their corporate income tax liability. Tax authorities have long struggled with monitoring these practices, which present lessons for the Philippines' carbon authorities. Collaboration with the Philippines Bureau of Internal Revenue could enhance oversight and compliance in this domain.

## Developing a carbon market under Option 4 with active trading and stable prices requires careful use of the CCC-determined "carbon price."

Option 4 is interpreted by this research as proposing a domestic carbon market in which enterprises either buy allowances if they emit more than their allocation or sell/trade their surplus allowances. As described in Section 3, governments worldwide are exerting significant efforts to develop active carbon markets—those with many participants, frequent trades, and

transparent pricing. These conditions help maintain relatively stable prices at a level that encourages efficient decarbonization.

For the Philippines, a key factor in achieving stable and efficient carbon pricing is the interaction between the two prices proposed in the bills: the market price—set by trading between enterprises—and the CCC-determined carbon price (the CCC price), used for the first three compliance options (Sec. 23).

Enterprises' demand for allowances would depend on the relationship between these two prices. Enterprises will buy allowances on the market (Option 4) only if the market price is lower than the CCC price. If it rises above that level, they will more likely choose Options 1, 2, or 3. As a result, the CCC price acts as a price ceiling for the market price. There would be no incentive to buy an allowance above the CCC price.

Relatively few governments have set price ceilings (in the form of a carbon tax or otherwise), though some apply **price floors**. In cases where price ceilings exist, they have helped prevent market prices from rising too high and making compliance too costly. This protection can improve public acceptance of carbon pricing and help enterprises make long-term investment plans because even if the market price fluctuates, they know it will not rise above the CCC price.

Setting the CCC price is therefore important not only for Options 1–3, but also for Option 4. If set too low, the market price will also stay low, weakening the incentive for enterprises to reduce emissions and sell their surplus allowances. This could undermine one of the main benefits of a carbon market: encouraging enterprises to find cost-effective ways to decarbonize. Enterprises with high mitigation costs would likely focus on Option 1—investing in their own value chain—while those with lower costs would have weaker incentives to cut emissions.

Conversely, if the CCC sets a higher price, enterprises will have a stronger incentive to both buy and sell allowances in the Option 4 market. This could lead to a more active carbon market, but without the protection against excessive market prices. In addition, a high CCC price could encourage enterprises to favour Options 4 instead of Options 1–3, reducing payments into decarbonization funds and government-managed programs, such as the People's Survival Fund (Sec. 26(c)(i)).

Including a price ceiling—or even a price floor as used in some other carbon markets—could help stabilize market prices. However, further analysis is needed to understand these interactions. Emerging research highlights several unintended effects of such price relationships that policy-makers may wish to consider (Bergh et al., 2021).

## In setting the carbon price, the CCC could reference carbon prices from other countries alongside the two components.

Because the carbon price for Options 1–3 is determined by the CCC rather than by trading, it functions similarly to a carbon tax. Legislators can therefore learn from international carbon tax experience when deciding how to set the CCC price.

The bills propose that the CCC determine this price by combining two components: (i) the cost of mitigation technologies—similar to the **marginal abatement cost**—and (ii) the cost of preventive resilience measures, including the broader socioeconomic costs of adapting to, and minimizing the effects of, climate change, which resemble the **social cost of carbon** (Sec. 24).

Both are useful guides, but complex to calculate. To avoid over-reliance on precise estimates, legislators might also reference carbon prices or tax rates from other countries. These benchmarks can guide how the CCC price might evolve. In many countries, authorities began with a low tax rate to gain acceptance and allow time for investment in emissions reductions, then gradually increased it.

For instance, Singapore introduced a carbon tax rate of SGD 5 per ton of $CO_2e$ in 2019 and set a progressive schedule through 2030. The current rate is SGD 25 per ton (National Climate Change Secretariat, 2025). Canada's federal system followed a similar path—starting at CAD 10 per ton in 2018 and increasing annually (Government of Canada, 2021; Wang et al., 2026). Governments announced these increases years in advance to help companies plan their investments and find the least-cost path to decarbonize.

Detailing how the CCC price might evolve is also important to align with changes in the supply of allowances. In most carbon markets, governments gradually reduce free allocations, expand auctioning, and tighten emission caps, which raise allowance prices over time. If the CCC price does not adjust accordingly, it could reduce incentives for emissions cuts and ultimately undermine the efficiency of the overall scheme.

## Restricting how much enterprises can purchase offsets can ensure the covered sectors effectively decarbonize.

Sec. 26 allows enterprises to purchase carbon offsets from certified projects in the Philippines. As written, the bills would let enterprises fully offset their emissions. However, many local offsets, such as those from forest conservation or blue carbon initiatives, focus on **avoided emissions** rather than reducing emissions from economic activities. If firms rely too heavily on such offsets, they may not do much decarbonization themselves.

Many governments limit the proportion of emissions that enterprises may meet through offsets. For example, China caps offset use at 5% for the power sector and 3% for others (ICAP, 2025e). The United States' Western Climate Initiative (WCI) and RGGI schemes allow only 4% (soon to be 6%) (Burtraw & Litz, 2025). The EU ETS and the New Zealand ETS do not allow any offsets (ICAP, 2023c, 2025f). Vietnam has one of the highest offset restrictions at 30% (ICAP, 2025b).

Setting a clear offset limit would help ensure that covered enterprises make direct emission reductions rather than depend entirely on external projects. It would also support the integrity and transparency of the Philippines' carbon pricing scheme.

### 2.1.5. Enterprises Might Sell Low-Cost Mitigation Projects on the International Article 6 Market That Do Not Count Toward the Philippines' NDC.

Sec. 17 proposes that the CCC will participate in the international Article 6 process. Inferring further from Sec. 26(c)(ii), enterprises could engage in international Article 6 markets, although this is not stated explicitly. In any case, this is an encouraging step that reflects the Philippines' intent to implement Article 6 of the Paris Agreement.

