



## **Wicklow Offshore Wind Farms – Speculation and Inadequate Regulation**

2009

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## 1. Background

Outdated and undemocratic legislation, drawn up 75 years ago to control activity below the high tide mark, has allowed developers to obtain valuable foreshore leases for construction of two of the biggest offshore wind farms in the world, on wildlife rich sandbanks, close to the Wicklow coastline.

These developments have been approved by the Minister for the Marine with:

- No statutory involvement of local authorities
- No public right of appeal against the Minister's decision

These huge industrial installations, occupying over 120 km<sup>2</sup> of Wicklow's coastal waters, will have a significant impact on the unspoilt natural beauty of the Wicklow coastline and its marine wildlife.

The manner in which these offshore wind farms were approved is inappropriate to the scale and impact of the developments and is out of line with good international practice. .

On this matter, Ireland is in breach of EU Environmental Legislation notably:

- The Consolidated Environmental Impact Assessment Directive 85/337/EEC (by failing to have in place access to a review procedure of decisions to grant consent which is "fair, equitable and not prohibitively expensive")
- The European Communities Directive 2001/42/EC - The SEA Directive (By failing to put in place a public plan or programme subject to Strategic Environmental Assessment, to assess cumulative impact of these extensive developments (totalling 1620MW) before consent.

### **Foreshore Act 1933**

Construction in Ireland's coastal zone is controlled by the **Foreshore Act 1933**, drawn up before large-scale development at sea was envisaged. This legislation confers unlimited power on the Minister for the Marine to award foreshore leases for construction in Irish coastal waters. There is no statutory involvement of local authorities and no public right of appeal against the Minister's decision.

This huge democratic deficit means that the Irish people have no control over what happens off their coastline. They can influence development up to the high water mark through participation in the land-use planning process. However once the development is below the high tide mark, the public and local authorities have no power even though the seas belong to the State and hence to the people of Ireland. The undemocratic and outdated nature of the Foreshore Act 1933 is well recognised and successive Irish governments have promised reform. No such reform has taken place.

## 2. Wicklow

Under this undemocratic regulatory regime, two of the biggest offshore wind farms in the world, have been approved in a low key manner off the Wicklow coastline.

- The **520 MW Arklow Bank Wind Farm** off Arklow was awarded a foreshore lease by Minister for the Marine, Frank Fahey in January 2002.
- The **1100 MW Codling Wind Park** off Bray Head was awarded a foreshore lease by Minister for the Marine, Noel Dempsey in November 2005.

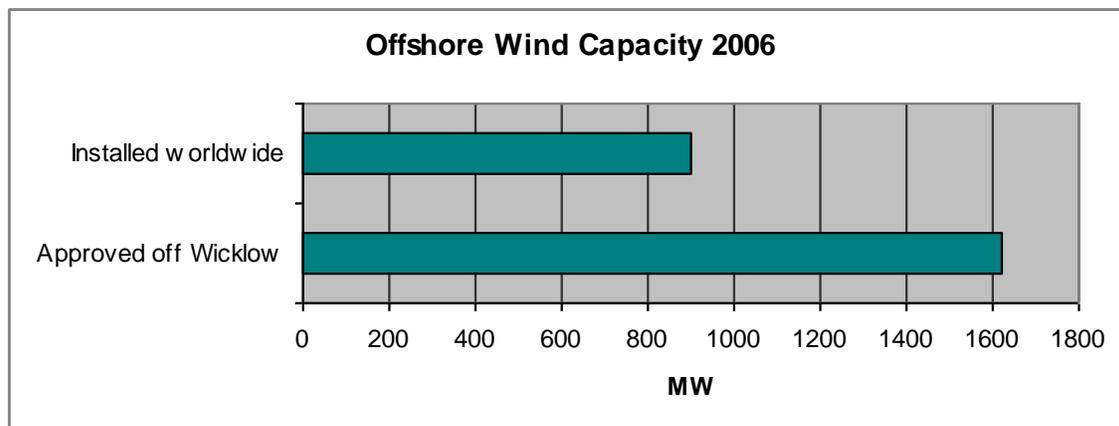
These massive industrial developments, the only offshore windfarms approved in Ireland to date, will involve a combined total of up to 420 giant turbines, stretching along the entire Wicklow coast from Bray Head to Arklow. Each turbine will be approximately 150m/530 feet high, taller than a 35 storey building. (See Table 1)

