LEGAL RESPONSE INTERNATIONAL (LRI)

CARBON TRADING SCHEMES AROUND THE WORLD

1. DEFINITIONS AND CONTEXT

1.1 GHGs and Gases

1.1.1 **CH_4:** Methane, a potent GHG with a high global warming potential.

1.1.2 **CO_2:** Carbon dioxide, a major GHG from burning fossil fuels.

1.1.3 **GHGs:** Greenhouse gases, which trap heat in the Earth's atmosphere.

1.1.4 **HFCs:** Hydrofluorocarbons, synthetic compounds used in refrigeration and air conditioning.

1.1.5 **N_2O:** Nitrous oxide, another GHG emitted from agricultural and industrial activities.

1.1.6 **PFCs:** Perfluorocarbons, industrial GHGs with high warming potential.

1.2 Measurements

1.2.1 **tCO_2e:** Tonnes of carbon dioxide equivalent, a unit measuring the impact of various GHGs in terms of CO_2.

1.3 Market Mechanisms

1.3.1 **Allowance:** A permit allowing the holder to emit one tonne of CO_2e.

1.3.2 **Cap-and-Trade:** A system where a cap is set on total emissions, and companies trade allowances to meet their targets.

1.3.3 **Offset Credit:** A credit earned by reducing emissions in one sector, which can be traded or used to offset emissions elsewhere.

1.4 Global Context

1.4.1 **Kyoto Protocol:** An international treaty, adopted in 1997 and effective from 2005, setting binding emission reduction targets.

1.4.2 **Paris Agreement:** A global climate treaty, adopted in 2015, aiming to limit global warming to well below 2°C above pre-industrial levels, and pursue efforts to limit the increase to 1.5°C.

1.5 Climate Strategies and Tools

1.5.1 **Linear Reduction Factor (LRF):** A mechanism in cap-and-trade systems to reduce the cap on emissions annually.

1.5.2 **NDCs:** Nationally Determined Contributions, climate action plans submitted by countries under the Paris Agreement.

1.5.3 **FOLU:** Forestry and Other Land Use, a sector accounting for emissions and carbon sequestration from forests and land use.

1.5.4 **CRVEs:** Certificates of Verified Emissions Reduction or Removal, tradeable credits in some ETS.

