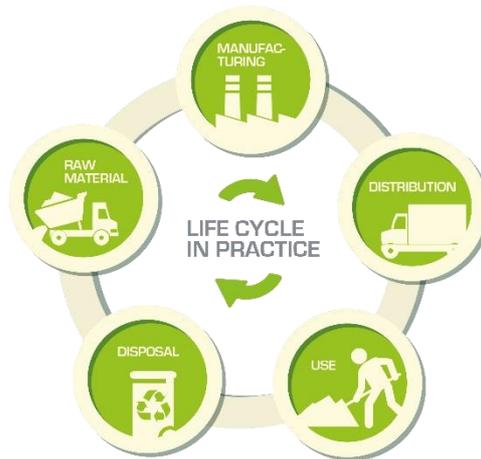


# LCiP’s maturity assessment conclusions (Energy Sector)

## FOREWORD

### Life Cycle approaches

Life cycle thinking helps companies make their businesses more attractive while minimizing their environmental impacts and improving their competitiveness. At the same time it is a strategic choice to orient developments based on Life Cycle Thinking (LCT). This method helps to assess the environmental impacts of a system (product, service, process, organization), from the extraction of raw materials to the end of life.



### LCiP Project

LCiP<sup>1</sup> aims to help SMEs in France (Nord-Pas de Calais), Belgium (Wallonia), Portugal and Spain (Basque Country) to identify and reduce the environmental impacts of their products and services across the entire Life Cycle in three sectors: building, energy & recycling.

### Maturity assessment

The maturity assessment aims to understand the current capacity of business sectors and SMEs in each sector and country to implement Life Cycle approaches. Based on a common framework of questions, surveys and interviews have been conducted in each sector in each region. The qualitative assessment for the **Energy sector** (including France (Nord-Pas de Calais), Portugal and Spain (Basque Country)) is presented below.

<sup>1</sup> the project is co-funded by the [LIFE+ Environment Policy and Governance Programme](#) of the EU

## MATURITY ASSESSMENT RESULTS

### Segmentation:

More than 50 organisations provided feedback to the maturity assessment survey, covering the entire value chain of the energy sector (companies and support organizations<sup>2</sup>):

- **Companies** have mainly a regional, national and international scope, ranging from microenterprises and SME's to big companies offering B2B services.
- **Support organisations** are mainly private organisations with a regional and national scope.

### Overall environmental strategy:

Most of the companies and support organisations integrate environmental considerations in their strategy and practices, although in Portugal they are not as developed as in North of France and Basque Country. The environmental strategies are in general promoted and supported by the top management.

While in the North of France all of the responding companies always include environmental aspects in their investments, in Portugal and in the Basque Country only about half of the responding companies declared they always have such concerns.

In the Basque Country and in the North of France the energy consumption is seen as the top environmental issue for the companies of the energy sector. In Portugal no priority is given to this topic when compared to water consumption, materials and air pollution.

### Life Cycle orientation of the businesses' environmental management:

The top management involvement and the business strategy are the two main drivers for the companies to get involved in environmental management and monitoring issues. Regarding the market, most of the companies feel that the customers' and the market opportunities are increasing the demand for a life cycle oriented environmental strategy:

The different regions have a different perception as to where companies have the greatest influence in the life cycle phases:

*North of France specificity: The use and end of life are the life cycle phases where companies have the most influence.*

*Portugal specificity: The production, transport and use are the life cycle phases where companies have the most influence.*

<sup>2</sup> This covers all organisations that are directly within the value chain (business associations, training centers, consultants, etc.)

*Basque Country specificity: The production phase is where the companies have most influence in relation to the life cycle approach.*

The lack of information, financial difficulties, and the recognition of the added value of Life Cycle approaches are the most pointed obstacle to the implementation of LC approaches in responding companies.

Globally, the environmental strategies of the energy companies have a generalist character rather than a life cycle approach. The most used tools are different, depending on the region of the responding companies:

*North of France specificity: Part of the companies (37%) understand the environmental impact of their activities but implement only ad hoc measures and manage those impacts using tools like carbon footprint assessment (71,4%), application of eco-design strategies and environmental labelling of their products.*

*Portugal specificity: The vast majority of the companies (75%) understand the environmental impacts of their activities, although only in part of the life cycle, and manage those impacts using tools like green procurement (80%), eco-design and GHG assessment.*

*Basque Country specificity: Half of the companies understand the environmental impacts of their activities along the entire life cycle and manage those impacts using environmental management systems, such as ISO 14001, and tools to reduce resource consumption and pollution (60%) followed by green procurement criteria.*

As for how long has life cycle thinking been adopted by companies, the survey has demonstrated a great diversity, although one can say that most of the energy companies have been working in this issue between 2 and 5 years. In the Basque Country one third of the companies work on LC approaches for less than one year. In Portugal, 75% of the companies work in these subjects for more than five years.

In the North of France and in Portugal all of the inquired energy companies develop LC approaches with internal staff. In the Basque Country 60% of the companies have an external team (e.g. consulting) to support their LC approaches.

In most cases nobody in particular inside the company is responsible for the implementation of LC approaches. The internal communication is in general more systematic than the external one.

At the same time, most of the support organisations from North of France and the Basque Country already provide services in in this field, whereas in Portugal the majority (67%) does not do so.

According to the sectoral support organizations, the most important life cycle oriented products/services are environmental management systems (ISO 14001) and life cycle assessments. Others like ecodesign, carbon footprint and design of sustainable product-service systems are also regarded as important.

The support organisations from North of France and Portugal are in general quite mature and have been providing LC services for more than two years. In the Basque Country half of the support organisations have been working in this kind of services for less than one year.

Except in the North of France (where the question was not asked), these organizations also contribute with publications related to the life cycle oriented environmental products/services they offer and disseminate results in publications (studies, papers, reports, etc.).

### Expectations and improvement

Some needs have been raised as core by the companies:

- Most of the responding companies believe that LC tools adapted to the specific sector reality should be further developed, in order to foster LC approaches in the energy sector.
- More subsidies, consulting and support regarding LC approaches are also considered of key importance, to overcome the financial difficulties.
- The companies of the energy sector should use more training materials and specific knowledge, to overcome the lack of information and the skills of the human resources in LC approaches.
- Sectoral organisations with expertise and data related to LC approaches are deemed necessary to support energy companies to overcome the technical difficulties of data collection and in the quantitative evaluation of the impacts of their products/services.
- The involvement of the different actors in the value chain and the increase in research activities would also help in the implementation of LC approaches.

## PERSPECTIVES

- ⇒ The energy sector in general feels that the **clients demand** a life cycle oriented environmental strategy.
- ⇒ In the energy sector there is also an opportunity in the **development of knowledge, skills and competences** of human resources, through specific training initiatives.
- ⇒ Regarding the insufficient access to **LCA data and tools**, the issue may be overcome by mutualizing efforts. Physical and online resource centres are developed in the LCiP project and can contribute to tackling this issue.
- ⇒ Another point raised by companies is the lack of case studies showing the concrete added value of developing Life Cycle approaches in the energy sector. Promoting **success stories** and case studies (some will be developed within the framework of LCiP) in events and through networks is a good way to attract companies.
- ⇒ In this line, further efforts should be encouraged for companies to **externally communicate** their LC practices.
- ⇒ There is a need for **collaborative approaches throughout the supply chain**, in order to develop life cycle approaches in the energy sector.

For further **information on Life Cycle approaches?**

Please visit LCiP website: [www.lifecip.eu](http://www.lifecip.eu)

(More information on the maturity assessment in the section “[mapping maturity](#)”)