

Planning for a Carbon-free Society 2050

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IPCC: To keep global temperature rise below 2°C

a tripling to nearly a quadrupling of the share of zero- and low-carbon energy supply from renewables, nuclear energy and fossil energy with carbon dioxide capture and storage (CCS), or bioenergy with CCS (BECCS) by the year 2050

(Intergovernmental Panel on Climate Change, WGIII, AR5: *Summary for Policy Makers, SPM.4.1*).

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Planning and Development Act: Sec. 37K

- *Nothing in this Act shall be construed as enabling the authorisation of development consisting of an installation for the generation of electricity by nuclear fission.*

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Energy policy will bring change:

- **2020: Ireland** - 20% greenhouse gas reduction (v2005)
16% renewable energy mandatory –
includes: 40% renewable electricity,
12% renewable heat, 10% renewable transport
- **2030: EU** - 40% greenhouse gas reduction (v1990)
27% renewable energy
Targets for individual member states to be determined
- **2050: EU** - Carbon free economy – 80-95% reduction in fossil fuel

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2020 targets Ireland - achievements to date:

- Greenhouse gases – falling short of target
- Renewable transport – on course
- Renewable heat – some shortfall
- Renewable electricity – 2015 - renewable electricity capacity 2.5GW producing c.24% of our electricity – major component is wind energy
- By 2020 – approximately a further 1.5GW renewable electricity needed
- New REFIT scheme for renewable electricity by end of 2016

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Technologies for renewable electricity in Ireland:

2020: On-shore wind primarily (most cost effective), some bio-energy (up to 9% of renewable electricity) and limited solar – possible increased interconnectivity – needs additional grid development – Grid 25 now reduced

2030: Wind (on-shore and possible off-shore), additional solar and bioenergy and possible ocean energy - increased interconnectivity and probable energy storage – will need more grid

2050: ocean energy – increased interconnectivity and storage

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Main limiting factors for renewable energy :

- Negative community reaction – no perceived gain
- Judicial Review (e.g. O’Grianna and Kelly cases)
- Proliferation of rural housing
- Protection of natural habitats and species and of landscapes
- Inadequate electricity grid

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Aarhus Convention

Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters

- *Article 6: Public participation in decisions on specific activities*
- *Article 7: Public participation concerning plans, programmes and policies relating to the environment*

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- Planning and Development Acts 2000-2015 - public participation in decision making on development plans and individual projects
- Environmental Assessment of projects (EIA) and of plans / programmes (SEA) – extensive provision for public participation

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Improved community engagement will be essential to renewable energy policy making and implementation.

Government Policy Statement: Ireland's Transition to a Low Carbon Energy Future 2015-2030, Sec.4.1

