Planning Reform on the Island of Ireland: from Policy to PRACTICE. 2nd May, 2013, Newry

Renewable Energy Development

NIRSA
National Institute For Regional and Spatial Analysis
An Institiúid Náisiúnta um Anailís Réigiúnach agus Spásúil

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Planning Context

- National Renewable Action Plans (RoI & UK)

Directive 2009/28/EC on the promotion of the use of energy from renewable sources

- Onshore (biomass, solar, hydro, wind) , Offshore (wave, tidal, wind)

RoI Targets	NI Targets
16% energy by 2020	15% energy by 2020 (UK)
40% of electricity 12% heat 10% transport	40% of electricity 10% heat N/A

- Targets achieved primarily from wind

Planning Context

RoI

- ***Strategy for Renewable Energy** – DCENR 2012*
- ***(Draft) Offshore Renewable Energy Development Plan** – DCENR*
- ***Onshore?***

- ***Wind Energy Planning Guidelines** – DoEHLG 1996*
- ***Wind Energy Dev. Guidelines for Planning Authorities** – DoEHLG 2006*
- ***Best Practice Guidelines:Wind Energy Industry** – IWEA 2012*
- ***Wind Atlas, County Development Plans and EIA***
- ***Ad-hoc planning?***

All-Island Energy Market-Renewable Electricity A 2020 Vision

NI

- ***Strategic Energy Framework** – DETI 2010*
- ***Offshore Renewable Energy Strategic Action Plan** – DETI 2012*

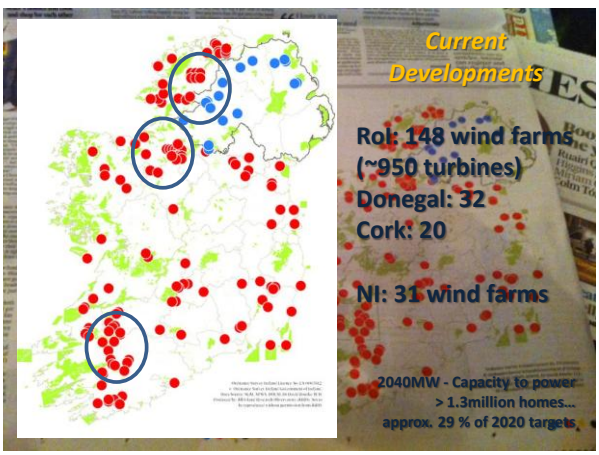
- ***(Draft) Wind Energy Development in NI's Landscapes** – DoE 2008*
- ***Wind Protocol** – NIRIG 2013*
- ***Landscape capacity studies ongoing***
- ***Landscape-based approach to planning?***

Electrical Interconnector RoI – NI

Key Guiding Principles

- Economic competitiveness (reduction of energy costs)
- Security in supply ("self-sufficiency" and reliable local sources)
- Sustainability (renewable sources and environmentally-friendly projects)
- Infrastructure (foundation for the above)
- Achievement of EU targets

Priority Principle?



The Future

- Irish/NI Governments' target primarily from wind
- Additional 2,500 new turbines in RoI and 600 in NI
- UK interests and export market

Spatial Strategies
Location?
Cumulative Effects?

Planning Requirements

- Planning Application
- Environmental Impact Assessment
  (>5 turbines or 5MW or significant effects)
- Appropriate Assessment (screening)
- Cumulative Effects Assessment

- Wind measuring mast (planning permission)
- Access to Grid (Gate 3) (planning permission)

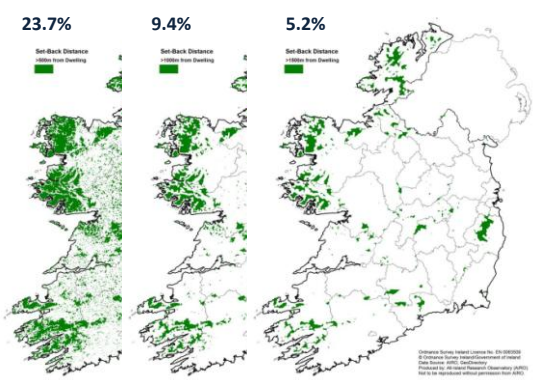
Key Potential Impacts

- **Human Health**
  - Noise
  - Shadow Flicker
  - Safety (distraction, proximity to roads and power lines)

