Doable without Carbon Emissions Pricing?

Michael E. Moore

Program Director

US Energy Association

October 28th, 2021 Stavanger, Norway (Virtual)

US Energy Association

- *USEA convenes, educates, and provides a nonpartisan forum for the energy industry.*
- *Internationally, USEA supports energy development by expanding access to safe, affordable, and sustainable energy in partnership with the U.S. Government.*
- *www.usea.org*

USEA
United States Energy Association

A Price on Carbon

"A price on carbon is essential to drive behavioral change and we are seeing elastic effects already taking place. Carbon is a new currency. A massive wealth transfer is already under way from large emitters to carbon reducers and this is taking shape in many forms including Renewable Energy Credits, Carbon Offsets, Low Carbon Fuel Credits, Zero Electric Vehicle Credits, and many many more.“

Randy Lack Co-CEO Element Markets, Houston October 26, 2021

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www.elementmarkets.com

Doable without Carbon Emissions Pricing?

- NO!
- Already taking place
- But, not as a single market system
- Efforts underway to create one unilateral market and process
- Maybe at COP26?

KEY STATISTICS ON REGIONAL, NATIONAL AND SUBNATIONAL CARBON PRICING INITIATIVE(S)

64	Carbon Pricing initiatives implemented
45	National Jurisdictions are covered by the initiatives selected
35	Subnational Jurisdictions are covered by the initiatives selected

In 2021, these initiatives would cover **11.65 $GtCO_2e$**, representing **21.5%** of global GHG emissions

https://carbonpricingdashboard.worldbank.org/

What is Carbon Pricing?

- Carbon pricing is an instrument that captures the external costs of greenhouse gas (GHG) emissions—the costs of emissions that the public pays for, such as damage to crops, health care costs from heat waves and droughts, and loss of property from flooding and sea level rise—and ties them to their sources through a price, usually in the form of a price on the carbon dioxide (CO_2) emitted.
- A price on carbon helps shift the burden for the damage from GHG emissions back to those who are responsible for it and who can avoid it. Instead of dictating who should reduce emissions where and how, a carbon price provides an economic signal to emitters, and allows them to decide to either transform their activities and lower their emissions, or continue emitting and paying for their emissions.
- In this way, the overall environmental goal is achieved in the most flexible and least-cost way to society. Placing an adequate price on GHG emissions is of fundamental relevance to internalize the external cost of climate change in the broadest possible range of economic decision making and in setting economic incentives for clean development. It can help to mobilize the financial investments required to stimulate clean technology and market innovation, fueling new, low-carbon drivers of economic growth.

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What is Carbon Pricing?

- There is a growing consensus among both governments and businesses on the fundamental role of carbon pricing in the transition to a decarbonized economy.
- For governments, carbon pricing is one of the instruments of the climate policy package needed to reduce emissions. In most cases, it is also be a source of revenue, which is particularly important in an economic environment of budgetary constraints.
- Businesses use internal carbon pricing to evaluate the impact of mandatory carbon prices on their operations and as a tool to identify potential climate risks and revenue opportunities.
- Finally, long-term investors use carbon pricing to analyze the potential impact of climate change policies on their investment portfolios, allowing them to reassess investment strategies and reallocate capital toward low-carbon or climate-resilient activities.

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World Bank and Carbon Pricing

- Carbon Pricing Dashboard
- Launched in May 2017, the Carbon Pricing Dashboard is an interactive online platform that provides up-to-date information on existing and emerging carbon pricing initiatives around the world. It builds on the data and analyses of the annual State and Trends of Carbon Pricing report series.
- The Carbon Pricing Dashboard was developed by the World Bank Group with the help of Navigant and ICAP and, is supported by the CPLC.
- This interactive tool complements World Bank Group activities to advance well-designed carbon pricing systems around the world:
- The Partnership for Market Readiness (PMR): Created in 2011, the PMR supports countries to assess, prepare, and implement carbon pricing instruments to scale up greenhouse gas mitigation. It also serves as a platform for countries to share knowledge and work together to shape the future of cost-effective climate change mitigation.
- The Carbon Pricing Leadership Coalition (CPLC): Launched in 2015, the CPLC brings together leaders from government, business and civil society, with the goal of putting in place effective carbon pricing policies that maintain competitiveness, create jobs, encourage innovation, and deliver meaningful emissions reductions.
- The Mitigation Action Assessment Protocol (MAAP): the MAAP is an online interface a tool that establishes a transparent and independent framework to help governments, project developers, investors and other relevant stakeholders to design, assess and compare the relative risks and performance of mitigation efforts across the globe.
- The International Carbon Action Partnership (ICAP) Secretariat supports the Carbon Pricing Dashboard by providing the latest data for mandatory cap-and-trade systems—building off the ICAP ETS Map. ICAP is an international forum for governments and public authorities that have implemented or are planning to implement emissions trading systems (ETS).
- The Carbon Pricing Dashboard is regularly updated with verified information on a regular basis, but please do not hesitate to ***Contact Us*** if you have any questions.

