Press release

29 March 2023

Blackwood supplies its *FlashTor* technology to a new black pellet plant in Thailand

Amsterdam/Bangkok – Blackwood Technology B.V. ("Blackwood") has been selected as torrefaction technology partner for the first commercial black pellet plant in Thailand. Blackwood has signed a contract with TTCL Public Company Ltd ("TTCL") for the supply of a 10 ton per hour *FlashTor®* torrefaction system for this new torrefaction plant in the Thai province of Lampang (the "Torrefaction Plant").

Torrefaction Plant
In 2022, TTCL and Blackwood launched a small-scale torrefaction demonstration plant in Thailand (the "Demo plant"). The purpose of the Demo plant is to showcase the *FlashTor®* technology and to produce test samples of black pellets for prospective offtakers. Based on the success of the Demo plant, TTCL started building a first commercial-scale facility using the *FlashTor®* technology. The Torrefaction Plant will produce 75,000 tons per year of torrefied pellets (aka black pellets). The plant is scheduled to start shipping product in Q4 of 2023.

Mr. Maarten Herrebrugh, Blackwood's CEO, said: "After successfully launching our joint Demo plant last year, we are excited to continue working with TTCL on this first industrial scale *FlashTor®* plant in Asia."

Agricultural residues
The Torrefaction Plant will use agricultural waste (corn residues) as feedstock to produce the torrefied pellets. Agricultural residues have great potential as feedstock for producing black pellets. The torrefaction process turns this waste into a high grade solid bio-fuel with enhanced fuel characteristics.

Mr. Wanchai President and CEO of TTCL, commented: "Using agricultural residues as feedstock to produce black pellets brings multiple benefits. The agro-waste which we plan to use as feedstock would otherwise be burnt on the field, causing significant air pollution each year after harvesting. In addition, purchasing agricultural waste provides the local farmers with an additional source of income."

Torrefaction of biomass
Torrefaction is a thermal pre-treatment technology to improve the fuel and handling characteristics of biomass and to reduce costs of the biomass-to-energy supply chain. Torrefied biomass is a carbon neutral, high quality solid biofuel, which can replace fossil coal in power stations, steel plants and coal gasification plants, using the existing coal infrastructure. Torrefaction is instrumental in unlocking the full potential of biomass for the purposes of energy generation as well as the production of bio-based fuels and chemicals.

About Blackwood Technology
Blackwood is a Dutch cleantech company, focusing on the torrefaction of biomass. Blackwood's leading and proven *FlashTor®* technology turns forestry and agricultural residues into a high grade solid

biofuel. Blackwood's core business is the sale of *FlashTor®* systems and licensing of the *FlashTor®* technology to the developers of torrefaction projects.

About TTCL Public Company Ltd

TTCL is an integrated Thai Engineering, Procurement and Construction (EPC) and investment company. TTCL was formed in 1985 and the company is now listed on the Stock Exchange of Thailand.

Traditionally, TTCL's EPC business focused on petrochemical, chemical and fertilizer plants as well as power generation projects. In recent years, TTCL shifted part of its activities onto renewable energy and environmental projects. In 2017, TTCL started investing into biomass renewable energy projects and is currently setting-up a torrefied pellet business. In 2020 TTCL became majority shareholder in Blackwood.