



# Bioenergy & community wind projects in the SouthEast of Ireland

**Stephen Oba**

Junior Energy Engineer, South East Energy Agency (SEEA)

[stephen@southeastenergy.ie](mailto:stephen@southeastenergy.ie)

# Overview: Community-led renewable energy project



Involves building a small renewable energy generation facility with a Maximum Export Capacity (MEC) between 0.5 MW – 5 MW.



Incentivises community involvement in the energy transition.



Well-suited in rural areas, delivering on national policy goals of climate action, rural regeneration, social cohesion, capacity-building and community development as well as ensuring that local communities benefit.

# Government support schemes

## • Small-scale Renewable Electricity Support Scheme (SRESS)

- Provide a simpler route to energy market for community-led projects.
- Provide end-to-end support to create a community energy sector.
- Provide capital grants for 2 categories of small-scale users:
  - Self-consumers → to install 50kW – 1MW RE projects.
  - Community/Local/SME projects between 1MW-6MW renewable energy projects.

## Support Scheme for Renewable Heat (SSRH)

- Fully incentivise the development and supply of renewable heat.
- 2-way support namely:
  - Operational-aid (for use of biomass and biogas for heating systems).
  - Installation grant (for investment in heat pumps).

Tier	Lower Limit (MWh/yr)	Upper Limit (MWh/yr)	Biomass Heating Systems Tariff (c/kWh)	Anaerobic Digestion Heating Systems (c/kWh)
1	0	300	5.66	2.95
2	300	1,000	3.02	2.95
3	1,000	2,400	0.50	0.50
4	2,400	10,000	0.50	0.00
5	10,000	50,000	0.37	0.00
6	50,000	N/A	0.00	0.00

# Templederry Community wind farm

- Ireland's first community-developed and owned windfarm.
- Delivers 4.5MW of renewable electricity; powers 3,500 homes annually.
- Project cost c.€6.2m
- Generate €1.0 - €1.4m per annum for Templederry Community Group in Co. Tipperary, Ireland.



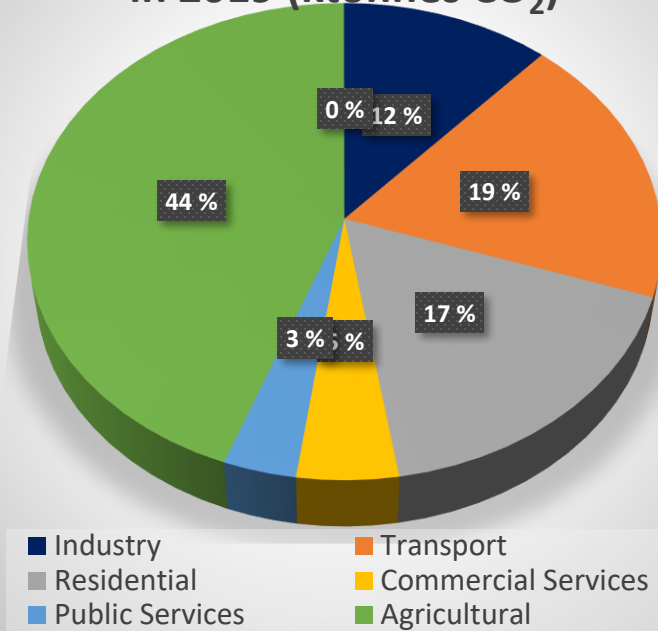


**Friends of  
the Earth**



# Bioenergy in South East region

The 3 counties CO<sub>2</sub> Emissions in 2019 (ktonnes CO<sub>2</sub>)



