Advanced Financial Instruments for Sustainable Business and Decentralized Markets

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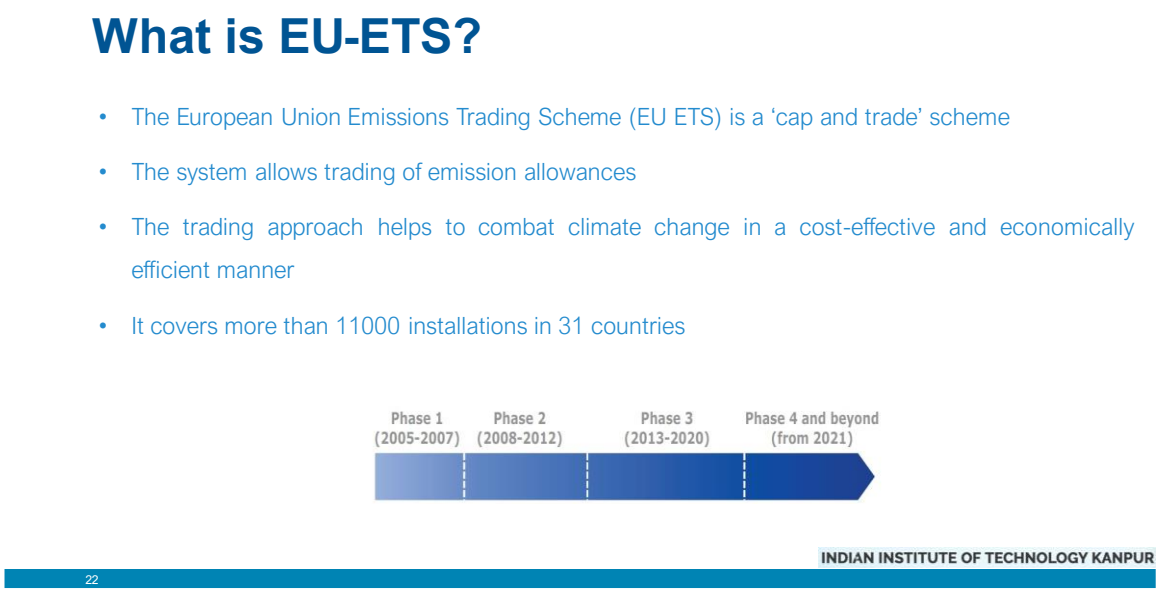
Week 5
Lecture No. 15

In this lesson, we will introduce the European Union Emission Trading System and its evolution over the three phases of its implementation. We will also discuss the role of the European Union Emission Trading System in emission reduction objectives. Each phase of EUETS implementation or European Union Emission Trading System implementation had certain objectives related to carbon pricing and emission reduction. We will discuss these in detail. We will also discuss the key features of EUETS across all the three phases of its implementation and the carbon pricing over these three phases. Next, we will discuss the EUETS annual cycle pertaining to monitoring and reporting and verification of emission allowances.

We will also discuss the methods of allowance allocation, namely free allowance allocation through benchmarking and grandfathering and auction method of allowance allocation. We will also discuss some of the important advantages and disadvantages of these methods. In this video, we will introduce the European Union Emission Trading System, its features and its implementation over the four phases.



To begin with, the European Union Emission Trading System or also referred to as Emission Trading Scheme is a cap-and-trade system as we have noted earlier. It caps the

total volume of greenhouse gas emission from the responsible installations for around 50% of the overall European Union greenhouse gas emissions. So, it covers around 50% of emissions. The system allows trading of emission allowances so that the total emission of the installation stays within the cap and the least cost measures can be taken up to reduce emissions in an efficient manner as we have discussed in the previous videos. Now therefore, this EUTS is a major tool of European Union in its efforts to meet emission reduction targets now and in the future as well. The trading approach helps to combat climate change in a cost effective and economically efficient manner.

