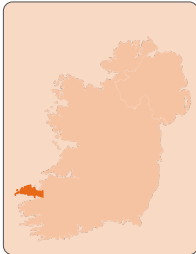




West Kerry / Corca Dhuibhne / Dingle Peninsula



West Kerry / Corca Dhuibhne / The Dingle Peninsula

is defined by the territory to the west of a line connecting Blennerville to Castlemaine and with an area of 583 sq. km and extending 48 km into the Atlantic.

- It has a resident population of 12,958, with 1,650 living in Dingle Town (CSO, Census, 2022) but sees visitors in excess of 1M annually.
- Second (or holiday) homes account for c. 26% of all houses on the Peninsula and tourism accounts for c. 30% of the local economy. Much of tourism product is low value.
- Farm-to-fork is underdeveloped. Much of agriculture product is not retained locally.



Corca Dhuibhne – Energy Master Plan and Demographic and Socio-Economic Profile data to support transition

- Total total energy use is 310 GWh and related CO2 emissions is 171 ktonnes. This accounts for half of the total emissions on the peninsula.
- 54% of energy use relates to Transport
 - 28% travel outside the Peninsula for work
 - Majority in favour of using public transport or electric or hybrid vehicles. More reticent about gas powered vehicles.
- **49% of CO2 emissions relate to agriculture**
 - **15% Farm / Agri related workers here vs 5% nationally**
- Largest employment category is “Other” at 26% - this includes pluriactivity
- Over 80% agree that the Peninsula should develop it's own sources of energy
- 46% of the housing stock dates to before 1980
 - Nearly 60% are favourably disposed to heat-pumps





The West Kerry Dairy Farmer's Sustainable Energy Community emerged from involvement in local innovation initiatives



ESB Networks Dingle Project



- One of five ambassadors for the ESB Networks Dingle project to trial Solar PV system; Residential-scale battery; Air Source Heat Pump; Electric Vehicle and Smart EV charger; Home Energy Monitoring System.



KETB / SEAI Community Energy Mentor Course



BORD OIDEACHAIS
AGUS OILIÚNA CHIARRAÍ
KERRY EDUCATION
AND TRAINING BOARD



SUSTAINABLE
ENERGY AUTHORITY
OF IRELAND

- One of 11 participants who learned about energy efficiency, community owned energy opportunities and sustainable energy communities





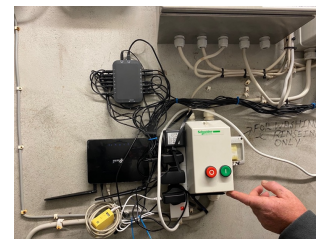
West Kerry Dairy Farmers Sustainable Energy Community



West Kerry Dairy Farmers SEC



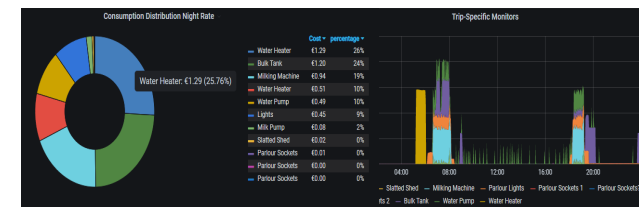
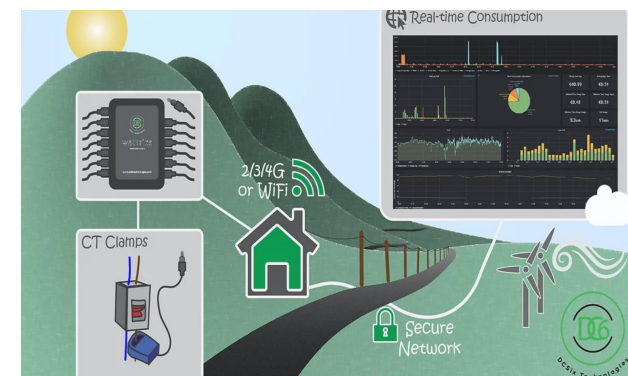
- 130 Members (100+ active)
- Steering Group established in late 2019:
 - 1 Chairperson (Farmer and Community Energy Mentor)
 - 3 Farmers
 - 2 Community Energy Mentors
 - Dingle Hub representative
 - ESB Networks representative
 - SEAI Mentor
- SEC and EMP applications developed and submitted to SEAI
- Consultants **DCSix Technologies** engaged to deliver Energy Master Plan
- **Watttrics** energy monitoring system installed on 9 farms





