

**Department of Communications, Marine
and Natural Resources**

**Report on a proposed national programme to increase
the gross consumption of “green electricity”.**

- Compliance with Directive 2001/77/EC (Article 3.2)

1. Introduction

- 1.1 *“DIRECTIVE 2001/77/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market”* addresses an obligation to member states to establish a programme to increase the gross consumption of renewable energy based electricity (“green electricity”) by 2010. The indicative target addressed to Ireland in the Directive is 13.2% of gross electricity consumption (see attachment 1)
- 1.2 The Directive also calls on Member States to adopt and publish a report setting national indicative targets for future consumption of electricity produced from renewable energy sources for the next 10 years. The first report is requested by 27 October 2002 (the relevant text is in attachment 2).
- 1.3 This report sets out -
- (a) (i) the national indicative target already published¹, (ii) the planned approach and (iii) reasons for the approach adopted,
 - (b) the measures already taken to contribute to the target, and
 - (c) the progress made towards delivering on the target of 13.2% of gross electricity consumption by 2010.

2. The (i) national indicative target, (ii) the planned approach and (iii) reasoning the approach .

¹ See attachment 3.

- 2.1 The national indicative target is to contribute a minimum 13.2% of green electricity to total electricity consumption by 2010 (attachment 3)
- 2.2 The planned approach is to intervene in the electricity generating market to the extent necessary to ensure green electricity contributes a minimum 13.2% to gross electricity consumption by 2010. The specific indicative target, the quantity of additional capacity required to deliver that target, the particular technologies employed and the detailed market interventions will be settled after a public consultation process is commenced in Q.1, 2003. This public consultation process will also consider the other obligations under Directive 2000/77/EC.
- 2.3 The reason for intervening in the electricity generating market whereas the Directive calls for increased consumption is primarily administrative efficiency. Increasing consumption directly can only be achieved by ordering all customers to source a minimum 13.2% of their electricity from green electricity or by ordering a lesser number of consumers to purchase an even higher amount of green electricity. This would impose a significant administrative cost including billing, cost of monitoring, metering and invoicing *etc.* Measuring green electricity generation (+ imports less exports) is, by comparison, a relatively light administrative exercise which can nevertheless deliver the obligation.
- 2.4 The reasons for commencing the public consultation in Q1, 2003 are twofold viz-
- (i) to ensure implementation of an EU Directive does not adversely affect the attainment of a complimentary and reinforcing national target to build 500 MW by 2005², and
 - (ii) to ensure the ability of wind energy to contribute to the target can be better assessed as soon as possible following the publication by the Commission for Energy Regulation³ of its report "*Study into the impacts of*

² See additional commentary in 3.3 following.

³ Joint study with OFREG.

increased levels of wind penetration on the Irish electricity system” due in Q4, 2002.

3 The measures already taken to achieve the target.

1995 –2000.

- 3.1 “*Renewable Energy – A Strategy for the future*” launched the national programme to promote renewable energy technologies in electricity production in the mid 1990s. It commenced “*Alternative Energy Requirement (AER) programme*”. Under the AER programme the competent Government Minister announces competitions from time to time to support the building of new renewable energy based electricity generating plant. Applicants are invited to bid prices, by technology, at which they are willing to sell green electricity to the Electricity Supply Board (ESB) from new green electricity generating stations. The ESB is obliged to purchase the output from green electricity stations selected in the competitive process for up to fifteen years at the individual prices bid (+ indexation). Access to the “guaranteed demand contract” generates a reasonable expectation of a long term revenue stream and, over time, has improved the bankability of such projects. Four AER competitions were held in the period. In addition, projects successful in related EU programmes (THERMIE) were allowed access to similar guaranteed demand contracts.
- 3.2 In this period additional positive support was provided by :
- the establishment of the Irish Energy Centre to disseminate information and lend support to the development of renewable energy technologies in energy supply and energy efficiency;
 - the establishment of and contributions by the Irish Wind Energy Association and Meitheal na Gaoithe supporting the wind sector, the Irish Biomass Association supporting the biomass sector and contributions from the Irish Hydropower Association, all nongovernmental organisations (NGOs),

- the publication by the Irish Planning Institute (NGO) of planning guidelines for wind park developments and the subsequent publication by the Department of the Environment and Local Government of “*Wind farm Development – Guidelines for Planning Authorities*”.

