

Straight Plc

CO2Sense carried out a feasibility study to explore the possibilities for Straight Plc to develop on-site renewable energy generation



Renewable Energy

- CO2Sense produced a feasibility study for Straight Plc looking at developing a solar PV and wind turbine installation on their site in Hull
- The suggested solar PV array and a wind installation would save 110 tonnes CO₂ each year, and generate around £95,000 in revenue from the Feed in Tariff
- However, the study found that wind installation was not feasible, but that a small solar PV array could be fitted on the factory roof
- Straight Plc have decided not to develop renewable electricity generation on-site at the factory for the time being and are considering off-site generation options presented as part of the study

Straight Plc wanted to see if it was possible to produce renewable electricity on the site of their plastic injection moulding factory, based in Hull. By generating electricity on site, the company would be able to cut their electricity costs, reduce their carbon footprint in response to demand from customers, and encourage others in the area to invest in renewable electricity.

CO2Sense carried out a feasibility study for Straight Plc, looking at how viable a wind or a solar PV installation would be for the site. The study considered all of the critical aspects of installing both technologies, including the social factors, technical issues, and the planning permission requirements. For the suggested installations the study then developed business cases and put forward options for financing.

“The study gave us an invaluable insight into what each technology would mean for the business and the local area... The feasibility study has stopped us from spending more money getting planning permission for projects that would not have been viable.”

Jonathon Straight – Managing Director – CO2SENSE

The study found that a wind installation and a solar PV array would save a total of 110 tonnes of CO₂ each year, and earn the company around £95,000 from the Feed-in-Tariff (FiT). Straight would also benefit from reduced electrical demand for the site, by reducing utility costs, and from selling any unused renewable electricity to the national grid.

“It is essential for any project to ensure that the financial, social, technical, environmental and financial aspects have all been considered before purchasing expensive equipment or undertaking planning applications.”

Victoria Maynard – Consultant – CO2SENSE

However, the study concluded that the site was too small for the wind turbine necessary to achieve Straight’s objectives, but made recommendations as to alternative opportunities for them to invest in wind energy on other sites. Solar PV was also not suitable, as of the structure of the factory roof would need strengthening before panels could be installed. Without strengthening the roof, Straight would only be able to install a small array that would give low carbon savings and FiT payments.



“The study gave us an invaluable insight into what each technology would mean for the business and the local area,” said Jonathan Straight, Managing Director at Straight plc, owners of the Powell Plastics business. “We now have a full view of everything that needs to be considered, from the economic consideration, to social implications of the development. The feasibility study has stopped us from spending more money getting planning permission for projects that would not have been viable, and has enabled us to identify other opportunities for investing



in renewable energy that we would not have otherwise considered.”

Victoria Maynard, Consultant at CO2Sense, said, “The study has looked at the factors specific to Straight Plc to establish the right technology for the company. This meant we had to consider everything that could impact on the development. It is essential for any project to ensure that the financial, social, technical, environmental and financial aspects have all been considered before purchasing expensive equipment or undertaking planning applications.”

As a result of the study, Straight Plc has decided not to develop renewable electricity generation on-site at the factory for the time being, but is considering the off-site generation options. Straight Plc and CO2Sense continue to work together to reduce carbon emissions and develop renewable energy generation.

CO2Sense was established by Yorkshire Forward to help businesses in the region to prosper in the low carbon economy.

We provide expertise and funding to help environmental companies to grow. We work with partners to help all organisations to fund and develop initiatives that reduce their carbon emissions.