However, if enterprises sell surplus allowances or mitigation outcomes on Article 6 markets, these reductions will not count toward the Philippines' NDC. This creates a potential risk: enterprises might prioritize low-cost mitigation projects for international trades, leaving only higher-cost options for domestic compliance.

Other emerging economies, including Vietnam, have raised similar concerns. Enterprises have prioritized lower-cost mitigation projects for export while retaining higher-cost measures for domestic NDC compliance, making it harder for countries to meet NDC targets for GHG mitigation (Burtraw & Litz, 2025; Dương, 2025b).

## 2.2 HB 6407 and HB 6890

HBs 6407 and 6890 have identical operative text section by section. These bills follow HBs 2055, 3685, and 3820 in many respects, with four substantial differences: international credit markets, allowance allocation, financial institutions, and tax incentives. For provisions that remain substantially similar, the analysis in Section 2.1 applies.

### 2.2.1 International Carbon Market Links Should Protect Domestic NDC Achievement

Sec. 17 clarifies links to international carbon markets. This section focuses on two markets: Article 6 of the Paris Agreement and CORSIA.

#### Article 6 of the Paris Agreement

Sec. 17(b) builds on the approach taken in HBs 2055, 3685, and 3820 by emphasizing the need to balance the Philippines' participation in international carbon markets with achieving its own NDC. It does this by clarifying the application of corresponding adjustments, which specify that mitigation outcomes from the Philippines will not be counted toward the country's own NDC when they are sold to foreign entities. In addition, Sec. 17(b) introduces a requirement that corresponding adjustments must be reported through the Philippines' Biennial Transparency Report. This measure ensures transparency and helps prevent double counting of emission reductions.

Legislators may consider a further refinement. For example, the Vietnamese government is considering a rule to retain a larger portion of domestic carbon credits to meet the country's own NDC targets, releasing the remaining credits for trades on international markets. It plans to reduce this share further by 2030 (Ly, 2025).

### CORSIA

Sec. 17 provides a legal basis for linking the proposed carbon pricing scheme with CORSIA. This is appropriate considering that the Philippines was among the first countries to announce its participation in the CORSIA pilot phase in 2021 (International Civil Aviation Organization, 2020).

In mid-October 2025, the Department of Energy issued a circular establishing general guidelines for carbon credits in the energy sector, which refers to the use of these credits under CORSIA (Department of Energy, 2025). HB 6407 develops this guidance further by referencing CORSIA explicitly as one of the international markets that the proposed carbon pricing scheme might connect to. Carbon credit markets are increasingly differentiating credits by eligibility and perceived quality, with CORSIA-eligible credits continuing to command a price premium relative to credits that have only met preliminary eligibility criteria (World Bank, 2026).

The inclusion of CORSIA fits with the trend in other countries in the region. Countries in the region, including Japan, China, Vietnam, and Malaysia, have all been developing regulations to ensure compliance with CORSIA.

## 2.2.2 Emissions Cap and Allowance Allocation Rules Could Benefit From Clearer Interim Adjustment Mechanisms

HBs 6407 and 6890 propose an emissions cap-setting method that combines domestic sectoral and enterprise-level context with globally recognized science-based approaches.

### Emission Cap and Allowance Allocation Method

HBs 6407 and 6890 refine the allocation method proposed in the prior filed bills, which propose that the CCC determines the emissions caps based on the sectoral decarbonization pathways of covered entities. HBs 6407 and 6890 refine this approach by first ensuring the CCC aligns the emissions caps with the Paris Agreement's collective goal of limiting global warming to 2°C, using globally recognized, science-based methodologies. HBs 6407 and 6890 then propose that this economy-wide cap be apportioned across industries subject to their "specific context, including the availability of low-carbon technologies and the challenges faced by hard-to-abate sectors." This approach both helps ensure that the Philippines meets its contribution to the Paris Agreement and recognizes the specific challenges of each industry.

### Timeline for Review and Adjustment of the Emissions Cap

Consistent with HBs 2055, 3685, and 3820 regarding the review cycle for the decarbonization pathways, HBs 6407 and 6890 add that the same review cycle will be applied to emissions caps, requiring that the CCC review and adjust the emissions cap at least every 5 years (Sec. 23 (c)). This does allow the option for review cycles shorter than 5 years, but it is worth noting that international practice shows that review cycles are usually shorter than 5 years. For example:

- China has issued benchmarks every 2 years (2019–2020, 2021–2022, 2023–2024) (ICAP, 2024a).
- Vietnam plans to issue benchmarks and allocate allowances every 2 years (2025–2026, 2027–2028, 2029–2030) (Thanh, 2025).

In cases in which the review cycle is longer—for example, South Korea's and the EU's ETSs (Li, 2023; Örtl, 2023)—rules allow for mid-cycle reviews and adjustments to respond to market changes, such as addressing allowance shortfalls or oversupply.

If legislators want to keep the 5-year review cycle, they may consider requiring the CCC to develop a plan outlining the degree to which the caps will be tightened over the review period.

### 2.2.3 Financial Institution Participation Could Improve Liquidity but Requires Strong Market Oversight

Sec. 19 includes financial institutions as covered enterprises, which HBs 2055, 3685, and 3820 do not explicitly include.

Including financial institutions can potentially benefit a carbon pricing scheme if these institutions act as willing buyers and sellers in the market and thus increase market liquidity. However, in other countries, financial institutions have been known to manipulate markets and distort prices through excessive trading of allowances.

To mitigate this risk, other governments have limited when financial institutions participate in the early phases of their ETSs. For example, China's and Vietnam's ETSs do not permit their participation, whereas South Korea began allowing financial institutions to enter the national carbon market after several years of trading.

