



EUROPEAN COMMISSION

Brussels, 12.01.2011  
C(2012) 8 final

**Subject: State aid SA.31236 (2011/N) – Ireland  
Renewable Feed In Tariff**

Sir,

**1. PROCEDURE**

1. By electronic notification of 29 June 2011, registered by the Commission on the same day (SANI 5097), the Irish authorities, in accordance with Article 108(3) of the Treaty on the Functioning of the European Union (TFEU), notified<sup>1</sup> the aid scheme "Renewable Feed In Tariff scheme". Following a request for further information by the Commission of 18 August 2011, the Irish authorities submitted additional information on 18 October 2011 and 29 November 2011.
2. Before notification, on 1 July 2010 the Commission received a complaint concerning the notified measure<sup>2</sup>. The non-confidential version of the complaint was forwarded to the Irish authorities for comments on 23 May 2011. The Irish authorities provided their comments on 28 June 2011.
3. The measure was notified as a prolongation and modification of a previously approved State aid measure concerning operating aid for renewable energy sources (N 571/2006 RES-E support programme)<sup>3</sup>. In fact, while the notified scheme is a continuation of the aid scheme previously notified to the Commission under N571/2006, it constitutes a new aid scheme, as the previous scheme already expired.

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<sup>1</sup> The notified measure was pre-notified on 8 July 2010 (registered as PN 169/2010).

<sup>2</sup> Registered on the same day under the number SA.31195 (2010/CP) – CP 169/2010.

<sup>3</sup> OJ C 311 of 21.12.2007, p. 3 - Decision C(2007)4317 final.

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## **2. DESCRIPTION**

### **2.1. Objective and background**

4. The Irish authorities explained that the notified scheme is a continuation and capacity expansion of the aid scheme previously notified to the Commission (N571/2006, which expired at the end of 2009). The notified scheme should incentivise the construction of a further 4000 MW of renewable electricity capacity.
5. The main objective of the notified measure is to increase renewable energy capacity from wind power, landfill gas and small hydropower and thus help Ireland achieve its obligation under Directive 2009/28/EC on the promotion of the use of energy from renewable sources (the Renewables directive)<sup>4</sup>. The Irish government set targets to increase the contribution from renewable energy sourced electricity to at least 15% of the electricity consumed by 2010 and 40% by 2020. According to the Irish authorities, depending on electricity growth forecasts, the 40% target will require installed renewable energy capacity of between 4700 MW and 6000 MW.
6. The support measure is based on a Renewable Energy Feed in Tariff (REFIT), which operates as a floor price mechanism. It is financed through a fund collected from all subscribers to the electricity network, the same way as the previous scheme (N571/2006).

### **2.2. Scope of the notification, legal basis, granting authority**

7. The notification concerns operating aid for the generation of electricity from small and large scale wind power, landfill gas and small scale hydropower. Small-scale electricity generation refers to a plant of 5MW or less.
8. The Irish authorities confirmed that the aid is only granted for the promotion of renewable energy sources as defined in the Community Guidelines on State Aid for Environmental Protection (Environmental Aid Guidelines)<sup>5</sup>, and in particular point 70(5) of those guidelines.
9. The legal basis is the Electricity Regulation Act 1999.
10. The Department of Communications, Energy and Natural Resources (DCENR) is the granting authority for the notified measure.

### **2.3. Duration, budget**

11. The aid will be granted under the notified scheme as from the Commission's approval of the measure. The measure will be open for applications until 31 December 2015.
12. The Irish authorities explained that the total budget of the scheme largely depends on the actual wholesale market prices and can vary over a fifteen year period. On the basis of a market price for electricity of 60 EUR/MWh, the budget was

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<sup>4</sup> Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ L 140 of 5.6.2009, p. 16.

<sup>5</sup> OJ C 82 of 1.4.2008, p. 1.

estimated at 196 million EUR to be paid per year. The Irish authorities underlined that if market payments are higher then the budget will be lower.

13. The support programme aims to allocate up to a quantitative capacity limit of an additional 4000 MW to ensure delivery of the 2020 target on a “first come – first served” basis to RES-E generators complying with the qualifying conditions of the programme.