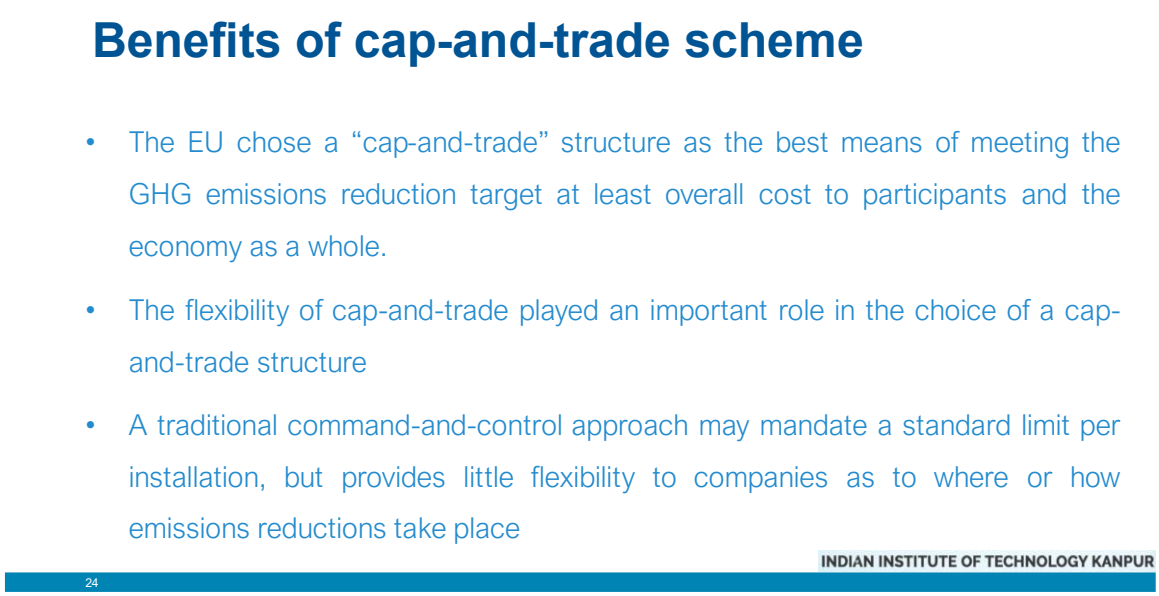
As the first and one of the largest emission trading systems across the world, it is the largest and most successful trading system for reducing greenhouse gas emissions or what we call as GHG, greenhouse gas emissions. It covers more than 11,000 installations in 31 countries, European countries. The system was first introduced in 2005 and has gone several changes since then. The implementation of the system has been divided into four phases over time and these phases are as follows.

First phase ran from 2005 to 2007. It was a three-year pilot phase aimed to create infrastructure for the free trade of carbon and establishing its pricing mechanism. This phase was marked with lower carbon prices as supply exceeded demand many times in the absence of reliable emission data. In the first phase, phase 2 ran from 2008 to 2012. In the previous pilot phase 1, it served to create headways in recording verified direct emissions data which proved very useful for phase 2. Using this emissions data, regulators created an emissions cap for various firms and reduced the carbon allowance supply. However, 2008 global financial crisis resulted in dampened economic activities leading to lower demand for carbon allowances driving prices further down. Next, we have phase 3 which ran from 2013 to 2020. The oversupply of carbon allowances in phases 1 and 2 laid the foundation of this phase which mainly focused on regulating the excess supply. This phase experienced an increase in carbon prices on the back of reforms such as backloading, market stability reserve and annual reduction of carbon allowance cap among others. This we will discuss in more details in subsequent discussions.

Currently, we are in phase 4 which is from 2021 and beyond up till 2030. So currently we are in phase 4. The fourth phase introduced more stringent policy measures to reduce carbon emissions. For example, the allowance supply cap will reduce at a higher rate of 2.22% every year compared to 1.74% earlier. So earlier it was 1.74% per year, now it has increased to 2.22%. This phase also focused on providing funding mechanisms for low carbon innovations to help energy intensive sectors in their transition to low carbon economy.

To summarize, in this video we introduced the European Union Emission Trading System and we also discussed some of its key features and its evolution across their four phases.

We noted that in initial phases, the pilot phase and phase 2, the scheme was evolving, and it has certain features which adversely affected prices such as oversupply of allowances leading to lower prices. However, from phase 3 and now in phase 4, the scheme has evolved and matured leading to more efficient pricing which is linked to carbon emissions. In this video, we discussed the benefits of EU-ETS Cap and Trade scheme. We tried to answer the question why you chose a cap and trade structure and also what are the direct explicit benefits of this scheme to EU over short to medium term as well as on long term.



To answer this question why you chose a cap and trade structure, you chose this as the best means of meeting the GHG or greenhouse gas emission reduction target at least overall cost to participants and the economy as a whole. It allows a set of environmental outcomes to be achieved at the lowest cost. A traditional command and control approach may mandate a standard limit for installation but provides little flexibility to companies as to where or how emission reduction objectives would be met. A taxation regime does not guarantee that these greenhouse gas emissions or reduction targets will be achieved in a multinational system agreement that kind or custom really that would be required across all countries on the right price for the carbon. It is also very difficult to determine the right price of carbon to obtain the cut in emissions without under or over charging companies or installations.

