Corporate Carbon Footprint under Tiered Hybrid Analysis. Application to a Spanish timber company

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The European Union advances steady towards reductions in production-based carbon emissions. The so-called diffuse sectors are now obliged to achieve these reductions. New policies based on the carbon footprint are been encourage to reach these commitments. However, voluntary reporting of the so-called scope 3 emissions hinders its successful implementation. In this study we elaborate a tiered hybrid analysis able to both report emission according to ISO/TR 14069 standard and achieve completeness. Process analysis for scope 1 and scope 2 emissions is implemented with multi regional input-output analysis for upstream scope 3 emissions. This novel approach is implemented in a Spanish timber company. The total Carbon Footprint in 2011 was 998.746 Kg CO2eq, of which 91% corresponds to scope 3 emissions. These emissions are globally distributed, 67% were related to European countries followed by China (12%). We identify and discuss pros and cons of this novel approach. Its European implementation could be highly effective in the reduction of global carbon emissions.