

# Planning Statement for a new sustainability Proposal at Sport in Desford (SiD)

Sport in Desford, The Flying Fields, Peckleton Lane, Desford, LE9 9JU

**SiD caters for 6 autonomous sports clubs on a 5 acre site and the 2 storey clubhouse has a footprint of 1,100m<sup>2</sup> and attracts approx. 1,000 clients per week. Over the past 12 years, SiD has implemented a number of developments that mean since 2015, SiD has been carbon negative in terms of its use of electricity over a full year. In 2021 SiD won a national award from the Decentralised Energy Association beating Centrica Business Solutions and Npower in the process.**

The existing surplus electricity generation (4,500KWh p.a.) has been achieved by installing:

- Doubled up insulation wherever possible
- modern double glazed windows
- 44KWp of solar panels (176 off 250W panels on every SE and SW facing roof)
- 6 Tesla Powerwall 2 batteries (81KWh, 30KW)
- LED lighting in and around the building
- PIRs in frequently used areas
- LED floodlights on 5 tennis courts
- Current energy flows in a "normal" year (all units, rounded, in MWh p.a.) are:

|                  |    |
|------------------|----|
| Solar generation | 41 |
| Consumption      | 35 |
| Import           | 12 |
| Export           | 17 |

## **This new project tackles our dependence on gas for heating and hot water**

Our well managed space and hot water heating was originally powered by propane but converted to natural gas in 2010, and has remained dependent on natural gas since then, hence this proposal is to replace completely this dependence on gas by installing:

1. 2 off 30 W 3 phase Air Source Heat Pumps (ASHP) with a COP around 2.5 with the internal units replacing the existing two condensing gas boilers (30KW and 38KW). The ASHPs would be set to take both the heating and hot water loads.
2. a new 20 KWp (approx,)solar array on the NW facing roof of the clubhouse working through a 12KW inverter (the max allowed by NGED) to help provide for the extra electrical demand of the ASHP. This being a permitted development.
3. a potential connection to the Flexible Power Project run by National Grid Energy Distribution (NGED) so that SiD can make a small contribution to balancing the Grid in exchange for some reduction in fees. It appears that Desford lies in the second largest constraint management Zone (CMZ) in the NGED (previously WPD) area