

Awareness of Climate Change

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EARTH Hour

Tomorrow at 8.30 pm (local time), people around the world will be encouraged to turn off their lights for an hour. **EARTH Hour** which started in 2007 in Sydney, Australia is a symbolic annual initiative of the World Wide Fund for Nature (WWF) aimed at individuals, households and businesses around the world to turn off lightings and electrical appliances for an hour to increase awareness about climate changes and energy conservation. Last year, about 50 million people around the world took part and the WWF targets to reach 1 billion people to illustrate the world community's support for actions to manage drastic climate change. The interested reader can go to <http://www.earthhour.org/home/> to find out more about this event.

While Earth Hour is an annual event, there are other organizations that are committed to generate more awareness and taking actions to limit climate change arising from the build-up in the atmosphere of carbon dioxide (CO₂) and other greenhouse gases. Since any form of motorized travel generates CO₂, a number of airlines, transportation companies and even travel guide book publishers that are more environmental conscious have begun providing information and opportunities for people to be aware of and take responsibilities to limit our personal "carbon footprint". Even power generating companies (GenCo) are also providing educational materials for their consumers on energy conservation tips.

Carbon Offset Schemes

To start with, any form of fossil fuel burning to heat or cool our houses and offices and to drive our vehicles will release CO₂ into the atmosphere thereby causing climate change. However, as these activities can be reduced but not avoided in most circumstances, what measures can responsible global citizens do to reduce their personal carbon footprint?

In response to this desire, a number of organizations had sprung up since the late 1990s offering some form of "Carbon Offset" schemes that allow you to "neutralize" CO₂ and other greenhouse gases that you are releasing into the atmosphere. Basically, this is how a typical Carbon Offset scheme works:

- The organization provides you with an online carbon emission calculator on its website to estimate the CO₂ you will be releasing to the environment for a particular activity such as heating a house or driving/flying from Point A to Point B
- The amount of CO₂ released (usually in tonnes) for that activity can be "offset" by buying a carbon credit from that organization
- The carbon credit is then used by the organization to pay someone to reduce the same amount of carbon emission into the atmosphere on your behalf

Organizations offering Carbon Offset schemes usually tied up or invest in energy related projects which typically falls into one or a combination of the four categories:

- Renewal energy such as use of biomasses, bio fuels, wind and solar energy
- Energy conservation which looks at improving energy generating efficiency in materials and equipment
- Waste reduction from fuel burning and combustion thereby reducing potency of gas emissions
- (Re)Forestation that are invested in long-term forestation to provide some form of renewal energy sources such as biomasses and to enhance bio-diversity

Making Sense of Carbon Offset Schemes

While carbon offset schemes provide individuals and businesses the opportunities to reduce their carbon footprint; there are hundreds of carbon offset schemes provided by various organizations. These organizations, many of which have online presence are commercial in nature. Hence, very often, individuals who are genuinely interested in purchasing carbon credits are faced with challenges in deciding which scheme to participate in.

Firstly, there are differences in the way these online carbon calculators compute the amount of carbon emission for a particular activity. For instance, the carbon calculator at the Climate Care website estimated that a return flight from Singapore and Hong Kong will emit 0.57 tonnes of CO₂ and requires £4.90 for the offset while the flight calculator at Blue Ventures Carbon Offset (BVCO) Company estimated 0.93 tonnes of CO₂ consumed and £13.10 of carbon offset is required for the same journey. Carbon calculators for car travel, house heating, etc at different carbon offset companies use different assumptions which add up to the confusion for the individuals and companies who are prepared to participate.

Secondly, detailed information provided by these companies on the administrative fee or overheads incurred and the actual funds that reaches carbon offset projects are often lacking. Furthermore, timely update on progress and success of these projects are also not provided. However, it is heartening to note that there some companies out there who made efforts to provide transparency on how the carbon credits purchased are used to fund these carbon offset projects. Lastly, there is no established framework or guidelines to monitor the activities of such carbon offset companies to ensure that they achieve the ultimate goal of minimizing climate change.

Since carbon offset schemes are a step towards protecting the environment from further climate changes, there should be greater joint governmental efforts in providing guidelines and code of practices for the carbon offset companies to adopt to ensure there are consistency in calculating each "carbon footprint", basis for computing carbon credits, the administrative overheads involved, project selection and management criteria as well as setting out basis to measure how successful are these carbon offsetting schemes.

Playing Our Part

In the meantime, those of us who want to ease our conscience, choose a carbon offset company carefully by examining the company's policies in details and when in doubt, email them for clarifications before you purchase the carbon offset credits. For those who want to be more proactive, you can consider participating in one of those carbon offset projects as a volunteer. Others may want to visit your power supply companies to pick up a brochure on how to use energy more efficiency – useful tips include using more mechanical ventilation instead of turning on the air-con at home throughout the night and setting the temperature to 25 deg. Other efforts could involve planning your driving and travel trip. Where practical, take public transport more frequently as an alternative.

All of us have a part to play and we need to work together to spread the understanding of the seriousness of the climate change issue. For a start, switch off an hour of lighting and electrical appliance (except the fridge) tomorrow as the first step to tackle climate change.

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