1999 - onwards

- 3.3 The national publication “*Green Paper on Sustainable Energy*” (1999) set a target to add an additional 500 Megawatts of new green generating plants to the electricity network by 2005. This programme was launched after the commencement of EU common rules establishing the internal electricity market. It was therefore necessary to notify the programme to the European Commission under prevailing state aids rules. The European Commission concluded (January 2001) the support model used in Ireland constitutes compatible state aid (N 553/01). The support programme as notified and approved relies on competitive tendering, compliance with EU procurement rules and wind technology as the predominant technology. If the national target is to be delivered within the published national deadline (2005) it is necessary to proceed with the extant programme compliant with the state aids clearance. The alternative, to commence a public consultation process, settle a new programme and secure state aids approval could not deliver the target by 2005 allowing reasonably for the additional lead in time to secure planning consents, deliver connections and comply with procurement rules. The Directive and the national target are complimentary and mutually reinforcing measures. It was decided therefore to conclude the extant national programme before commencing a public consultation programme on future detailed targets and support measures under the Directive. All the administrative steps necessary to complete the current AER programme will be commenced before end 2002. This will be followed almost immediately by the public consultation process which will also address the wider obligations arising under Directive 2001/77/EC.
- 3.4 Following publication of the *Green Paper* the then Department of Public Enterprise commissioned reports on a “*Strategy for Intensifying Wind Energy*”

Deployment” and an “*Assessment of Offshore Wind Energy Resources..*”. In addition the then Department of the Marine and Natural Resources published guidelines and procedures for exploring and securing offshore sites for windpark developments.

- 3.5 The national publication *Strategy for Intensifying Wind Energy Deployment*, as the name implies, concentrated on wind technology. The concentration was justified by the predominance of wind technology under the AER programme and in the knowledge the issues raised would apply, to a greater or lesser extent, to other technologies. The report recommended, *inter alia*, the market had matured sufficiently to justify the removal of project size caps and ownership caps applied in previous rounds to avoid market concentration in an embryonic market. In addition the report recommended that unlike previous AER rounds, in the future applications in AER rounds should have planning consent at the time of application. These recommendations were accepted by the competent Government Minister. However state aids clearance was granted on the assumption competitive bidding would apply. It was therefore necessary to impose a quantitative limit below the known quantity of projects with planning permission when offering guaranteed demand contracts to the market in order to guarantee competitive bidding. It was not possible therefore to offer the entire 500 MW in one tranche. The allocation of contracts under the first tranche was announced in February 2002. The second tranche will be offered to the market before end 2002.
- 3.6 Two pieces of legislation were enacted in the period which impact directly on the green electricity market.
- 3.6.1 The Electricity Regulation Act 1999, was primarily concerned with establishing an independent regulator (now the Commission for Energy Regulation or CER). The Act also provided for the accelerated full liberalisation of the green electricity market (generation and supply). Players are now free to source and supply green electricity to any customer in the Irish market.
- 3.6.2 The Sustainable Energy Act 2002 established Sustainable Energy Ireland (SEI) as a statutory body. Since its establishment in May 2002, in the field of renewable energy alone, SEI has:

- launched a RD&D programme;
- contracted for the development of a digitised wind resource which will also incorporate terrain data, information on the electricity grid and information on planning and the heritage;
- contracted professional pollsters to identify public attitudes to and perceptions of renewable energy developments, and
- commenced a high profile publicity campaign on energy issues.

In addition SEI funds a Renewable Energy Information Office which offers detailed professional advice to planners and developers in particular and more general advice to the wider public.

4 The progress made towards delivering on the target of 13.2% of gross electricity consumption by 2010.

- 4.1 About 4% of all electricity is sourced from large hydro facilities operated by the ESB on an ordinary business case. It is estimated the annual output of projects already built under the AER programme contributes between 1% & 2% to gross consumption. It is expected the 500 MW of plant to be built in the period 2000 & 2005 will contribute between 4% & 6% depending on overall growth levels in gross electricity consumption in the period. In the low case it is expected green electricity will contribute 9% to gross consumption by 2005 and taking the higher figure total consumption could rise towards 12% by 2005. It is concluded both scenarios are proportionate to the attainment of a minimum contribution by green electricity of 13.2% of gross electricity consumption by 2010.

