

Master's degree project: Green Diesel

Preem intends to renovate its MHC facility to a process for hydrogen treatment (GHT) primarily of renewable raw materials such as fatty acids and methyl esters from tall oil; however, even other renewable raw materials, such as plant and animal fats, are also of interest.

The forenamed facility is primarily scaled for so-called raw tall oil (RTD) from the SunPine process in Piteå. RTD consists of a mixture of fatty acids, methyl esters and resin acids extracted from raw tall oil.

Because the production of green diesel is limited by the availability of raw material, it is also important to look at other potential raw materials for the GHT facility described above. Examples of such raw materials include plant and animal fats, byproducts, etc.

The Master's degree project consists of accessing the availability of such alternative raw materials. The following aspects are important in surveying these resources:

- 1) Description of the process that generates the raw material (especially from a renewability perspective)
- 2) Availability
- 3) Chemical composition (fatty acids, catalyst contaminants, such as metals etc.)

The Master's project should begin with a review of the SunPine process (Piteå) and the GHT process (Preemraff Gothenburg).

Contact person

Ulf Kuylenstierna, Tel. [+46] 10-450 41 82