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## Business models for increased diffusion of solar photovoltaic (PV) technology

### Project description

Solar Photovoltaics (PV) is a renewable energy technology with an enormous potential to offset fossil fuel generated electricity. PV technology has decreased rapidly in price over the last decade, and is now at or below cost parity with fossil fuel based electricity generation in large parts of the world. However, PV is also – compared to established energy technologies – a radically different technology, and the increased use (diffusion) of PV systems thus faces various barriers related to infrastructure, institutions and actors' practices and perceptions.

One way to facilitate PV diffusion is to develop new *business models* for PV diffusion. PV is suitable for small-scale (not least rooftop) applications, which contrasts to traditional (centralized) electricity generation. The most basic business model is the “turnkey” model, in which the PV adopter (user) purchases the PV system and is responsible for service and maintenance. However, the turnkey business model is not suitable or attractive to all user segments. Therefore, there are also actors who offer business models that – to various degrees – provide *PV as a service* (e.g. leasing) rather than as the sale of a product. Through this *servitization*, actors can obtain a PV system installation on their roof without the need for upfront capital, risk or hassle related to maintenance etc.

In this Bachelor Project, your job is to investigate these business models from a user (PV adopter) perspective. To build an understanding of their motives and experiences, you will interview Swedish actors (primarily companies) who have adopted rooftop PV systems through *PV as a service* business models. The objective is to understand the reasons why certain kinds of business models are preferred by different kinds of actors, and how business models could be developed in the future to facilitate further PV diffusion (e.g. by adapting them to certain user segments). You will be supervised by researchers that study the same topic, and your results may influence future academic publications.

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