#### CHAPTER III

# EUROPEAN EMISSIONS DIRECTIVE AND THE LINKING DIRECTIVE

This chapter explains the Union's response on the issue of climate change by establishing the European Directive of 2003/87/EC as a guidance for the Union's member states in doing the emissions trading. This chapter also discusses the Union's commitment to the Kyoto Protocol. Moreover, this chapter describes the European Linking Directive of 2004/101/EC as a basis of the Clean Development Mechanism projects they are doing with the developing countries as alternative means to reduce the Union's GHGs emissions level.

## A. European Union's Response on Climate Change

As the developed countries, the European countries are also acknowledging the fact that they owe the rest of the world the historical debts they should pay. The formation of the EUETS by the European Union Commissions or the Commission and the European Parliament or the Parliament cannot be separated from the development of climate change issues in international relations and international politics. EUETS was launched after the Commission's proposal of December 2002 and the Directive 2003/87/EC were

adopted in March 2003 and were approved by the Parliament on 2 July 2003 to be formally launched and operated in 2005.<sup>13</sup>

Many assumed that EUETS' formation by the European Community was ultra-quick if things were viewed from the making of Kyoto Protocol in 1997. At that time, there were two opposing positions from the two main actors of international politics, the European and the American side in the third COP in Kyoto. The European Community opposed the idea of the emissions trading that was promoted by the United States of America as one of NEPI that can solve the climate change problems.

The Kyoto NEPI or the IET was introduced based on the United States of America's experience on the permit trading in the acid rain program. The US which believes in free-market environmentalism approach and to use the free-market solutions for the issues. The US views that the emissions trading could be the best policy to cope with the climate change. The US also believes that with the limited tradable permit to emit certain gases, the government of states can control the total quantity of the gases that are emitted on local, national or even international level.

Hill, Malcolm, The European Union's Emissions Trading Scheme: A Policy Response to the Kyoto Protocol. 2006, retrieved on June 30, 2010, taken from <a href="http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=1&hid=110&sid=33be3a45-4ea0-43de-acfe-14cee4f80420%40sessionmgr111">http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=1&hid=110&sid=33be3a45-4ea0-43de-acfe-14cee4f80420%40sessionmgr111</a>

Driven by the business communities, the United States focuses on the market incentives and voluntarism with lesser emphasize on regulations. This market-based mechanism enhances the pursuit of profits from the valuable commodity permit to emit which is very attractive for the business communities supporting the US' government. This, the government believes would encourage the voluntary actions of the business communities to reduce their emissions level.

On the other hand, the EU believes in the regulatory solutions to address climate change issue. The Union strongly supports the stringent and quantified emissions reduction as the best way to cope with the climate change issues. EU then has developed environmental policies on the basis of regulations, the directives within the EU and together overcome the environmental dumping and the transaction costs problems that are related to climate change issue. Moreover, the EU argues that heavy reliance on market based solutions would misallocate the natural resources and produce inadequate incentives to prevent environmental degradation. The Union decided to avoid possibility of the market failure by setting the prevention actions than the cure and by solving the problem from the core issue, which is reducing the GHGs emissions. With the mixed competence that the member states have, the Union decided to apply the 'burden-sharing' agreement.

Damro, Chad, and Luaces-Mendez, Pilar, The Kyoto Protocol's Emissions Trading System, 2003. Retrieved on July 1, 2010, taken from <a href="http://www.ucis.pitt.edu/euce/pub/workingpapers/Kyoto\_2003.pdf">http://www.ucis.pitt.edu/euce/pub/workingpapers/Kyoto\_2003.pdf</a>

The signing of US' delegation to the Protocol did not bring any effects because after Bill Clinton being impeached by the House of Representative from the presidency, and being replaced by G.W. Bush on January 20th, 2001, US delegation did not make any further support by ratifying it. Under G.W. Bush's administration, US' delegation rejected the Protocol through the Byrd-Hagel Resolution. The Resolution states that the US will not ratify the agreement to reduce GHGs emission because this could be detrimental to the economics of the United States. In this Byrd-Hagel Resolution, US Senate also expresses their disappointment to the Convention in which China, Mexico, India, Brazil and South Korea are classified as the developing countries. Based on that, they then have no responsibilities to reduce their GHG emissions whereas US considers those states emitted GHG emissions that reach dangerous level also. In conclusion, the US will not ratify the Protocol unless there will be meaningful involvement from the developing countries to be actively involved in the global effort to cut the emission level that may cause climate change. 15

US' withdrawal from the Protocol has encouraged the EU to show its leadership on international politics related to climate change issue. The EU has determined to be a pioneer of the GHGs emissions trading to show its true willingness to combat climate change. However, without the experience on the

<sup>&</sup>lt;sup>15</sup> Byrd-Hagel, retrieved on March 31, 2010 from <a href="http://www.nationalcenter.org/KyotoSenate.html">http://www.nationalcenter.org/KyotoSenate.html</a>

similar fields, the Union decided to borrow and develop the NEPI presented at the Protocol.

