Carbon footprint assessment and life cycle analysis

Helping our clients improve the carbon performance of their projects

We are committed to evaluating the projects we work on with a global cost approach that includes environmental impact. Therefore, we carry out **carbon assessments and life cycle analyses (LCA)**. This expertise allows us **to identify the main sources of greenhouse gas emissions (GHG)** from projects and **to identify the best ways to reduce them**.

Our Environment Division has the skills to carry out these assignments, using appropriate reference tools and tools developed in-house or in partnership (e.g. UrbanPrint, with “Efficacity”, French research institute which supports the energy transition of urban areas).

Our approach

Carbon footprint assessment

- Understand the project and its context
- Define the scope of the GHG emissions
- Use the most accurate emission factors
- Define the relevant baseline project and compare it to the ongoing project
- Present the results in a detailed document presenting the assumptions and data considered.

Emission reduction

- Deduct from the assessment the main sources of emissions
- Work with design teams to define high environmental performance alternatives.

Our clients benefits

- Better knowledge of the externalities of their project
- Compliance with regulations (if any) and access to financing
- Identification of ways to reduce GHG emissions
- Development of eco-design
- Respect for environmental, social, economic and ethical issues (CSR).

Our added value

- Coordination with project data sources (via BIM)
- Analysis of results and proposals of action plans for emissions reduction and eco-design.

Identify operational solutions to reduce the carbon impact of your projects

Our approach integrates the carbon footprint from the design phase to optimize the environmental performances of the project.

REFERNCES CARBON FOOTPRINT ASSESSMENT

Territorial decarbonation plan

Carbon footprint assessment and roadmap for local CO_2 emission reduction strategy

Objective
Reducing the carbon footprint of a given territory.

Solutions
Through a territorial carbon assessment, evaluate local emissions and their main sources. Then develop a roadmap to implement operational solutions for reducing emissions at short, medium and long term.

Results
Reduction of local CO_2 emissions, improvement of air quality and optimization of the territory's environmental performance.

Carbon footprint assessment of an infrastructure project

Analyze the impact of a project through its carbon emissions and improve its design

Objective
Determine the carbon footprint of a project to assess its capacity to reduce local emissions.

Solutions
To determine the carbon footprint of an infrastructure project, it is first necessary to define the scope of the emissions calculation (direct or indirect) and the time frame (construction and/or operation phase).
The result is then compared to a reference project to evaluate whether or not it allows a reduction in local emissions.

Results
The result of the carbon footprint assessment guides the design of the project and helps to determine its participation to emissions' reduction plan and adaptation strategies to climate change.

Assessment of the eligibility of a project for green financing

Carbon footprint assessment for certification

Objective
Determine the carbon footprint of a project to assess its capacity to reduce local emissions.

Solutions
Carrying out a carbon assessment of the project and comparing it with a reference project to determine its relevance and the level of reduction of greenhouse gas emissions it allows.

Results
Obtaining international funding conditioned by a minimum level of participation in the reduction of local greenhouse gas emissions and adaptation to climate change.

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