2. CARBON TRADING SCHEMES LIST

Country	Type of Carbon Trading Scheme	Legislation	Status	Coverage	Market Size	Comments
European Union	**European Union Emissions Trading System (EU ETS)**	Directive 2003/87/CE of the European Parliament and of the Council (Link)	Implemented	Includes a wide array of sectors and greenhouse gases. Initially designed to regulate CO_2 emissions, the scheme now also includes N_2O and PFCs from certain sectors. The EU ETS applies to over **10,000 installations** across key industries such as power generation, energy-intensive manufacturing (e.g., steel, cement, and chemicals), and intra-EU aviation. From 2024, the scheme will expand to cover maritime transport, aligning with the EU's **Green Deal** objectives. Additionally, a new system (**EU ETS2**) will regulate emissions from road transport and buildings starting in 2027.	It covers approximately **40% of the European Union's total greenhouse gas emissions**. This equates to over **1.4 billion metric tons of CO_2** equivalent emissions annually, making it one of the largest carbon markets in the world. The cap on emissions is reduced annually, ensuring a steady decline in overall emissions in line with the EU's climate goals. For example, the cap for 2021–2030 is being reduced by 2.2% annually, a mechanism known as the Linear Reduction Factor (**LRF**). The system's scale and the sectors it encompasses make it a critical tool in achieving the EU's target of a **55% reduction in GHG emissions by 2030 and net-zero emissions by 2050.**	There is quite an amount of information regarding the EU ETS. As a summary, it was established in 2005 and is the world's first and largest carbon market, serving as a cornerstone of the EU's strategy to combat climate change and reduce greenhouse gas emissions cost-effectively. Operating on a **'cap and trade'** principle, the system sets a cap on the total amount of greenhouse gases that can be emitted by installations covered under the system. This cap is reduced annually in line with the EU's climate targets, ensuring that overall emissions decrease over time. Companies receive or purchase emission allowances, which they can trade with one another as needed. Each allowance permits the holder to emit one tonne of CO_2 equivalent. By limiting the total number of allowances, the EU ensures that they have a **market value**. If a company emits more than its allowances, it must purchase additional allowances or face significant fines. Conversely, companies that reduce their emissions can sell surplus allowances, incentivizing innovation and efficiency. The system is currently in its **fourth trading phase** (2021-2030), with reforms introduced to align with the European Green Deal and the EU's increased climate ambition for 2030. Notably, from 2024, the EU ETS will expand to include emissions from the maritime sector, and system EU ETS2 will be established to cover emissions from road transport and buildings.
China	**China´s Emissions Trading Scheme (China ETS)**	Interim Regulations on the Administration of Carbon Emissions Trading (Link)	Implemented	Currently limited to the power generation sector, which accounts for a significant portion of the country's total emissions. The system regulates over **2,000 key emitters**, including coal-fired, natural gas, and other power plants, targeting only CO_2 emissions at this stage. Plans are underway to expand the China ETS to other high-emission industries such as steel, cement, aluminum, and petrochemicals.	