Sec. 19 mandates that financial institutions account for and report their financed emissions, and submit decarbonization pathways aligned with the Philippines' 2050 net-zero target. This requirement is a good step by giving regulators useful information to address market manipulation; however, legislators may wish to consider additional rules on market oversight, penalties, or, as other countries in the region have done, a complete prohibition during the early years of trading.

### 2.2.4 Broad Tax Exemptions Could Support Market Development but Raise Fiscal and Integrity Risks

Sec. 36 exempts all revenues from allowances and carbon credit transactions from all taxes, fees, and duties to "maximize the flow of climate fund into decarbonization and resilience activities."

Exemption or reduction of taxes on allowances and credits after they are issued is common practice in countries in the Southeast Asian region that are encouraging their carbon markets to develop, such as Thailand, Malaysia, and Vietnam.

However, there are risks in terms of tax revenue loss, market manipulation, and tax avoidance opportunities. In particular, as the cost of allowances and credits is deductible against the taxable profits of enterprises for corporate income tax, exempting allowances and credits from taxes makes it difficult for the tax authority to accurately monitor enterprises' costs in general.

Although there are strong reasons to exempt trades from taxes, legislators may wish to examine whether full exemption from all taxes and for all allowance and credit transactions

is necessary, or whether a more limited tax incentive is more suitable. For example, countries with more mature carbon pricing schemes do not exempt trading income from taxes. Similarly, Vietnam has exempted income earned from carbon credit trades from corporate income tax, but, crucially, only income received from the first trade of the credit, not subsequent trades (Vu, 2025).

## 2.3 HB 2481

HB 2481 is interpreted as being similar to a conventional cap-and-trade scheme. Analysis of the proposed scheme identified two main issues for legislators to consider.

### 2.3.1 HB 2481's Auctioning Schedule May Be Too Rapid for a New Compliance Market

The bill proposes a relatively rapid increase in the portion of allowances that would be auctioned, with the remaining freely allocated (Sec. 22–23).

- Years 1–2: All allowances are freely allocated.
- Year 3: DENR auctions 30% of the allowances; the remainder is freely allocated.
- Years 4–10: The auction share increases annually until Year 10, when all allowances are auctioned.

In comparison, no existing ETS in Asia currently follows such an accelerated schedule.

- South Korea: The government is following three phases. Phase 1 (2015–2017): no auctions, instead all allowances freely allocated; Phase 2 (2018–2020): 3% auctioned; Phase 3 (2021–2025): 10% auctioned (ICAP, 2022b).
- China: The government allocates allowances freely and will introduce auctions in the national scheme by 2030. There are only limited allowances auctioned in regional pilots (ICAP, 2025e).
- Japan: Based on the existing plan, the government will introduce auctions only from 2033 (ICAP, 2023a).

A few carbon markets outside the region have comparable or faster schedules. However, each began in countries with more developed decarbonization policies and covered smaller portions of the economy, and none have yet reached 100% of allowances.

- EU ETS: Launched in 2005 with nearly all allowances free (only 0%–3% auctioned during 2005–2012). By Phase IV (2021–2030), about 57% are auctioned. Free allocations for carbon leakage sectors will be fully phased out by 2034 under Carbon Border Adjustment Mechanism (CBAM) reforms (ICAP, 2025f).
- UK ETS: Introduced in 2021 with 50% auctioning, increasing to 75% by 2024 (ICAP, 2025d).
- US RGGI: Launched in 2009, auctioning 91% of allowances, a share that has remained stable (Burtraw & Litz, 2025; ICAP, 2025c).

- Washington State Cap-and-Invest: Introduced in 2023 and now auctions 36% of allowances (ICAP, 2024b). Washington participated in the WCI during the design phase, allowing it to build trading capacity even before launching its own system.

The main advantage of this rapid schedule is that it could generate significant revenue for the government if the carbon price is high enough.

However, there are significant disadvantages to consider. Many ETSs provide companies with a longer period of free allocation. This allows enterprises to develop their capacity to trade allowances and manage compliance costs before full auctioning begins. This transition period also allows authorities to develop oversight and monitoring systems. By reducing immediate financial pressure, extended free-allocation phases give both regulators and enterprises time to adapt to the system.

In addition, allowance prices usually start low when most allowances are free, since supply exceeds market demand. As the auction share rises and emission caps tighten, scarcity increases the price, making compliance more costly for enterprises over time.

### 2.3.2 The Climate Reinvestment Fund Could Be Broadened to Support Energy and Industrial Transition

Auction proceeds and penalty payments would be deposited into the Climate Reinvestment Fund, administered by DENR. The fund is intended to finance climate mitigation, adaptation, and just transition programs (Sec. 23, Art. VII) and to primarily support community-level just transition initiatives, including social protection measures (Sec. 37, Art. XI).

Many carbon pricing systems globally allocate part of their revenues to just transition and similar community resilience programs. However, none dedicate all revenues solely to these activities. The closest examples are in North America—Washington State's Climate Commitment Act (ICAP, 2024b), California and Quebec's linked ETS (Wang et al., 2026), and the RGGI (Burtraw & Litz, 2025)—all of which direct significant, but not the majority, portions of auction revenues to social and climate resilience programs.

A balanced approach could improve both impact and efficiency. Allocating part of the Climate Reinvestment Fund to energy and industrial transition investments—for example, to enabling infrastructure, low-carbon investments, or energy-system modernization—could strengthen the effectiveness of the carbon pricing scheme. International experience shows that carbon pricing revenues are increasingly being used to support broader climate, energy, social, and industrial policy objectives, including through dedicated transition, innovation, and social climate funds (Monar, 2024; Organisation for Economic Co-operation and Development, 2019; World Bank, 2026).