Biogas potential production of 3 counties in SouthEast

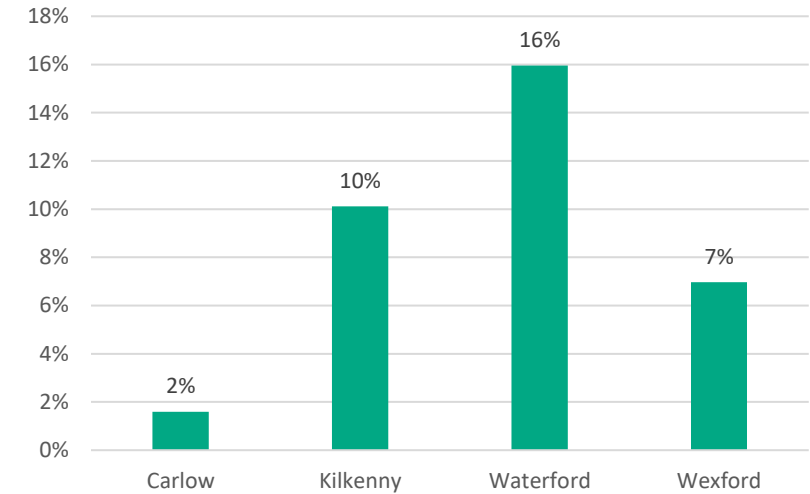
752 GWh

8%

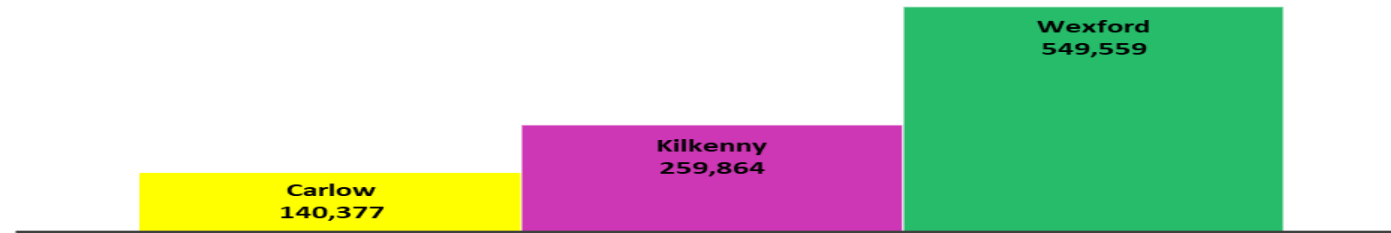
300 GWh

- Potential biogas production from 3 counties
- % overall energy supply to meet total primary energy requirement (TPER) of 3 counties.
- Beneficiary Energy savings since 2013 through Energy Efficiency and demand reduction in business, community, and homes

% of land utilisation for bioenergy



- ❑ Agriculture accounted for 44% of CO<sub>2</sub> emissions in the 3 counties in 2019.
- ❑ Represents 32% of Ireland's total GHG emissions.

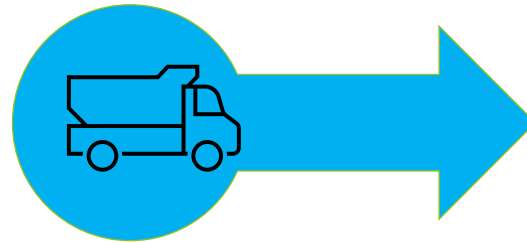


AVERAGE HEAT CONSUMPTION OF THE TOP10

# Bioenergy Projects



Ormonde Upgrading Limited (OUL) produce and transport the bio-gas (biomethane) for community & fuel for fleet.



**First Facility**

80,000 – 100,000



**Subsequent facility**

<400,000



**Kilkenny: Machinery Yard**  
 Fuel type: Natural gas  
 Heat consumption: 123,303 kWh



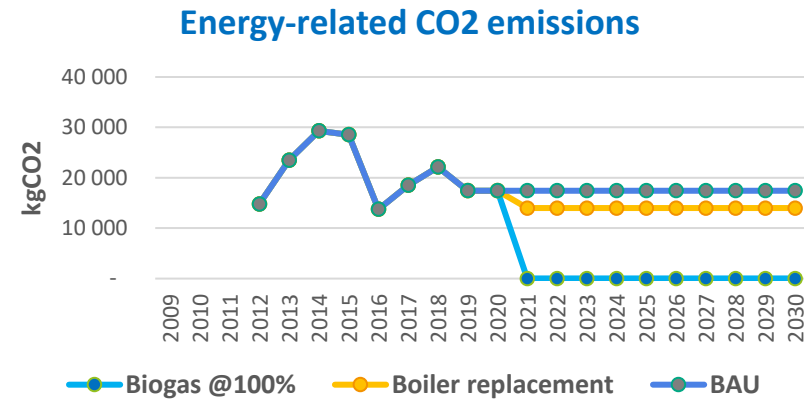
**Wexford: Fire Station**  
 Fuel type: MGO/LPG  
 Heat consumption: 73,964 kWh



