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Scottish Executive: Renewables Policy

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Overview

- Renewables targets and strategy
- Achievements to date
- Current delivery programme
- The gaps
- Conclusion



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Scottish Renewables Policy

- Set out in “Securing a Renewable Future: Scotland’s Renewable Energy” 2003
- Followed introduction of ROS 2002
- Environmental/climate change imperative
- Plus economic development aim
- Still applies



The Enormous Potential

- | Technology | Capacity (GW) |
|-----------------------------|-----------------|
| Onshore wind | 11.50 |
| Offshore wind | 25.00 |
| Wave | 14.00 |
| Small hydro | 0.30 |
| Tidal stream | 7.50 |
| Landfill Gas | 0.07 |
| Forestry Residues | 0.09 |
| Energy Crops | 0.14 |
| Agricultural Wastes | 0.40 |
| Municipal Solid Waste (MSW) | 0.10 |
| TOTAL | 59.10 GW |
- **This total equates to nearly ten times current peak demand**



Scottish Renewables Targets

- 18% electricity generation to be sourced from renewables by 2010
- **40% by 2020**
- Expressed as % of demand – comes to about 6GW of installed capacity
- Current study to establish impact of renewables on grid – eye to future



Achievements to date

- About 150 renewable generating stations currently operating in Scotland
- Means about 2.4GW installed capacity
- 2004 renewable generation was 16% of demand
- Mainly **hydro and onshore wind**
- **On course to meet 2010 target early**



Outlook: windy

- Already about 1.47GW consented (not all built)
- Another 5GW in Section 36 consents process (larger projects)
- Plus nearly 3GW in scoping



Internal Policy review 2006

- Current Renewables Obligation (Scotland) results in on-shore wind
- How far does this achieve policy aims of protecting environment plus encouraging economic development?
- What about security of supply?
- What about diverse renewables resources?



Result of review:

New Clean Energy Programme

- Set out by Deputy First Minister last year
- Built on economic devt, environment, and security of supply
- Designed to encourage **diversity** of resources
- Focus on Marine, Biomass and Hydrogen



Marine Generation

- Untapped resource and young sector
- **Head start in Scotland:**
 - European Marine Energy Centre (EMEC) in Orkney.
World-leading testing facility
 - Developers – inc. world-leading OPD
 - Conducting marine generation Strategic Environmental assessment (SEA) to help developers identify sites



Clean Energy Programme: Marine

Building on Scotland's strength in marine energy, we are:

- Amending Renewables Obligation (Scotland) to support marine – could be worth up to **£700M** to the sector over next 20 years.
- Short-term kick-start: **£8M** marine support fund
- Our aim: 10% of 2020 target from marine



Biomass Generation

- Potential to strengthen rural areas:
jobs/addressing fuel poverty
- Much to learn from elsewhere in Europe
- Some support already available through
Forestry Commission Scotland and wood
fuel officers



Clean Energy Programme: Biomass

- High-profile Demonstrators (Queen Margaret University College & Perth & Kinross schools)
- Regional aid (UPM in Irvine and Balcas -pellet plant in Inverurie)
- Community focus in Highlands & Islands through SCHRI
- **£7.5M** new biomass support scheme (over 100 applications)
- Hope for future rounds of funding
- Future strategy devt: **Biomass Action Plan** – due out shortly



Clean Energy Programme: Hydrogen

- Potential for remote areas: jobs/security of supply (already supported Unst project)
- FREDs: HEG report published October
- Response is **£1.5M** hydrogen support scheme



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Clean Energy Programme: microgeneration

- Very important for future and potential for shift to distributed generation
- Already encouraged in Scotland through SCHRI – & rate of applications from households continues to increase
- Community projects important in rural areas
- Microgeneration vision to be covered in Energy Efficiency Strategy



Plus off-shore wind

- Talisman demonstrator project – deepest water off-shore wind demonstrator in the world
- New Strategic Environmental Assessment to help developers identify sites
- Other potential projects



The Gaps:

Need for updated planning guidance

- Draft updated planning guidance on renewables
- Consultation – 1020 responses
- Encourages local authorities to **define** suitable areas for renewables developments
- Highlights **economic benefit** as material consideration



The Gaps: need to influence UK regulation

Energy regulation is **Reserved** to the UK Government, but Scotland is working to influence:

- Grid – access and availability
- Transmission charges
- Islands connections
- Access to grid for future marine energy projects



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The Gaps: Hydro and wider potential for energy storage

- New Forum for Renewable Energy Scotland (FREDS) sub-group formed on hydro
- Need for research on renewables and storage (esp. as move to higher targets)



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The Gaps:

Renewable Heat: commitment to develop strategy by end of 2007

- Targets and market support are electricity-based
- Renewable heat can help rural areas/off gas grid
- Some support in place – SCHRI (solar water and ground source heat pumps = 75% of all installations)
- New SCHRI community biomass focus in H&I
- New Biomass support scheme
- FREDS sub-group to inform Strategy



Conclusion

- Scotland well-placed to become the renewables powerhouse of Europe.
- Scottish Executive's Clean Energy Programme focuses on marine, biomass and hydrogen sectors, and economic benefits.