



SMARTrenew Project

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Donegal County Council
January 2021



SMARTrenew is a strategically important €1.6m project partly funded by the Northern Periphery and Arctic (NPA) Interreg programme and consists of an international consortium of partners from

- Ireland – Letterkenny Institute of Technology,
 - Finland,
 - Norway,
 - Iceland,
 - Faroe Islands,
- **Ireland - Donegal County Council**
- Northern Ireland – Derry City and Strabane District Council

SMARTrenew aims to improve the uptake of smart renewable energy mix and energy storage in rural and sparsely populated regions of Northern Europe, which are still over-reliant on fossil fuels for heating and energy.

Pilot Project (Sept - Oct 2020)



Milford Public Services Centre & Community Library

Renewable Mix/Smart Storage

- 3no. 42.6 KW Air Source Heat Pumps
- 6kW Solar PV Array
- Fabric Upgrades - Pumped Cavity Insulation

Pilot Project Benefits

- Removal of the dependency on heating oil
- Providing a smart renewable energy mix
- Providing smart heating and electric controls
- Introduction of renewable energy technologies to public service buildings

Est. Annual Savings Generated by SMARTrenew Project			
Project Element	[kWh]	[€]	[tCO2]
Air Source Heat Pumps	184,262	€8,680	34.2
Solar PV Array	4,901	€882	1.7
Fabric Upgrades	11,399	€969	2.9



Contract Award



Oil Tank Removal



PV Installation



Pump Controls to BMS



Air Source Heat Pumps

Milford PSC
Updated 2 days ago

Real Time Statistics	Device	Alert
All Devices Offline Check >		
Running Days 81	Annual Production 71.80kWh	
Total Production ⚙️ 906.00kWh	Total Anticipated Yield 181.20 EUR	
Trees Planted 2.47Tree(s)		

Solar PV Install Smart Phone App

Letterkenny Public Services Centre Sustainable Green Roof & Pollination Plan

2002

Bauder Sedum
green roof system
constructed



2018

Sedum was poor
condition through
lack of natural
pollination

2019

Sedum regeneration
through pollination, each
hive contains
approximately 35,000
Native Irish Honey Bees



2021

Pollinators supporting
the health and
sustainability of the
Sedum ecosystems

Proposed Donegal County Council Projects

- **Public Services Centres**
 - Renewable upgrades incorporating air source heat pumps, PV Solar, cavity insulation, LED lighting upgrade
- **Regional Cultural Centre**
 - LED lighting upgrade, upgrade heating system
- **Library Buildings**
 - LED lighting upgrade, upgrade heating system
- **Fire Stations**
 - LED lighting upgrade
- **Central Machinery & Plant Store**
 - LED lighting upgrade, EV Charging Points