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Main types of Carbon Pricing

- **An emissions trading system (ETS)** is a system where emitters can trade emission units to meet their emission targets. To comply with their emission targets at least cost, regulated entities can either implement internal abatement measures or acquire emission units in the carbon market, depending on the relative costs of these options. By creating supply and demand for emissions units, an ETS establishes a market price for GHG emissions. The two main types of ETSs are cap-and-trade and baseline-and-credit:
- **Cap-and-trade systems**, which apply a cap or absolute limit on the emissions within the ETS and emissions allowances are distributed, usually for free or through auctions, for the amount of emissions equivalent to the cap.
- **Baseline-and-credit systems**, where baseline emissions levels are defined for individual regulated entities and credits are issued to entities that have reduced their emissions below this level. These credits can be sold to other entities exceeding their baseline emission levels.
- **A carbon tax** directly sets a price on carbon by defining an explicit tax rate on GHG emissions or—more commonly—on the carbon content of fossil fuels, i.e. a price per tCO_2e. It is different from an ETS in that the emission reduction outcome of a carbon tax is not pre-defined but the carbon price is.
- **An offset mechanism** designates the GHG emission reductions from project- or program-based activities, which can be sold either domestically or in other countries. Offset programs issue carbon credits according to an accounting protocol and have their own registry. These credits can be used to meet compliance under an international agreement, domestic policies or corporate citizenship objectives related to GHG mitigation.
- **RBCF (results-based climate finance)** is a funding approach where payments are made after pre-defined outputs or outcomes related to managing climate change, such as emission reductions, are delivered and verified. Many RBCF programs aim to purchase verified reductions in GHG emissions while at the same time reduce poverty, improve access to clean energy and offer health and community benefits.
- **Internal carbon pricing** is a tool an organization uses internally to guide its decision-making process in relation to climate change impacts, risks and opportunities.
- **For governments**, the choice of carbon pricing type is based on national circumstances and political realities. In the context of mandatory carbon pricing initiatives, ETSs and carbon taxes are the most common types. The most suitable initiative type depends on the specific circumstances and context of a given jurisdiction, and the instrument’s policy objectives should be aligned with the broader national economic priorities and institutional capacities. ETSs and carbon taxes are increasingly being used in complementary ways, with features of both types often combined to form hybrid approaches to carbon pricing. Some initiatives also allow the use of credits from offset mechanisms as flexibility for compliance.
- **Many companies** use the carbon price they face in mandatory initiatives as a basis for their internal carbon price. Some companies adopt a range of carbon prices internally to take into account different prices across jurisdictions and/or to factor in future increases in mandatory carbon prices.
- **GHG emissions** can also be implicitly priced through other policy instruments such as the removal of fossil fuel subsidies, energy taxation, support for renewable energy, and energy efficiency certificate trading. Implicit carbon pricing initiatives are not covered in the State and Trends of Carbon Pricing series and on this website.

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Carbon Pricing Leadership Coalition

- The Carbon Pricing Leadership Coalition (CPLC) is a voluntary initiative that catalyzes action towards the successful implementation of carbon pricing around the world. The CPLC brings together leaders from government, business, civil society and academia to support carbon pricing, share experiences and enhance the global, regional, national and sub-national understanding of carbon pricing implementation. The CPLC Secretariat is administered by The World Bank Group.
- Climate change is the greatest challenge humanity has encountered, and cannot be addressed by any one jurisdiction, business, or organization. Effective climate action requires jurisdictions, businesses, and organizations across the globe to make a concerted effort to work towards the common goal of limiting atmospheric carbon emissions and lessening the effects of climate change. Carbon pricing is a powerful policy tool to align international will towards this common purpose.
- **As of mid-2021, the Coalition comprises 35 national and sub-national governments, 176 private sector organizations from a range of regions and sectors, and 102 strategic partners representing NGOs, business organizations, and universities.**
- https://www.carbonpricingleadership.org/who-we-are

https://static1.squarespace.com/static/54ff9c5ce4b0a53decccfb4c/t/614b3a242b48a65e02ccc978/1632320041214/CPLC+_NetZero_Report.pdf

International Emissions Trading Association

International trade group to develop robust rules and accounting standards per the Paris Agreement on carbon markets for voluntary programs and carbon reduction programs.

Works with market participants, other trade groups, governments, think tanks and NGO’s.
Goal is the advancement of a global carbon trading mechanism to reduce GHG’s.
See their website for the wide range of activities, accomplishments and objectives

www.ieta.org

US and Carbon Pricing

- Executive Order 13390 1-20-2020 Sec. 5. Accounting for the Benefits of Reducing Climate Pollution. Social Cost of Carbon (SCC)
- Carbon Tax initiatives
- Social and Environmental Justice
- CSR/ESG
- Regional carbon markets
- Voluntary carbon reduction credits
- Proposed in Reconciliation Bill-methane fee, carbon price, carbon border adjustment fees for carbon intensive imports

Whoever Prices their Carbon first the other two will take their market share….