These developments will industrialise the seascape along the entire Wicklow coastline, most of which is designated as an Area of Outstanding Natural Beauty. They will radically alter the character of the coast and have a significant adverse visual impact on the coastal “views and prospects” listed for protection in the Wicklow County Development Plan.

An idea of the implications for the **amenity and scenery** of the Wicklow coastline can be gauged from the Environmental Impact Statement for Codling Wind Park. In this document, the developers acknowledge that all 400 turbines will be visible from the prime tourist beach of Brittas Bay.

In total approximately **1620 MW** of offshore wind power had been approved in full sight of the Wicklow coastline by 2006. The inappropriate scale of this development can be appreciated when one considers that this was **almost double the total amount of offshore wind power (900 MW) then installed worldwide.**

Figure 1 – Offshore wind capacity comparison between Wicklow and World 2006



### 3. Permitting Process

Construction at sea is regulated by the Foreshore Act 1933. Under this outdated legislation, developers seeking a foreshore lease to construct an offshore wind farm:

- Choose an offshore location, on “a first come first served” basis.
- Apply to the Minister for the Marine for (i) foreshore licence for initial exploration; (ii) a foreshore lease for construction .Under EU legislation, this application must be accompanied by an Environmental Impact Statement.

**Local authorities have no statutory involvement in the awarding of foreshore leases;** their authority apparently ends at the high water mark. Wicklow County Council had therefore no responsibility to assess visual or environmental impacts of the proposed developments.

A public consultation period of **one month**, announced by two small advertisements in local and national papers, took place for both the Arklow Bank and Codling Bank applications. The public could make submissions within that period but such submissions had no real weight as under the Foreshore Act 1933, there is **no public right of appeal** against the Minister’s decision

For offshore wind farm applications after 2002, the developer’s Environmental Impact Statement and any submissions arising from the public consultation are considered by the **Marine License Vetting Committee**, (MLVC). This is a small committee of marine scientists and engineers appointed by the Secretary of the Department of the Marine to advise the Minister on foreshore lease applications. The MLVC prepares a report and a recommendation for the Minister as to whether a foreshore lease should be granted. The MLVC has no planner or landscape professional as a member. **This means that no independent, professional assessment of landscape impacts of these massive industrial developments on the Wicklow coastline has been carried out.**

### 4. International Practice

Offshore wind farms could be a useful source of renewable energy. However they represent unprecedented industrial development at sea. It is widely agreed that they must be to a proper scale and properly sited to avoid negative impacts on the marine environment. It is acknowledged that the future of offshore wind farms lies in large installations far from shore (e.g. in North Sea) where visual impact is not an issue. .

Denmark and UK, which together account for 80% of all installed offshore wind capacity world-wide, have overhauled legislation in advance of permitting offshore wind farms. Strategic Environmental Assessments of the coastline have been carried out by government. Strict guidelines control size and scale of development, distance from shore, avoidance of protected habitats etc.

Other EU maritime countries exploring the potential of offshore wind such as Germany , Netherlands and Belgium, have updated legislation and banned offshore wind farms (apart from small demonstration projects) inside the 12 nautical mile limit (22km) in order to avoid negative landscape and environmental impacts in the sensitive in- shore zone.

## In Ireland:

- Outdated foreshore legislation has not been updated
- No system of integrated coastal zone management or marine spatial planning has been introduced.
- Developers have been allowed to;
  - Pick out their preferred locations close to the Wicklow coastline on a “first come first served” basis with no public tender
  - Apply to the Minister for the Marine for foreshore leases under the undemocratic Foreshore Act 1933, drawn up before offshore wind farms were ever envisaged.