Benefits of cap-and-trade scheme

- *Certainty about quantity.*
- GHG emissions trading directly limits GHG emissions by setting a system cap that is designed to ensure compliance with the relevant commitment
- *Cost-effectiveness:*
- Trading reveals the carbon price to meet the desired target
- *Revenue:*
- If GHG emissions allowances are auctioned, this creates a source of revenue for governments
- *Minimizing risk to Member State budgets:*
- The EU ETS provides certainty to emissions reduction from installations responsible for around 50% of EU emissions

So it offers a sort of flexibility which plays a very important role. That is the trading allows companies in the system to determine what the least cost option is for them to meet a fixed cap. The carbon price is then set by the market or in a market-based mechanism through trading and based on a wide range of factors. The flexibility of cap and trade combined with other key benefits played a very important role in the choice of cap-and-trade structure. Let us now discuss some of the explicit benefits of this scheme.

Let us now highlight some of the explicit benefits of the cap-and-trade scheme. To begin with we have certainty about quantity that is JG emissions trading directly limits the greenhouse gas emissions by setting a system wide cap that is designed to ensure compliance with the relevant commitment. That is there is certainty about the maximum quantity of greenhouse gas emissions for the period of time over which system caps are set. This is relevant for supporting the EU's international objectives and obligations and achieving environmental goals. Next, we have cost effectiveness.

Trading reveals the carbon price to meet the desired target. The flexibility that trading brings means that all firms face the same carbon price and ensures that emissions are cut where it costs least to do so. Next, we have revenues. If greenhouse gas emission allowances are auctioned, this creates a source of revenue for governments. At least 50% of which is expected to be used to fund measures to tackle climate change in the EU and other member states.

Lastly, we have minimizing risk to member state budgets. The European Union emission trading system provides certainty to emission reduction from installations responsible for around 50% of EU emissions. This reduces the risk that member states will need to

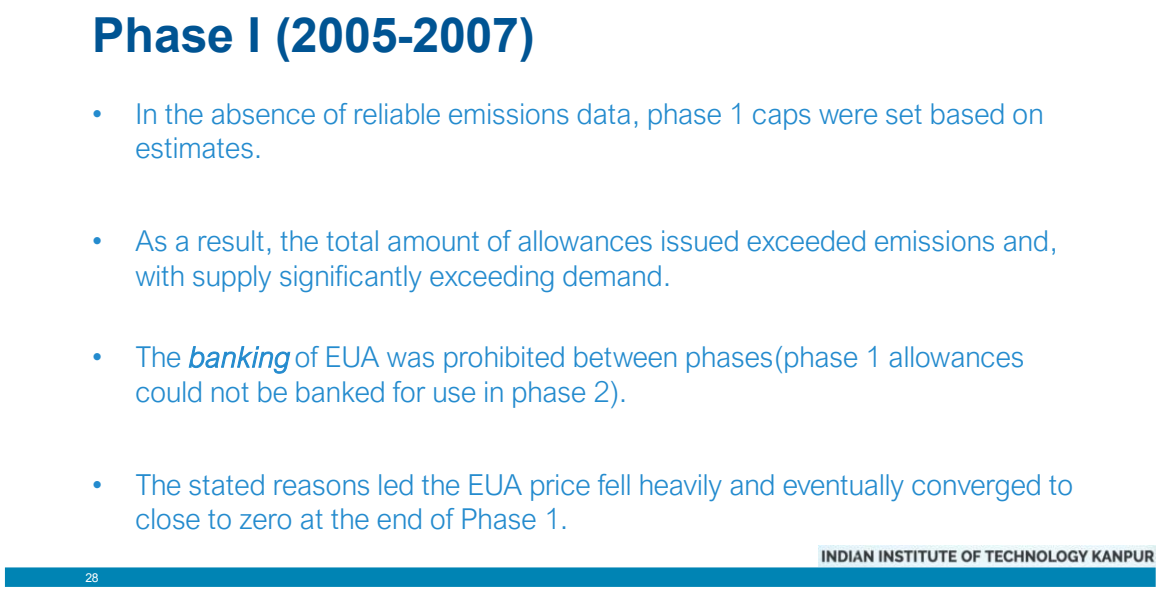
purchase additional international emission units to meet their international commitments under the quota protocol. To summarize this video, we discussed four explicit benefits and the flexibility that is available because of this cap and trade-based trading scheme to EU and that is why it chose this cap and trade based scheme. These benefits included certainty about the quantity related to the targeted emission reductions, its cost effectiveness, its auxiliary revenue potential and also minimizing risk to member state budgets for meeting their international commitments.

