

Wood Energy in the Western Region: Role of the Public Sector and Lessons from RASLRES

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RASLRES Workshop: Aims for today

- Aim: Increase bioenergy use in rural areas
 - Pilot projects - wood, energy crops, marine biomass
 - WDC lead - Action Renewables (NI), Env. Research Institute (Scotland), Norjso Municipality (Sweden)
 - Budget €2.8m/3 years
- Workshop on Public Sector role:
 - Heat users
 - Drivers of change
- Issues: Energy Services Contract, small scale installations, building local markets

Wood Energy - Drivers

■ Economic:

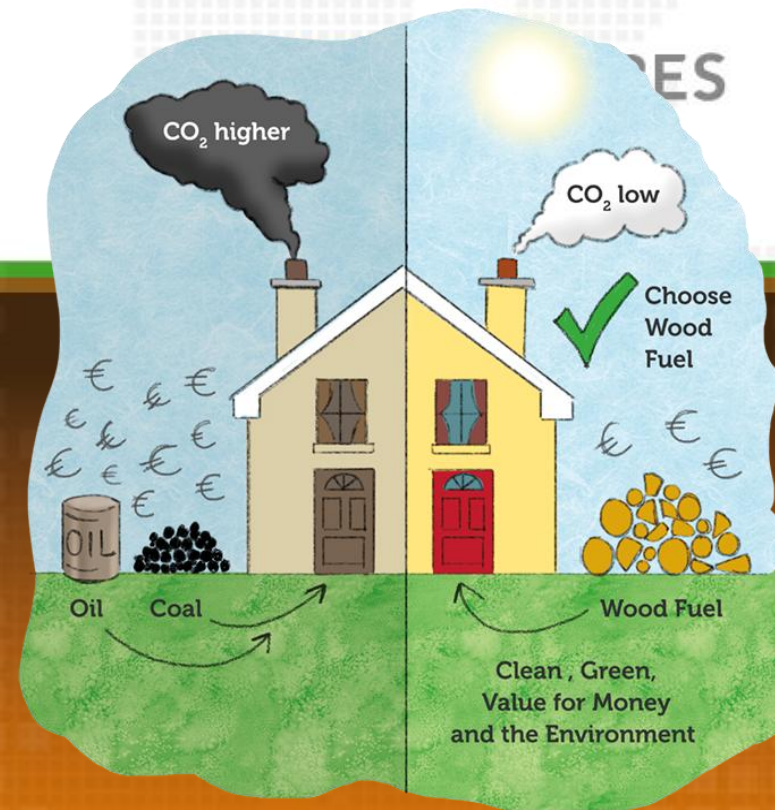
- Fuel diversity and security
- Employment/enterprise
- 900 jobs if 12% RE-Heat

■ Environment:

- CO₂ reduction 600,000t if 12% RE-Heat

■ Policy:

- National RE Action Plan
- EU Directive 16% RE by 2020 (at ~ 6.6%)
- **12% heat**, 40% electricity, 10% transport



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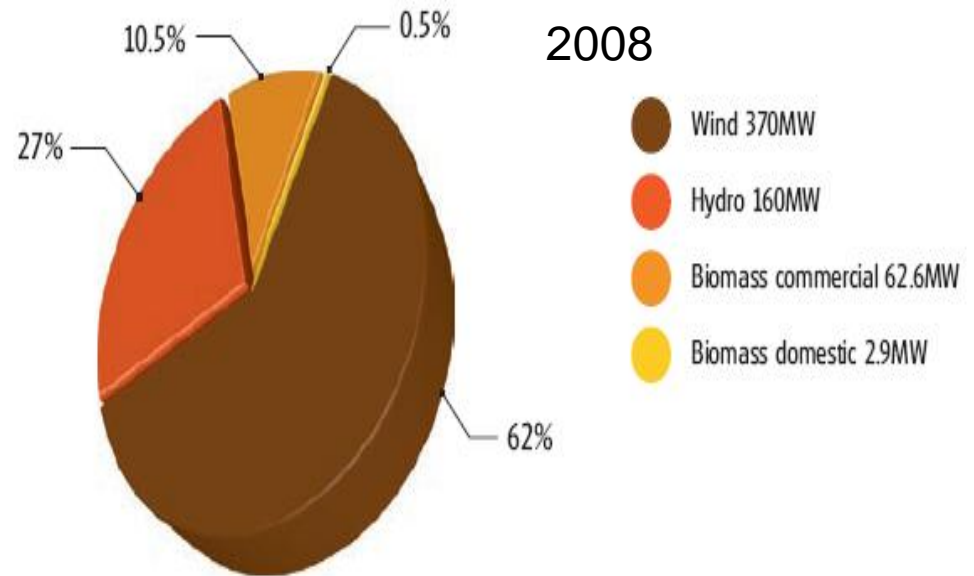
Renewable Energy in the Western Region