## 5. Strategic Environmental Assessment

Other EU maritime countries considering offshore wind farm development have carried out a Strategic Environmental Assessment of their coastlines, in compliance with the SEA EC-Directive (2001/42/EC) in advance of offering sites for public tender for possible offshore wind farm development.

Such assessments are deemed to be essential by governments, offshore developers and environmental groups. **In Ireland there was no Plan for offshore renewable energy development and no Strategic Environmental Assessment to assess cumulative environmental impacts.** Many environmentalists expressed concern about this departure from best international practice. The shallow sandbanks on Ireland’s East coast, (Bray Bank, Codling Bank, Arklow Bank, etc) are a key target for developers as the shallow water makes development less costly. However these sandbanks are a rare and vulnerable wildlife habitat, listed for protection under the EU Habitats Directive because of their importance to a wide range of marine life for foraging, breeding, shelter, etc. In addition Ireland has yet to complete the survey and designation of marine sites required under EU nature protection legislation.

## 6. CASE STUDIES

### 6.1 Arklow Bank Wind Farm

When the Arklow Bank Wind Farm was awarded a foreshore lease by Minister Frank Fahey in Jan 2002, it was by far the largest offshore wind farm with planning consent in the world. With a capacity of 520MW, it amounted to three times the combined capacity of all offshore wind farms installed in the world at that time. It was the first approved offshore wind farm to propose using giant 3.6 MW turbines. The project, as consented, involves a total of around 200 turbines, 10 km offshore, stretching in a double row for 27 km along the coastline from Wicklow Head (Co Wicklow) to Ballymoney, (Co Wexford).

To date, just seven turbines have been erected This is the Arklow Bank Phase 1, built owned and operated by US multinational, General Electric, as a test facility for its 3.6MW

turbines. It involves a section of the Arklow Bank, subleased from the original developers.

#### *Undemocratic Permitting process*

Under the Foreshore Act 1933, the Minister for the Marine and Natural Resources (Mr Frank Fahey TD) had sole authority to accept or reject the foreshore lease application:

- There was no statutory involvement of local authorities
- No public right of appeal against the Minister's decision

#### *Shortcomings in Assessment*

Due to the unprecedented nature of the project, the Department of Marine and Natural Resources, (DMNR), commissioned a leading environmental consultancy, EIS Ltd, to assess the Environmental Impact Statement submitted by the developer as part of the application for a foreshore lease for the Arklow Bank project.

The stated requirements of the Assessment included:

- Examination of the Environmental Impact Statement
- A Preliminary Report,
- An Assessment Report
- Preparation of Schedule of Conditions and Requirements.

Material released to Coastal Concern Alliance under "Access to Information" regulations (available on request from CCA) shows that the commissioned Assessment was not completed. In fact it appears to have been abruptly cut short when EIS Ltd's Preliminary Report raised serious questions about the robustness of the developer's environmental impact assessment and the consultation process.

- ***In August 2001***, EIS Ltd completed the first stage of its commission by submitting its **Preliminary Report** to DMNR, setting out the preliminary assessment of the Environmental Impact Statement. The Report examined the information provided in the EIS and "*drew attention to significant areas of information deficiency*" stating "*there appears to be insufficient information to provide a basis for a decision*". The report described consultation on the project as "*very limited*" and requested further information on impact of project on stability of the Bank and coastal processes, on tourism, landscape, flora and fauna etc.
- ***On 8 January 2002***, EIS Ltd wrote to DMNR stating that the information requested from the developer had been received and requesting authorisation to proceed to the next stage of their commission - preparation of the "**Assessment Report and Conditions**". DMNR did not give this authorisation and EIS Ltd's "Assessment Report and Conditions" for this massive and unprecedented project was never prepared.
- ***On 11 January 2002***, Frank Fahey, Minister for the Marine granted a 99-year foreshore lease to Sure Partners Limited, a wholly owned subsidiary of Airtricity, for the construction of the 520 MW Arklow Bank Wind Farm.