In a series of next few videos, we will discuss the evolution of EU-ETS in a phase wise manner starting from phase 1. EU-ETS was set up in 2005. It is the world s first international emission trading system and now currently it is in fourth phase running from 2021 to 2030. Let us start by discussing the history of EU-ETS. The Kyoto Protocol of the UN Framework Convention for Climate Change that is UNFCC was agreed upon in 1997 and it set the legally minding greenhouse gas reduction targets or what we call as CAPs for 37 industrialized countries for the first commitment period which runs from 2008 to 2012.

This led to the need for policy instruments to meet the Kyoto commitments. In March 2000, the European Commission presented a green paper on greenhouse gas emissions trading within the European Union. The first ideas on the designs of EU ETS were presented in this paper. This paper served as a basis for numerous stakeholder discussions that helped shape the EU ETS in the first phases. This led to the adoption of EU ETS directive in 2003 and introduction of EU ETS in 2005.

The CAPs or the targets on allowances was set at national level through what we call as national allocation plans. The first phase of EU ETS from 2005 to 2007 was considered as

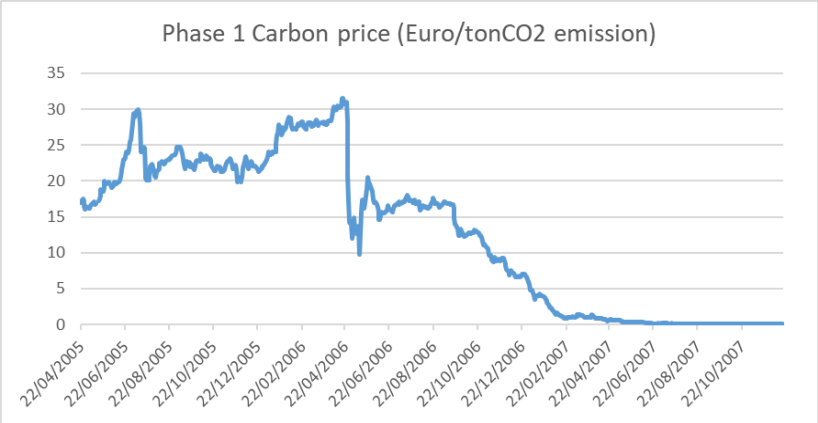
a pilot phase. This phase was used to test price formation in the carbon market and to establish the necessary infrastructure for monitoring, reporting and verification of emissions what we call as MRV, M for monitoring, R for reporting and V for verification. The CAP in this phase was largely based on estimates as there was no reliable emission data available. In this phase, it was a three-year kind of pilot for what we call as by learning by doing to prepare for phase two when the EU ETS would need to function effectively to help EU meet its Kyoto targets.



Let us discuss some of the key features of phase one. Phase one covered only CO2 emissions from power generators and energy intensive industries. Also, almost all allowances were given to businesses for free. We will discuss some of these concepts later as well. The penalty for non-compliance was 40 euros per ton of carbon emission.

Now this phase one, it succeeded in establishing a price for carbon, a reliable price for carbon. Also, it established free trade in emission allowances across EU through this EU ETS scheme. And also it provided the much needed infrastructure to monitor, report and verify emissions from the businesses covered. However, in the absence of reliable emission data in phase one, caps were set on the basis of estimates only. As a result, the total amount of allowances issued exceeded the emissions and therefore it resulted in poor supply, which significantly exceeded the demand for permits.

Phase I – EUA prices



And then in 2000, the prices of allowances fell to zero because of this precise issue because phase one allowances could not be banked for using phase two. We will discuss the concept of banking later as well, but essentially it meant carry forwarding of current allowances in the subsequent phases. In the absence of banking, all such poor supply of allowances became worthless, and prices fell to zero. As you can see here in this diagram, we were able to set up some kind of price around 30 euros, which though was fluctuating but stabilizing, but suddenly because of the oversupply there was a sharp fall. It felt in this around 2006 April, it fell to 10 and then again it fell to zero.

This was in 2007, this sharp fall to zero reflected that oversupply of these emission permits as compared to the emission. So, supply exceeded demand, supply far exceeded the demand because there were more UAs while demand was less, this demand was established based on the verified emissions data that was in the public and subsequently prices fell. To summarize in this video, we introduced the evolution of EU-ETS scheme in phase one. We noted some of its key features and some of its achievements what it established. We also noted some of the problems in this phase related to pricing, particularly the oversupply of permits as compared to the demand leading to sharp price fall.