## B. European Union's Commitment as Annex 1 of Kyoto Protocol

Having the statement to be fully willing to cope with the climate change issues and problems, the European countries are hoped to take real actions in combating the climate change issues.

Adopted on December 11<sup>th</sup>, 1997, the Kyoto Protocol was opened for the ratification on March 16<sup>th</sup>, 1998. It is stated in the Article 25 of the Protocol that the Protocol will enter into force after 90 days from the day at least 55 of parties ratified the Protocol and at least 55% emitting countries of total emissions from 1990, as the base year of the Protocol.

The European Community ratified the Protocol on April 29<sup>th</sup>, 1998 and furthermore, signed the Protocol on May 31<sup>st</sup>, 2002. This reaffirms the Union's commitment to pursue multilateral solutions to the global concern of climate change. The ratification papers are deposited at the UN Headquarters in New York by the Spanish President of the Union's Environment Council, Jaume Matas, and the EU Environment Commissioner, Margot Wallstrom and several of EU's environment ministers.

Margot Wallstrom and the Minister Matas state that the Union's ratification on the Protocol is a clear indication that with political will and

collective social effort, the Union has committed to the global framework to address climate change.

European countries accounted for 2.765 million tons of CO<sub>2</sub> emissions in 1990, or comprised 20% of Annex 1 parties' total emissions. <sup>16</sup> Using the bubble concept, the member states' emissions are not viewed individually, but as a whole of economic regional group. The Union has committed to reduce their emissions level up to 8% from the base year, 1990 by 2012.

As Annex 1 parties of the Kyoto Protocol, the Union may use the mechanisms the Protocol supplies to cut their GHGs emissions level. The Union may use the International Emissions Trading, Clean Development Mechanism, or the Joint Implementation to achieve their commitment under the Protocol in its commitment periods.

## C. Formation of European Union Emissions Trading Scheme

Early signal of the Union's response on climate change can be seen back at 1998 after the Third COPs that was held in Kyoto, Japan. The Union focused on its role in combating climate change and thought of the proper mechanisms to be applied. The European Commission's proposal on the emissions trading was submitted on June 1998. Through the 1998 Communication, Bjerregaard, the Environment Commissioner of the Union, stated that the Union should be really

<sup>&</sup>lt;sup>16</sup> Hill, Malcolm, The European Union's Emissions Trading Scheme: A Policy Response to the Kyoto Protocol, Journal of Contemporary European Studies, 2006, Routledge. Taken from <a href="http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=1&hid=110&sid=33be3a45-4ea0-43de-acfe-14cee4f80420%40sessionmgr111">http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=1&hid=110&sid=33be3a45-4ea0-43de-acfe-14cee4f80420%40sessionmgr111</a>, retrieved on June 30th, 2010

involved in the emissions trading and should not let other actors of international politics to dictate the rules on how to address the climate change issue.

The discussion was then continued with the Green Paper on March 2000. Green Papers that are published by the Union are meant to be the start of a consultation process for the stakeholders, both the government and non-government to explore certain issues. In the consultation, all the parties share their views and opinions on the given issue to be able to help them to make effective and right decisions. This 2000 Green Paper is under the title, 'Green Paper on greenhouse gases emissions trading within the European Union'. Here, this Green Paper is intended to launch the discussion on the GHGs emissions trading within the Union and the relationship between the emissions trading and other policies as the Union's attempts to cope with the climate change.

There were various responds to this Green Paper that is launched by the Commission. Those responses can be categorized under two groups; the first is the non-governmental submission, and the second is the governmental submission. The non-governmental submission consists of NGOs and the business parties; whereas, the government submission is from the European Parliament, the Economic and Social Committee, and the Committee of the Regions.

The NGO's submission states that the Union, in addressing the issue of climate change, has to achieve the effectiveness by setting, monitoring, and verifying the compliance functions. While, it is obvious that the submission from the business parties highlights their business interests like the GHGs emissions trading should not burden their economic interests.

