

Implementing The Energy Transition in Ireland



The beginning of Tipperary's Transition from Fossil Fuels

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- 40%+ improvement in energy performance.
- Fossil fuels 90% gone from buildings.
- 85 separate projects done.
- Over €1M saving per annum.
- Ambition to deliver more
- Council up to speed on energy transition. – local policy includes energy focus.
- Supporting Tipp Energy in wider community
 - Sustainable Tipp €37M investment program 2017-2020
 - Energy improvements in capital grants
- Energy in Agriculture national event for 2500 farmers.





“We’re frustrated with lack of depth and continued use of fossil fuels. We need deeper, faster and renewable retrofit”

- Tipperary Energy Agency Initiative supported by SEAI
- Expert led renovation with spin off research.
- Designed to overcome barriers to deep retrofit
- Eliminate fossil fuels with heat pumps
- 60-70% cut in cost and carbon
- 70 homes to date.
- Still need financial solution



Deep Retrofit

2013-2015
~**1000** fuel
poverty/ Shallow
F to E

EU SERVE
project **400**
buildings E1 to B2
(HES Pilot)

2006 House of
Tomorrow
Shallow
Retrofit **80**
homes (F to D)

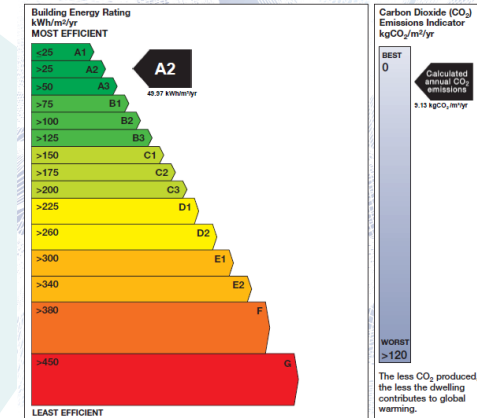
Building Energy Rating (BER)

BER for the building detailed below is: **A2**

Address: KNOCKANAMOHILL
NEWTOWN
HENCH
CO. TIPPERARY

BER Number: 10492949
Date of issue: 09/12/2016
Valid until: 09/12/2026
Assessor Number: 105719
Assessor Company No: 100525

The Building Energy Rating (BER) is an indication of the energy performance of this dwelling. It covers energy use for space heating, water heating, ventilation and lighting, calculated on the basis of standard occupancy. It is expressed as primary energy use per unit floor area per year (kWh/m²/yr). 'A' rated properties are the most energy efficient and will tend to have the lowest energy bills.



Superhomes:

- Identifies what is needed (survey)
- Designs how to do it
- Identifies who to do it.
- Supervises works & supports homeowners.
- Supports finance/ grants etc.



- Initial discussion on how to decrease emigration
- Facilitated by community development expert from LEADER.
- Retrofit as community development
- Communities leading their citizens through making retrofit the norm.
- Now 12 separate communities contracting ~50+ staff.
- Currently €3M PA spend (200 homes) shallow retrofit
- Energy Agency role was to steer from electricity to retrofit initially, governance and support now.
- Energy Citizens.

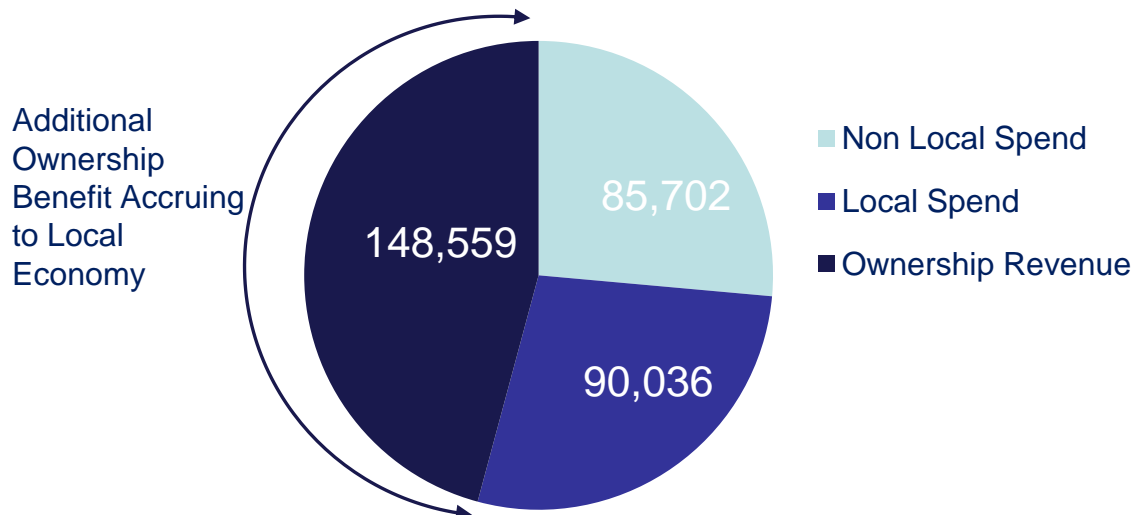


Templederry Community Windfarm



- Open to locals to invest in 2001
- Built in 2012
- Powering 3500 homes.
- Supported by Local Energy Agency & LEADER
- Before the speculators & anti-wind sentiment
- Led by passionate pragmatic energy citizens not external developers.

Value to Local Economy / MW / Annum



* Based on real figures for one project. NPV assuming 20 year life time

What's different in Tipperary?



- Tipperary Energy Agency is a social enterprise
 - A purpose for being, governance for that purpose
 - Must deliver or will (be irrelevant!) and not survive
 - Staff are allowed develop competence.
 - We've been lucky in terms of hiring excellent people
- We have a purpose
 - Policy to remove fossil fuels for programs and clients
 - Forces engineers to come up with solutions & they deliver!
 - Passionate and ambitious staff.
- We understand drivers for change
 - People need to be convinced why and shown how to act.
 - Solutions must be robust and cost effective.
 - The state has provided significant grant supports.

No More Fossil Fuel

Activate the “Energy Citizen”



- Need a rising **Carbon Tax** per annum with protections
- Ban fossil fuel from new build!
- Need policy makers, then policies.
- People need support as much as grants.
- Achieved in the rest of the world by making people part of solution:
 - Allowing sale of electricity from people’s roofs.
 - Community heating
 - Cooperative wind energy.
- In Ireland citizens are specifically excluded from benefitting from the energy transition.
- We all need to get passionate and ambitious about the energy transition.



Thank you for opportunity to contribute to your deliberations.

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