

# Tybroughney Pig Farm Case Study

## Pig Farm reduces costs through Energy Efficiency Upgrades



The Tybroughney Pig Farm is located just off the N24, outside Carrick-on-Suir, Co. Tipperary. Tybroughney Pig Farm consists of a number of extensive buildings which house 6,300 pigs in rotation. The farm operates on a 24/7, 365 days per year basis resulting in an all year-round electricity demand for lighting and motive power for the grain mill and feed mixer including various other farm equipment.

In 2014, Tybroughney Pig Farm reached out to 3cea to conduct an energy audit at their site to identify potential energy saving opportunities. The purpose of the audit was to assist the facility with the identification of energy efficiency measures. 3cea identified motor and lighting upgrades among other measures which when implemented, would result in annual energy cost savings.

3cea Project managed the entire grant application progress for the owners and were successful in applying for 30% grant funding under the BEC scheme towards the capital cost of the identified motor and lighting upgrades at Tybroughney Pig Farm.

### Summary

<b>Company name:</b>	<b>Tybroughney Pig Farm</b>
<b>Project actions:</b>	Energy audit, installation and commissioning of lighting and motor upgrades
<b>Finance source:</b>	Internal
<b>Additional funding:</b>	SEAI BEC 2014 programme
<b>Grant %</b>	30%
<b>Grant amount:</b>	€1,953
<b>Total project cost:</b>	€6,510
<b>25-year savings:</b>	€1,426
<b>Simple payback time:</b>	5.9years



Weaner Rooms

	Nov 2013 to Jun 2014	Nov 2014 to Jun 2015	Savings
<b>Total Consumption</b>	185,100kWh	181,047kWh	-2%
<b>Total Energy Costs</b>	€23,604	€22,178	-6%

### Installed Measures



Efficient motor control- Variable Speed Drive



Installed Variable Speed Drive



IP rated T5 light fittings



Installed T5 lighting in Farrowing pan

## Benefits

Lighting expenses reduced by up to 78% that offer more brighter lighting than the traditional lamps.

New T5 lamps provide longer operational lifespan which reduces maintenance costs.

Significant energy savings will be achieved by upgrading the Fans and pump system by replacing existing throttling valves and dampers with VSDs.



Aerial map of Tybroughney Pig Farm



Grain Silos