Environment and Public Health (Wind turbines) Bill 2012 – *Deputy Willie Penrose*

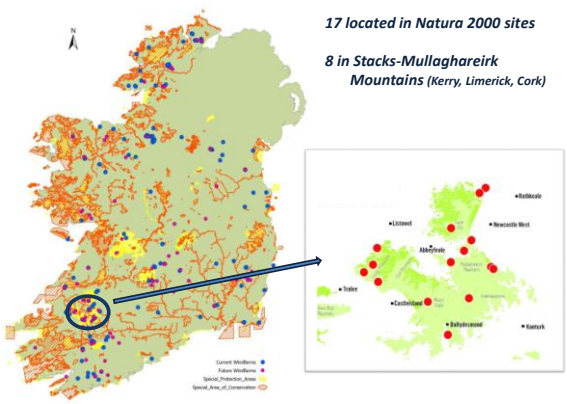
Establishment of mandatory set back distances:

- ✓ 500 metres where turbine height is up to 50 m
- ✓ 1,000 metres where turbine height is up to 100 m
- ✓ 1,500 metres where turbine height is up to 150 m
- ✓ 2,000 metres where turbine height is > 150 m



Key Potential Impacts

- **Biodiversity, Flora and Fauna**
  - Habitat removal, degradation, fragmentation
  - Species disturbance (feeding, breeding, roosting, etc.)
  - Mortality by collision
    - Birds and Bats



17 located in Natura 2000 sites

***8 in Stacks-Mullaghareirk Mountains** (Kerry, Limerick, Cork)*

Key Potential Impacts (Cont.)

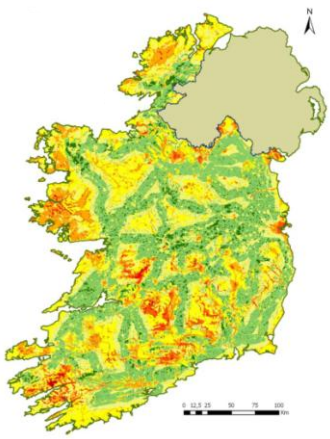
- **Landscape**
  - Visual impact (scenic routes and designated views)
  - Zone of Visual Influence
  - Landscape character change

- Number (and spatial extent)
- Siting (ridges versus lower ground)
- Spacing (regular versus irregular)
- Height (tall, medium, short)
- Layout (grid, aligned, clustered)

Key Potential Impacts (Cont.)

- **Soil**
  - Slope
  - Stability (e.g. Derrybrien)

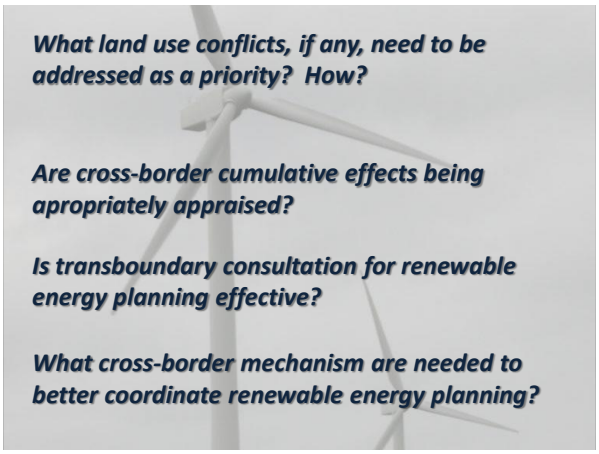
- **Water**
  - Drainage and changes in hydrology
  - Secondary effects on water-dependant habitats
  - Karst limestone



Evidence-based National / All-Island Wind Energy Strategy

Ad-hoc (project-led) *versus* Objectives-led

Cumulative Effects


What land use conflicts, if any, need to be addressed as a priority? How?
Are cross-border cumulative effects being apropriately appraised?
Is transboundary consultation for renewable energy planning effective?
What cross-border mechanism are needed to better coordinate renewable energy planning?