

CHAPTER V

CONCLUSION

International community through the UN establishes the UNFCCC that aims at stabilizing the GHGs concentration in the atmosphere at safe level that would prevent dangerous anthropogenic interference with the climate system. The third annual meeting of the Convention that is called the COPs results in a protocol called the Kyoto Protocol, as it was held in Kyoto, in 1997. This Protocol is a firm foundation for the international community especially the developed countries to try to cope with the climate change by reducing the world's GHGs emissions level through the 'Three Flexible Mechanisms' the Protocol supplies, namely: the International Emissions Trading, the Joint Implementation, and the Clean Development Mechanism. It is a responsibility that the countries listed as Annex 1 parties to the Protocol have to reduce their GHGs levels up to 5% from their 1990 levels by 2008-2012.

European Countries listed as Annex 1 Parties to the Protocol ratified the Protocol in May 31, 2002. Ninety days after the signing, the Protocol legally binds the European Countries with the responsibility to cut the GHGs emissions level up to 8% from their 1990 levels by 2008-2012.

European Countries, through the Commission's proposal in December 2002 are trying to fulfill their commitment to the Protocol by establishing the European

Union Emissions Trading Scheme with Directive 2003/87/EC to rule and regulate the systems of their emissions reduction.

The Union sets the EU ETS in three periods. The first period of the trading is called the First Phase of EU ETS, that is the period to trade GHGs emissions from 2005-2007; the second period is the Second Phase of EU ETS which is coinciding with the Commitment Period of the Protocol, 2008-2012; and the last period set by the Union is the Third Phase of the Protocol, which is the period beyond 2012.

The first phase of the EU ETS runs from 2005-2007 and serves its intended purposes, that is, to see and to set everything that the scheme needs before entering the commitment period until the second period of the EU ETS has the better systems so the Union can fulfill its commitment to the Protocol well. Indeed, there were some problems occurred during the First Phase of the EU ETS, like over-allocations, the drop of the permit's prices, and the lack of management systems in some member states.

Over-allocation in some member states was due to the over-flexibility of each member states to set their NAPs. This makes the market simply work inefficiently because the more allocation an installation or a company has, the less they felt like to cut the GHGs emissions. This pushes the price of permits to drop, because there were many permits supplied but no one needs it. The First Phase then results in the more GHGs emissions emitted by the Union. However these lessons are serve its function, that is, to help the Union sets better system for the commitment period.

In the Second Phase of the EU ETS, the Union has changed some features and regulations related to the GHGs emissions trading as a better system to address the shortcomings in the first phase. Namely, the caps or the allocation of permits each member state will be lower to create scarcity of the caps; there are more quantity of the caps approved by the Commissions to be distributed by auctions, beside by grandfathering and benchmarking; there are more GHGs emissions to be reduced, not only the CO₂; there are more sectors to be included in the GHGs emissions reduction; and the last, there are more sanctions proposed to be given to those member state which does not fulfill its commitment to the Protocol.

The member states may claim the quantity of allocations they need for the NAPs but the Commissions is the one to decide the exact quantity of allocation they will get to make sure that all member states are cutting enough GHGs. The limited allocation each member state has will drive them to implement the Scheme better and to reduce more GHGs emissions level as the fulfillment of the Union's commitment to the Protocol.

The result from the first year of Second Phase of EU ETS, 2008, shows that the EU-15 has succeeded to cut the aggregate GHGs emissions level up to 6.5% below the base year level in 1990. It emphasizes that the better system within the EU after entering the commitment period of the Protocol helps the Union to reduce its GHGs emissions more effectively.

The Clean Development Mechanism or the CDM projects within the Linking Directive of the Union also works well. The CDM projects work effectively as it achieve the aims of the Convention, which are; first, to help the Annex 1 parties to reduce more of its GHGs emissions level through supplementary means outside the IET; second, it helps the Non-Annex 1 parties to achieve sustainable development through technology transfer from the Annex 1 parties.

There are some projects which some member states of the Union do with the Non-Annex 1 parties of the Protocol, such as China and India as the biggest suppliers of CERs. The European Countries that have projects in CDM in China are for instance the Germany, Dutch, Austria and others.

The CDM projects between the Union and China vary from the energy efficiency projects and those of new and renewable energy projects in some areas of China. The energy efficiency projects are intended to make the energy use as efficient as possible or in other words, to generate more energy from fewer energy consumption. While the new and renewable energy projects are intended to reduce and replace the use of coals in China's installations with the renewable resources that will not harm the environment, like for example the hydro power, wind power, and biomass energy power.

Hydro-power stations projects are done in some areas of China that are near to big rivers to help China generating more energy and electricity through renewable resources which is water. These projects hold by Germany companies cut GHGs

emissions up to 432.339k tons of CO₂ equivalents per year. On the other hand, the wind power stations hold by Austrian companies in China cut emissions up to 199k ton of CO₂ equivalent per year. Moreover, biomass power projects done among NATIXIS, the European Carbon Fund and China cut about 183.009 tons of GHGs emissions each year.

The CDM projects under the cooperation between the Union and China has helped China in their independence toward the coals that they have always used before to other renewable resources that can generate more energy with cleaner technology and environment friendly. These projects are also give benefits for China in the form of the transfer technology so China can reach their sustainable development

The Union has successfully cut their GHGs emissions level through the Scheme and the Linking Directive. It is proven that the EUETS is successfully designed and established by the Union to help them commit to the Kyoto Protocol.