The governments' outlook generally show their positive responds toward these GHGs emissions trading the Commission has proposed. The Parliament supports the initiation of this emissions trading system to be introduced to the Community to address the climate change. Parliament also expresses its opinion on the allocation methodologies, saying that it should reflect the idea of 'polluter pays'.

The Commission's Directive Proposal on October 2001 is the environmental measure for the project, stating the mandatory system of the emissions trading, the sectors and GHGs that are involved in the project. The allocations of permit to emit and grandfathering are also discussed in the proposal. This set the quantity of the commodity and the penalty given to parties that do not show its good compliance.

The Proposal Directive of EUETS that was proposed in October 2001 suggests that the trading use a mandatory system of limited number of sectors and CO<sub>2</sub> emissions only. It also mentions that the credits or the quantity to emit CO<sub>2</sub> will be allocated through grandfathering with the 1997 Burden Sharing Agreement as the foundation. The penalty for the non-compliance would be 50 Euro or twice the average market price per ton CO<sub>2</sub> emitted above the allocated

allowance. This is to create the eager to cut emissions among the member states of the EU. The Proposal also states that the Clean Development Mechanism and the Joint Implementation credit would be addressed in a subsequent directive.

The next step taken in the decision making process that has been done by the European Union institutions was called the reading. The readings are intended to be the time to read everything about the gotten materials so far, by the Commission and the Parliament. This first reading of the emissions trading took place in October 2002 and results in 80 amendments. The Parliament in this first reading wants to broaden the scope of the scheme to cover more sectors like the chemical industry, aluminum plants and more coverage of the GHGs emissions, like the sulphur dioxide (SO<sub>2</sub>) and nitrogen oxides (NOx). Other amendments were, that the Parliament wanted to set the penalty higher, by choosing the higher between the 50 € or twice of the average market price. The Parliament also stated that the allocation would be by grandfathering mainly but there would be 15% auctioning in 2005-2012 period.

The second reading was held by the Environment Committee in spring 2003. Basically, this second reading is the same as the first reading, unless they amended five key issues. These key issues are the national ceilings for allowances, opt-outs only for installations, not sectors, and an included other

sectors, such as transportation sector; grandfathering until 2008 and then 5% auctioning; the use of CDM and JI should be limited. 17

Mandatory system, with rights to exempt installations, unless vetoed by the Commissions. Start with limited numbers of sectors covered by IPPC, CO<sub>2</sub> only, + optional inclusion of other sectors and gases. Grandfathering mainly – but 5% auctioning up to 2008 and 10% thereafter. Penalty: 40 euro up to 2008; 100 euro after. The use of JI and CDM is 'supplemental to domestic action'. Not addressing the internal links.

The Directive is then formally adopted in July 2003, and is called the Directive 2003/87/EC.

#### C.1. The European Union Emissions Trading Scheme

European Union Emissions Trading Scheme or the EUETS is known for being the first international GHGs emissions trading in the world established to cope with the climate change. This scheme was created by the Union with the good will and commitment to reduce the emissions by using it as the commercial commodities to help the business actors to cut emissions without really being hurt from its economic interests. This is in line with the first article of the Directive 2003/87/EC that "the Directive establishes a scheme for greenhouse gas emission allowance trading within the

Wettestad, Jorgen, 2005, 'The Making of the 2003 EU Emissions Trading Directive: An Ultra-Quick Process due to Entrepreneurial Proficiency?, Massachussetts Institute of Technology.

Community in order to promote reductions of GHGs emissions in a costeffective and economically efficient manner". 18

The idea of the international emissions trading is to cut the emissions emitted by the industrial activities by creating a market based mechanism of a price for carbon through establishment of a cap-and-trade system and liquid market for emissions reductions which regulates the GHGs emissions by giving installations or companies an allowance and a target. The installations or actors have to achieve this target or else they have to choose between buying the unused allowances from other actors or paying the sanctions given by the Union. The Union has put high prices for each ton of GHGs emissions emitted by the actors to encourage them to cut their emissions.

## C.2. Emissions Trading in European Union Emissions Trading Scheme

It is stated in the Directive 2003/87/EC that in the Council Decision of 94/69/EC concerning the conclusion of UNFCCC, the Union is involves in achieving stabilization of GHGs concentrations in the atmosphere at a level which prevents dangerous anthropogenic interference on the climate system through cap and trade system.

