CARBON CUT UK TRADING LTD

Company No. 10180631

48 Alner Road Blandford Forum Dorset DT11 7FJ Jan 18th, 2021

Dear

To-date the founder has invested £350,000.00 into this project, not including £150,000.00 grant or time and expertise. There are no other finance/investment arrangements other than \pounds 50,000.00 Bounce Back loan

The technology is medium complexity in problem to overcome, but low complexity in the answer to the problem.

In lay-person terms - placing a flexible tray into a cavity wall to collect and expel water/condensation from the cavity

This has and is achieved in an affordable and sustainable way, with limited disruption to all parties, occupants/landlords and public.

All insurances will be placed on investment.

Moving Forward

With climate change near the top of political/scientistic problems, the major issues of CO2 and plastic waste must be tackled in an affordable way.

Emissions from buildings have be addressed in two ways, reduction of energy use, and decarbonisation of energy. The latter is being address with wind and solar, but these energy supplies cannot address the energy problem, without large reduction of usage.

Most buildings are large wasters of energy, construction of new buildings is improving, existing buildings have a long way to go.

This area is where our affordable and sustainable Tray will reduce the consumption of energy and in turn reduce emissions.

The normal way of new technology entering the marketplace is, starting in a small way/area and building coverage in time, expanding the company at the same pace. This cannot be the way forward for this technology, mainly because of time constraints, by way of the speed of Climate Change.

The way forward is licensing to large companies with the capability of continental roll-out.

Making this jump is challenging, being construction like to move slowly, if at all, and we will have to make a Unicorn business overnight.

Step one - Technology is ready

Step two – The IP value is sufficient to finance the expansion.

Step three - making the technology known to political/construction industries.

Step four – making customers/end-users aware of the new technology, companies like, Social Housing, Private Landlords Associations, and from them finding their maintenance companies, who would be fitting our technology – further, BRE (Building Research Establishment) and construction companies would be informed.

All the above would-be large users of our Trays

Step 5 – After creating/assessing the demand – UK – setting Manufacture, Distribution, Fitting, license contracts.

OPPORTUNITY OVERVIEW

The market opportunity is being helped by proposed legislation, came into force in 2018, meaning that private landlords of flats and houses will be forced to upgrade the insulation of their flats and houses to Category D, from E, F and G by at least two levels¹. Failure to achieve this means they will lose the right to lease such properties again.

Within a block of flats, the system also has the additional benefit of holding the insulation in place in each flat. This enables individual flats to achieve insulation without having to have the overall agreement of the total block, or, if one occupant does not require/want cavity fill this would stop the others having cavity fill, until now.

Currently, it is extremely costly to have insulation enhancements in mid/high-rise buildings. To achieve similar insulation savings to those achievable with Carbon Cut, older multi-story buildings must be clad externally **(Band)** or dry-lined internally at a much higher cost (X5) and considerable disruption. These systems suffer the additional disadvantages in that installing dry lining loses internal space.

¹ Residential Landlords Association, *Minimum Energy Efficiency Standards*, <u>https://www.rla.org.uk/landlord/guides/minimum-energy-efficiency-standards.shtml</u>, Apr2017

There are **5.4m Hard to Treat cavities** (BIES quarterly Energy Efficiency statistics²) that could benefit from the Carbon Cut system and could potentially achieve a higher category of energy assessment.

There are 2.6 million flats in England built before 1980 without insulation of which 800,000 flats (Government figures) are medium rise blocks (>12/18metres high). These are one of initial primary targets for the Carbon Cut as these flats are mainly sheltered housing. A lot of these buildings are constructed via brick boundary walls with block inner walls. Floors sit on the inner walls. This type of construction has continuous cavities from top to bottom. It was originally envisaged that they would be cladded like several other high-rise buildings, but this has not happened due to the high cost (affordability) and associated long payback period (sustainability).

The UK Department for Business, Energy & Industrial Strategy (BEIS) is keen to promote alternative means of filling these Hard-to-Treat cavities **(UK Market cap £30B)** and so that only clad or dry line is done when there is no alternative. This has been the logic of DECC financing the Carbon Cut pilot scheme and supporting the commercialization of the system.

The private sector (commercial/private rent and private domestic) is the prime target with the market in total for the UK is 5.4m hard/easy to treat cavities (BEIS Quarterly Energy Efficiency statistics) of which Carbon Cut plans to target 2m+ of these medium rise buildings.

The chartered institute of building (CIOB) have stated in their report of Buildings under refurbishment and retrofit that "up to 30m buildings may have to be retrofitted".

Yours faithfully, C. RIGGS Printed name: Chris Riggs

Position: Director

² Report Energy Efficiency in British Housing, <u>https://www.gov.uk/government/collections/household-energy-</u> efficiency-national-statistics