# **Towards 2020**

**Renewable Energy Targets** 

#### **Current Position with RIDP**

The diagram illustrates the five planned phases of the RIDP. Phases One and Two are complete. Phase Two identified a number of options for transmission infrastructure development.

Phase Three will now determine the most suitable option. An international team of independent experts covering the disciplines of environment, ecology, archaeology, engineering and communications has been commissioned to carry out further studies into the various identified options. It is anticipated that this phase will be completed by December 2011 by which time a preferred way forward will be proposed.

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Set the boundaries of a study area	Carry out detailed studies to identify a range of technically sound solutions	Complete detailed environmental and economic studies to identify a preferred scheme and work programme	Deliver the Environmental Impact Assessments for each link in the scheme and make the Planning Applications	Begin the construction phase of each link

Towards 2020 renewable energy targets

## **Stakeholder Engagement and Involvement in Phase 3**

A critical part of Phase 3 is the engagement of key statutory and strategic stakeholders. There will be a strong emphasis on participation in the process.

In practice this will mean that a number of stakeholders, representing a broad range of environmental, economic and social interests, will be invited to contribute to the assessment process. As routes are not yet being considered, these stakeholders will help inform important assessment selection criteria, indicators and weightings.

No single link project will provide the answer required to make the grid fit for purpose. Phase 3 has been established to identify the preferred scheme comprising a series of individual link projects.



#### **Further Information**

Members of the project team will be available to answer any questions which may arise.

NIE RIDP Project Manager 120 Malone Road Belfast BT9 5HT Tel: 00 44 (0) 8457 643643 EirGrid RIDP Project Manager The Oval 160 Shelbourne Road Dublin 4 Tel: 00 353 (1) 7026640

info@ridp2020.com www.ridp2020.com

The Renewables Integration Development Project (RIDP) is a joint project between

NIE – the transmission system owner and planner in Northern Ireland
EirGrid - the transmission system operator in the Republic of Ireland
SONI - the transmission system operator in Northern Ireland









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#### **Introduction**

As an island, Ireland has one of the smallest electricity markets in Europe. In 2007, the governments in Northern Ireland and the Republic of Ireland decided that to increase efficiency, the network should be planned on an all-island basis. Co-ordinating the development of transmission infrastructure in both jurisdictions makes it easier to secure the flow of electricity and allows flexibility in the operation of the network which helps to ensure the best possible price for electricity.

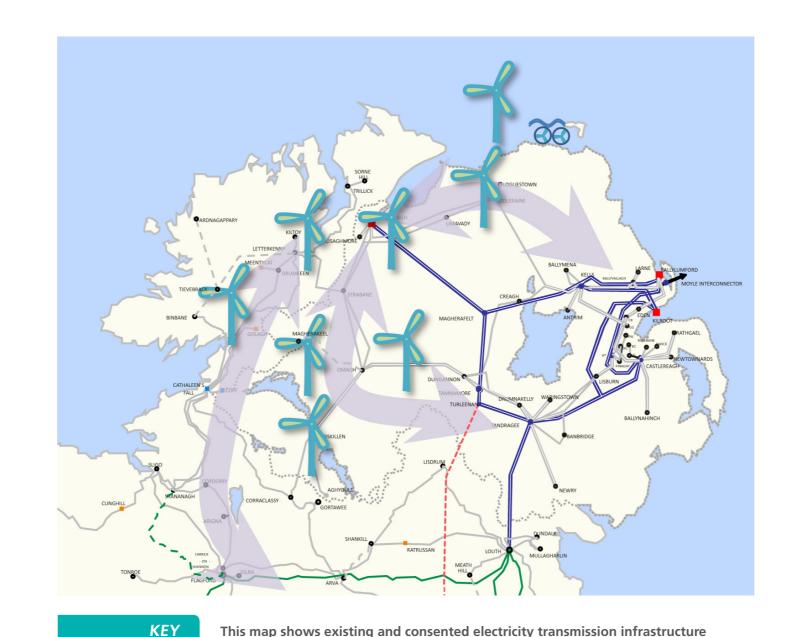
Today we no longer rely on a small number of large power stations to generate the electricity that we use. Instead we are also generating electricity in a cleaner, greener way through renewable energy, most of which harnesses the power of wind. European energy policy has driven and supported these changes to offset the effects of climate change on a world-wide scale and to stabilise energy prices against volatile gas and oil costs. We are fortunate that Ireland has some of the best renewable energy resources in Europe in its wind and tidal energy. In the coming years it is likely that biomass will play a part in the transition to a low carbon energy system.

#### What is RIDP?

Northern Ireland Electricity (NIE), EirGrid and the System Operator for Northern Ireland (SONI) have responsibility for developing and operating the electricity network in Northern Ireland and the Republic of Ireland and are jointly developing the Renewable Integration Development Project (RIDP). The aim of RIDP is to identify the optimum reinforcement of the electricity transmission grid in the north and the north west of the island to cater for expected power output from renewable energy sources. This will require new power lines to be built.

RIDP will help both Governments achieve their renewable energy generation targets of 40 percent of electricity consumption by 2020.

As well as ensuring that demands from renewable generators for connection to the transmission network can be met, RIDP will also considerably strengthen the existing grid - significantly increasing the transmission grid in Northern Ireland, while enhancing the capabilities of the grid in the Republic of Ireland. This is required to make the grid fit for purpose. The project will create highly skilled jobs in the planning and construction phase and will facilitate the attraction of investment to the island of Ireland.



WIND ENERGY GENERATION **EXISTING 275 kV LINES EXISTING 110 kV LINES** TIDAL WAVE ENERGY GENERATION EXISTING 220 kV LINES IOINTLY PROPOSED 400 kV NORTH/SOUTH INTERCONNECTOR TYPICAL REQUIRED GRID **CONSENTED 110 kV LINES** BALLYLUMFORD, COOLKEERAGH, CONSENTED 220 kV LINES KILROOT POWER STATIONS

### What is an Electricity Transmission System?

A transmission system is the network that moves bulk electricity on high voltage lines or underground cables from where it is being generated to where it is needed. The transmission network is like the motorways and dual carriageways of the electricity system, while the distribution system is like the smaller roads that deliver the electricity into homes, farms and businesses.

Electricity flows throughout the whole system so that power generated in Antrim, for example, can supply a customer in Cork and vice versa. This pooling of generation enables the transmission system operator to choose the lowest cost source of electricity at any given time, which helps to reduce final electricity prices for everyone.

### **Key Policy Drivers**

#### Europe

The primary focus of European energy policy is to improve security of supply, increase energy from renewable sources, increase competitiveness in European energy markets and improve interconnection across Europe to facilitate the future European Energy Market. http://ec.europa.eu/europe2020

#### **Northern Ireland**

In Northern Ireland the Minister for Enterprise, Trade and Investment published a Strategic Energy Framework (SEF) in 2010. www.detini.gov.uk/deti-energy-index.htm

#### Republic of Ireland

In the Republic of Ireland, the main energy policy driver is the White Paper 'Delivering a Sustainable Energy Future for Ireland,' which was published in 2007. www.dcenr.gov.ie/Energy

The NI and ROI documents acknowledge that renewable energy in the forms of onshore and offshore wind, tidal and wave energy and biomass will play a pivotal role in achieving the targets set. But they also recognise the fact that considerable investment is required in the electricity transmission network to support the integration of renewables and to upgrade the system. RIDP is key to the network challenge of the north and north west which are areas identified as having high potential to contribute to renewable energy targets.