Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Group for Sustainability and Technology (SusTec)
Department for Management, Technology, and Economics
Weinbergstrasse 56/58

Duration: 6 Months
Starting Date: ASAP, March / April 2019

Proposal for Master Thesis

"Going climate positive – what would it take for a large corporate"

Case study – Co-supervised by SusTec (www.sustec.ethz.ch) and Dr. Bastien Girod, Southpole

Background and context

- **Science based targets** and related reporting like TCFD (Task Force on Climate-related Financial Disclosures) **are gaining traction among companies**
- **With the report on 1.5 degrees by the IPCC, it has become clear that global emissions need to be reduced dramatically**– with 50% emission reductions until ~2030 and net zero by 2050
- **But: Globally emissions are still increasing, since not every company is "doing their fair share"**
- In addition, there is **growing awareness that** CO2 reduction will not be sufficient on this short timeline / **negative emissions technologies will be needed**/ cheaper
- The **transition from Kyoto to Paris** could reduce the opportunities for compensation projects / at the same time mobilize more capital (tbc)

Based on this, „Climate Leaders" are increasing their ambition to "climate positive", but the path is far from clear.

To make this ambition of "climate positive" actionable, we would like to propose a **master thesis as a case study with a large company** – answering the following questions

- Which "negative emission" technologies / methods can be used today and in the future (considering in particular the transition from Kyoto to Paris) and will they be sufficient / affordable at scale?
- What would "net climate positive" mean for a company, what would be the cost and what can we learn from the case study for other industries?

We are looking for an excellent student who is highly motivated and is able to work independently. Industry experience would be very valuable. Strong communication and project management skills as well as a background in business administration, economics or engineering are additional assets. The student will be an integrated part of the dynamic SusTec team in Zurich and will be supervised by one PhD student and a post-doctoral researcher.

Are you interested? **Please send your CV, a short letter of motivation (max. one page) and transcripts of previously obtained degrees (with grades)** to Dr. Petrissa Eckle (peckle@ethz.ch). Applications from non-ETH students are welcome.

We look forward to receiving your application!

Zurich, February 2019