Covers approximately **5.1 billion tonnes** of CO_2 annually, representing more than 40% of the country's total CO_2 emissions. As the system expands to include additional sectors, this figure is expected to rise significantly, potentially covering up to **60% of national GHGs emissions**. Despite its size, the system has faced challenges, including low carbon prices and limited trading volumes, but these are expected to improve with ongoing reforms and expansions.	China ETS was officially launched in July 2021. It represents a significant step in the country's efforts to mitigate greenhouse gas emissions and it is administered by the Ministry of Ecology and Environment. The system operates on a **cap-and-trade mechanism**, where companies are allocated emission allowances based on carbon intensity benchmarks. Firms emitting less than their allowances can **sell the surplus**, while those exceeding their quotas must purchase additional allowances, thereby incentivizing emission reductions.
United States (California)	**California's Cap-and-Trade Program (California ETS)** (Linked with other system under the WCI).	Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms (Link)	Implemented	Includes a wide range of sectors, making it one of the most comprehensive systems in the world. It regulates major sources of GHG emissions such as electricity generation (**both in-state and imported power**), industrial facilities, and fuel suppliers, which account for transportation emissions. The program primarily covers CO_2, but it also regulates **other greenhouse gases** like CH_4, N_2O, and high-global-warming-potential gases such as HFCs.	The California ETS is substantial, covering approximately **85% of the state's total** GHG emissions. This equates to roughly **350 million metric tons of CO_2 equivalent annually**. Revenue generated from allowance auctions has surpassed **$20 billion** since the program's inception, with funds reinvested into initiatives such as renewable energy projects, zero-emission vehicle incentives, and sustainable community development.	California's Cap-and-Trade Program, initiated in 2012, is a central component of the state's strategy to reduce GHG emissions. Administered by the California Air Resources Board (CARB), the program operates on a **cap-and-trade mechanism**, setting a statewide limit on GHG emissions from significant sources. This cap declines annually, aligning with California's climate objectives, including achieving a 40% reduction from 1990 emission levels by 2030 and attaining **carbon neutrality by 2045**. The program encompasses approximately 450 entities, covering sectors such as electricity generation, large industrial operations, and fuel suppliers. Regulated entities must hold sufficient allowances to cover their emissions, with each allowance permitting the emission of one metric ton of CO_2 equivalent. Allowances are distributed through a combination of **free allocation and quarterly auctions**, and entities can trade allowances, providing flexibility in how they comply with emission reduction requirements. Revenue generated from the auctions is directed into the Greenhouse Gas Reduction Fund.
South Korea	**South Korea´s Emissions Trading Scheme (K-ETS)**	Act on the Allocation and Trading of Greenhouse-Gas Emission Permits (Link)	Implemented	Extensive, encompassing six greenhouse gases regulated under the Kyoto Protocol, including CO_2, CH_4, and N_2O.	The K-ETS covers approximately **600 entities**, accounting for around 70% of South Korea's national GHG emissions. This translates to more than 500 million metric tons of CO_2 equivalent annually,	K-ETS was launched in 2015 and stands as East Asia's first nationwide, mandatory carbon market. The program is a pivotal component of South Korea's strategy to achieve carbon neutrality by 2050, a goal enshrined in the "**Carbon Neutral Framework Act**" of 2021.

