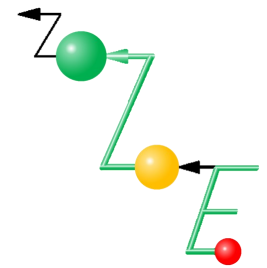
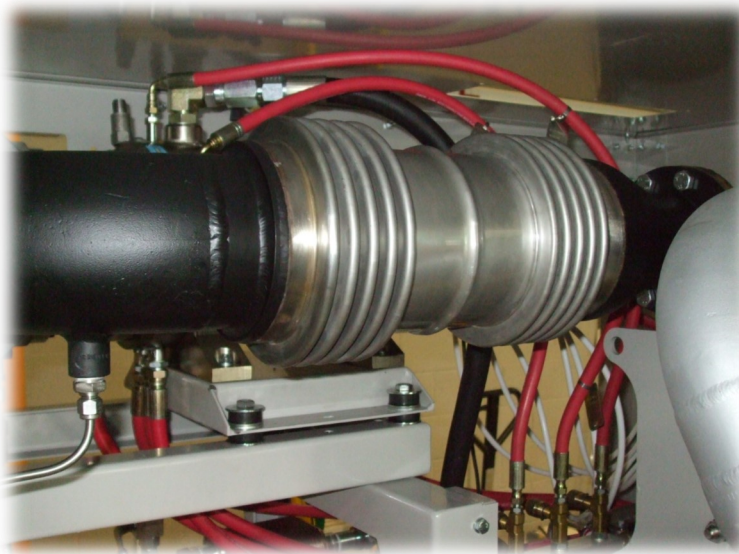


Case Study

Containerised ORC on Pyrolysis Waste2Energy



This system utilised the waste heat from a pyrolysis system for the disposal of waste, using ZE ORC technology to generate electricity. Designed for use on military operating bases both domestically and in theatre, this is a fully containerised system which can be rapidly deployed. Building on waste disposal technology that is already proven on UK vessels, marrying the Pyrolysis to the ZE ORC equipment to produce a sustainable Waste2Energy solution



The Pyrolysis equipment takes untreated waste materials, from food, plastic and tins to be processed. Waste heat is harvested from this process and passed into a heat transfer fluid, which is then brought into ZE's Organic Rankine Cycle technology and used to produce a high quality 3 phase output. The system was aimed at eliminating the need for trucks and independent contractors to remove waste from military sites, in order to boost site security. It was also seen as part of the US military's drive for reductions in fossil fuel use and logistical footprint as well as

the adoption of sustainable electricity production bring promoted by the US government.

The waste heat capture is non invasive, which means that the operation of the ORC does not affect the operation of the Pyrolysis. When the ORC is not running e.g for maintenance, the Pyrolysis equipment can continue to function.

