

Client Case Studies



8 Energia - Identification & Quantification of GHG Emissions



The Context

- Leading the energy industry in the Republic of Ireland (RoI) and Northern Ireland, Energia Group operates in three separate areas: Renewables, Flexible Generation and Customer Solutions.
- In the Flexible Generation area, Energia Huntstown Power operates combined-cycle gas turbine (CCGT) plants (Phase 1 rated at 684MW and Phase 2 rated at 808MW) which are capable of meeting 11% of peak energy demand in the all-Ireland electricity market.
- Each phase maintains a back-up solution in the form of an auxiliary boiler (gas-fed) and an emergency diesel generator.

The Challenge

- Energia Huntstown Power as a participant in the EU-ETS is required to calculate its own direct and indirect emissions related to its activities.
- Its calculated data is also required to be verified by an independent verification company as part of its annual reporting obligations.

The Idea

- The Energia team wished to formalise their approach to calculating their own direct and indirect emissions and determining a baseline against which future performance could be measured. In addition, corporate stakeholders expressed an interest in having access to this information to assist with investor relations.
- Antaris worked with Energia to identify and quantify the organisation's annual greenhouse gas emissions in line with the principles of ISO 14064-01:2018.
- We set a goal to develop a quantification tool to allow the organisation to assess future greenhouse gas emissions.

The Execution

- The execution of the idea involved a site visit to gather requisite data.
- Typical of the data sources used to identify and quantify emissions, included:
 - equipment maintenance records
 - energy bills
 - gas chromatography
 - bulk fuel invoice data.
- This information facilitated a baseline to be generated.
- A quantification tool was then developed to facilitate annual quantification of greenhouse gas emissions.
- The tool was developed to meet the reporting requirements outlined in ISO 14064-01:2018 and allowed for trends and comparisons of annual greenhouse emissions to those emissions in the baseline year.
- The tool also allowed for the greenhouse gas emissions per unit of generated electricity to be calculated.
- Upon handover of the developed quantification tool, training was provided to relevant staff on how to input data into the quantification tool.

The Results

- Antaris assisted Energia Huntstown Power in the development of an easy-to-use greenhouse gas quantification tool along with reporting methodology.
- Training was provided on both the tool and the reporting methodology.
- The tool is envisaged to reduce the amount of time required for internal quantification and external verification of future greenhouse gas emissions.

Thank you.

We look forward to hearing from you.

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