Country	Type of Carbon Trading Scheme	Legislation	Status	Coverage	Market Size	Comments
				It applies to large emitters across 23 industrial sectors, including power generation, petrochemicals, steel, and cement, as well as aviation. Facilities emitting **25,000 metric tons** or more of CO_2 equivalent per year are required to participate, while companies emitting over 125,000 metric tons across all their facilities are also subject to the scheme. This comprehensive sectoral and gas coverage makes the K-ETS one of the most ambitious emissions trading systems in Asia.	making it the second-largest carbon market in Asia after China's national ETS. The cap on emissions is gradually tightened over time, with allowances decreasing in line with South Korea's climate targets, which include a **40% reduction in emissions by 2030 and carbon neutrality by 2050**. The system also integrates offset credits, allowing entities to use Korean Certified Emission Reductions (**KCERs**) for compliance, thus promoting domestic and international project-based emissions reductions.	The K-ETS operates on a cap-and-trade mechanism, where a cap is set on total greenhouse gas emissions, and allowances are distributed to covered entities. These entities can trade allowances, providing flexibility in how they meet their emission reduction targets. The system has undergone several reforms to enhance its effectiveness, including the introduction of market stabilization measures and the expansion of sectors covered. Additionally, South Korea has been proactive in exploring international cooperation on carbon markets, engaging in bilateral agreements to purchase carbon reductions from developing countries.
New Zealand	**New Zealand Emissions Trading Scheme (NZ ETS),**	Climate Change Response Act 2002 (Link)	Implemented	Comprehensive, encompassing all GHG covered under the Kyoto Protocol, including CO_2, CH_4, N_2O, and several industrial gases. The scheme applies to a broad range of sectors, including forestry, energy, industry, liquid fossil fuels, and waste. However, **biological emissions from agriculture**, which constitute a significant share of New Zealand's emissions profile, are currently excluded but are under consideration for inclusion in future iterations. Forestry plays a unique role in the NZ ETS, acting as both a source and a sink for emissions. Forest owners can earn New Zealand Units (**NZUs**) for carbon sequestration, making the sector a key player in offsetting emissions from other areas.	Covers approximately 50% of the country's total GHG emissions, making it one of the few national systems with such broad coverage. The **forestry sector is particularly prominent**, as New Zealand is one of the few countries that includes land-use, land-use change, and forestry (**LULUCF**) in its emissions trading scheme. The government has introduced an annual cap on the supply of NZUs, which declines over time to meet New Zealand's climate targets. For 2023, the cap was set at **28.9 million NZUs**, with a gradual reduction in line with the country's goal of achieving net-zero emissions by 2050. The inclusion of auctioning and cost containment measures, such as price floors and ceilings, ensures market stability while driving meaningful emissions reductions.	The NZ ETS, established in 2008 under the Climate Change Response Act 2002, is the government's primary instrument for reducing greenhouse gas emissions. It operates on a **cap-and-trade mechanism**, where businesses are required to measure and report their emissions and surrender one NZU for each tonne of emissions they produce. The government controls the supply of NZUs, reducing the number available over time to incentivize emission reductions. **Participants can trade NZUs in the secondary market**, allowing flexibility in how they meet their obligations. The scheme has undergone several reforms to enhance its effectiveness, including the introduction of auctioning for NZUs and adjustments to market governance.
Canada (Quebec)	**Québec's Cap-and-Trade System (Quebec ETS)**	Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (Link)	Implemented	Targeting multiple GHGs such as CO_2, CH_4, N_2O, and high-global-warming-potential industrial gases. The system applies to sectors including electricity generation, fossil fuel distribution, industrial facilities emitting over **25,000 metric tons of CO_2** equivalent annually, and large emitters in heavy industries like cement and aluminium. Additionally, transportation fuels are covered through the regulation of fuel distributors, ensuring a significant portion of emissions from transportation is addressed.	Covers approximately **80–85% of the province's total GHG emissions**. Linked with California's system under the WCI, it forms the largest carbon market in North America, with a combined market size of over **300 million metric tons of CO_2** equivalent annually. Québec uses auction mechanisms to distribute allowances, setting a minimum price to ensure a stable carbon market while driving investment in emission reduction technologies. As of recent years, Québec's allowance prices have steadily increased.	Québec's Cap-and-Trade System for GHG emission allowances, established in 2012, is a pivotal component of the province's strategy to combat climate change. This system operates on a cap-and-trade mechanism, setting a limit on total GHG emissions and allowing entities to trade emission allowances within that cap. In 2014, Québec linked its system with California's Cap-and-Trade Program through the WCI, creating a larger carbon market and fostering cross-border collaboration on emission reductions. The system is administered by Québec's *Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs* (**MELCCFP**), which oversees the registration of emitters and participants via the Compliance Instrument Tracking System Service (**CITSS**). This platform facilitates the tracking and trading of emission allowances, ensuring transparency and compliance within the market. To maintain the system's effectiveness, Québec and California initiated a process in June 2023 to assess and adjust the operating parameters of their Cap-and-Trade Systems, aiming to align with evolving climate goals and market dynamics.
Japan (Tokyo)	**The Tokyo Cap-and-Trade Program**	Tokyo Metropolitan Environmental Security Ordinance (Link- not the law)	Implemented	Focuses exclusively on CO_2 emissions from large-scale commercial and industrial buildings. The program targets facilities that consume energy equivalent to at least **1,500 kiloliters of**	Covers around **1,300 large facilities**, collectively accounting for approximately 20% of the city's total CO_2 emissions. The cap for each facility is determined based on historical emissions, with reduction	The Tokyo Cap-and-Trade Program, initiated on April 1, 2010, is Japan's first mandatory emissions trading scheme and the world's first urban cap-and-trade system targeting CO_2 reductions from large commercial and industrial buildings.

