

Finlays waste to resource initiatives - Circular economy

Finlays is committed to a sustainable future. Operating across the entire value chain, we are keenly aware of the economic, social and environmental impact of our activities. As owners of tea estates, we also take a long view on our natural environment – with a deep understanding of how our business is intimately linked to the landscape where we are located. Take forests as an example. Tea cultivation is dependent on the forests that surround them. Forests help mitigate climate changes by controlling the micro-climate, providing water and biodiversity (to help control pests and diseases), and they sustain agriculture in the area.

Where we operate we undertake work to protect natural forests both inside our estates and outside. All of our tea estates' boilers are powered by sustainable firewood and 83% of our overall group energy is provided by renewable sources. We are increasing our efforts to reduce our waste production and turn waste into resources, where possible and in doing so increasing our participation in a 'circular economy'.

Globally we are continually looking for ways to reduce, re-use, recycle and recover our waste streams, diverting as much waste as possible from landfill, where possible. Taking steps towards 'zero to landfill'. Reducing waste increases efficiency and decreases production costs.

Following reuse, recycle, recover, reduce hierarchy allows us to repurpose waste materials, extending the lifecycle of materials, reduce the amounts of raw materials used and therefore aids in reducing our impact on finite resources, globally.

Finlays has implemented a few waste to resource projects globally:

Biogas: sustainable waste management system which had just recently been commissioned. The biogas plant has now been in operation for a couple of years with the Combined Heat and Power System (CHPS) generating 0.54 GJs per hour of electricity and the same amount of heat energy. During that time waste from our tea farms and factories



have ensured continuous production of gas and generation of electricity. The biogas yield of substrates fed into the digester is fairly consistent for all the substrates although currently, the It consists of 1700 m³ digester which will approximately hold approximately 7,000 tonnes of organic waste; a mixture of spent black and green tea waste. The digested substrate is discharged into a slurry lagoon before being applied as a soil fertiliser to timber plantations, new field clearings and tea plantations.

The project is scalable and fairly easy to replicate, we planning a second plant installation in Kenya.

Boiler upgrade: Refitting and repurposing boilers in Argentina to use agroforestry offcuts / sawdust, has allowed our operations here to halt the use of timber in our tea production and use a otherwise wasted (sent to landfill) local resource from the agroforestry. The replacements made to our exchangers generate approximately 57,000GJs of energy through waste per annum. Saving the use of raw materials required and the reducing carbon emissions.

Alternative Materials: In Sri Lanka our tea estates use organic waste materials called paddy husks, which is made up of materials such as rice husks as alternative to sustainable firewood sources. In 2016 we used 175 tonnes of paddy husk to replace firewood.

