

# CASE STUDY



## Hall Farm

|                                |   |
|--------------------------------|---|
| <b>Description:</b>            | A renewable technology project specifically aimed at creating self generated electricity.   |
| <b>Renewable Technologies:</b> | The evaluation of technologies focused on the performance comparison of two solar PV systems and two wind turbines.   |
| <b>Study Outcomes:</b>         | It was concluded that all technologies were viable. However, it was recommended that a 50 kW Endurance turbine was used with a payback time of 6.4 years. Solar PV 49.35 kWp was also Recommended with a payback time of 9.6 years. |

### Annual benefits from a 50kW Turbine and 49.35 kWp Solar PV

| <u>Renewable Technologies</u> | <u>Carbon emissions saved</u> | <u>FIT Income</u> | <u>Electricity Generated kWh</u> |
|-------------------------------|-------------------------------|-------------------|----------------------------------|
| <u>50 kW Wind turbine</u>     | 70.3 tonnes                   | £34,408           | 136,000 kWh                      |
| <u>Solar PV 49.35 kWp</u>     | 17.9 tonnes                   | £11,361.36        | 34,533 kWh                       |



***If you are interested in renewable energy technologies, want to know whether your site is suitable and how much energy & CO<sub>2</sub> emissions you could save contact our office on 01953 798112.***