

Date / / 5. Social Issue and Environment

* Write the procedure of trading in Carbon credits

- 1] Carbon credits must be real, quantifiable, verified reduction in GHG emission.
- 2] 6 gases are eligible for carbon credits.
- 3] Gases have different values depending on their global warming potential.
- 4] Methane 21-23 times more potent than CO_2
- 5] All GHG expressed metric tons of CO_2 equivalents
- 6] One tons of CO_2 equivalent = one carbon credit

Burning of fossil fuel is a major source of industrial greenhouse gas emission, especially for power, cement. The major gas emitted are CO_2 , methane, HFCs, etc. which will increase the atmosphere's ability to trap infrared energy and thus affect climate. The concept of carbon credits came into existence as a result of increasing awareness of the need for controlling emission. It was created in Kyoto Protocol, an international agreement between more than 140 countries. Carbon credits are generated by enterprises in developing world that shift to cleaner technologies and thereby save on energy consumption, consequently reducing their GHG emissions. Credits can be exchanged in business or bought or sold in international market. For each ton of carbon dioxide emission avoided, the entity gets a certificate which they can sell. Credits can be used to finance carbon reduction schemes between trading partners around the world. This is managed by UN-mandated international convention.

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* Write an essay on "How Carbon Credit Concept is helping in minimizing the pollution".

Carbon credit create a market for reducing greenhouse emission by giving money to cost of polluting air. It becomes cost of business and is visible in balance sheet. For example, consider a business that owns a factory putting out 100,000 tonnes of greenhouse gas emission in a year. Its government is an Annex I country that enacts a law to limit the emission that the business can produce. Factory is given quota of 80,000 tonnes per year. The factory has to reduce emission or have to purchase carbon credit. This carbon credit can be sold as well as bought in market. We should consider the impact of manufacturing alternative energy. Since for example, the energy consumed and carbon emitted in manufacture and transportation of large wind turbine could prohibit a credit.

✓ One seller might be a company that will offer to offset emission through a project in the developing world, such as securing methane from a swine farm to feed a power station that previously could use a fossil fuel. So although the factory continues to emit gases, it would pay another group to reduce the equivalent of 20,000 tonnes of CO₂ emission from atmosphere next year.

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✓ Another seller may have already invested in new low-emission machinery and have a surplus of allowance as a result. The Factory could make up for its emission by buying 20000 tones of allowance from them. The cost of the seller's new machinery would be subsidized by sale of allowance. Both Buyer and seller would submit account to prove their allowance were met correctly.