

## Härjeåns Energy AB

Härjeåns Energy AB is owned by Härjeåns Kraft AB. In 2015 we had 27 employees, a revenue of SEK 164 million and a net income of SEK -23 million. The company produces and sells sawdust-pellets and briquettes made from peat. The production unit is located in Sveg in Härjedalen, Sweden and the produced pellets are used in district heating furnaces in the central part of Sweden or by homeowners in the whole country. The peat briquettes are used in the district heating plant in Uppsala. Härjeåns Energy AB currently produces about 75 000 tons per year at the plant in Sveg.

In 2010 we wanted to improve the competence of our employees and contacted Karlstad University. This resulted in a course given by Karlstad University to staff at the company in the spring of 2012.

In 2014, the company was offered and accepted a doctoral student working on our problems with fouling build-up in the superheated steam dryer. The fouling factor in the drying systems causes downtime and brings about cleaning costs. Cost of one cleaning is in the order of SEK 1 400 000 plus the additional cost of two weeks of downtime. Härjeåns Energy AB aims to improve knowledge of fouling and to develop strategies for limiting downtime and allowing increased production of bioenergy.

The doctoral student is employed by and works at Karlstad University. This, of course, limits the flow of information and possible research questions. In 2014, 2015 and 2016, however, Roger Renström spent as much time as possible here at Härjeåns Energy AB. He visited us on nine different occasions and spent 25 days either driving or on-site in Sveg during these three years. The VIPP project (started in 2014) aimed to lengthen the periods between each cleaning. When the VIPP project started, the typical running time was four weeks between each cleaning; now it is more than 16 weeks. So far, the cooperation has been very fruitful from an industrial point of view.

Since the VIPP research school started in 2014, the production manager, maintenance manager and myself as CEO have been constantly in discussion about research and tests. These discussions have been extensive and focused on more than just the fouling problems. We have the know-how about the plant in Sveg and representatives from the university have the necessary scientific perspective, thus giving valuable input about which issues that are worth investigating. Moreover, they implement research findings into the production and maintenance plans. Representatives from Karlstad University also give valuable scientific input into the everyday work here in Sveg.

The staff at Härjeåns energy AB is very interested in improving our routines and learning more. We look forward to further cooperation. Surely this must be a prime example of achieving academic excellence and industrial relevance at the same time.



Anders Wiklund, CEO, Härjeåns Energi AB