## Summary: Arklow Bank Wind Park

**A valuable section of Irish public waters, stretching for 27 km along the Wicklow coastline, was leased by the Minister for the Marine to a private developer for what was the largest consented offshore wind farm in the world, (520MW Arklow Bank Wind Park) without any democratic control or proper independent assessment.**

## 6.2 Codling Wind Park

Following the awarding of the lease for the Arklow Bank project, the Department of Marine and Natural Resources changed the method of assessing offshore wind farm applications. Instead of engaging external environmental consultants to provide independent assessment, the Minister was to be advised by a **Marine License Vetting Committee** (MLVC) a small committee of marine scientists and engineers, appointed by the Secretary General of the Department of the Marine.

Ireland's second offshore wind farm, the massive 1100 MW Codling Wind Park off Bray Head (developer Treasury Holdings/ Fred Olsen Renewables) was approved by Minister Noel Dempsey in 2005, on the recommendation of the MLVC.

The MLVC did not have a professional planner or landscape expert as a member. Therefore **no independent, professional assessment of the developer's assessment of landscape impacts (as set out in the EIS) was carried out.**

Under the Foreshore Act 1933 governing construction at sea, the Minister had sole authority to award the foreshore lease. There was:

- No statutory involvement of local authorities
- No public right of appeal against the Minister's decision

The 1100MW Codling Wind Park will be situated on the Codling Bank, 12 km off Bray Head. It will comprise 220 massive 5MW turbines, each 150m high (as high as a 35-storey building). The wind farm will cover a total area of 55 km<sup>2</sup>. It will dominate coastal views from Killiney Bay, Bray, Greystones and Wicklow town and will be visible from as far down the coast as Brittas Bay. This entire coastline is a high amenity area, designated as an Area of Outstanding Natural Beauty in county development plans, in recognition of its importance.

The giant 5MW turbines proposed for this project, were developed primarily for use in deep water sites, far from shore, where visual impact is not an issue. e.g. North Sea, Still at prototype stage, their impacts on the marine environment had not been assessed.

The low key, undemocratic manner in which this development was approved was completely inappropriate for a project of this size with major implications for the economy, environment and heritage of Wicklow. There were **no submissions** from the public and **no objections**. Very few people were aware of the scale of the project or realised that local authorities had no statutory involvement in assessing the development.

**No press release** about the Codling Bank project was issued by the Department of the Marine at any stage in the application process or on the awarding of the foreshore lease. This was contrary to EU legislation on public participation and is a further indication of the lack of transparency surrounding the entire project.

### **Summary: Codling Wind Park**

**This massive industrial project, employing untested technology, was awarded a 99- year foreshore lease by the Minister for the Marine, on the advice of a small, unaccountable Committee appointed by his Department. There was no statutory involvement of local authorities, no public right of appeal and no independent, professional assessment of landscape impacts. The project was entirely developer-led. As there was no National Plan for offshore renewable energy, the government managed to avoid its obligation under the EU SEA Directive to carry out a Strategic Environmental Assessment on “all plans and programmes likely to have a significant effect on the environment”**

### **6.3 Case Studies Summary**

Under the outdated Foreshore Act 1933, the entire coastline of Wicklow, most of which is designated as an Area of Outstanding Natural Beauty was in effect zoned for extensive industrial development on the sole authority of the Minister for the Marine without any democratic control, national plan for offshore renewable energy or strategic environmental assessment. .

