

(1) Internship Title: Mechanical Engineering Intern

Internship focus: CFD and Mechanical Design for Sustainable Solar Energy Systems

Location: Uppsala, Sweden

Duration: 4–12 months]

Start Date: January 2026

About the Internship:

Join our multidisciplinary research team working at the intersection of **clean energy innovation** and **sustainable engineering**. This internship supports the goals of the **EU Green Deal** and the **United Nations Sustainable Development Goals (SDG 7: Affordable and Clean Energy, SDG 9: Industry, Innovation & Infrastructure, and SDG 13: Climate Action)** by contributing to the design and optimization of next-generation **solar collector technologies** — including photovoltaic (PV), solar thermal, and hybrid PVT systems.

Your Mission:

As a trainee, you will take an active role in both **research and applied engineering**, contributing to innovative solutions for sustainable energy systems. Your missions will include:

- Conducting **CFD simulations** (using COMSOL, OpenFOAM, or similar tools) to model heat transfer and fluid dynamics in advanced solar collector designs.
- Supporting the **mechanical and thermal design** of solar collector components, focusing on optimizing heat exchange, thermodynamic performance, and system integration.
- Assisting in the **mechanical design of balance-of-plant systems (BoP)** for solar thermal and hybrid installations.
- Contributing to the **optical design** of solar concentrators and collector elements to maximize energy capture and efficiency.
- Participating in **rapid prototyping** (e.g., 3D printing) and laboratory testing of designed components.
- Preparing **technical reports and documentation** to support scientific publications and industrial collaboration.

Learning Outcomes:

This internship offers a balance of **technical training and research experience**, allowing you to:

- Strengthen your skills in **computational fluid dynamics, mechanical and optical design, and renewable energy systems**.
- Gain hands-on experience with **state-of-the-art simulation and prototyping tools**.
- Contribute to **research publications** or conference presentations.
- Work within a **collaborative European research environment**, aligning with sustainability and innovation objectives under the EU Green Vision.

Required Profile

- **Education:** Bachelor's or Master's student in **Mechanical, Mechatronics, Energy, or Process Engineering** (or related discipline).
- **Technical Skills:** Experience with **CFD tools** (COMSOL, OpenFOAM, or similar) and **CAD design software** (SolidWorks, Inventor, etc.).



- **Soft Skills:** Curiosity, analytical mindset, and passion for renewable energy and sustainable technologies

Why Join Us?

- Work on **real-world sustainability challenges** driving the energy transition in Europe.
- Be part of a **dynamic research team** committed to innovation in renewable technologies.
- Benefit from a **stimulating international environment** with mentorship and training opportunities.

(2) **Internship Title:** Environmental Engineer internship

Internship focus: Life Cycle and Sustainability Assessment of Next-Generation Solar PVT Systems

About the Internship:

This internship is part of a broader initiative supporting the **European Green Deal** and several **United Nations Sustainable Development Goals** — notably **SDG 7 (Affordable and Clean Energy)**, **SDG 9 (Industry, Innovation, and Infrastructure)**, and **SDG 13 (Climate Action)**.

You will contribute to the environmental and economic evaluation of **V2 PVT (Photovoltaic-Thermal) technologies**, a new generation of hybrid solar systems that combine **electricity and heat production** to maximize renewable energy efficiency and sustainability across their entire lifecycle.

Your Mission

As an intern, you will take part in a **research-oriented and analytical project** that bridges environmental science, engineering, and sustainability economics. Your main responsibilities will include:

- **Data Collection & Analysis:** Gather and process technical, environmental, and operational data related to V2 PVT components and system configurations.
- **Life Cycle Assessment (LCA):** Conduct environmental performance assessments in line with **ISO 14040/44** standards using tools such as **OpenLCA** or **SimaPro**.
- **Life Cycle Costing (LCC):** Evaluate the economic feasibility of V2 PVT systems across their full lifecycle — from raw material extraction to end-of-life management.
- **Environmental & Economic Impact Assessment:** Quantify the sustainability and cost-effectiveness of developed technologies, integrating results into comparative analyses and policy-relevant indicators.
- **Technical Reporting:** Contribute to documentation, research summaries, and deliverables for internal R&D and potential academic dissemination.

Required Profile

- **Education:** Bachelor's or Master's student in **Environmental Engineering, Energy Engineering, Industrial Ecology, or Business with a Sustainability focus**.
- **Technical Skills:** Experience with **Life Cycle Assessment (LCA)** and **Life Cycle Costing (LCC)**; familiarity with **OpenLCA, SimaPro**, or equivalent tools.



- **Additional Skills:** Strong analytical thinking, data interpretation, and report writing; interest in **renewable energy systems** and **sustainable innovation**.

Learning Outcomes

This internship provides a valuable opportunity to **gain hands-on experience** in sustainable technology evaluation and research. You will:

- Develop advanced skills in **LCA, LCC, and sustainability assessment methodologies**.
- Learn to use professional **environmental analysis tools** (OpenLCA, SimaPro, etc.).
- Strengthen your understanding of **eco-design principles** and **circular economy frameworks** in renewable energy.
- Work closely with researchers and engineers contributing to **EU-funded projects** and **sustainability-driven innovation**.
- Enhance your ability to communicate scientific and technical findings effectively.

Why Join Us?

- Contribute to the **sustainability transition** in Europe through measurable research outcomes.
- Collaborate in a **multidisciplinary and international research environment**.
- Gain **mentorship and professional development** aligned with the EU Green Vision and sustainable engineering practices.
- Opportunity to participate in **project dissemination activities** and **academic publications**.

Contact us:

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