Phase II (2008-2012)

Key features

- Phase 2 coincided with the first commitment period of the Kyoto Protocol
- Lower cap on allowances, more new countries joined
- The proportion of free allocation fell slightly to around 90%
- The penalty for non-compliance was increased to €100 per tonne
- Businesses were allowed to buy international credits totaling around 1.4 billion tonnes of CO2-equivalent

In this video, we will discuss the evolution of EUTS in its phase two. The second phase of EUTS ran from 2008 to 2012, the same period as the first commitment period under Kyoto Protocol. From 2008, businesses could also use emission reduction units generated under Joint Implementation, that is JI to fulfill their obligations under EUETS. This made the EUETS the largest source of demand for CDM which is Clean Development Mechanism and JI emission reduction units. We will discuss these concepts related to CDM, Clean Development Mechanism and JI, Joint Implementation in subsequent videos.

Phase II (2008-2012)

Key features

- Union registry replaced national registries and the European Union Transaction Log (EUTL) replaced the Community Independent Transaction Log (CITL)
- The aviation sector was brought into the EU ETS on 1 January 2012
- Verified annual emissions data from the pilot phase was now available
- However, the 2008 economic crisis led to emissions reductions that were greater than expected.

Towards the end of phase two, the scope of EUTS was expanded by including aviation as well. Let us discuss some of the key features of this phase two. First and foremost, this phase two coincided with the first commitment period of Kyoto Protocol where the

countries in the EUTS had concrete emission reduction targets to meet. Second, the lower cap on allowances was available that is somewhat around 6.5% lower as compared to 2005. And new countries joined including three particularly Iceland, Liechtenstein, and Norway. So three countries joined. Also, nitrous oxide emissions from the production of nitric acid are included by a number of countries. Next, the proportion of reallocation fell slightly to around 90%. Several countries started holding auctions which also acted as source of revenue.

The penalty for non-compliance was increased to 100 Euro per ton. And then businesses were allowed to buy international credits totaling around 1.4 billion tons of CO2 equivalent. Another important feature was that Union Registry replaced National Registries and the European Union Transaction Log replaced the Community Independent Transaction Log. Deviation sector was brought into the EUTS on 1st January 2012 although application for flights to and from non-European countries was suspended for 2012.

Importantly, because now verified annual emissions data on the pilot phase was now available, the cap on allowances was reduced in phase two based on actual emissions. However, in 2008 economic crisis, the crisis led to emission reductions that were far greater than expected and this led to a large surplus of allowances and excess credits which weighed heavily on the carbon price through phase two resulting in a slight decrease in prices in 2008. To summarize, in this video, we introduced the evolution of phase two from 2008-12 which fell around the same time as first commitment of the Kyoto Protocol. We noted that the EUETS scheme expanded with a number of changes and improvements during this phase. However, still some concerns remained particularly driven by the 2008 economic crisis.

Phase III (2013-2020)

Key features

- The reform of the ETS framework for phase 3 (2013-2020) changed the system considerably compared to phases 1 and 2
- A single, EU-wide cap on emissions in place of the previous system of national caps (NAPs)
- Auctioning as the default method for allocating allowances (instead of free allocation)

In this video, we will discuss the evolution of EUTS around its phases three and four. Phase three running from 2013-20. The third phase of the EUTS was shaped by the lessons learned from the previous two phases, phase one and two and in particular significant efforts were taken to improve the harmonization of scheme across the EU following a review of EUTS agreed upon in 2008. In phases one and two running from 2005, so phase one ran from 2005-07 and phase two ran from 2008-12 which was the first commitment period. Free allowances were allocated according to member state specific national allocation plans or what we call as NAPs.

During the first phase of EUTS, the process of preparing these NAPs was found to be time complex and not sufficiently transparent and harmonized. Therefore, the European Commission emphasized the need to make phase two NAPs simpler and more transparent and more harmonized and therefore from third trading period onward which began in 2013 up till 2020 NAPs are no longer used. Instead, the location is determined through common rules agreed directly at EU level and member states were required to prepare an allocation plan now which is known as National Implementation Measures or NIMs, National Implementation Measures document. The third phase which is running from 2030 to 2020, it coincides with the Kyoto Protocol second commitment period as agreed in Doha in December 2012. The EU is one of the jurisdictions that has committed to a target under the second commitment period and the EUTS will be key in achieving that target.

Phase III (2013-2020)

Key features

- Harmonised allocation rules applying to the allowances still given away for free
- 300 million allowances set aside in the New Entrants Reserve (NER)
- The Union-wide cap for stationary installations decreased each year by a linear reduction factor of 1.74%. The 2013 cap was set on the basis of the average total quantity of allowances issued annually in 2008-2012

Nonetheless, the EUETS is defined by EU legislation and operates independently of the actions of other countries under the UNFCC, United Nations framework, underlining the commitment of the EU to tackle climate change. The EUETS does not have an end date and continues beyond phase three and currently is running in phase four. So, the reform of the ETS framework in phase three changed the system considerably from phases one and two and let us discuss some of the key features of this. To begin with, a single EU-wide cap on emissions was put in place of the previous system of national caps. Second, auctioning as the default method for allocating allowances was chosen instead of free allocation.