At end 2006, **1620 MW** of offshore wind power had been approved off Wicklow, almost double the total amount of offshore wind power (**900 MW**) then installed worldwide. The 520MW Arklow Bank and 1100MW Codling Bank projects are situated on shallow sandbanks, important marine habitats listed for protection in the EU Habitats Directive (Annex1)

The size and number of turbines permitted (420 turbines, approx 160 m/520 ft high) and their proximity to a sensitive coastline is completely out of line with best international practice. Both projects were awarded foreshore leases of 99 years duration – the maximum possible period under the enabling Irish legislation.

In a clear example of “project splitting” at variance with EU environmental legislation, no application for planning permission was made for the substantial land based elements required to bring the electricity generated by these two projects to shore.

To compound the **democratic deficit** underlying the permitting process, one of these wind farms, the Arklow Bank project was approved by Minister for the Marine Frank Fahey, without the authorisation by his Department of the production of the vital “**Final Assessment Report and Conditions**” from EIS Ltd., the independent consultants commissioned by the Department to assess the developer’s environmental impact statement. The consultants’ Preliminary Report had raised serious questions about the adequacy of information provided on key environmental, economic and social impacts of

the project. **This departure from proper procedures on such a major project is a serious cause for concern and calls in question the quality of the assessment..**

## **7. Speculation in Foreshore Leases**

Developers have profited hugely from Ireland's outdated and undemocratic permitting procedures which have allowed them to

- pick out any site they wish off the Wicklow coastline with no public tender,
- spend a relatively small amount on producing an EIS and employing consultants to get planning consent
- gain valuable foreshore leases for the biggest offshore wind farms in the world under legislation long acknowledged by all political parties to be out of line with best international practice.
- sell on the foreshore leases thus acquired to international power companies at a price based on the size of the offshore wind farm permitted. .

The value of offshore sites is largely based on consented megawatts and is currently (2009) estimated to be in the range of €150,000 to €400,000 per consented megawatt. Taking the lower figure, a 520MW consented offshore wind farm would be worth €78,000,000 and a 1100MW project would be worth €155,000,000.

The two foreshore leases obtained by developers off Wicklow were sold to international power companies. In January 2008, the foreshore lease for the 520MW Arklow Bank project was sold on by shareholders who included Airtricity (the original promoters) and NTR (National Toll Roads) to Scottish and Southern Energy Plc, an international utility.

In February 2008, the lease for the 1100MW Codling Bank Offshore Wind Park was sold on by Treasury Holdings and Fred Olsen Renewables (the original promoters) to Viridian Group plc, a UK power company. The figures quoted above give some idea of the substantial profits to be made on such transactions.

## **8. Further development planned**

Treasury Holdings and Fred Olsen Renewables have applied for another foreshore lease for a further massive development "1000MW Codling Bank 2" off the Wicklow coast. This additional development will, if permitted, bring the total amount of offshore wind power permitted off Wicklow to a staggering 2620MW. (Double the total amount of offshore wind power (1400MW) installed worldwide at end 2008). In addition numerous applications have been made for foreshore licenses for initial investigation for further wind farm development off the Wicklow coastline. It appears that developers have declared open season on the Wicklow coastline with absolutely no input from the people of Wicklow.

## Coastal Concern Alliance: Recommendations

Everyone agrees that Ireland should develop alternative energy supplies. However this laudable objective must not be realised at the expense of local democracy protected coastal landscapes and fragile marine habitats. Offshore wind farms must be to a proper scale and properly sited

Under the Foreshore Act 1933, the Minister for Communications Marine and Natural Resources has **power to change the terms of foreshore leases**; for example the size and scale of development can be altered at the Minister's discretion.

