

“The proposed site will be used to locate various items of equipment involved in the production, use, storage and analysis of clean energy. The main aim will be to generate research data and proof of concept of novel integrated processes for clean energy generation, however as part of this any energy generated by this work may be used by the broader campus network or beyond.

Units targeted for this may include but will not be limited to units designed for gasification, pyrolysis, anaerobic digestion, gas cleanup, feedstock preparation (e.g driers, grinding or pelletising equipment) and combustion.

Units will predominantly be supplied by industrial partners and will generally be standalone transportable items which will be positioned on the base in respect to each other to make best use of the modular nature of the equipment and the space available

Units will process feedstocks or varying forms with the majority being organic material such as agricultural byproduct, forestry material and food residue but which could also include plastics and other substances. These feedstocks may also be stored in containers in small quantities on the base.

Additional ancillary equipment and supplies may be required such as product and sample storage facilities, monitoring and analytical equipment or compressed gasses.

Typical use of the space would follow the pathway of feedstock being received before being pre-treated if necessary to make it suitable to be processed by one of the energy creation methods (eg pyrolysis) the material is then converted from its received form to an intermediate form (e.g. biogas, syn-gas, char etc) such that it is capable of being used to create heat and/or electricity though its use as a fuel (eg via a micro turbine generator) or similar. Any residue or product not consumed in the process will then be collected, stored and appropriately disposed of. As a final step this generated power has the potential to be stored onsite or used through the campus directly or used in another manner.

It is not expected that any of the units on the facility itself will have an intensity of use or scale of operation in anyway similar to a commercial operation”