## 2.4 HB 1817

HB 1817, with the short title **Carbon Rights Act of 2025**, differs from the other bills examined in this paper because it does not propose to establish a carbon price, emissions cap, auctioning system, or compliance obligation for covered emitters. Instead, it addresses

a related but foundational question: who owns carbon credits, how they may be transferred, and how benefits from carbon projects should be shared. This makes HB 1817 relevant to the proposed carbon pricing schemes because any domestic compliance market, offset mechanism, or Article 6-linked system will need clear rules on carbon credit ownership, transferability, accounting, and safeguards.

### 2.4.1 Carbon Rights Rules Could Support Market Certainty, but Need to Align With Compliance Design

Sec. 3(a) of HB 1817 defines "carbon rights" as "the legal entitlements to the benefits derived from carbon avoidance, carbon reduction, or carbon removal activities." It also provides that these rights pertain to the output of those activities and "shall not be deemed as natural resources." Sec. 3(b) defines "carbon credits" as transferable instruments representing verified reductions, avoidance, or removals of one metric ton of carbon dioxide equivalent. This could help reduce legal uncertainty for carbon project developers, landholders, Indigenous Peoples, communities, and potential buyers. In turn, clearer ownership rules could support the operation of the offset and crediting elements contemplated in the carbon pricing bills, particularly where covered enterprises may purchase offsets or engage in domestic or international markets.

However, the relationship between carbon rights and compliance obligations would need to be carefully clarified. The carbon pricing bills reviewed earlier focus on covered enterprises, emissions allowances, decarbonization funds, offsets, and Article 6 transactions. HB 1817, by contrast, focuses on project-generated credits from nature-based, technology-based, and hybrid projects. If these credits are later allowed for compliance under a domestic carbon pricing scheme, legislators may wish to specify eligibility criteria, limits on use, additionality, permanence, verification standards, and rules to prevent double selling or double counting. Without these links, carbon rights may be clear as private or community-held assets, but their role in a domestic compliance market may remain uncertain.

### 2.4.2 Ownership and Benefit-Sharing Rules Should Reinforce, Not Complicate, Just Transition Objectives

Through this framework, carbon credits would be treated as transferable legal and commercial assets with recognized carbon rights, rather than merely as public regulatory allowances created by the domestic cap-and-trade system. HB 1817's ownership rules are relevant to the just transition aspects of a future carbon pricing framework because they affect who benefits from project-generated carbon credits. The bill distinguishes among public lands, private lands, ancestral domains, overlapping jurisdictions, and technology-based projects. HB 1817 sets out specific rules for nature-based and technology-based projects. For nature-based projects, it affirms private and Indigenous claims in some contexts, recognizes state interests in others, and requires transfer agreements to include benefit-sharing provisions. These rules could help ensure that carbon market participation benefits communities and rights holders, rather than only project developers or buyers.

These rules would need to work coherently with the revenue and benefit-sharing approaches in the other bills. HB 2481 proposes a Climate Reinvestment Fund for mitigation, adaptation, and just transition programs, while the other carbon pricing bills allow enterprises to use decarbonization funds or purchase offsets from certified projects. HB 1817 could complement these mechanisms by clarifying entitlement to carbon credit revenues, but legislators may wish to ensure that benefit-sharing rules are consistent with broader just transition objectives, Indigenous Peoples' rights, local community safeguards, and any future rules on the use of credits for domestic compliance.

### 2.4.3 Article 6, NDC Accounting, and Tax Incentives Require Coherence Across the Bills

HB 1817 also overlaps with the international market provisions analyzed in Sections 2.1 and 2.2. It contemplates the sale and transfer of credits under Article 6 mechanisms, mandates the CCC to issue Letters of Authority, establish measurement, reporting, and verification systems, and apply corresponding adjustments, and provides that certain credits should not be claimed by the government as part of the Philippines' NDC achievement where they are intended for market transactions. These provisions are directionally consistent with the Article 6 and corresponding adjustment provisions in the other carbon pricing bills, but they also sharpen an important policy choice: how much mitigation should be available for international transfer, and how much should be retained to support domestic NDC achievement.

Finally, HB 1817 proposes generous tax incentives for carbon project developers, including full deductibility of certification-related expenses and exemption of carbon credit sales from all forms of taxation. This mirrors the broader concern raised in relation to HBs 6407 and 6890: tax incentives may help develop a carbon market, but broad exemptions may also create risks of revenue loss, tax avoidance, and uneven treatment between carbon credits, allowances, and other investment activities. Legislators may wish to consider whether incentives should be targeted to early-stage project development costs, first transfers, or priority project types, rather than applying broadly to all credit sales. This would better align HB 1817 with the fiscal-integrity concerns raised in the analysis of the carbon pricing schemes.

# 3.0 International and Regional Developments in Carbon Pricing

This section reviews international and regional examples to inform Philippine carbon pricing design, providing practical insights for developing an effective national scheme.

Carbon pricing schemes differ widely in how they balance three interrelated elements: (i) economic incentives, (ii) institutional capacity and feasibility, and (iii) overall performance and outcomes. These dimensions shape whether a scheme functions through a tax, cap-and-trade market, or one of a variety of hybrid approaches, how it allocates revenues and allowances, and how it fits within broader policy and administrative structures.

## 3.1 Carbon Pricing Internationally

Carbon pricing has become a mainstream climate policy tool. The World Bank's *State and Trends of Carbon Pricing 2026* reports that direct carbon pricing now covers nearly 30% of global GHG emissions across 87 implemented policies and has mobilized over USD 107 billion for public budgets in 2025 (World Bank, 2026). ETSs are also expanding: ICAP reports that 41 ETSs are now in force worldwide, covering 26% of global emissions, with another 16 systems under development or consideration (ICAP, 2026).

