



## LIFE CYCLE ASSESSMENT ANALYST WITH PROVEN PROGRAMMING SKILLS (M/F)

Fixed term contract | 18 months | Fulltime/40h | Belval

### Your work environment

The Luxembourg Institute of Science and Technology (LIST) is a Research and Technology Organization (RTO) active in the fields of materials, environment and IT. By transforming scientific knowledge into technologies, smart data and tools, LIST empowers citizens in their choices, public authorities in their decisions and businesses in their strategies.

<https://www.list.lu/>

### You will be part of the LIST Environmental Research and Innovation department

As part of a Research and Technology Organization (RTO), the Environmental Research and Innovation (ERIN) Department tackles some of the major environmental challenges our society is facing today, such as climate change, ecosystem resilience, sustainable energy systems, the efficient use of renewable resources, and environmental pollution prevention and control. To this end, the mission of the ERIN department is:

- 1) To conduct impact-driven scientific research and development, as well as technological innovation
- 2) To support companies in the implementation of new environmental regulations and advise governments on determining sustainable policies for the future, with the objectives of :
  - Analyzing, managing and exploiting sustainable resources (water, air, soil, renewable energy, bioresources)
  - Reducing the environmental impact of human consumption and production activities

The Environmental Sustainability Assessment and Circularity (SUSTAIN) Unit of the Environmental Research and Innovation department (ERIN) of LIST is developing knowledge, transferable (software) technologies and practical methods for the integrative evaluation and management of the sustainability and toxicological risks of human driven systems. Its final purpose is to foster sustainable, technology driven eco-innovation in industry and to support sustainability-oriented policy-making. Within the SUSTAIN Unit, the applicant will be incorporated in the Life Cycle Sustainability Analysis (LCSA) research group. The activities conducted within the LCSA group mainly consist in the development and application of methods, metrics and tools to assess the sustainability performance of products, technologies and policies for both industrial organisations and policy makers.

Job reference: ERIN-2020-067

#### Application file:

- A CV
- A motivation letter
- References names of two or three referees

#### Apply online:

<https://www.list.lu/en/jobs/environment-job-opportunities/job-offer/erin-2020-067/>

### Your working environment

#### The research department

<https://www.list.lu/en/research/erin/>

<https://www.list.lu/en/jobs/researchers/>

## What you will be doing

The life cycle assessment (LCA) analyst who has proven experience in implementing LCA will be in charge of research and applied projects, ideally both with academic and industry partners.

The life cycle analyst will work in the SemanticLCA and BEST research projects together with international teams of experienced researchers.

In SemanticLCA, partnering the University of Cardiff, she/he will be responsible of all task related to LCA calculations at building and district level and their integration into urban modelling software tools. Special focus will be given to the integration of time dependency in LCA calculations, to the assessment of indoor impacts and to the combination of LCA with Building Information Management tools.

In BEST, partnering NTNU (Norway), she/he will contribute in understanding the large-scale environmental implications of developing biomass-based energy carriers for the global economy. Based on prospective LCA, and coupling with scenarios from energy models, the exercise requires a good understanding of life cycle modelling as well as energy systems. The candidate needs to be familiar with LCA thinking and typical obstacles of method-coupling.

Within these projects, the successful applicant may also have the opportunity to work on collaborative projects with industrial partners.

Moreover, the applicant will also be asked to:

- Maintain documentation of the developed work, according to the institute's standards
- Contribute to the development of the group's technological assets, which are mainly information systems
- Be a main actor in the definition of the requirements, the design and prototyping/development phases, as well as in the Assessment with professionals towards transfer to the market
- Contribute to the licensing/IP protection of the developed technologies

## Which profile we are looking for

### Educational background

- Master degree in engineering or computer science or equivalent, with further specialization in LCA

### Required seniority

- First experience in Life Cycle Assessment will be considered as an asset

### Technical skills

- Good to excellent knowledge of LCA tools like Brightway2, OpenLCA, SimaPro
- Programming skills in Python or other languages like Java, Julia, R or Go are appreciated
- Basic knowledge of Built environment and Energy Systems domain
- Proven organizational skills and interdisciplinary thinking
- Convinced problem solving mind-set and a strong team-working capability
- Comfortable in working independently and creatively

### Language skills

- Flawless knowledge of English (both spoken and written) is required
- Knowledge of German and/or French and/or Luxembourgish is considered as an asset

## Interested ? Please apply online

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