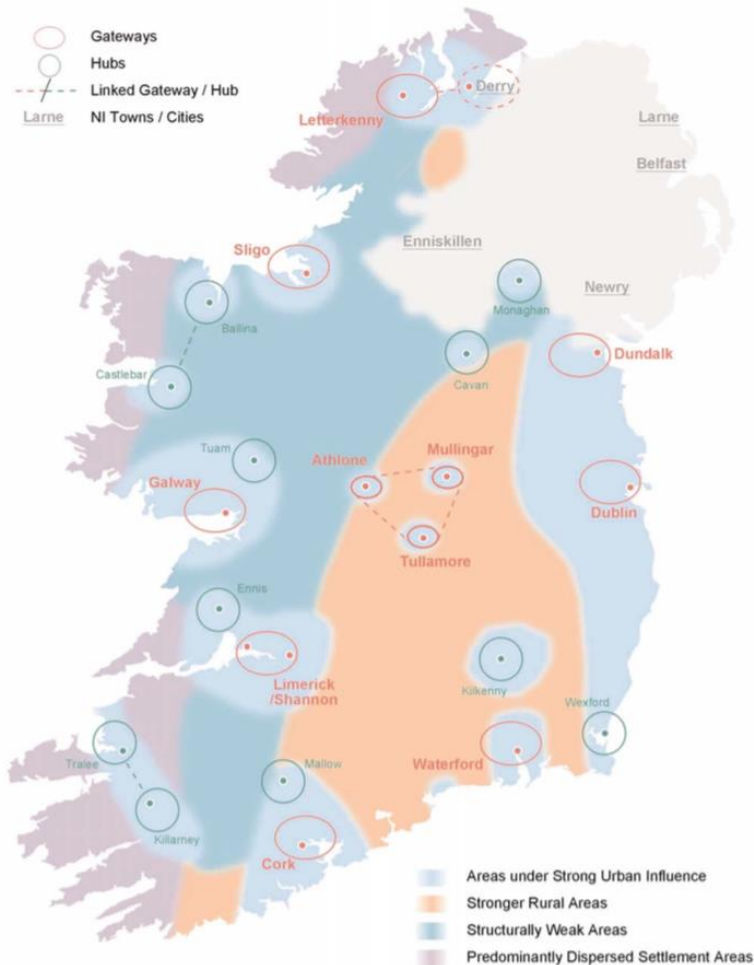
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- *A lack of public awareness of national energy policy and its implications;*
- *The national energy policy debate starts when a planning application for new infrastructure is made and takes place solely within this narrow context, failing to reach any resolution. The same debate on the same issues repeats itself with every piece of infrastructure;*
- *There is a difficulty in achieving an accepted balance between the public and private good*

(Submission of ESB on Green Paper)

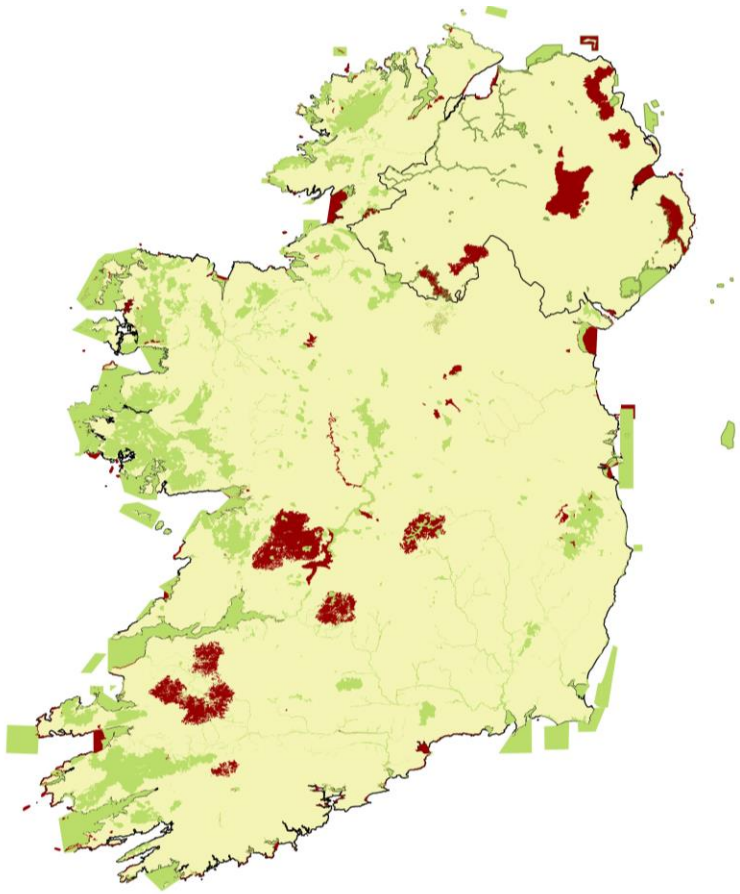
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NSS Rural Area Types