A growing number of jurisdictions are planning to implement or consider border carbon adjustments, including the EU's CBAM (full enforcement aimed for 2026), the United Kingdom's CBAM (set to enter into force in 2027), and emerging discussions in Australia, Canada, Norway, and Iceland. This trend may incentivize exporting countries to establish or strengthen domestic carbon pricing: border carbon adjustments impose a carbon levy based on the emissions intensity of imported products after deduction of any carbon price paid in the origin country. In its current configuration, the EU CBAM covers only a small share of the Philippines' total exports (about 0.02%) (Centre d'Études Prospectives et d'Informations Internationales [CEPII], 2025). Yet the EU is considering expanding the product scope of the EU CBAM, which may increase the Philippines' exposure to the EU CBAM.

## 3.2 Canada

From 2019 to 2025, Canada applied a dual carbon pricing approach at the national level, combining a consumer fuel charge with an Output-Based Pricing System (OBPS) for large industrial emitters.

The government withdrew the consumer fuel charge earlier in 2025. The decision to remove the consumer-facing carbon pricing resulted in part from public opposition, which has been tied to a difficulty communicating the benefits of the policy to households clearly. (Cosbey, 2025; Logg-Scarvell, 2025). This is a key lesson for the Philippines, particularly when allocating the funds from auctions and carbon price payments. Switzerland offers a useful contrast: its government publicly itemizes how carbon revenues are recycled—through visible rebates on energy bills and targeted support for clean-energy investments—helping citizens see

a direct return on what they pay and maintain strong public acceptance of the policy (Cosbey, 2025).

### 3.2.1 Canada's OBPS Shows How Industrial Carbon Pricing Can Combine Trading and Fixed-Price Compliance

The OBPS now serves as the primary tool for national-level carbon pricing and Canada's sole national carbon price. It applies to industrial companies with high emissions. Under the OBPS, the government sets emission-intensity benchmarks for each sector. Companies emitting below their benchmark earn surplus credits that they can sell or bank for future compliance, while those exceeding their benchmark must purchase credits, submit eligible offsets, or pay an excess emissions charge (Cosbey, 2025). Hence, the OBPS combines elements of both a carbon tax and an ETS by allowing facilities either to trade credits or pay a fixed price for allowances linked to their amount of emissions. A fixed price per ton of emissions is multiplied by the number of emissions exceeding the allowed level. In this way, the "fixed price" acts as a price ceiling because entities would adopt trading if it can be done at a level lower than this fixed charge.

The OBPS acts as a backstop in jurisdictions without an equivalent system, which currently includes 9 of Canada's 13 provinces and territories (Wang et al., 2026). Four provinces have chosen to implement pricing at the provincial level rather than adhering to the national system—namely, Alberta, British Columbia, Quebec, and Ontario (Wang et al., 2026). This model allows the national government to guarantee consistency in ambition while giving provinces flexibility in design and administration if they choose. Provinces choosing not to implement pricing at the provincial level can instead just adopt the national system. A federal equivalency review, scheduled for 2026, will reassess whether provincial programs remain aligned and may introduce tighter national standards and reporting requirements (Wang et al., 2026).

### 3.2.2 Provincial Systems Show How Design Choices Affect Coverage, Prices, Revenue Use, and Flexibility

Three of the four provincial systems (Alberta, British Columbia, and Ontario) use an intensity-based emissions cap similar to the federal OBPS and the approach proposed in HB 2055 and HB 3685. In contrast, Quebec stands out as the only cap-and-trade system in Canada (directly linked to California's much larger market via the WCI) that imposes an economy-wide emissions cap through market linkage and auctions, similar to HB 2481 (Wang et al., 2026).

Alberta's system applies to facilities emitting over 100,000 $tCO_2e$, with voluntary opt-ins above 2,000 $tCO_2e$, while British Columbia's system applies to facilities emitting over 10,000 $tCO_2e$, with opt-ins above 1,000 $tCO_2e$.

Alberta and British Columbia allow various compliance options—trading credits, purchasing offsets, or paying a direct charge to the compliance body—although their offset thresholds differ significantly. Ontario, by contrast, bans offsets entirely under its Emissions Performance Standards program. Facilities can bank unused credits for several years, but are not allowed to

borrow from future periods. While this flexibility reduces compliance costs, it can also dampen credit demand when combined with lenient benchmarks—contributing to an oversupply and weakening the carbon price signal, as observed in Alberta and British Columbia (Wang et al., 2026).

Alberta's TIER Fund price, previously aligned with the federal benchmark, was frozen at CAD 95 per $tCO_2e$ in 2025, diverging from the planned federal trajectory to CAD 170 by 2030. In contrast, British Columbia and Ontario remain aligned with the federal path, while Quebec's market-determined price typically trades within a comparable range due to its linkage with California's cap-and-trade system (Wang et al., 2026).

Every system requires third-party verification using accredited verifiers. All jurisdictions earmark carbon revenues for industrial decarbonization or clean innovation. For example, Alberta's TIER Fund and Ontario's EPS funds directly reinvest in emissions reduction projects (Wang et al., 2026). This differs from HB 2481.

### Strong Points and Areas for Improvement

Several features of Canada's carbon pricing system have worked well. Clear institutional roles have improved coordination and accountability, with environment ministries handling measurement, reporting, and verification and compliance, and finance ministries managing revenues and the transition fund (Wang et al., 2026). A comparable delineation between the DENR and the Department of Finance could strengthen coordination, promote accountability, and ensure transparent management of proceeds.

At the same time, Canada's experience highlights areas for refinement. Generous emissions benchmarks under the federal OBPS—and in several provincial systems that mirror it—have reduced compliance strictness, allowing many facilities to meet targets without significant additional abatement. This has reduced prices and slowed decarbonization progress. Additionally, the absence of absolute caps (except in Quebec) means that total industrial emissions could still rise, even if the emission intensity of economic output falls. Tightening the stringency of benchmarks could reinforce the environmental integrity of Canada's framework while preserving the flexibility that has supported its durability.

