Announcement

28 June 2016

Successful co-firing of Blackwood's advanced biomass pellets in Helen Oy's Salmisaari power plant in Helsinki, Finland

Amsterdam – Helen Oy ("Helen"), the electricity utility of the city of Helsinki, Finland, has successfully completed a co-firing test with advanced biomass pellets at its Salmisaari coal-fired power plant. The advanced biomass pellets, also known as "torrefied pellets", were successfully transported, handled, co-milled and co-fired to produce green electricity and heat.

The torrefied pellets were produced using the torrefaction technology of Blackwood Technology B.V. ("Blackwood"), a Dutch torrefaction technology company based in Amsterdam.

Jussi Kukkonen, Development Manager of Helen, commented: "Last year we had already conducted a successful test with torrefied pellets at our Hanasaari pulverized coal power plant. This second and larger test, at our Salmisaari plant, provides us with additional comfort that torrefied biomass has an important role to play in Helen's transition away from fossil coal and towards renewable biomass-based fuels. The bio-fuel produced with Blackwood's technology was co-fired alongside fossil coal and we are very positive about the results."

Maarten Herrebrugh, Blackwood's CEO, added: "We are delighted that this second set of tests also went well. The tests demonstrated once again the superior characteristics of our torrefied pellets in terms of durability and grindability. We are now looking forward to working with Helen on the development of a regular supply chain of torrefied pellets, in order to help increase the production of renewable energy in the city of Helsinki."

Torrefaction of biomass

Torrefaction is a thermal pre-treatment technology to improve the fuel characteristics of biomass. Torrefied biomass is a carbon neutral, high quality bio-fuel, which can be co-fired in pulverized coal power stations, using the existing coal infrastructure. Also, the higher energy density of torrefied biomass results in a substantial reduction of logistics cost in the biomass supply chain.

The advantages of torrefied pellets over regular wood pellets make torrefied pellets a superior alternative for utilities planning to replace fossil coal with biomass. The use of torrefied biomass as a renewable alternative for coal in existing coal-fired power plants, contributes to the reduction of CO_2 emissions while using existing infrastructure and can therefore help mitigate climate change in a cost-effective manner.

About Blackwood Technology B.V.
Blackwood is a Dutch renewable energy company, focusing on the torrefaction of biomass. Blackwood's leading and award-winning torrefaction technology was proven at industrial scale in a demonstration plant in the Netherlands. Torrefied pellets produced by Blackwood's technology have been successfully co-fired in large scale European power plants as well as in smaller scale CHPs. Blackwood is planning a worldwide roll-out of its technology through a licensing model. As part of this strategy, Blackwood has signed a licensing agreement with South African utility Eskom for the construction of torrefaction plants in the SADC region.

About Helen Oy
Helen's business consists primarily of the production of electricity, district heating and cooling, as well as energy distribution and sales. The company has close to 400,000 customers throughout Finland. The company's district heating covers over 90 percent of the heating needs of the city of Helsinki. Helen also expands energy-efficient district cooling in Helsinki. The company aims to produce energy in a carbon-neutral way by the year 2050.