**L&G Techit UK Ltd Executive Summary**

L&G was established in 2012 to develop a zero emissions clean energy system. Specifically the patented technology relates to an innovative combustor (Cleen Sun) assembly that through appropriate process integration, can increase net efficiencies by up to 30% absolute.

The unit is capable of using hydrogen, methane or syngas as a working fluid, delivered from industrial process, national transmission system or electrolyser. By creating a high temperature plasma from the working fluid, Cleen Sun utilises an optimised magnetohydrodynamic drive to generate electricity pre-thermal energy recovery or heat transfer. In absence of any mechanical parts, its operating costs are exceptionally low, leading to a significant competitive advantage when it comes to LCOE.

The unit, while producing power, is effectively an energy efficiency tool. Which by virtue of the fact it requires no additional raw fuel to produce electricity, is on an incremental generation basis, a zero carbon technology.

A market assessment has been completed, identifying the below applications, that collectively represent a >£58Bn a year market for product supply and servicing, under mature/established conditions.

* CCGT (combined cycle gas turbines)
* Integrated steel mills – thermal power generation plant
* Integrated steel mill – production reheat furnaces
* Flat/float glass – raw material melt furnace
* Domestic boilers

Other markets exist, such as ceramic and cement production, but these are yet to be evaluated.

To date the shareholders have invested >£400k to develop the concept up to Technology Readiness Level 3 (TRL3), delivering and testing a proof of concept unit. The company now wish to advance TRL4 and TRL5 works, specifically for industrial applications; which they consider the optimum point of market entry. Against this objective they have the interest and support of an international steel company and a UK glass industry research and development organisation. In addition to these prospective clients, they have developed working relationships with Universities of Sheffield (energy team) and Birmingham (materials and manufacture).

This is an exciting time in L&G’s development plans and they are looking forward to developing at pace during 2021.