## 3.3 Carbon Pricing in Southeast and East Asia

The regional trend across Asia is from voluntary to mandatory carbon pricing (ICAP, 2025a). The World Bank similarly identifies national ETS developments in India, Japan, and Vietnam as contributing to an increase in global ETS coverage in 2026 (World Bank, 2026). Carbon prices and carbon tax rates across the region are generally low compared with European and Canadian standards but are increasing as markets mature.

Several countries now operate or are preparing compliance markets. South Korea's ETS is following a cap-and-trade principle with absolute emission caps tightened annually. China's intensity-based ETS—the world's largest by emission coverage—has operated since 2021. Both markets have suffered from an oversupply of allowances that kept prices low and limited trading activity beyond what was needed for compliance, but the governments are addressing these issues.

Japan's Green Transformation ETS launched in 2023 under a base-and-credit system. In this system, each enterprise establishes a baseline emissions target derived from historical data or efficiency standards. There is, therefore, no control over the total emissions or emission intensity of the sector, as in the case of a cap-and-trade system. Trading on the Japan Exchange Group has so far been limited, but in 2026, the ETS will transition from a voluntary to a mandatory scheme (JPX, 2025).

Meanwhile, Singapore maintains Southeast Asia's only fully implemented carbon tax and has announced rate increases to align with international benchmarks (Ministry of Sustainability and the Environment, 2024).

Governments are trying to balance climate ambition and economic growth, energy costs, and export competitiveness. At the same time, public concern over the climate crisis is growing as people increasingly see its impacts across the region. In response, governments increasingly present carbon pricing as a "polluter-pays" instrument and a revenue tool to support economic development (Febiola et al., 2023; Zafarullah & Mehnaz, 2025).

### 3.3.1 Indonesia Is Building a Hybrid Carbon Market, but Free Allocation and Low Prices Limit the Signal

Indonesia is developing a mixed system combining a domestic compliance market, a legislated but not yet implemented carbon tax, a voluntary market, and an Article 6 trading mechanism.

The government is rolling out the domestic compliance market in phases. The first phase covers state-owned coal plants operated by Perusahaan Listrik Negara, the state-owned power company. Future stages involve an expansion to captive coal and gas plants and then later to all fossil fuel power generation by 2030. As of November 2025, no auctions have been held as auction rules remain pending. Instead, all allowances are freely allocated using output-based benchmarks. Trading activity of allowances remains limited, and the market price is low (about IDR 12,000 per ton, or about USD 0.76). Facilities can trade surplus allowances among themselves; however, overallocation has limited demand and kept trading low. Companies may use domestic offsets up to a defined limit as an additional compliance option.

While Indonesia legislated a carbon tax, its implementation—originally scheduled for April 2022—has been repeatedly postponed due to inflationary and fiscal concerns (delos Reyes, 2022). Regulation 110/2025, however, has restated the government's intention to impose this tax. In the interim, the government continues to develop its ETS and measurement, reporting, and verification frameworks and expand its participation in international carbon markets. In 2025, Indonesia began its first bilateral trades under Article 6 of the Paris Agreement, signalling its openness to international market integration, and signed a series of mutual recognition agreements with leading carbon standards (Carbon Pulse, 2025).

### 3.3.2 Vietnam's Pilot ETS Offers Lessons on Phased Coverage, Benchmarks, and Offset Limits

Vietnam's national compliance market is in its pilot phase, awaiting the finalization of the allowance allocation plan and trading regulations. The ETS pilot phase—scheduled from 2025

to 2028—will regulate emissions from steel, cement, and thermal power sectors, followed by a full operational phase expanding coverage and introducing allowance auctions. The government will allocate allowances based on sectoral benchmarks, and covered entities may use carbon credits, including Article 6 traded credits, to offset up to 30% of their compliance obligations. Trading will take place on the Hanoi Stock Exchange (Trọng, 2025).

The country shows a green light for implementing Article 6 of the Paris Agreement and is working to align its domestic carbon credits with international standards. Vietnam also has imposed taxes on fuels and other pollutants (environmental protection tax and fee), reduced direct power subsidies, and reformed energy prices, all of which create an enabling environment for more effective carbon pricing (Luân Dũng, 2025).

# 4.0 Conclusion

Overall, the proposed bills represent a significant and timely effort to establish a carbon pricing framework and supporting carbon market architecture that can support the Philippines' NDC, strengthen investment signals for low-carbon development, and contribute to a just and competitive economic transition.

IISD's review identifies several areas where legislative refinement could strengthen the design and implementation of the proposed schemes.

- **HBs 2055, 3685, and 3820** offer an innovative and flexible mix of compliance options, but international experience suggests that focusing initially on a smaller set of sectors, clarifying the role of decarbonization plans in allowance allocation, and carefully designing the CCC-determined carbon price so that it supports an effective domestic compliance market could strengthen implementation.
- **HBs 6407 and 6890** present key refinements to the preceding bills by clarifying connections with international carbon markets, aligning emissions caps with the collective temperature goal under the Paris Agreement, explicitly including financial institutions as covered enterprises, and introducing additional tax incentives. Further refinement could focus on protecting domestic NDC achievement, clarifying interim cap adjustments, safeguarding market integrity where financial institutions participate, and assessing whether tax exemptions should be more targeted.
- **HB 2481** provides a clear pathway toward auctioning and revenue recycling through the Climate Reinvestment Fund. However, its relatively rapid auction schedule might benefit from a more gradual phase-in. Moreover, while prioritizing community-led just transition programs is commendable, broadening the uses of revenues to include infrastructure and industrial transition investments could accelerate the economy's adaptation to carbon pricing and deliver wider social and economic benefits.
- **HB 1817** complements the proposed carbon pricing bills by clarifying the legal status, ownership, transfer, and benefit sharing of carbon credits. This could help reduce the legal uncertainty for carbon project developers, communities, Indigenous Peoples, and potential buyers. Further refinement could focus on ensuring consistency with NDC accounting, strengthening safeguards against double counting and false claims, clarifying how credits may be used in any future domestic compliance scheme, and assessing whether the proposed tax exemptions should be more targeted.