Article 9 of the Directive 2003/87/EC states that to begin the cap and trade system of reducing the GHGs emissions, first "each Member State shall develop a national plan stating the total quantity of allowances that it intends

<sup>18</sup> First Article of Directive 2003/87/EC

to allocate for that period and how it proposes to allocate them". 19 Allowance here is defined as "an allowance to emit one ton of carbon dioxide (CO2) emissions equivalent during a specified period". One ton of CO2 equivalent means "one metric ton of CO2 or an amount of any other GHGs with an equivalent global-warming potential". While emission means the "release of GHGs into the atmosphere from sources in an installation". 20

The 4th article of the Protocol emphasizes:

"..member states shall ensure that, from 1 January 2005, no installation undertakes any activity listed in Annex I resulting in emissions specified in relation to that activity unless its operator holds a permit issued by a competent authority". 21

It means that the member states have to regulate the distributions of allowances the Community for each of installation within the regions, its monitoring, and its reporting emissions process.

To begin the operation, first of all each member state will have to periodically submit the National Allocation Plans or the NAP to the Union. NAP is then determines the cap or the limit of the total amount of emissions that installations within the EUETS may emit in each of the member states, and specifies how many GHGs emission allowances each plant will receive. This NAP can be sold or bought by the installations or the companies within the scheme.

Article 9 of Directive 2003/87/EC.
Article 3 of Directive 2003/87/EC.
Article 4 of Directive 2003/87/EC.

The tenth article of the Directive regulates the method of allocation of allowances. It states that for the three-year period beginning on 1 January 2005 member states shall allocate at least 95% of the allowances free of charge. For the five-year period beginning on 1 January 2008, member states shall allocate at least 90% of the allowances free of charge. To allocate the allowance of the GHGs emissions free of charge is to allocate the allowance through grandfathering and benchmarking system.

The NAP itself can be set by three ways, namely; grandfathering, benchmarking, and auctioning.<sup>23</sup> Grandfathering method is the setting of NAPs by each of the member state by referring to their historical emissions approach. The government of each member state would give freely the allowances or permits to emit the CO<sub>2</sub> emissions to companies or entities within their regions based on each of their historic productions, emissions or consumption levels.

On the other hands, the benchmarking method is widely known as a more complex method of setting the NAPs as it is set on the basis of a performance-based standard combined with a certain production or the emission rate. The emission rate itself is often associated with best available

<sup>&</sup>lt;sup>22</sup> Article 10 of Directive 2003/87/EC.

Gilbert, Alyssa, Reece, Gemma, Comparative Analysis of National Allocation Plans for Phase I of the EU ETS, 2006, London. Taken from <a href="http://www.environ.ie/en/Publications/Environment/Atmosphere/FileDownLoad,1310,en.pdf">http://www.environ.ie/en/Publications/Environment/Atmosphere/FileDownLoad,1310,en.pdf</a>. Retrieved on January 26, 2011

technology, but it could also be an average emission rate for the sector. The common feature is that the installations having an emission rate higher than the standard will not receive more allowances. On the other hand, those installations having an emission rate lower than the standard will receive more allowances.

Both the grandfathering and benchmarking method of allocating allowances for the NAP is, therefore, giving the installations within each member states the free allowances. The third method is auctioning, this is different from the other two methods which are free of charge, the auctioning method is the most straightforward and transparent method of allocating allowances, as in auctioning method, the amount of allowances allocated to an installation depends on the price it is willing to pay. So, literally, the parties using the auctioning method have to literally buy the allowances they need before using them.

In the market, the trading of GHGs emissions run like this example: the installation can still do their manufacturing process like usual and buy the extra allowances from others or apply the green technology. Since, the installation using green technology will emit lower emissions, they will have unused allowances and they can sell it to others who need it. Those whose emissions are exceeding the allowances should buy extra allowances to cover the emissions from those lower could save their unused allowances from

using the greener technology. Here is an example: each of installation A and installation B before the EUETS emitted 320 tons of GHGs emissions. Now that the EUETS is working, they have to cut their emissions to 280 tons of GHGs. Installation A has decided to use the greener technology as they think it will bring them benefits from the unused allowances that they can sell. Using the green technology, installation A emitted only 240 tons of GHGs emissions. On the other hand, installation B, instead of using greener technology, they have decided to do the manufacturing process like how they always do. At the end of the year, the data shows that they have emitted 300 tons of GHGs; therefore they have to cover their 20 tons of emissions exceeded or pay the tax. For the higher price of sanction, installation B has decided to buy the unused allowances from the installation A. Here, the basis of trading is created.

The Article 16 of the Directive 2003/87/EC regulates the penalties in the trading for those installations exceeding the permitted emissions. The first verse states:

"Member States shall lay down the rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and shall take all measure necessary to ensure that such rules are implemented..."