End

Attachment 1.

Extract from “DIRECTIVE 2001/77/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity”

(Extract) ANNEX

Reference values for Member States' national indicative targets for the contribution of electricity produced from renewable energy sources to gross electricity consumption by 2010 (*).

This Annex gives reference values for the fixing of national indicative targets for electricity produced from renewable energy sources ('RES-E'), as referred to in Article 3(2):

member state (*0)	RES-E TWh 1997 (**)	RES-E % 1997 (***)	RES-E % 2010 (***)
Belgium	0.86	1.1	6.0
Denmark	3.21	8.7	29.0
Germany	24.91	4.5	12.5
Greece	3.94	8.6	20.1
Spain	37.15	19.9	29.4
France	66.00	15.0	21.0
Ireland	0.84	3.6	13.2
Italy	46.46	1.60	25.0
Luxembourg	0.14	2.1	5.7
Netherlands	3.45	3.5	9.0
Austria	39.05	70.0	78.1
Portugal	14.30	38.5	39.0
Finland	19.03	24.7	31.5
Sweden	72.03	49.1	60.0
United Kingdom	7.04	1.7	10.0
Community	338.41	13.9%	22%(****)

Attachment 2

Extract from *DIRECTIVE 2001/77/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity*

Article 3

National indicative targets

1. Member States shall take appropriate steps to encourage greater consumption of electricity produced from renewable energy sources in conformity with the national indicative targets referred to in paragraph 2. These steps must be in proportion to the objective to be attained.
2. Not later than 27 October 2002 and every five years thereafter, Member States shall adopt and publish a report setting national indicative targets for future consumption of electricity produced from renewable energy sources in terms of a percentage of electricity consumption for the next 10 years. The report shall also outline the measures taken or planned, at national level, to achieve these national indicative targets. To set these targets until the year 2010, the Member States shall:
 - take account of the reference values in the Annex,
 - ensure that the targets are compatible with any national commitments
3. Member States shall publish, for the first time not later than 27 October 2003 and thereafter every two years, a report which includes an analysis of success in meeting the national indicative targets taking account, in particular, of climatic factors likely to affect the achievement of those targets and which indicates to what extent the measures taken are consistent with the national climate change commitment.
4. On the basis of the Member States' reports referred to in paragraphs 2 and 3, the Commission shall assess to what extent:
 - Member States have made progress towards achieving their national indicative targets,
 - the national indicative targets are consistent with the global indicative target of 12 % of gross national energy consumption by 2010 and in particular with the 22,1 % indicative share of electricity produced from renewable energy sources in total Community electricity consumption by 2010. The Commission shall publish its conclusions in a report, for the first time not later than 27 October 2004 and thereafter every two years. This report shall be accompanied, as appropriate, by proposals to the European Parliament and to the Council. If the report referred to in the second subparagraph concludes that the national indicative targets are likely to be inconsistent, for reasons that are unjustified and/or do not relate to new scientific evidence, with the global indicative target, these proposals shall address national targets, including possible mandatory targets, in the appropriate form."

“Dermot Ahern Pledges To Surpass EU Green Energy Targets.” -- Dublin, Thursday, 3rd October, 2002 (extract).

The Minister for Communications, Marine and Natural Resources, Dermot Ahern TD, today said the Government intended surpassing EU targets for usage of The Minister for Communications, Marine and Natural Resources, Dermot Ahern TD, today said the Government intended surpassing EU targets for usage of green electricity in Ireland.

The Minister told a conference on wind energy in Dublin today that under EU obligations, Ireland would have to produce 13.2% of its total electricity consumption from renewable energy sources by 2010.

But Mr Ahern declared:

“That’s our bottom line – that’s the minimum. Like many of you, I think we should go further.”

...once AER VI is launched he (the Minister) would talk to the renewable energy sector to set additional targets for the increased penetration of green energy technologies over the next decade....

“Ultimately we have to decide on appropriate support structures to ensure that our targets are delivered”.

ENDS