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				crude oil annually, which typically includes office buildings, hotels, hospitals, and large factories. Unlike national-level emissions trading systems, Tokyo's scheme is tailored specifically for urban emissions, making it a localized yet impactful approach. The program encourages the adoption of energy efficiency measures, including building retrofits, energy-efficient lighting, and HVAC system upgrades.	targets set at **25% for commercial buildings and 27% for industrial facilities during the current compliance period** (FY2020 to FY2024). Since its launch, the program has achieved substantial results, including a total reduction of **22%** in GHG emissions during its first compliance period (FY2010 to FY2014).	Administered by the **Tokyo Metropolitan Government (TMG**), the program requires facilities consuming energy equivalent to **1,500 kiloliters** or more of crude oil annually to meet specific emission reduction targets. Each covered facility has its own cap, calculated based on base-year emissions and a compliance factor, compelling them to implement energy efficiency measures or participate in emissions trading to achieve their targets. The program has demonstrated significant success; by the end of fiscal year 2012, it achieved a total GHG emission reduction of 22% from baseline emissions. Currently, the program is in **its third compliance period** (FY2020 to FY2024), with facilities required to reduce emissions to 25-27% below base-year levels, depending on their assigned category.
United Kingdom	**UK Emissions Trading Scheme** **(UK ETS)**	The Greenhouse Gas Emissions Trading Scheme Order 2020 (Link)	Implemented	Includes CO_2, N_2O, and PFCs, among others. The scheme applies to energy-intensive industries, power generation, and aviation operating within the UK. Facilities emitting more than **20 megawatts of thermal** input are required to participate, ensuring the system captures significant emitters.	Covers approximately one-third of the country's GHG emissions, equivalent to around **155 million metric tons of CO_2 annually**. The initial cap on allowances was set 5% lower than the UK's share under the EU ETS, with a Linear Reduction Factor ensuring a steady decline in emissions allowances over time. This declining cap aligns with the UK's legally binding commitment to reduce emissions by **68% by 2030 compared to 1990 levels**. The system incorporates auctioning and secondary market trading, with robust mechanisms to prevent price volatility, such as the Cost Containment Mechanism (**CCM**) and an auction reserve price.	UK ETS was established on January 1, 2021, replacing the UK's participation in the EU ETS following Brexit. This cap-and-trade system **sets a limit on total GHG from certain sectors**, with the cap decreasing over time to drive emission reductions. Participants must obtain and surrender allowances equivalent to their emissions, which can be purchased through auctions or traded in secondary markets. The UK ETS is designed to be at least as ambitious as the EU ETS, with an **initial cap set 5% lower than the UK's previous share** under the EU system. The scheme includes mechanisms to stabilize the market, such as an auction reserve price of £22 per tonne and provisions to address significant price fluctuations. The UK government has also initiated consultations on expanding the scheme to additional sectors, as explained.
Australia	**Australian Carbon Credit Unit**	The Australian Carbon Credit Unit (ACCU) Scheme is governed by the Carbon Credits (Carbon Farming Initiative) Act 2011 (Link)	Defunct	n/a	n/a	Australia's approach to carbon pricing has evolved over the past decade. In 2012, the government introduced the CPM under the Clean Energy Act 2011, which began with a fixed carbon price and was intended to transition to a cap-and-trade system. However, **the CPM was repealed in 2014**, and since then, Australia has not implemented a nationwide carbon pricing scheme. Instead, the country has focused on alternative measures, such as the Emissions Reduction Fund (**ERF**), which provides incentives for businesses to reduce emissions through various projects. Additionally, the Safeguard Mechanism was introduced to ensure that emission reductions achieved through the ERF are not offset by significant increases elsewhere in the economy. Despite the absence of a national carbon pricing mechanism, discussions continue regarding the potential reintroduction of such a scheme to meet Australia's climate commitments. Now, the primary carbon credit unit is the Australian Carbon Credit Unit (ACCU) which is a regulated, tradeable financial instrument.
Mexico	**Mexico Emissions Trading System: Testing phase** **(Mexico ETS/Pilot Program)**	Agreement establishing the preliminary basis for the Emissions Trading System Pilot Program in Mexico (Link) (Link)	Planned	During its Pilot Program focuses primarily on CO_2 emissions and applies to the energy and industrial sectors. These include power generation, oil and gas, cement, steel, chemicals, and other energy-intensive industries. Facilities that emit more than **100,000 metric tons of CO_2 equivalent annually** are required to participate, capturing a significant share of emissions from key sectors of Mexico's economy.	Covers approximately 40% of the country's total GHG emissions, equivalent to over **200 million metric tons of CO_2 equivalent annually**. Around **300 entities are participating in the pilot**, representing the largest emitters in the energy and industrial sectors. During the pilot phase, allowances are allocated based on	It is the first in Latin America, commenced its Pilot Program in January 2020, following the mandate of the General Law on Climate Change amended in 2018. The Pilot Program is designed to test the system's design, enhance emissions data quality, and build capacity in emissions trading, with the aim of informing the development of the fully operational phase. During this pilot phase, allowances are allocated free of charge based on historical emissions data, and while trading is permitted, there are no direct economic consequences for non-compliance, allowing participants to familiarize themselves with the system's mechanisms. The operational

