30 credits – Master’s thesis project on battery and supercapacitor energy storage for utility-scale PV plants

About us

Welcome to Solkompaniet - Sweden’s market leader in solar energy for businesses. We have been driving the industry forward for over 10 years and yet we have only just begun.

Our founders built Sweden's first ground-mounted PV plant in 2009 and since then we have helped investors and companies build plants from Östersund in the north to Skurup in the south, as well as Sweden's first and largest agrivoltaic plants. Currently we are also building Sweden's largest plant (again) at 22 MW!

Background

With increasing energy prices and a need to phase out dependence on fossil fuels, the European electricity market is facing a rapid shift from plannable to variable electricity production. To maximize electricity production from renewable sources such as wind and solar, more flexibility needs to be integrated. A part of this solution is battery and supercapacitor energy storage.

The scope

Now we are looking for 1-2 master’s thesis students (at least one Swedish speaking) who shares our love for renewable energy and the transition to a sustainable electricity grid and wants to work with our investment in utility-scale PV, battery and hybrid energy storage systems (PV BESS/HESS). With us, you become part of a fantastic growth journey and among your colleagues are the industry’s foremost experts in solar.

In this master’s thesis, you will develop a method to find optimal type and sizing of battery and supercapacitor storage for different sizes of utility-scale PV plants (~20-500 MW) to maximize the benefit and efficiency of a PV plant. To do so, several factors need to be taken into consideration: ancillary services, network codes (RfG), nearby power grid factors etc.

The thesis work preferably starts in January.

More about us

Solkompaniet is a value-driven company with the ambition to build a sustainable society - for real! With around 190 employees, we build solar plants all over the country and are the market leader in solar for businesses. We are a privately owned company and the owners include the Axel Johnson group. Our offices are located in Stockholm, Gothenburg, Helsingborg, Jönköping and Västerås.

We are fast-growing and constantly looking for new talents to join us. During next year, we will be searching for people with a passion for electrical power engineering.

For more information

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