Region - 716MW of RE

- Wind - 491MW
- Hydro - 160MW
- Bioenergy - 65MW

- Oil dependent
- Limited gas network

Figure 4: Renewable energy deployment in Western Region



Regional Heat Market

- RE Heat market share ~ **1.5%**
- Heat market demand ~ 927,000toe (2.3m odt woodchip)

48% Domestic	35% Industrial	16% Services
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- 65MW installed capacity:
 - 3MW - domestic; 52MW – five industrial sites
 - ***10MW - 39 sites b/w 60kW to 1MW***
 - Donegal - 4.4MW (15 boilers)
 - Clare - 2MW (7 boilers)
 - Galway - 1.3MW (6 boilers)
 - 66% (26 boilers) private; 34% (13 boilers) public

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Regional Wood Fuel Supply

- Commercial woodchip supply 11,350tn:
 - 6 suppliers, 8 market-ready if demand increases

- **Forestry** ~10% region's land area (259,000ha)
 - Sustainable fuel supply from **private forestry**
 - 83,000ha of private planting in last 20 years

- **Energy Crops** (willow, miscanthus)
 - ~3,500ha nationally (~500ha SRC)
 - ~325ha in region (~84ha SRC)



Current Market Profile

- Active across the region
- Highest rates - Donegal, Clare, Galway
- Varied heat users - 1/3 public sector
- Range of boiler technology/sizes
- Woodchip and woodpellet markets
- Robust woodchip supply supports deployment of larger scale boilers
- Market projections for D>S
 - Scope for energy crops, forestry
- BUT LOW MARKET GROWTH



Market Strategy: Demand & Supply Clusters

- Demand and Supply in tandem
- **How to address market barriers?**
 - Supply chain approach - fuel producer to user
 - Long term planning
 - Increase market visibility
 - Build scale, expertise, confidence
 - Policy and planning - public sector leadership
 - Demonstration projects, R&D

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Market Strategy: Demand & Supply Clusters

- **Result of strategy:**
- **High economic impact**
- high % indigenous SMEs
- retain high % of profits in regional economy
- 1MW=2 full time jobs



RASLRES Actions

- Wood energy services in Western Region:
 - 1) *Impartial* technical and business advice
 - 2) Market research (available on-line)
 - 3) Industry networking
- 14 pilot project clients
 - 5 private, 9 public
 - 20MW_{th} potential
 - 8 Local Authorities



Wood energy and the public sector

- Internal:
 - Control energy costs
 - Future proof building stock
- External:
 - Stimulate local enterprise - demo impact, cluster
 - Position region as pro-RE
 - Leadership on economic, social, environmental agendas

Public Sector Clients - Heat Users



- Clients:
 - Teagasc, HSE West, Co. Co.'s, Letterkenny IT
 - Feasibility & project support to bring to tender (60kW-400kW)
 - Inform on public user profile and issues:
 - Contract types – ESCOs
 - Clustering of sites (2 streams to market):
 - >100kW (4MW in 8 sites), < 100kW (350kW in 6 sites)
 - Heat loads – offices, leisure centres, public services

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Public Sector Leadership: Local Authority Action Plan

- 8 LAs engaged March
- LAs as positive actor in RE market
 - **Policy** – vision for county/region, LT guidance, confidence
 - **Action** – deployment, capacity to respond
- Action areas:
 - Policy analysis – CDPs, County Dev Boards
 - Procurement – identify projects
 - Energy actions – internal expertise, project partners
 - Advocacy – engage others



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Conclusion

- Public Sector has significant role in market:
 - **Heat users** – build clusters of sites, demo impact
 - Contract options to address risks/finance
 - **Leadership:**
 - County policy and vision
 - Aid local loop development
 - Market confidence and sector's profile

Thank you

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