

# CHP Upgrade

## Dundalk Sewage Treatment Plant

Dundalk had two CHP units installed in 1999 which have since been dismantled to make one. The engine had a poor efficiency and required substantial repairs. However, after successfully replacing their CHP Unit, the benefits and cost savings were clear. The 3 Counties Energy Agency (3CEA) through the Sustainable Energy Authority of Ireland's Better Energy Communities programme is helping by administering state-wide funding for energy efficiency and renewable energy projects.

### Summary

<b>Company name:</b>	EPS
<b>Project actions:</b>	Replacement of the existing CHP unit by a higher efficiency unit.
<b>Finance source:</b>	Internal
<b>Additional funding:</b>	SEAI BEC 2018 programme
<b>% funding:</b>	30%
<b>Grant amount:</b>	€ 55,470
<b>Total project cost:</b>	€ 184,632
<b>25-year savings:</b>	€ 1,538,290
<b>Simple payback time:</b>	2.1 years



	Annual Energy (kWh)	Annual Value (€)	Annual CO <sub>2</sub> (tonnes)
Imports Before project	2,798,615 kWh	€ 223,889.20	719 tonnes
Imports After project	2,029,470 kWh	€ 162,357.60	521 tonnes
Savings	769,145 kWh	€ 61,531.60	198 tonnes

### Benefits

Thanks to the CHP unit replacement, EPS saved money and reduced its carbon footprint through the BEC 2018 Programme.

The replacement of the CHP unit has resulted to more thermal energy to be produced per unit of electrical output and to increase the overall output per m<sup>3</sup> of biogas.

3CEA are working hard to develop another award-winning project involving SMEs, local community groups, local authorities and homeowners. For more information on BEC please contact 3CEA office.