Hochschule Ruhr West - A role model for CO₂ accounting in public administration in NRW

The Efficiency Agency NRW (EFA) is a practitioner in the field of resource efficiency and carbon accounting in the state of North Rhine-Westphalia (NRW), Germany. Our agency is a neutral business partner for small and medium-sized businesses. EFA works for and with companies and science based partners as Universities.

Project background

In 2012 the state government NRW placed the requirement to find a way for SMEs to get in touch with CO₂ accounting. EFA did a research on existing accounting tool and the potential usefulness for SMEs. The result was disappointing. The existing tools where either far too expensive and technologically advanced or to basic.

We developed ecocockpit.de, our own accounting tool, together with and for SMEs.

The tool is based on the GHG-Protocol and focuses especially on "scope 3 emissions". With the tool on the one hand and a workshop concept on the other hand, we found a pragmatic way to bring SMEs in contact with CO₂ accounting.

Since 2014 over 50 companies used ecocokpit.de to balance their CO₂ emissions and to create their Corporate Carbon Footprint (CCF) or Product Carbon Footprint (PCF) in a partnership with EFA.

The project

Basis for the Project is the "Climate Protection Law North Rhine-Westphalia" - § 7 climate neutrality for public administration in NRW till 2030 – and the idea to bring this topic to reality.

In a first meeting Mr. Prof. Dr. Deuber, Hochschule Ruhr West (HRW), Mr. Pöschel and Mr. Buers (EFA) and Mrs. Dr. Deuber (KlimAktiv gGmbH) developed a Master Course "Corporate Carbon Footprint for public administration in NRW".

Within the course the students got the task to account the carbon emissions of the campus "Hochschule Ruhr West", to give recommendations for action (short-term) and to develop the future climate strategy (long-term) for HRW.

To bring the course in the challenge of reality the students were organized as a fictional engineering office supported by external consultants as EFA and KlimAktiv.

Project participants

Hochschule Ruhr West – Institute of natural sciences - Module CO_2 Accounting in the Master Module Energy and Environmental Engineering

Effizienz-Agentur NRW (EFA) – wide experience in the CO₂ accounting in cooperation with and for SMEs

KlimAktiv gGmbH - wide experience in Corporate Carbon Accounting in the field of administration and municipalities

Results

Hochschule Ruhr West is the first University in NRW and one of the first University's in Germany calculated a science based corporate carbon footprint.

Outcome of the project is an action plan to reduce the highest CO_2 emissions technically on the one hand and a climate strategy on the other hand.

Overall HRW achieved a holistic understanding of their main CO₂ emissions and transparency regarding their resource consumption.

Technical Recommendations:

- Construction measures regarding heating and cooling energy,
- A concept for decentralized power generation,
- Guideline for future construction projects in the public sector in NRW

Organizational Recommendations:

- Concept of mobility for students and employees,
- Emission based procurement guideline for the office and the canteen