First allocation rules were applied to the allowances still given away for free. More sectors and gases were included. Three million allowances set aside for new interests reserved to fund the deployment of innovative renewable energy technologies and carbon capture and storage through the NER 300 program. In phase three of EUTS, which is running from 2013 to 2020, the European Union wide cap for stationary installations decreased each year by a linear factor of 1.74 percent. The 2013 cap was set on the basis of the average total quantity of allowances issued annually in 2008 to 2012. Coming to phase four, some of the key features for phase four were as follows. The allowance supply cap was supposed to reduce at a higher rate of 2.2 percent each year as compared to 1.74 percent earlier. As of 2021, emissions from UK installations previously covered by EUTS are no longer considered in the cap. The initial volume of NER at the start of phase four amounted to 331 million allowances. This included unallocated allowances from phase three and 200 million allowances from the market stability reserve, MSR. We will discuss this MSR concept in subsequent discussions. Unlimited banking has been allowed since 2008, but borrowing is not allowed explicitly.

Phase IV (2021-2030)

Key features

- The allowances supply cap will reduce at a higher rate of 2.22% every year, compared to 1.74% earlier
- The initial volume of the NER at the start of Phase 4 amounted to 331.3 million allowances
- Unlimited banking has been allowed since 2008. Borrowingis not allowed
- As of 2020, the EU ETS and the Swiss ETS are linked

However, implicit borrowing within trading periods is allowed, which is the use of allowances allocated in the current year for compliance in the previous year. As of 2020, EUTS and the Swiss ETS are linked, which means that allowances issued in one system can be surrendered for emissions generated in either of the two systems. The linking agreement between the EU and Switzerland sets out the conditions and requirements under which the two systems are linked. A direct link was created between the registries of both the systems, which allowed regulated entities to transfer allowances from one account in one system to another account in the other system. These transfers are planned, generally taking place twice a month.

To summarize this video, we noted that EUTS scheme which was implemented earlier in phases one and two considerably improved in phases three and four. In particular, the number and amount of installations and gases that were covered that improved substantially. Moreover, the scheme became more efficient and seamless across different member nations as policies were streamlined and also the targets that were supposed to achieve within a given timeframe were accelerated. In this video, we will discuss the evolution of EUTS. In particular, we will focus on the price and volume and trading volume dynamics at European Union Emission Trading System.

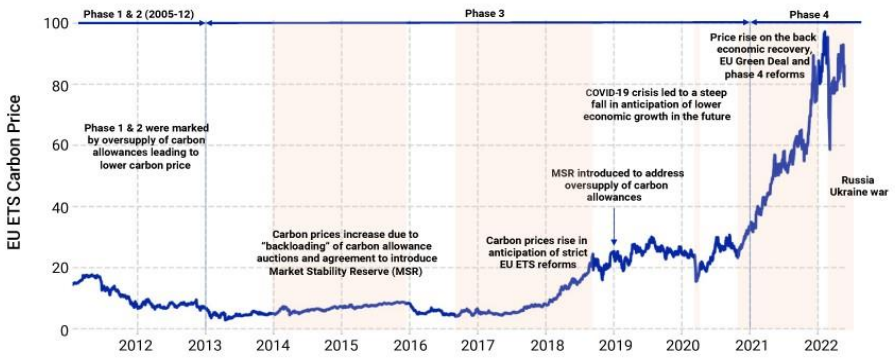
To begin with, in the back of robust fundamentals, the market in emission allowances developed very strongly from the beginning. In phase one, the trading volumes rose from 321 million allowances to 1.1 billion allowances in 2006 and 2.1 billion allowances in 2007. So, 1.1 to 2.1 according to the World Bank s annual carbon market reports. In fact, the European Union Emission Trading System remained the main driver of the international carbon markets during phase two. For example, in 2010, European Union

allowances accounted for almost 85% of the value of the total global carbon market. Trading volumes jumped from 3.1 billion in 2008 to 6.3 billion in 2009, a phenomenal jump. In 2012, 7.9 billion allowances were traded, which was 56 billion euros. In fact, the daily trading volumes exceeded 70 million in mid of 2011, indicating very strong liquidity and trading activity in the market. However, this period was also characterized by certain price dynamics that is interesting to note.

