Western Development Commission
Coimisiún Forbartha an Iarthair

WDC
WESTERN DEVELOPMENT COMMISSION
COIMISIÚN FORBARTHA AN IARTHAIR

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Western Region renewable energy analysis on the use of biomass as a contribution to the national renewable heat target

The Western Development Commission (WDC) is a statutory body promoting economic and social development in the Irish counties of Donegal, Sligo, Leitrim, Roscommon, Mayo, Galway and Clare. The WDC works in co-operation with transnational, national, regional and local bodies involved in western development.[1]

The WDC along with the Sustainable Energy Authority of Ireland, were tasked to '*complete a regional renewable energy analysis on the use of biomass as a local contribution to the national renewable heat target and develop a range of actions to support the development of renewable energy in the region'.* This covers:

- Mapping biomass installations already in usage
- Assessing the biomass feedstock supply available to the region
- Identifying potential future biomass heat demand and use
- Recommending the next steps in the development of biomass heat in the region

This is timely in the light of the proposed Renewable Heat Incentive (RHI), that the Department of Communications, Climate Action and Environment (DCCAE) propose to introduce. The Incentive will:

- Offer payments based on metered renewable heat output (€/MWh).
- Be paid for a 15 year period
- Eligible only to newly installed biomass systems (and other renewable heat technologies)
- Make biomass heat an attractive proposition compared to fossil fuel heating

Your support in this survey will be greatly appreciated and will help us develop the biomass sector in the Western Region, supporting jobs and growing our low carbon economy.

WDC and biomass specialists Reheat are managing this survey. Please participate by clicking here to complete the short on-line questionnaire – and or contact either Clodagh or Steve with any questions directly:

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[1] For more details on the WDC, see www.wdc.ie

Biomass background

Globally biomass use amounts to about one billion tonnes of oil equivalent, a level comparable to the consumption of gas or coal. This makes it the largest renewable source in use worldwide. Biomass constitutes about 66% of the EU's renewable energy, providing important contributions to renewable heat production and in electricity generation. It is the best established most mature renewable energy sector in most EU nations. Municipal solid waste, industrial waste, agricultural crops and residues, oil bearing plants (oilseed rape for example) and animal products are all feed stocks variously used to generate renewable heat and power, but by far the most important source of biomass is wood. Wood fuels account for 61.2% of the EUs renewable energy supply.

Biomass is far more job intensive than all other forms of renewable energy due to its on-going fuel supply chain. In this regard, significant economic benefits arise due to the switch from imported gas or oil to the use of locally produced wood fuel. Due to its mild wet climate, Western Ireland is an ideal place to grow trees and produce biomass. It also tends to rely upon oil for heating, which is expensive, imported and has high CO_2 emissions.

Whilst wood fuels can deliver carbon savings compared to fossil fuels it is equally important to note they deliver higher carbon savings compared to other forms of renewable energy as well. Here are some figures for commonly used renewable energy technologies (grammes of CO_2 per kWh supplied).

- Ground Source Heat Pumps --- 123g CO_2/kWh
- Wind --- 48g CO_2/kWh
- Solar PV --- 105g CO_2/kWh to 190g CO_2/kWh

This compares to wood fuels --- 25g CO_2/kWh to 97g CO_2/kWh