The third verse emphasizes the due date of the reductions should take place:

"Member States shall ensure that any operator who does not surrender sufficient allowances by 30 April of each year to cover its emissions during the preceding year shall be held liable for the payment of an excess emissions penalty. The excess emissions penalty shall be EUR 100 for each ton of carbon dioxide equivalent emitted by that installation for which the operator has not surrendered allowances".<sup>24</sup>

Furthermore, the third verse of Article 16 of the Directive states that when the installations exceeded the permitted emissions, they have paid the sanctions or the penalties, it does not mean that they can emit emissions equal to those of their allocations with addition of those emissions they exceeded. The installations still have to cut their emissions according to their NAPs set earlier.

#### D. Formation of the European Linking Directive

The EUETS Directive of 2003/87/EC generally states the emissions trading as the main tool to reduce the emissions and reduce the effects of the climate change. However, the Union also considers the other two mechanisms from the Kyoto Protocol; they are the CDM and the JI. Thus, the Union has establishes a linking directive to these mechanisms in order to help the member states to use the two mechanisms as a supplement to their efforts in cutting the emissions.

Through these two mechanism of CDM and JI, the installations of every member states within the Scheme can invest in the aboard projects as an

<sup>&</sup>lt;sup>24</sup> Article 16 of Directive 2003/87/EC.

alternative to cut emissions while helping other states which are usually the third world states to cope with the climate change. The Union then establishes the rule and regulation about how the other two mechanisms of the Protocol will be used by the Union to help the Union cuts the GHGs emissions level.

Regarding this issue, the Commission on 23 July 2003 submitted a proposal to link the ETS with the CDM and JI mechanisms. The proposal aims at amending the Directive of 2003/87/EC and to allow the 'conversion' of JI and CDM credits into allowances for use in the EU ETS from 1 January 2008 onwards or in other words, start at the Second Phase of the Scheme. The reason for the inclusion of CDM and JI was that the installations within the Scheme can reduce the compliance costs by widening the range of opportunities to reduce GHGs emissions in installations in other Member States of the Union as well as those installations outside the EU countries at lower costs.

The proposal, at first, was opposed by the environmental NGOs as this can trigger the bigger use of CDM's and JI's credits to be converted into allowances than the cutting emissions at home, or IET among installations within the Scheme. However, then the Commission made sure that the ETS together with CDM and JI would help the Union to foster the emissions reductions process.

While the Proposal submitted by the Commissions signaling the conversion of CDM and JI's credits with the allowance of GHGs emission units,

the amended Directive of 2004/101/EC states that operators or installations are allowed to use CDM and JI credits directly to offset the reduction obligations under ETS Directive. This means that the installations do not have to convert the CERs and ERUs from CDM and JI credits into EUAs for use in the Scheme.

### D.1. The European Union's Linking Directive 2004/101/EC

The Linking Directive is established by the European Parliament and the Council of the EU to link the EUETS and the other two supplementary Kyoto Protocol mechanisms and to amend the Directive 2003/87/EC which generally regulates the emissions reduction system through the international emissions trading. This Linking Directive is intended to regulate the other two mechanisms of the Kyoto Protocol, the CDM and JI, to help the Annex 1 states to reduce their emissions level through those supplementary systems in the Second Phase of the EUETS.

Each installation within the Scheme may use the emission credits that are generated through the project activities eligible pursuant to Article 6, the article that regulates the Joint Implementation; and Article 12, the article that regulates the Clean Development Mechanism, of Kyoto Protocol. The first article of the Linking Directive defines Project Activity as "a project activity approved by one or more Annex I Parties in accordance with Article 6 or Article 12 of the Kyoto Protocol and the

decisions adopted pursuant to the UNFCCC or the Kyoto Protocol". The project under these articles of 6 and 12 will produce ERU and CER that later on, these ERU and CER can be exchanged for one allowance of the NAPs.

Emission Reduction Unit, or ERU, means a unit issued pursuant to Article 6 of the Kyoto Protocol and decisions adopted pursuant to the UNFCCC or the Kyoto Protocol. This ERU is a unit to measure the amount of one ton of emission reduction that is generated by the JI that the Annex I state did in the other developed countries in economic transition to help them cut their GHGs emissions level. While Certified Emission Reduction or CER means a unit issued pursuant to Article 12 of the Kyoto Protocol and the decisions adopted pursuant to the UNFCCC or the Kyoto Protocol. The CER is a unit to measure one ton of emissions reduction generated through CDM projects the Annex I states did in the third world or the developing countries.

<sup>&</sup>lt;sup>25</sup> Article 1 of Directive 2004/101/EC