**SHOWCASING OUR MANUFACTURERS’s SUSTAINABILITY ACHIEVEMENTS

A short guide for writing your CASE STUDY**

**Purpose:** This is a simple guide for Make UK members to tell their story about any measures their business may have undertaken to improve sustainability, highlighting the benefits and future plans for further improvement.
We don’t want to be too prescriptive but we do need a minimum information to make it meaningful and credible. So if there is anything that you think is relevant and that does not fit in the boxes, please do add it where you see fit. Don’t refrain from telling us about your achievements!

We may get back to you to obtain further clarification if needed and to ensure our understanding is correct.See the **example on the next page** (again this is not prescriptive).

**Writing your case study**

1. About you and your company:

Company name:
Your name and professional title:
Brief description of your company, e.g. what you make/do, including:

* sector, size (small, medium or large and staff number), turn-over, single or multiple sites, UK only or multinational, position in supply chain (e.g. OEM/1st/2nd/ or lower tier)
* are you part of a cluster/hub/port and in what region (North East/North West, East/West Midlands, East of England, London, South East/South West etc…)
1. What action(s) have you taken or are planning to take?
	* What new technologies and skills did/will you introduce to enable you to implement this?
2. Why did you decide to do this?
3. What benefits have you seen, or do you expect to see from taking action?
4. What is your top tip for other businesses who want to do their bit to reduce emissions and tackle climate change?
5. Have you committed to a net zero target or signed up to a net zero pledge? If so, which one?

Scope: you can tell your story in one (or both ) of the following ways:
- improvements at your site level (process/operations, buildings, management, other initiatives e.g. nature-based solutions e.g. planting trees, serving less meat), behavioural change

- in your supply chain (e.g. downstream: how your product or service help/will help your customer become more sustainable, or upstream, how your choice of supplies/raw materials has influenced your emissions)
Metrics: Try to give quantitative information if you can. If you don’t have any, we still want to know what you are doing!

* This can be a % reduction of your carbon footprint, energy, raw materials and other resources (e.g. water) consumption, waste reduction or a more precise measure e.g. emissions in Cequ.,  energy consumption in KWh, or volume (tonnes) of waste, resources or...
* How much cost savings and new jobs/new apprenticeships (if applicable) this has directly resulted in.

**Promoting your story** - please answer the following questions:

* Are you happy for us to use your story to showcase you in various events or to illustrate what could be done to enhance policy? (if not it will feature only on Make UK’s website) Yes/No
* Do you wish your name to appear publicly (the company name and your title will be mentioned)? Yes/No
* Would you (consider) signing up to the UK official COP26 campaigns ([SME Climate Hub](https://smeclimatehub.org/uk/) or [Race to Zero](https://unfccc.int/climate-action/race-to-zero-campaign#eq-4)}?
* Would you like to participate in COP26 specifically? Yes/No
* Do you wish to feature on a video showcasing our manufacturers prefaced by Nigel Topping, the UK High Level Climate Action Champion for UN climate talks, COP26? Yes/No

**Example 1**Company A, a small Rochdale-based manufacturer of vinyl-wrapped doors and windows, employing 41 people, has become a leader in climate action.  Back in 2015 the refusal of a crucial planning application for a biomass burner to heat the factory forced them to make significant improvements to their factory and fleet. Dedicating 10% of their turnover over 5 years to achieve their goal enabled them to invest £1.5 million in assets, training and other improvement. This may sound a significant outlay but most of these investments are actually cash flow neutral or positive: the biomass burner generates £60,000 a year through the Renewable Heat Incentive (RHI) scheme, which are re-invested in further improvements. The 246kW rooftop solar PV array is being paid for with a cash flow neutral loan over 6 years using the savings on their electricity bills. They also generate income through the Feed-in Tariff (FIT) and Smart Export Guarantee (SEG) schemes. Their LED lighting system is being paid for through electricity savings. In 2020, they decided to go further and declared a climate emergency, committing to [a bold and radical plan](https://protect-eu.mimecast.com/s/W1CpCnOrNcB729H9Psry?domain=crystaldoors.co.uk/) to reach net zero by 2022, covering their supply chain (scope 3) emissions, by offsetting the emissions they cannot get rid of through local nature-based solutions (planting trees).
As a result of these measures their carbon footprint has reduced by over 75% since 2015. This strategy shows that you don’t need to be a large business with significant funds to go zero carbon.

**Example 2- supply chain (customer) level**

Company A offers various energy recovery solutions whereby the heat energy produced by compressing air can be recovered and reused in other manufacturing processes. A large number of industries can benefit from energy recovery, and can use up to 94% of the thermal energy as low-grade heat, e.g. to heat process water or even to direct it into the heating or hot water systems of the facility itself, thus very significantly improving the factory’s energy efficiency.
There are numerous examples of how beneficial energy recovery technology can be from both financial and sustainability perspectives. One of these is a manufacturer of textiles for the automotive industry. The company achieved average energy cost savings of £37,000 a year and reduced annual CO2 emissions by 260,000 tonnes by adopting Company’s A energy recovery technology. Based on the compressor running for 8,424 hours per year, the combination of the compressor and energy recovery unit is recovering more than 1.4 million KWh of energy a year.

Working side-by-side with their customers Company A has developed other tools and solutions for smart and energy efficient factories, for example the Internet of Things (IoT) enabled data monitoring system, which gives remote insights into the compressed air installation. Trained and certified engineers use these insights to help to predict maintenance needs, optimising the factory’s energy performance, and securing production uptime. Also, the central controller not only selects the most efficient mix of compressors but is also Industry 4.0 enabled, thereby optimising energy performance. Another major technological product innovation, is the compressor with integrated Variable Speed Drive (VSD+), which enables  energy savings of up to 50%   (compared to a conventional fixed speed model), saving a significant amount of energy. In 2019 Company A’s VSD machines under 100kW, installed in the UK, saved industry 18,000,000 kWh.

The XYZ oil-free centrifugal machine/tool underwent some innovative enhancements aimed at maximising it energy consumption. As a result, the number of units sold of this tool type on average, per year, avoids 26,500 metric tonnes of CO2 every year (which corresponds to 5626 passengers cars driven for one year), compared to previous models (this is a worldwide figure).