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				The pilot phase currently limits its scope to CO_2 emissions but plans to expand its coverage to include other GHGs such as CH_4 and N_2O in the future operational phase.	historical emissions to establish a baseline for the fully operational phase. The planned operational phase will incorporate auctioning mechanisms and stricter caps to progressively reduce emissions in line with Mexico's Nationally Determined Contributions (**NDCs**) under the Paris Agreement.	phase, **initially expected to begin in 2024**, will introduce binding emission caps and compliance obligations, with the potential inclusion of additional sectors and greenhouse gases, aligning the ETS with Mexico's climate commitments under the Paris Agreement.
Colombia	**Colombia Carbon Tax**	Law 1819 of 2016 (Structural Tax Reform)- Article 221 (Link- Spanish)	Planned	The coverage of Colombia's carbon pricing framework is designed to target both CO_2 emissions and other GHGs under its developing ETS. The current carbon tax primarily applies to the **fossil fuel sector, covering the sale, withdrawal, and importation of fuels such as gasoline, diesel, and natural gas.**	Nowadays, covers approximately **24% of the country's total GHG emissions**, equating to about 50 million metric tons of CO_2 annually. The planned ETS is anticipated to significantly expand this coverage by incorporating large emitters across multiple sectors, including energy, transportation, and industrial processes. The government has also integrated offset mechanisms into the carbon tax, allowing regulated entities to use certified emission reductions (**CERs**) from domestic projects for compliance.	Colombia has implemented a multifaceted approach to carbon pricing, primarily through the establishment of a carbon tax and the development of an ETS. In 2016, the government introduced a carbon tax under Law 1819, targeting the sale, withdrawal, and importation of fossil fuels within the country. The tax rate is determined by the amount of CO_2 emissions produced from the combustion of these fuels, with rates adjusted annually for inflation. For instance, as of 2019, the tax was set at approximately USD 5.5 per ton of CO_2. Producers and importers are responsible for collecting and remitting the tax, which covers about **24% of Colombia's total emissions**. Complementing the carbon tax, Colombia is in the process of establishing a National Program of Tradable Greenhouse Gas Emission Quotas (**PNCTE**), effectively laying the groundwork for a national ETS. The legal framework for the PNCTE was set forth in the 2018 Climate Change Management Law, granting the Ministry of Environment the authority to regulate the system.
South Africa	**South Africa´s Carbon Tax Act**	Carbon Tax Act, 2019 (Act No. 15 of 2019) (Link)	Planned	It focuses on CO_2., CH_4, and N_2O emissions. The tax applies to direct emissions from fuel combustion, industrial processes, and fugitive emissions across key sectors, including power generation, mining, manufacturing, and transportation. The framework also accounts for sectors such as **oil and gas exploration and waste management**. Companies emitting more than 0.1 megatons of CO_2 equivalent annually are subject to the tax.	