Supervisors:
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Preferred background of candidates:
E.g., Anthropology, Informatics, Law, Entrepreneurship, but experience in qualitative research and interest in repair is more important than your background; students from all faculties are invited to apply.

UiO:Energy:
This project is situated in one of the four main research areas of the UiO:Energy - Energy Transitions and Sustainable Societies

Project title:
Repair and Conserve: The contribution of independent repair towards energy conservation in a sustainable circular economy

Project description:
Three facts guide this project:

1. Norway ranks nr. 1 on the Human Development Index (HDI), but nr. 158 on the Sustainable Development Index (SDI). The SDI calculates the ecological efficiency of nations in delivering human development by adding consumption-based CO_2 to the HDI.
2. Norway ranks nr. 5 on the global list of household final consumption expenditure per capita.
3. Norway ranks nr. 1 in generating electronic waste per capita globally.

These facts hang together. For example, a Norwegian household has on average 8 to 9 connected devices, such as mobile phones, laptop, smart watch, television, etc. The high consumption level of digital devices explains Norway's nr. 1 ranking in generating e-waste.

What does this have to do with energy? Energy is used by these devices as well as stored in them (and we don't mean in their batteries). We can express this energy in the form of a product's carbon footprint. For example, the carbon footprint of the production of your mobile phone is about 16-20 kg CO_2 and of your laptop about 150-200 kg CO_2. In order to compensate for the CO_2 emissions from production, distribution, and recycling, a mobile phone should have a life time of at least 25 years and laptop at least 20 years.

We don't expect consumers to hang on to their phones and laptops for 20 years or more, but doubling the lifespan of the devices we own today – postponing the purchase of new devices – would result in a decrease in energy use (less devices are produced) and a decrease CO_2 emissions. As a result, Norway may no longer rank nr. 1 in the e-waste index and maybe even move up in the SDI.

Repair can play a central role in extending the lifespan of a digital device, but we don't know enough about if, how, and where consumers repair their devices in Norway. This project is in particular interested in the role of small independent repair shops and community repair events (repair cafés, repair parties). These shops and events often implement repair on products that are no longer covered by product warranty, because they are too old or they are bought second-hand.

In order to understand their contribution towards energy conservation in a sustainable circular economy, we need to know more about how these independent repair shops and events operate, who their customers are, what they repair, but also what the societal, legal or political obstacles are to fully contribute to a sustainable circular economy. Dependent on the background of the students, we will develop more precise research questions. The expected deliverables are:

i) Around 20 interviews with owners/repairers of small independent repair shops (mobile phones, laptops, television, etc.)
ii) Around 5-10 interviews with organisers/repairers of community repair events
iii) Thematic analysis of the interviews: the focus depends on the background and interest of the students, but can include regulatory aspects, analysis of access to tools and spare parts, customer profiles, cultural aspects, inventory of obstacles for indendent repairers, etc.
iv) Independent repair map of Oslo (prototype app or website)
v) One popular article and one academic article written together with supervisors

This project is part of the UiO:Energy thematic research group *Circular Energy for a Circular Sustainable Economy* (Circular Energy)