

# Insulation and Energy Systems Upgrade Fr Griffin Road Fire Station

*With a large electricity and oil demand for heating and electrical devices at their Fire Station, Galway County Council is concerned about promoting a sustainable energy practice while meeting their daily business objectives. However, after successfully installing their PV panel system and their new sustainable lighting system, upgrading their heating devices and increasing their building insulation, the benefits and cost savings were clear.*

## Summary

|                             |   |
|-----------------------------|---|
| <b>Company name:</b>        | Galway County Council   |
| <b>Project actions:</b>     | Roof insulation, Cavity wall insulation, draft proofing 25 windows and 3 doors. Installation of high efficiency heating devices. Installation of PV panels. Lighting Upgrade. |
| <b>Finance source:</b>      | Internal  |
| <b>Additional funding:</b>  | SEAI BEC 2016 programme   |
| <b>% funding</b>            | 30%   |
| <b>Grant amount:</b>        | € 36,369  |
| <b>Total project cost:</b>  | € 72,738  |
| <b>25-year savings:</b>     | € 296,807   |
| <b>Simple payback time:</b> | 3.06 years  |



|                               | Annual Energy (kWh) | Annual Value (€)   | Annual CO <sub>2</sub> (tonnes) |
|-------------------------------|---------------------|--------------------|---------------------------------|
| <b>Imports Before project</b> | <b>260,034 kWh</b>  | <b>€ 30,423.90</b> | <b>114 tonnes</b>               |
| <b>Imports After project</b>  | <b>138,344 kWh</b>  | <b>€ 18,551.60</b> | <b>67 tonnes</b>                |
| <b>Savings</b>                | <b>121,690 kWh</b>  | <b>€ 11,872.30</b> | <b>47 tonnes</b>                |

## Benefits

Reduced their carbon footprint following the upgrade of heating devices, windows/doors/wall/attic insulation and electricity system upgrade

Replacement of old heaters (water immersion and fan heaters) with more efficient heaters (under sink water heater and top track system).

The PV panel system provides a clean, renewable electricity supply with no greenhouse gas emissions. LED lighting upgrade.

*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.*