In view of the serious **democratic deficit** and **shortcomings in environmental assessment** surrounding the awarding of foreshore leases for construction of two of the biggest offshore wind farms in the world off the Wicklow coast, Coastal Concern Alliance calls on Eamon Ryan, Minister for Communications, Marine & Natural Resources to:

- **Review the terms** of the two foreshore leases awarded for Wicklow waters and the **manner** in which these unprecedented projects were approved
- Ensure that **no taxpayer's money** is used to subsidise these **developer-led** projects or to connect them to the national grid until the above review has been carried out, its results published and the implications for Wicklow's economy, environment and quality of life, fully assessed.
- Carry out **Strategic Environmental Assessment** of the impact of this large scale, industrial development on Wicklow's coastal environment in accordance with the EU SEA Directive
- Introduce a transparent and democratic system of governance for our seas which affords a **statutory role to local governments** in assessing the impact of massive developments off their coastline which will affect their economy, environment and heritage

**Wicklow's beautiful coastline** is a valuable resource and home to rich marine life. It is a vital part of our heritage, making a huge contribution to our economy and our quality of life. All political parties, relevant government departments and NGOs have stated for many years that Ireland's coastal resources must be protected by a proper system of marine spatial planning, strategic environmental assessment to assess cumulative impact of large developments and integrated coastal zone management to manage the land/sea divide. Yet over the same years, extensive developer-led projects which will occupy over 120 km<sup>2</sup> of the Wicklow coastline and change the face of the county have been approved by successive Ministers for the Marine in a low key manner under outdated and undemocratic legislation.

Coastal Concern Alliance is calling on the Government and our public representatives to ensure that the developer-led, land grab off Wicklow is halted and that our county is afforded the same environmental protection as other maritime counties in Ireland and the EU.

**Table 1: Offshore windfarms in Wicklow awarded foreshore leases for construction**

<b>Arklow Bank Wind Farm (520 MW)</b>	
<b>Status</b>	<ul style="list-style-type: none"> <li>▪ Foreshore license for initial exploration granted in 2000.</li> <li>▪ Foreshore Lease for construction and operation of wind farm granted by Mr Frank Fahey TD Minister for the Marine (11/1/2002) to Sure Partners Limited, a wholly owned subsidiary of Airtricity Holdings Limited.</li> <li>▪ Phase 1 (25.2 MW) operational June 2004.comprises 7 x 3.6 MW turbines.</li> <li>▪ This initial phase is built, owned and operated by General Electric as a technology learning and demonstration platform for its 3.6 MW turbine.</li> </ul>
<b>Turbines</b>	200 x 3.6 MW ( or bigger up to max height of 160m)
<b>Turbine Height</b>	124m/ 406 ft (7 x 3.6MW turbines installed) (Maximum height permitted: 160m)
<b>Distance from shore</b>	10km to 13km
<b>Consented project</b>	200 turbines in double row along Arklow Bank , a shallow sand bank running in north- south linear direction for 27 km along coast from Wicklow Head(Co Wicklow) to Ballymoney, (Co Wexford) <b>Total Area of Site : 68km<sup>2</sup></b>
<b>Water depth</b>	5 to 25 metres
<b>Lease</b>	99 years
<b>Latest News</b>	2008: Airtricity sold to UK power company, Scottish and Southern Energy, for £2.2 bn. Assets included foreshore lease for Arklow Bank.

<b>Codling Wind Park (1100 MW)</b>	
<b>Status</b>	<ul style="list-style-type: none"> <li>▪ Foreshore License for initial exploration granted April 2001.</li> <li>▪ Foreshore lease for construction and operation of windfarm granted by Mr Noel Dempsey, Minister for the Marine (15/11/2005) to Codling Wind Park Ltd jointly owned by Treasury Holdings and Fred. Olsen Renewables (Norway)</li> </ul>
<b>Turbines</b>	220 x 5 MW
<b>Turbine Height</b>	160m/524 ft (maximum height permitted)
<b>Distance from shore</b>	12 km at nearest point
<b>Consented project</b>	200 turbines in 13 rows on shallow bank off Bray Head between Greystones and Wicklow town. <b>Total area of site: 55 km<sup>2</sup></b>
<b>Water depth</b>	9 to 16 metres
<b>Lease</b>	99 years
<b>Latest News</b>	2008: Treasury Holdings' wind energy unit Eco Wind Power was sold to Viridian, a UK power company.