Energy Master plan: Key Findings

- In 2019, this farming community used energy of over 10,000 MWh (generating 2,900 tonnes of CO₂) and costing circa €1 million
- Agricultural diesel is the single biggest energy consumer (52%) and costing circa €750,000. If biomethane could be substituted for diesel, there is a substantial market opportunity.
- Technology such as PV panels will reduce energy costs where the meter between the dairy parlour and the domestic dwelling is shared.
- Retrofitting of farm dwelling houses to B2 could reduce energy usage by 1,400 MWh and 360 tonnes of CO₂.
- Opportunities to make simple operational changes and make instant savings i.e scraper frequency, improve insulation on pipework,





Roadmap and Next steps

| Project | Target Number of Deployments | TED Reduction (MWh) | CO ₂ emissions savings (t CO ₂) |
|----------------------------|------------------------------|---------------------|--|
| Dwelling House Retrofit | 94 | 1,388 | 357 |
| Heat Recovery | 120 | 229 | 68 |
| VSD Pump | 98 | 118 | 35 |
| LED Lighting | 86 | 86 | 25 |
| Micro Gen Solar PV | 65 | 338 | 98 |
| Micro Hydro | 1 | 20 | 6.000 |
| AD Plant & Biogas Tractors | 130 | 5,323 | 1,405 |

Next Steps:

Solar PV audits to be carried out on 80+ farms to determine orientation and suitability of roofs and to match generation requirements with demand. These audits will also determine opportunities for head exchange technology deployment.



Anaerobic Digestion Pathway for cooperative community investment in secure, local, affordable and sustainable energy

KEY
ENABLER

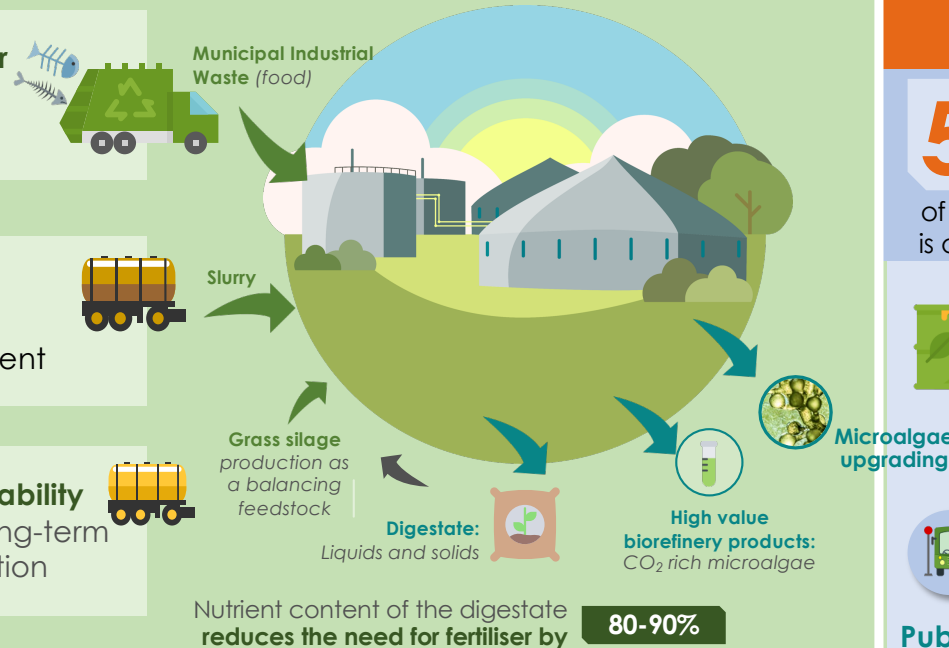
Pillar for local circular economy: short food supply chains (offal)

KEY
ENABLER

Immediate emissions reduction through improved management

KEY
ENABLER

Support economic viability of small farms with long-term contracts for production



**Biomethane use in transport vehicles provides
HIGHEST CARBON REDUCTION of all renewable fuels**

CHALLENGES



Need **to develop sustainable** transport using **locally produced fuel**

- o Forecourt refuelling
- o Duel fuel vehicle conversion



Need **Renewable Transport Fuel Obligation scheme involvement** to support financial viability



Enabling community investment

DINGLE PENINSULA ENERGY MASTERPLAN

54%

of energy use
is on transport

49%

of emissions are
from agriculture



**POTENTIAL MARKET:
Transport fuel**



Public transport: buses

Agri: tractors / contract machinery

Marine: tour & fishing boats

Commercial: van and truck fleets



KEY ENABLER

**Replaces fossil fuels
with green energy**

Go raibh maith agaibh

Thank you