South Africa's carbon tax covers approximately 80% of the country's total greenhouse gas emissions, making it one of the most ambitious carbon pricing systems in the Global South. The initial tax rate of **R120 per ton of CO_2 equivalent applies to around 300 of the largest polluters**, collectively responsible for the majority of national emissions. However, tax-free allowances—ranging from **60% to 95%**—are available during the first implementation phase to ease the financial burden on businesses, particularly in energy-intensive sectors	South Africa implemented its Carbon Tax Act in June 2019, marking a significant step toward reducing greenhouse gas emissions. The tax was initially set at R120 per ton of CO_2 equivalent, with annual increases to account for inflation plus 2%, reaching R190 per ton by 2024. To mitigate the financial impact on businesses, the government introduced various tax-free allowances, enabling companies to reduce their taxable emissions by up to **95% during the first phase, which extends until December 2025**. Additionally, a carbon offset mechanism allows entities to invest in certified emission reduction projects to further lower their tax liabilities. Looking ahead, **the second phase of the carbon tax**, commencing in 2026, aims to strengthen emission reduction efforts by decreasing tax-free allowances and adjusting incentives, aligning with South Africa's climate commitments under the Paris Agreement.
Kazakhastan	**Kazakhstan's Emissions Trading System (KAZ ETS)**.	Environmental Code of the Republic of Kazakhstan (2021) (Link)	Implemented	Focuses primarily on CO_2 emissions from energy-intensive sectors, including power generation, mining, metallurgy, oil and gas extraction, and chemical industries. The system applies to installations emitting more than **20,000 metric tons of CO_2 annually.**	Covers about 50% of Kazakhstan's total greenhouse gas emissions, translating to roughly **160 million metric tons of CO_2 annually**. Approximately 180 installations are currently regulated under the system, primarily representing large industrial emitters. During the current phase (2022–2025), the system uses benchmarking as the primary allocation method to ensure fairness and incentivize efficiency improvements.	KAZ ETS launched in January 2013, is a cap-and-trade mechanism aimed at reducing greenhouse gas emissions in line with the country's international commitments. The system sets an overall cap on CO_2 emissions, distributing allowances to regulated entities based on benchmarking methods. Initially, allowances were allocated for free, but there are plans to introduce auctioning to enhance market efficiency. The KAZ ETS has undergone several phases, with the current **Phase Five spanning from 2022 to 2025**. During this phase, the system continues to refine its allocation methods and expand its regulatory framework. Kazakhstan has also developed a domestic offsetting standard, the **Qazaq Green Certificate Program**, to encourage emission reduction projects outside the ETS-covered sectors. These initiatives align with Kazakhstan's strategic goal of achieving carbon neutrality by 2060, as outlined in the "*Strategy of the Republic of Kazakhstan on Achieving Carbon Neutrality by 2060*."
India	**Carbon Credit Trading Scheme. Planned ETS**	Energy Conservation (Amendment) Act, 2022 (Link)	Planned	India's emerging Carbon Credit Trading Scheme (**CCTS**) is currently focused on CO_2 emissions from energy-intensive industries and projects that contribute to	India's CCTS is expected to cover a significant portion of the country's emissions, particularly in energy-intensive sectors that collectively account	India has been actively developing its carbon market framework to address climate change and promote sustainable development. In June 2023, the Indian government officially notified the CCTS under the Energy Conservation Act, 2001, marking a significant step toward establishing a

