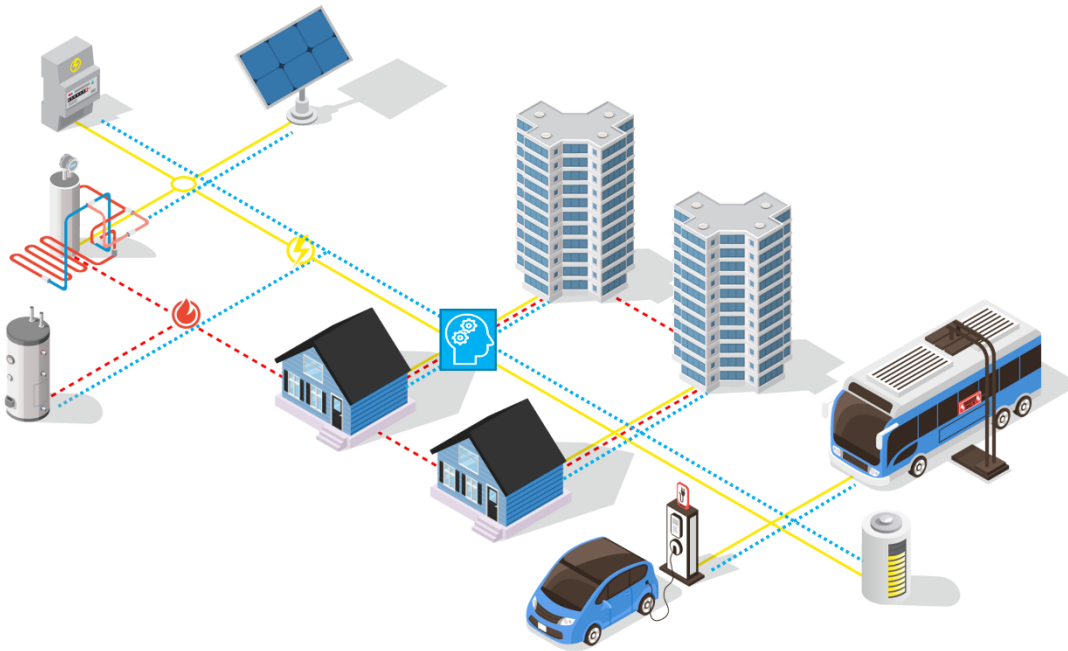


How to evaluate district energy flexibility ?



Are you passionate about sustainable energy solutions? Do you want to contribute to a greener future? Look no further! Our engineering team is excited to offer an internship opportunity that combines cutting-edge technology with environmental impact.

Why Energy Flexibility Matters

As our cities grow and evolve, so do their energy demands. Districts, with their diverse mix of buildings, play a crucial role in this energy landscape. Because of increasing decentralized energy production and electrification, energy planners face the challenge of accommodating larger consumption while avoiding costly network upgrades. Clearly, demand-side energy flexibility is the key to achieving a resilient and cost-efficient energy system. However, there is no established solution to evaluate the potential for energy flexibility in current and future energy districts, as this is typically not a primary concern of existing energy planning tools.

The Role of the Internship

As an intern, you'll be at the forefront of developing an innovative tool to assess energy flexibility within districts. The tool will be built on top of the advanced district energy simulation tool [Dimosim](#), and in collaboration with various experts in the field, including the developers of Dimosim.

Here's what you'll be working on:

- **Methodology development:** Design strategies to quantify the flexibility potential hidden in districts and extract meaningful techno-economic indicators for flexibility

- **Model Development:** Collaborate with our team to enrich existing model and implement new models. In particular, we will focus on electric vehicle flexibility, which will involve data collection, simulation tool survey, and possibly in-house development.
- **User Interface:** Design an intuitive interface for the tool, making it accessible to district planners, energy consultants, and policymakers.
- **Implementation:** Develop the tool to simulate various flexibility scenarios.

Why Join Us?

- **Impact:** Your work will directly contribute to sustainable urban development and energy transition.
- **Learning Experience:** Gain hands-on experience in energy modeling, energy flexibility, software development.
- **Collaborative Environment:** Work closely with experts in different fields within an international innovation project ([GlocalFlex](#)), learn from their insights, and contribute your fresh perspective.
- **Networking Opportunities:** Connect with professionals at the forefront of innovation in energy.

Qualifications

We're looking for enthusiastic individuals with:

- A background in energy engineering and simulation computer science, or related fields.
- Strong analytical skills and a passion for sustainability.
- Proficiency in programming (Python, experience in web development and/or data visualisation considered a plus).
- Excellent communication skills and a collaborative mindset.

Ready to make a difference? Apply now and be part of the energy revolution!

Salary: 2000 or 2500 CHF/month depending on internship status (mandatory or non-mandatory)

Type of project: Internship, minimum 5 months. Location: Neuchatel

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