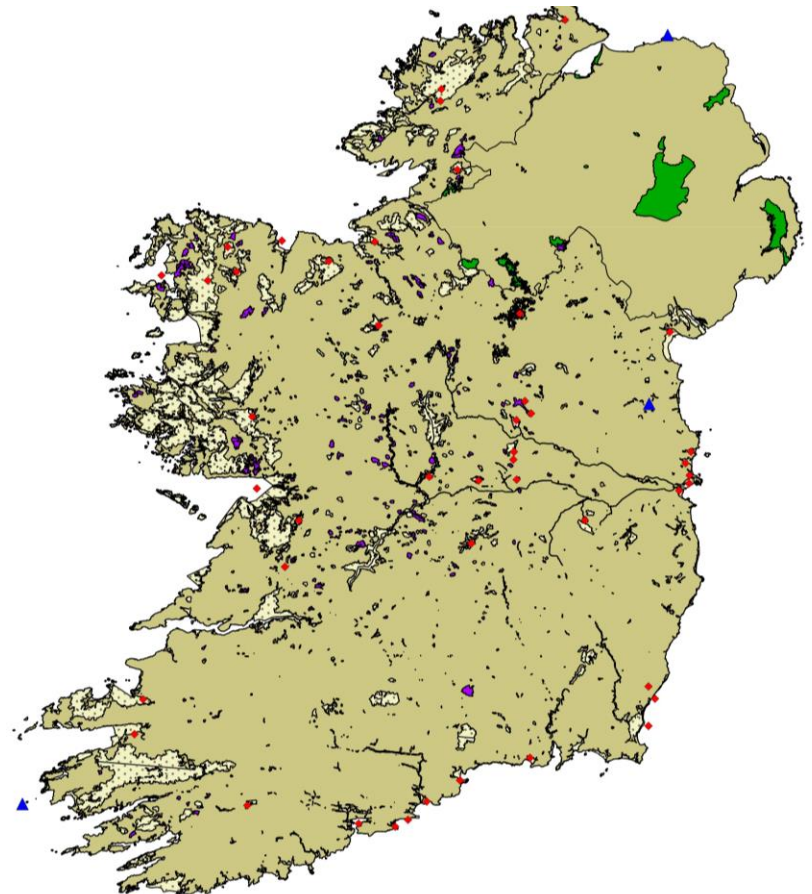


- 2011 Census - 433,000 one-off rural houses
- 57% of all houses built in 2014 were one-off houses
- Structurally Weak Areas: “accommodate any demand for permanent residential development as it arises subject to good practice...”

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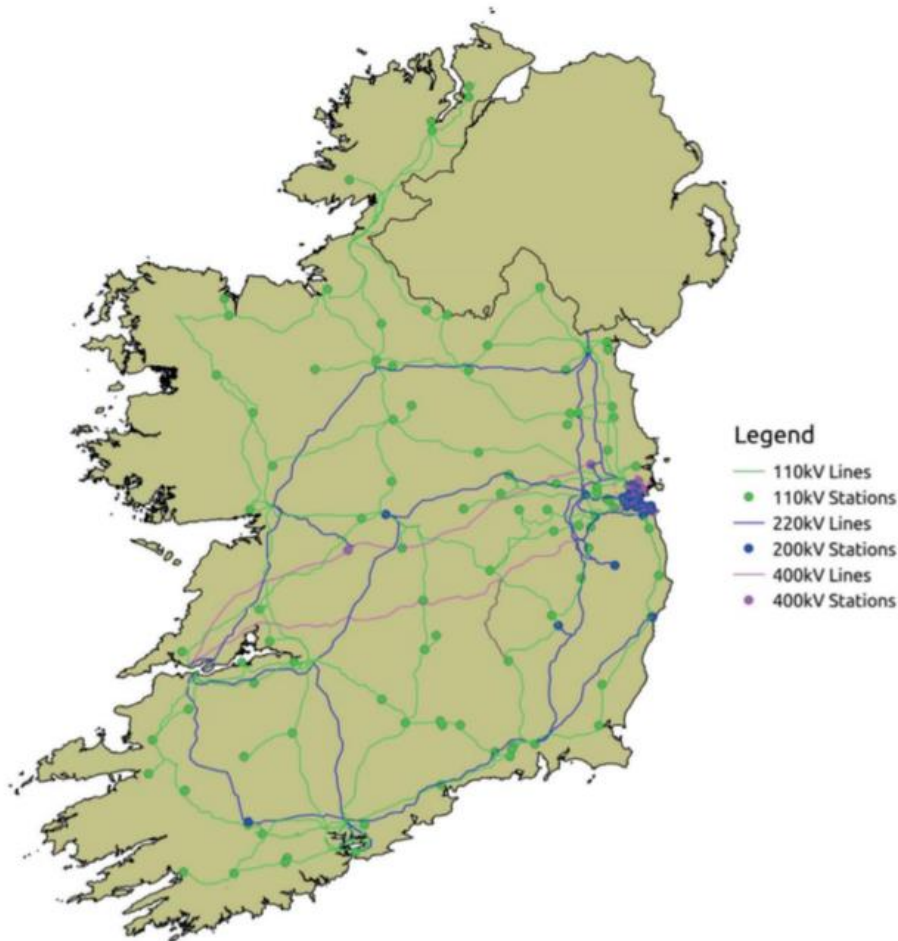


