



7th INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION Academic

“CLEANER PRODUCTION FOR ACHIEVING SUSTAINABLE DEVELOPMENT GOALS”

Application of the Norm NTC-ISO 14064 at ITM Campus Robledo, for Greenhouse Gases (GHG) Emission Measurement and its Carbon Footprint (CF) Determination

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Abstract

The present work contains the result of the Carbon Footprint (CF) measurement of the Metropolitan Technological Institute of Medellín (ITM), which is a public institution that provides teaching, research and extension services. The calculation of this sustainability indicator was made for Robledo campus, in accordance with the methodology described in ISO 14064 (Greenhouse Gases Measurement), ISO 14040-14044 (Life Cycle Analysis), and the information provided by the Institution and endorsed by the different dependencies of its consumptions of materials and energy resources, necessary for its correct operation. Additionally, the data of conversion and emission factors associated to the Colombian context or subtracted from the literature are considered, being these the most approximate to the current technical, economic, social and environmental conditions of ITM. According to implemented methodology, the ITM carbon footprint for 2.016 was 912,302 Ton CO₂eq and per student was 0,0925 Ton CO₂eq /Student

Keywords: Greenhouse Gases, Carbon Footprint, Life Cycle Assessment, Sustainability, University.