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				renewable energy, energy efficiency, and sustainable practices	for more than **60% of national GHG emissions.** The program is aligned with India's ambitious target of achieving net-zero emissions by 2070 and reducing the emissions intensity of its GDP by 45% by 2030 compared to 2005 levels.	regulated carbon market. The CCTS aims to facilitate the trading of carbon credit certificates, **each representing the reduction or removal of one ton of tCO_2e**. The scheme encompasses both compliance and voluntary sectors, allowing entities to register projects that contribute to emission reductions and earn tradable carbon credits. To oversee the implementation and governance of the carbon market, a National Steering Committee has been formed, comprising representatives from various government ministries and regulatory bodies.
Brazil	**Brazilian Greenhouse Gas Emissions Trading System** **(SBCE)**	Law No. 15,042/2024, which establishes the Brazilian Greenhouse Gas Emissions Trading System (Link- Portuguese)	Planned/Recently Implemented	Focuses on CO_2, CH_4 and N_2O. The system targets major emitting sectors, including energy, manufacturing, agriculture, transportation, and waste management. Additionally, Brazil has emphasized the integration of **forestry and land-use emissions, recognizing its unique position as home to the Amazon rainforest**.	The SBCE is expected to cover a substantial portion of Brazil's emissions, given the country's significant contributions to global greenhouse gas emissions from deforestation and agriculture. Brazil's carbon market includes a phased implementation plan, initially focusing on sectors with high emissions intensity, such as energy and industry, before expanding to broader categories.	Brazil has recently established a regulated carbon market through the enactment of Law No. 15,042 on December 12, 2024, creating SBCE. This cap-and-trade system sets limits on greenhouse gas emissions for various sectors of the economy, requiring companies to hold emission allowances, known as Brazilian Emission Quotas (**CBEs**), for each ton of CO_2 equivalent they emit. Companies emitting above their allocated quotas must purchase additional CBEs or Certificates of Verified Emissions Reduction or Removal (**CRVEs**) from entities that have reduced their emissions below the set limits. The SBCE is structured to be implemented in phases, allowing for a gradual transition to full operation. The Inter-ministerial Committee on Climate Change (**CIM**) serves as the managing body, overseeing the system's governance and ensuring compliance with national climate goals.
Turkey	Developing ETS	Climate Change Mitigation Strategy and Action Plan (2024-2030) (Link)	Planned	Will primarily focus on CO_2 emissions from energy-intensive sectors such as cement, iron and steel, and power generation.	Projected to cover approximately 40-50% of the country's total greenhouse gas emissions once fully operational	Turkey is actively developing its ETS, with plans to initiate a pilot phase in early 2025. This initiative is part of Turkey's broader climate strategy, as outlined in the Climate Change Mitigation Strategy and Action Plan (**CCMSAP**) for 2024 to 2030, which envisions the ETS playing a central role in reducing greenhouse gas emissions. The pilot phase aims to include industries such as cement, aligning with the European Union's Carbon Border Adjustment Mechanism set to commence in 2026. The implementation phase is scheduled to run from 2027 to 2034, during which the system will be fully operational.
Indonesia	**Economic Value of Carbon (Nilai Ekonomi Karbon, NEK) Trading Scheme**	Presidential Regulation No. 98 of 2021 on the Implementation of Carbon Pricing to Achieve the Nationally Determined Contribution Target and Control Over Greenhouse Gas Emissions in National Development (Link)	Implemented	Currently focuses on CO_2 emissions from the power sector, particularly coal-fired power plants. The ETS applies to power plants with a capacity of 25 MW or more, which are connected to the state-owned electricity grid operated by PLN. These installations are regulated under Technical Emissions Ceiling Approvals (**PTBAE**), which set intensity-based emissions limits.	Covers 99 coal-fired power plants, which account for approximately **81.4% of the country's power generation capacity**. This equates to roughly 150 million metric tons of CO_2 emissions annually, a significant share of Indonesia's total greenhouse gas emissions.	Indonesia has been actively developing its carbon pricing mechanisms to align with its climate commitments and economic goals. In early 2023, the country launched the Economic Value of Carbon (Nilai Ekonomi Karbon, **NEK**) Trading Scheme, a mandatory, intensity-based ETS targeting the power sector. The initial phase focuses on coal-fired power plants connected to the state-owned utility PLN's grid, specifically those with a capacity of 25 MW or more. This phase covers 99 coal-fired power plants, representing approximately 81.4% of Indonesia's power generation capacity. Complementing the ETS, Indonesia introduced a carbon tax in April 2022, initially targeting the power sector with plans to expand to other sectors by 2025, depending on readiness. The tax is part of a broader decarbonization strategy regulated under the Law on the Harmonization of Tax Regulations. In **September 2023**, the Indonesia Stock Exchange launched the Indonesia Carbon Exchange (**IDXCarbon**), providing a platform for trading carbon credits. This initiative aims to facilitate the country's goal of achieving net-zero emissions by 2060. The exchange allows carbon units to be traded similarly to stocks, promoting transparency and accessibility in the carbon market. Furthermore, Indonesia is developing a carbon trading mechanism for the Forestry and Other Land Use (**FOLU**) sector, recognizing the significant role of forests in carbon sequestration. The Ministry of Environment and Forestry is preparing this mechanism to enhance the potential of carbon trading within the FOLU sector, aligning with the country's broader climate strategy.

3. SOURCES

Along with other sources, including national legislation, government reports, regulatory update, the table above relies on the ICAP ETS map and the ETS factsheet summaries, where more information about the respective projects could be found. The ICAP website provides valuable tools that facilitate a deeper understanding of ETS worldwide. However, this table has not strictly followed its categorization or criteria in our research and has incorporated multiple sources to develop a broader and more comprehensive overview of ETSs globally.

ETSs labelled as 'under consideration' on the ICAP map have been omitted from our analysis. The primary criterion for exclusion is that these systems do not yet have a concrete plan for implementation or remain in a preliminary discussion phase and are therefore not included in this assessment.

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