Legend



Legend
■ NHAs

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Electricity grid:

- Limited penetration of 400 kV and 220 kV
- Western areas particularly disadvantaged
- Intense public resistance to improvements

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Existing provisions for **community gain** in Strategic Infrastructure Development (Bord Pleanála)

Planning and Development Act: Sec. 37G(7)(d):

- *a condition requiring—*
 - (i) the construction or the financing, in whole or in part, of the construction of a facility, or*
 - (ii) the provision or the financing, in whole or in part, of the provision of a service,**in the area in which the proposed development would be situated, being a facility or service that, in the opinion of the Board, would constitute a substantial gain to the community.*

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- **Planning and Development Act, Sec. 10(2)(n):**
a development plan shall include objectives for
*the promotion of **sustainable settlement and transportation strategies** in urban and rural areas including the promotion of measures to—*
 - *(i) **reduce energy demand** in response to the likelihood of increases in energy and other costs due to long-term decline in non-renewable resources,*
 - *(ii) reduce anthropogenic **greenhouse gas emissions**, and*
 - *(iii) address the necessity of **adaptation to climate change**;*
in particular, having regard to location, layout and design of new development;

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Wider Planning Considerations – need an integrated whole of Government approach – settlement policy, energy generation, heating and transport.

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The Climate Action and Low Carbon Development Act 2015

- National transition objective: a low carbon economy to be achieved through:
 - a national low carbon transition and mitigation plan - to lower greenhouse gas emissions;
 - a national adaptation framework to address issues arising from climate change;
 - Specific sectoral plans to identify the adaptation measures to be taken by individual Government departments – includes energy.

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- **Towards a National Planning Framework 2015:**

A Roadmap for the NPF 2016 -

- Transitioning to a low carbon society is listed as a potential theme
- Challenges include ensuring rural communities benefit from a well planned approach to renewable energy development

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- **Maritime Area and Foreshore (amendment) Bill:**
Will likely give An Bord Pleanála development consent powers for renewable energy projects in the maritime area.
- **Directive 2014/89/EU: Maritime Spatial Planning Framework:**
Legal transposition required by Sep 2016 and spatial plans by 2021 – preliminary work has commenced on these.

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- **Ireland's Transition to a Low Carbon Energy Future 2015-2030:**
 - Existing Offshore Renewable Energy Development Plan (OREDPA) (finalised)
 - No national (land-based) spatial energy plan -
 - Draft Bioenergy Plan (SEA in progress)
 - Renewable Electricity Policy and Development Framework (spatial element) (SEA to commence 2016)

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Renewable Electricity Policy and Development Framework (DCENR):

- Aims to establish what scope remains for large scale renewable energy development on land, identify suitable areas and devise appropriate policy (including **community engagement**)
- Time horizon is 2030 and beyond

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Renewable Electricity Policy and Development Framework:

- Intended to inform the new National Planning Framework
- Can be incorporated into regional spatial and economic strategies in time



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