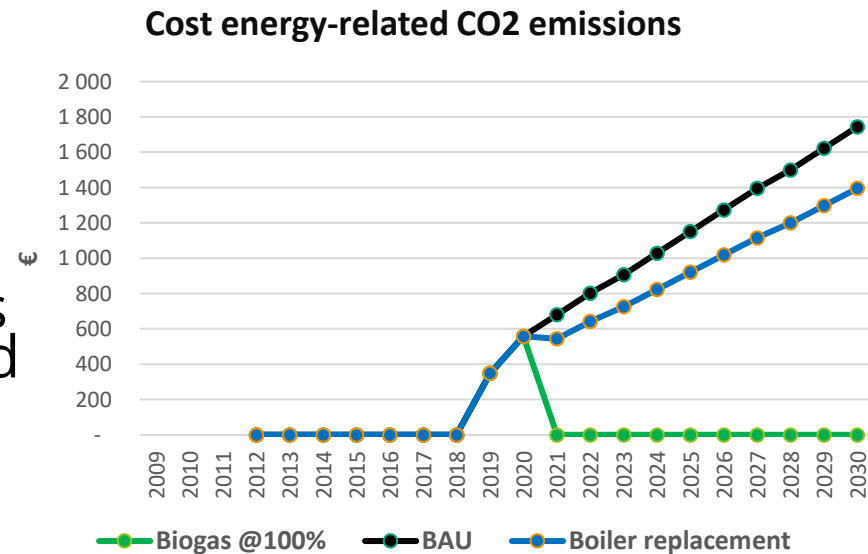
**Carlow Fire Station**  
 Fuel type: LPG/Heat Pump  
 Heat consumption: 65,303 kWh

# Benefits & good practices

- Local communities have the opportunity to own a stake in large-scale renewable energy initiatives through a co-ownership structure.
- Revenue re-investment along the energy value chain (e.g., community-based virtual power plant for electricity trading, utility-scale solar projects etc.)
- Develop creative benefit mechanisms (near neighbour payments, community benefit funds) to increase local acceptance of renewable energy development.
- Develops local amenities, contracts local firms during construction, and creates long-term jobs.



Biogas has zero associated carbon (100% CO<sub>2</sub> offset) for its production and utilisation.



Carbon tax reductions of €16,363 projected over 10-year period to 2030.



# Challenges



**Financing:** Financing community-owned wind energy projects can be difficult. These projects frequently necessitate large upfront funding, which can be difficult to get.



**Planning permission:** Planning process is usually complex and time-consuming process. Community-owned initiatives face additional challenges as they may not have the same level of resources and expertise as larger project developers.



**Grid connection:** RE developers struggle to access the energy grids due to few connection points, limited grid infrastructure & system constraints.



**Energy market:** Competitive auction process & high energy prices affect community-owned projects as they cannot compete with private-led projects.

# Upcoming community-led projects

Name of facility	Applicant	County	Type of renewable	Maximum Export Capacity (MW)
Barnland Community Solar Farm	Kilanerin-Ballyfad Community Development Association CLG	Wexford	Solar	0.65
Coolnagloose Community Solar Farm	Coolnagloose Community Solar Limited	Wexford	Solar	1
Glenoge Community Solar Farm	Glenoge Community Solar Ltd.	Wexford	Solar	4.99
Graigie Beg Community Solar Farm	Graigie Beg Community Renewables Ltd.	Wexford	Solar	4.99

**Thank you for your attention**