As deliberations continue, the Philippines has an opportunity to design a carbon pricing framework that is credible, practical, and responsive to national development priorities. A well-designed scheme can help mobilize investment, support affected communities, and position the country for a low-carbon transition that is both ambitious and equitable.

# References

van den Bergh, J., Castro, J., Drews, S., Exadaktylos, F., Foramitti, J., Klein, F., Konc, T., & Savin, I. (2021). Designing an effective climate-policy mix: Accounting for instrument synergy. *Climate Policy, 21*(6). https://www.tandfonline.com/doi/full/10.1080/14693062.2021.1907276

Burtraw, D., & Litz, F. (2025). *Regional Greenhouse Gas Initiative will see improvements as part of third program review.* Resources for the Future. https://www.resources.org/common-resources/regional-greenhouse-gas-initiative-will-see-improvements-as-part-of-third-program-review/

Carbon Pulse. (2025). *Preparing an innovative and globally competitive carbon market in Indonesia.* Coaction Indonesia. https://coaction.id/preparing-an-innovative-and-globally-competitive-carbon-market-in-indonesia/

Centre d'Études Prospectives et d'Informations Internationales. (2025). *BACI: International trade database at the product level* (Version 202501) [Data set]. https://www.cepii.fr/DATA_DOWNLOAD/baci/doc/baci_webpage.html

*China's carbon market to introduce absolute emissions caps from 2027.* (2025, August 26). Reuters. https://www.reuters.com/sustainability/climate-energy/chinas-carbon-market-introduce-absolute-emissions-caps-2027-2025-08-26/

Cosbey, A. (2025). *The end of Canada's carbon price?, with Aaron Cosbey* [Podcast]. Resources for the Future. https://www.resources.org/resources-radio/the-end-of-canadas-carbon-price-with-aaron-cosbey/

delos Reyes, A. (2022, June 28). *Indonesia delays carbon tax scheme again on global risk.* Argus. https://www.argusmedia.com/en/news-and-insights/latest-market-news/2345415-indonesia-delays-carbon-tax-scheme-again-on-global-risk

Department of Energy. (2025). *Providing the general guidelines for the generation, management, and monitoring of carbon credits in the energy sector (Department Circular No. DC2025-09-0018)*. Republic of the Philippines.

Department of Energy. (2025, October 16). *DOE issues general framework for carbon credits in the energy sector.* Philippine Information Agency. https://pia.gov.ph/press-release/doe-issues-general-framework-for-carbon-credits-in-the-energy-sector/

Dũng, L. (2025). *Chốt mức thuế bảo vệ môi trường đối với xăng, dầu | Báo điện tử Tiền Phong.* https://tienphong.vn/chot-muc-thue-bao-ve-moi-truong-doi-voi-xang-dau-post1787978.tpo

Dương, T. (2025, September 26). *Đề xuất giữ lại 50% tín chỉ carbon trong giao dịch quốc tế, tránh rủi ro bán vượt.* VnEconomy. https://vneconomy.vn/de-xuat-giu-lai-50-tin-chi-carbon-trong-giao-dich-quoc-te-tranh-rui-ro-ban-vuot.htm

European Court of Auditors. (2023). *Special report 18/2020: The EU's Emissions Trading System: Free allocation of allowances needed better targeting.* https://www.eca.europa.eu/en/publications/SR20_18

Febiola, S., Edbert, F., Ariffin, M., & Sanjaya, R. (2023). Carbon tax as an implementation of the polluter pays principle in Indonesia. *Realism: Law Review, 1*(2), 1–19. https://doi.org/10.71250/rlr.v1i2.17

Government of Canada. (2021). *Update to the pan-Canadian approach to carbon pollution pricing 2023–2030.* Environment and Climate Change Canada. https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/carbon-pollution-pricing-benchmark/update-pan-canadian-approach-2023-2030.html

Intergovernmental Panel on Climate Change. (2021). Annex VII: Glossary. In J. B. R. Matthews, V. Möller, R. van Diemen, J. S. Fuglestvedt, V. Masson-Delmotte, C. Méndez, S. Semenov, & A. Reisinger (Eds.); In V. Masson-Delmotte, P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J. B. R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, & B. Zhou (Eds.)], In *Climate change 2021: The physical science basis. Contribution of Working Group I to the sixth assessment report of the Intergovernmental Panel on Climate Change.* Cambridge University Press. https://dx.doi.org/10.1017/9781009157896.022

International Carbon Action Partnership. (2022a). *Kazakhstan emissions trading system.* https://icapcarbonaction.com/en/ets/kazakhstan-emissions-trading-system

International Carbon Action Partnership. (2022b, December 5). *Korea emissions trading system (K-ETS).* https://icapcarbonaction.com/en/ets/korea-emissions-trading-system-k-ets

International Carbon Action Partnership. (2023a, February 22). *Japan GX-ETS.* https://icapcarbonaction.com/en/ets/japan-gx-ets

International Carbon Action Partnership. (2023b, February 27). Indonesia launches emissions trading system for power generation sector. https://icapcarbonaction.com/en/news/indonesia-launches-emissions-trading-system-power-generation-sector

International Carbon Action Partnership. (2023c, October 26). *New Zealand emissions trading scheme.* https://icapcarbonaction.com/en/ets/new-zealand-emissions-trading-scheme

International Carbon Action Partnership. (2024a, July 31). *China releases draft allocation plan for power sector for 2023 and 2024.* https://icapcarbonaction.com/en/news/china-releases-draft-allocation-plan-power-sector-2023-and-2024

International Carbon Action Partnership. (2024b, November 21). *USA—Washington cap-and-invest program.* https://icapcarbonaction.com/en/ets/usa-washington-cap-and-invest-program