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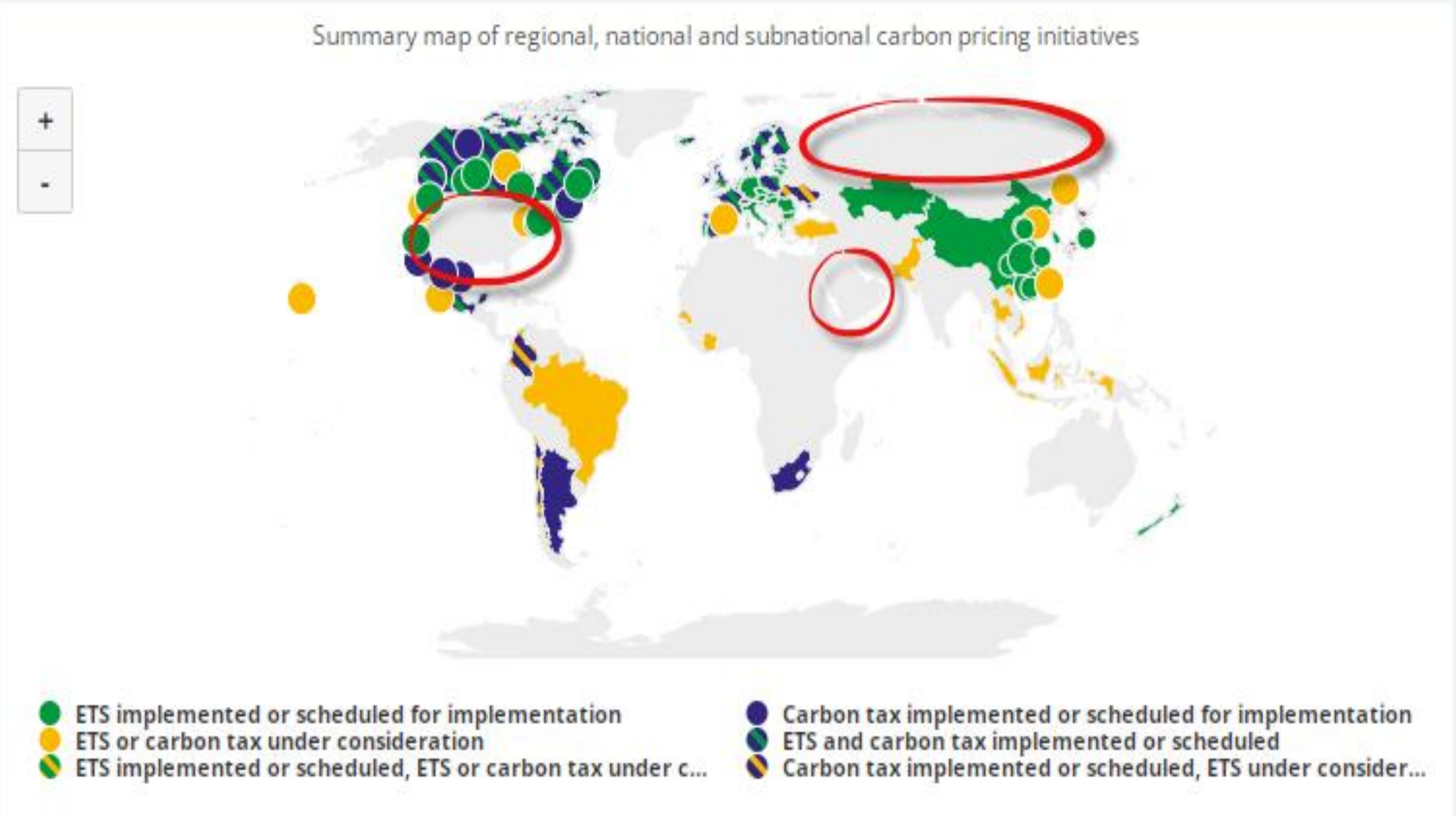

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“The Prize” or the “Bump in the Road”?

- A question of when and not if….
- Benefits?
- Consequences?
- Opportunities?

Questions?
Thank you!

- Michael E. Moore
- Program Director US Energy Association
- Washington, DC
- www.usea.org
- mmoore@usea.org

Carbon Pricing can take different forms and shapes.

- Carbon pricing refers to initiatives that put an explicit price on GHG emissions, i.e. a price expressed as a value per ton of carbon dioxide equivalent (tCO_2e).
- Considering different carbon pricing approaches:
- An emissions trading system (ETS), on the one hand, provides certainty about the environmental impact, but the price remains flexible.
- A carbon tax, on the one hand, guarantees the carbon price in the economic system against an uncertain environmental outcome.
- Other main types of carbon pricing offset mechanisms, results-based climate finance (RBCF) and internal carbon prices set by organizations.
- Scaling up GHG emission reductions and lowering the cost of mitigation is crucial to decarbonize economies. Given the size and urgency imposed by the climate challenge, a full range of carbon pricing approaches will be required, alongside other supporting policies and regulations.

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