Carbon Footprint of Bulent Ecevit University, Devrek Campus: A Case Study

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Abstract. The amount of greenhouse gases in the Earth's atmosphere is increasing rapidly as a result of energy demand and the usage of fossil fuels since industrial revolution. Greenhouse gases (GHG) causes the global warming and climate change due to capability of their heat absorption. The higher education institutions not only have a research and education role but also have a role on exploring and practicing environmental sustainability. The calculation of carbon footprint which is the measure of carbon dioxide or greenhouse gases (GHGs) emissions by an individual, organization, event or product expressed in CO2 equivalents [1].
Institutions are working to become carbon neutral by reducing their GHG's. They are lowering energy usage, using renewable energy and points the importance of sustainable living. The measurement and calculation of the CO2 emission during activities at institutional level is a very important starting point and the data obtained by carbon footprint calculations may helpful to reduce the environmental impacts of institutions.
In this study, the carbon footprint of Bülent Ecevit University Devrek Campus, calculated by DEFRA method for the years 2012 and 2016. The number of students, the infrastructural changes, transport, waste management, recycling, electricity and fuel consumptions have analyzed for the years 2012 and 2016. Devrek Vocational School's carbon footprint for the years 2012 and 2016 was found to be about 557 and 492 tons CO2-eq, with heating, transportation and other activities contributing about 50- 35%, 37 -49% and 13-15% respectively.

Keywords: Carbon Footprint, Greenhouse Gas Emissions, Devrek Campus.