International Carbon Action Partnership. (2025a, April 8). *Emissions trading worldwide: ICAP status report 2025.* https://icapcarbonaction.com/en/publications/emissions-trading-worldwide-icap-status-report-2025

International Carbon Action Partnership. (2025b, July 2). *Vietnam issues rules for pilot ETS, launching August 2025.* https://icapcarbonaction.com/en/news/vietnam-issues-rules-pilot-ets-launching-august-2025

International Carbon Action Partnership. (2025c, July 23). *USA—Regional Greenhouse Gas Initiative (RGGI)*. https://icapcarbonaction.com/en/ets/usa-regional-greenhouse-gas-initiative-rggi

International Carbon Action Partnership. (2025d, August 1). *UK emissions trading scheme.* https://icapcarbonaction.com/en/ets/uk-emissions-trading-scheme

International Carbon Action Partnership. (2025e, September 29). *China National ETS.* https://icapcarbonaction.com/en/ets/china-national-ets

International Carbon Action Partnership. (2025f, October 20). *EU emissions trading system (EU ETS)*. https://icapcarbonaction.com/en/ets/eu-emissions-trading-system-eu-ets

International Carbon Action Partnership. (2026). *Emissions trading worldwide: ICAP status report 2026.* https://icapcarbonaction.com/en/publications/emissions-trading-worldwide-icap-status-report-2026

International Civil Aviation Organization. (2020). *CORSIA states for Chapter 3 state pair.* https://www.icao.int/CORSIA/corsia-states-chapter-3-state-pairs

International Institute for Sustainable Development. (n.d.). *Taxation.* https://www.iisd.org/topics/taxation

JPX. (2025). 日本取引所グループ. 日本取引所グループ. https://www.jpx.co.jp

Li, T.Y. (2023, September 21). *South Korea to review emissions market regulations.* Argus. https://www.argusmedia.com/en/news-and-insights/latest-market-news/2491442-south-korea-to-review-emissions-market-regulations

Logg-Scarvell, J. (2025). *Backlash against carbon pricing in Australia and Canada*. Carnegie Endowment for International Peace. https://carnegieendowment.org/research/2025/09/carbon-pricing-backlash-elite-grassroots-protest-australia-canada?lang=en

Ly, K. (2025, September 28). *Viet Nam proposes to retain 50% of carbon credits in international trading.* https://van.nongnghiepmoitruong.vn/vietnam-proposes-to-retain-50-of-carbon-credits-in-international-trading-d775432.html

Mataba, K. (2025). *The use of green tax incentives for renewable energy deployment in emerging and developing countries*. International Institute for Sustainable Development. https://www.iisd.org/publications/report/green-tax-incentives-renewable-energy

Ministry of Ecology and Environment of the People's Republic of China. (2025). *Progress report of China's national carbon market (2025)*. https://xcoss.henan.gov.cn/typtfile/20251009/1613827be7d04b2aaa0cfc06b84f458e.pdf

Ministry of Sustainability and the Environment. (2024). *Carbon Pricing Act.* https://www.mse.gov.sg/policies/climate-change/carbon-pricing-act/

Monar, C. (2024). *Maximising benefits of carbon pricing through carbon revenue use: A review of international experiences.* Institute for Climate Economics. https://www.i4ce.org/wp-content/uploads/2024/05/Maximising-benefits-of-carbon-pricing_27june.pdf

National Climate Change Secretariat. (2025). *Carbon tax.* https://www.nccs.gov.sg/singapores-climate-action/mitigation-efforts/carbontax/

Organisation for Economic Co-operation and Development. (2019). *The use of revenues from carbon pricing* (OECD Taxation Working Papers No. 43). https://doi.org/10.1787/3cb265e4-en

Örtl, E. (2023, June 29). *Der EU-Emissionshandel wird umfassend reformiert.* Umweltbundesamt. https://www.umweltbundesamt.de/themen/der-eu-emissionshandel-wird-umfassend-reformiert

Thanh T. (2025, June 24). *Phân bổ hạn ngạch phát thải khí nhà kính cho cơ sở.* Tạp chí Kinh tế - Tài chính Online. https://tapchikinhtetaichinh.vn/phan-bo-han-ngach-phat-thai-khi-nha-kinh-cho-co-so-25995.html

Trọng N. D. (2025, May 8). *Kinh nghiệm phát triển và quản lý thị trường các-bon trên thế giới và bài học cho Việt Nam.* Tạp chí Công Thương. https://tapchicongthuong.vn/kinh-nghiem-phat-trien-va-quan-ly-thi-truong-cac-bon-tren-the-gioi-va-bai-hoc-cho-viet-nam-139113.htm

Vu, P. N. N. (2025). *Chính thức miễn thuế TNDN đối với thu nhập từ chuyển nhượng tín chỉ các bon lần đầu từ ngày 01/10/2025?* https://thuvienphapluat.vn/ma-so-thue/phap-luat-thue/chinh-thuc-mien-thue-tndn-doi-voi-thu-nhap-tu-chuyen-nhuong-tin-chi-cac-bon-lan-dau-tu-ngay-0110202-207451.html

Wang, J., Sanderson, I., & Noel, W. (2026). *Canadian Carbon Pricing Systems: 2025 Review.* Pembina Institute. https://www.pembina.org/pub/canadian-carbon-pricing-systems-2025-review

World Bank. (2026). *State and trends of carbon pricing 2026.* https://doi.org/10.1596/978-1-4648-2348-0

Zafarullah, H., & Mehnaz, M. (2025). Balancing economic growth and sustainability for environmental protection in Southeast Asia: A regional perspective. *Southeast Asia: A Multidisciplinary Journal, 25*(2), 95–107. https://doi.org/10.1108/SEAMJ-01-2025-0003

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