Chapter 13

Study of Carbon Footprint in Organizations

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ABSTRACT

With the ever increasing intrusion of humans in the environment, it is imperative that individuals and organizations as a unit contribute to an ecologically sustainable environment. With the awareness about carbon emissions and their long term effects increasing; more and more companies are investing in achieving greener ways of production. This chapter aims to study how socially/environmentally conscious today’s corporations are, and what courses of action are being taken towards a greener and carbon neutral society in terms of saving basic equivalents of resources such as paper, water, electricity etc. In this chapter we have conducted a survey to analyze the major sources of carbon emission in corporate offices and discuss how corporations can be engaged in contributing to a greener environment.

INTRODUCTION

During the early part of the 21st century, there were many articles, blogs and journals which spoke of measures that organizations could take to ensure a healthy path towards a carbon neutral society. Most of such measures included reducing usage of items like paper, water, electricity & fuel. This project will look at how many of these measures are being followed and how much is the scope of further improvement. The total carbon footprint of the entire world in 2013 was 2150 Giga tons of CO₂ equivalents, whereas the same was around 350 Giga Tons of CO₂ equivalents in 1990. (Global Carbon Project, 2013) The period from 1980 to 2013 has seen a massive jump in the global carbon footprint compared to the years prior to 1980. Fossil fuels and Conversion of land from forests to pastures and crop lands are the

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two major reasons for the massive jump in carbon footprint of the earth in the recent years. Amongst the two, burning of fossil fuel is responsible for more than two thirds of the global carbon footprint and a major contributor to the remaining one third of global carbon footprint is the land conversion. Looking at region wise contributors to carbon footprint, one can observe that Europe and North America contribute to more than 50% of world’s total carbon footprint. The two most populous countries in the world viz. China and India account for around 13% of world’s total carbon footprint. Around half of the carbon emissions from human activities go to the atmosphere whereas the remainder of emissions goes to oceans and land parts almost equally. The emissions which stay in the atmosphere are responsible for the warming of the planet in general and also for other climatic changes that are occurring simultaneously. (Global Carbon Project, 2013). However looking at per capita emissions the region wise top contributors change, Oceania and North America would form the top contributors to territorial emissions with the per capita emissions being 14 & 13 tCO₂ per person and the same for an average Asian would be 4.1 tCO₂ per person, Africa being the lowest per capita contributor has its average individual contributing only 1.1tCO₂. However, per capita emissions from burning gases show that Europe and North America contribute the most with 1970 MtCO₂ per person and 1696 MtCO₂ per person respectively; Asia is at a close third with 1360 MtCO₂ per person whereas Central America and Oceania are the most conservative contributors with 48 & 68 MtCO₂ respectively. (Roberts, 2013) In 2012, Schneider Electric presented 5 CIOs of the country with the Green Crusader award. The award was given for steps taken by the CIOs in ensuring greener methods of using office resources thereby reducing their organizations’ carbon footprint. Following are the winners of the 2012 Green Crusader Awards and the actions they took as CIOs for carbon reductions.

Baljinder Singh – CIO, EXL Service

Awarded for taking the initiative of moving the entire organization base to a dynamic cloud based environment which covered all the IT aspects of the organization including desktop, datacenter, network, applications, tools and products.

Bhujay Kumar Bhatta – Operation Manager; IT Shared Services, ITC Ltd.

Awarded for taking the initiative of decentralizing the software platforms used for critical applications like ERP & CRM in the organization. This step moved ITC closer to a cloud like environment and thus helped them in reducing their carbon footprints.

Damon Frost – CIO, Proctor & Gamble, India

Damon was responsible for the successful integration of all departments under one IT infrastructure which was to be a cloud environment. This again led P&G to be recognized as an organization that does focus on its carbon footprint as a corporate citizen.