During the early phases, phases one and two, they were characterized by the oversupply of carbon allowances and this led to the expectation that demand is less while supply is more and therefore lower carbon price as we can see here in phase one and two. In fact, the previous price also fell to close to zero, as we discussed earlier, but around by the end of phase two, it was hovering around $20. Now gradually as market dynamics was understood and market regulators understood how prices were working, they tried to resolve this problem of oversupply and certain mechanisms such as backloading of carbon allowance of auctions, as well as introduction of MSR led to expectations that in future, the supply will not exceed the demand and therefore there was a strong recovery happening there onwards. This recovery was predominantly in anticipation of a lot of reforms such as this backloading of allowances, market stability reserve and various other reforms. Particularly, as you can see when MSR market stability reserve was introduced to address this problem of oversupply of carbon allowances, there was a very strong recovery.

However, around this period, around 2020, because of COVID, there was a sharp fall. Because it was expected due to crisis, economic activity and economic growth would be lower and therefore demand of these allowances would be lower while given the supply because supply was well planned in advance, there will be more supply so prices fell but again, after COVID period was over, there was a strong recovery. And also there were certain reforms which are visible in the form of this very strong rise in the prices. Although here this was the period of Russia Ukraine war and tumultuous economic activity in the Euro region. So because of this, there is increase in volatility and sharp fall here but in general, the expectation are that once these geopolitical crisis situations will stabilize, prices will again see a steady recovery and low volatility periods characterized by good market quality.

Evolution of EU-ETS



Source: https://www.msci.com/www/blog-posts/introducing-the-carbon-market/

Now, let us summarize what has happened in phase one to four in a more structured manner. First, it is phase one, which ran from 2005 to 2007. This phase one was a three year pilot phase, it was a pilot phase test phase, which aimed at creating an infrastructure for free trade of carbon and establishing its pricing mechanism. This this particular phase was also marked with lower carbon prices as supply exceeded the demand in the absence of reliable M-section data. Next, we come to phase two, which ran from 2008 to 2012. The pilot phase one sought to create headways in recording verified direct emissions data, which proved to be useful in phase two. Using this emissions data regulator created an emission cap for various firms and reduce the carbon allowances supply. Although 2008 global financial crisis resulted in lower and dampened economic activities, leading to lower demand for carbon allowances driving the prices down. Next, we come to phase three that ran from 2013 to 2020. In this period, in this particular phase three, the oversupply of allowances in phase one and two laid the foundation of this particular phase.

A lot of learning happened, which mainly focused on regulating the excess supply. So, this phase experienced an increase in carbon prices with these reforms. On the back of reforms such as backloading, market stability reserve and annual reduction of carbon allowance cap and so on. So, this led to a robust recovery of prices.

Lastly, we have phase four, which ran and currently running. It starts from 2021 and will go up till 2030. This fourth phase introduced more stringent policy measures to reduce carbon emission. For example, the allowances supply cap will reduce at a higher rate at 2.22% every year as compared to 1.7% earlier. This phase also focused on providing funding mechanisms for low carbon innovations to help energy intensive sectors in their transition to low carbon economy. So overall, we can say the EU-ETS scheme started with

its robust fundamental though initial period there were certain hiccups but now as we move ahead in the fourth phase, we move in the fourth phase, the prices and trading activity has to a great extent achieved their objectives, the prices are linked to economic activity and they reflect the scarcity of environment, its ability, the environment's ability to absorb greenhouse gases, which is nicely and very efficiently captured in the carbon pricing. So the prices in a way we can say have become efficient and attain its objective. And given the trading volumes are so large, it almost account for more than 85% of the global carbon market dynamics. So it's a very important and most successful carbon market, EU-ETS as we have understood.

EU-ETS compliance cycle

The annual procedure of monitoring, reporting and verification (MRV), together with all the associated processes, is known as the ETS compliance cycle.

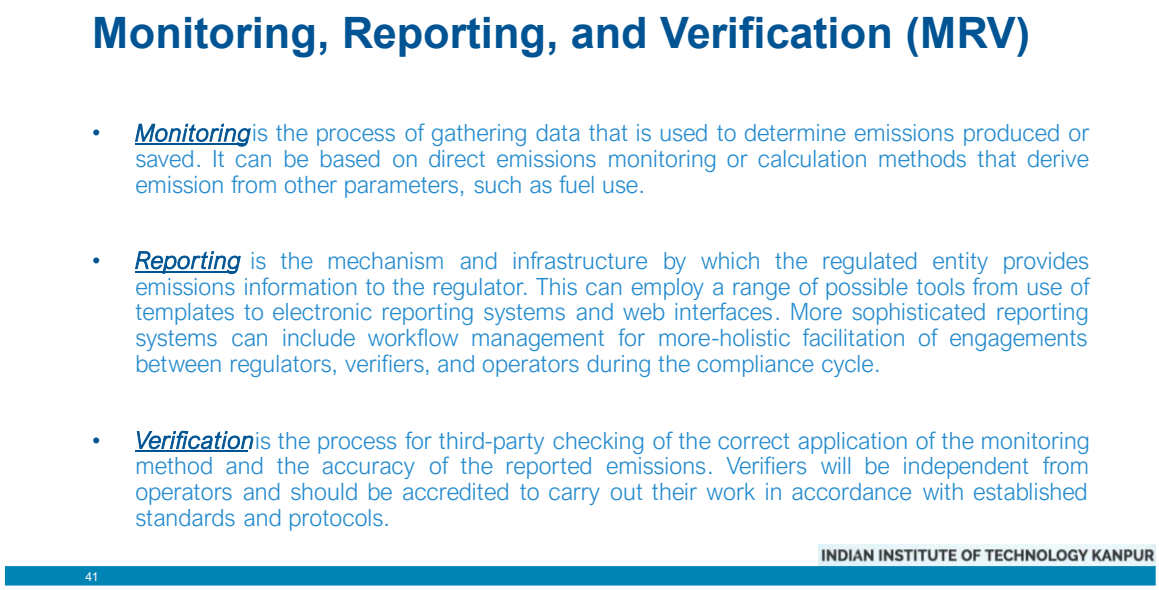
EU-ETS Handbook
Source:
http://ec.europa.eu/clima/policies/ets/index_en.htm

In this video, we'll introduce EU-ETS compliance cycle. This compliance cycle runs for the entire calendar year from January to December and it employs three very important steps of monitoring, reporting and verification that we are going to explore in more detail. To begin with this EU-ETS compliance cycle starts with the calendar year in first of January, which is the start of monitoring for the period of current year. Next important date is 28th February, where the launches are received. These can be free allowances. When the installations receive these free allowances for the current year emissions, often the installations borrow these allowances for previous years' emission, for meeting previous years' emission targets, they often use them as borrowing so that this 28th February allowance received also help in that.

On 31st of March, they are submitting the verified emissions report to competent authority for the previous year and also the entries of verified emission data in the registry. So the verified emission data is entered and emission reports are submitted, verified emission reports are submitted. On 30th April allowances are surrendered for the previous year. So depending upon the emission levels in the previous year, the allowances are submitted. In

fact, the operators installations they are requested by their competent authorities to submit these verified emission reports of the previous year as early as 28 February, which is this.

On 30th June, by June, they are supposed to submit their improvement or non-confirmity reports. So if there is any non-confirmity, that report is to be submitted corresponding to the previous year by to competent authority. By the third quarter, the verifier is expected to start the verification process for the current year. So the current year verification starts by third quarter. And by December end, it is expected to prepare the annual emission report for the current year.



The entire process of continuous monitoring plus trading and the verification takes place through the entire year. If there are any changes that also continuously take place, if there are any changes to then approval is needed in the current monitoring plan through the year so that those changes need to be incorporated. But this continuous monitoring, reporting and verification process runs like this. And this entire process ends on 31st December. And all the entire data of monitoring and any changes are submitted to the competent authority.

So the entire process are three very important components, monitoring, reporting and verification of the data. This along with all the associated processes is known as ETS compliance cycle as we discussed the entire cycle of monitoring, reporting and verification. Let us discuss the three components of this process individually. So first we have monitoring.

This is the process of gathering data that is used to determine emissions produced or saved. It can be based on direct emissions monitoring or calculation methods that derive

emissions from other parameters such as fuel use. Then we have reporting. Reporting is the mechanism and infrastructure by which the regulator entity provides emissions information to the regulator. This can employ a range of possible tools from use of templates to electronic reporting systems and web interfaces. In fact, more sophisticated reporting system can include workflow management for more holistic filtration of engagements between regulators, verifiers and operators during this entire compliance cycle.

And lastly, we have verification process. As part of verification process, it requires third party checking of correct application of the monitoring method and accuracy of the reported emissions. Verifiers will be independent from operators and should be accredited to carry out their work in accordance with the established standards and protocols. So, to conclude this MRV or monitoring reporting verification system, it is at the core of ETS. This MRV system is at the core of emission trading system as it is essential to assure the environmental integrity of the system. It is how participants determine their emissions and the number of allowances that they must surrender.

So this MRV or monitoring reporting verification system underpins the demand for allowance in the market and robust MRV systems build confidence in the market that emission reductions are real and accurate. To summarize this video, we introduced the concept of MRV which is monitoring reporting and verification as an integral part of UTS compliance cycle. We also discussed how over the entire calendar year from January to December, the EUETS compliance cycle runs with different steps.