#### **2.4. Beneficiaries**

14. The beneficiaries of the aid are undertakings operating renewable energy sources (hereinafter "RES-E") generators who produce electricity from small scale hydro, large or small scale wind and landfill gas. The support for any particular project cannot exceed 15 years and may not extend beyond 31/12/2034. Compliant applications received will be ranked for subsequent assessment on the basis of the earliest date application/s received or deemed received first on or after the commencement date.
15. The plants must be new plants in Ireland, or new plants in other EU Member States<sup>6</sup> neither built nor under construction on 1 January 2010. The projects must be built and operational by 2020. The last date for receipt of completed applications under this programme is 31 December 2015. The Irish authorities confirmed that all the RES-E eligible for support fall within the definition of renewable energies in Article 2 of the 2009/28 EC Renewable Energy Directive.

#### **2.5. Form of the aid, aid levels, aid intensity**

16. The aid is granted in the form of a floor price tariff, calculated per Wh electricity produced, so when, on an annual average, the market payments are above the levels set out in REFIT, the scheme does not make any payments.
17. It is financed by a levy, the so called public service obligation levy, which is charged to all electricity customers and operated by the energy regulator. It is designed to support certain national policy objectives such as the use of renewable energy sources in electricity generation.
18. The aid will be granted to those retail suppliers of electricity who enter into so called Power Purchase Agreements (PPA) with generators of renewable energy sources (RES-E). However, the indirect beneficiaries of the aid are RES-E generators.
19. Under a PPA, the supplier undertakes to purchase all the output from a selected new RES-E plant at contract prices which are fixed between the RES-E producer and the supplier at the commencement of each individual contract (PPA prices) for 15 years, irrespective of the open market price. For every kWh purchased under the PPA, the supplier will receive a so called REFIT payment from a fund, the amount of which varies according to the average annual market price. The PPAs are

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<sup>6</sup> In this case, in line with the flexibility mechanisms included in the Renewables Directive, electricity imported from another EU Member State must be covered by an inter Member State agreement whereby that Member State accepts explicitly and states in a document agreeing a statistical transfer between Ireland and that Member State, that it will not use the electricity from that plant to meet its own RES-E target and has thereby also accepted that the electricity can be counted towards Ireland's renewable target.

negotiated in the open market between any selected RES-E generator and any supplier, and the PPA price of each contract is decided by the contracting parties.

20. The selected RES-E generators will be awarded “letters of offer”, confirming to suppliers that those will be entitled to REFIT payments in return for entering PPAs with the selected generators. Once access to the programme is granted, the support can continue for up to 15 years, since the PPAs are entered for up to fifteen years.
21. A contracting generator can cancel a PPA at any time by agreement, (or, in the case of a dispute, after giving a minimum period of notice of 12 months to the contracting supplier), but in the event of such cancellation, the generator cannot re-enter the scheme at a later stage.
22. The REFIT payments were established based on the following elements: technology cost, balancing cost, and the average annual market payments.
23. The notified scheme covers a number of technologies operating from different production cost bases, and the Irish authorities have set the following technology prices, with reference as on 1 January 2010, which correspond to the total generation cost of the specific technology (see total levelised generation cost in table 2 below):

<b>Technology</b>	<b>REFIT Technology price</b>
	<i>per MWh</i>
<i>Onshore wind (above 5MW)</i>	EUR 66,35
<i>Onshore wind (5MW or below)</i>	EUR 68,68
<i>Landfill gas</i>	EUR 81,48
<i>Hydro (5MW or below)</i>	EUR 83,81

*Table 1: Overview REFIT technology prices (source Irish authorities)*

24. The Irish authorities have provided detailed calculations of the costs incurred by the RES-E generators, including a substantiation of the data used. The Irish authorities used discount rates of 7% for wind installations, 6% for hydro installations and 10% for landfill gas installations. The Irish authorities refer to two reports, using a discount rate of 8% in levelised cost calculations<sup>7</sup> and a discount rate of 10% for onshore wind projects with a rate of 12% for offshore wind and biomass projects<sup>8</sup>. The Irish authorities also compared the rates to a recent study carried out for the UK<sup>9</sup>.

<sup>7</sup> All Island Grid Study, Workstream 1, Renewable Energy Resource Assessment, A report to the Department of Communications, Energy and Natural Resources and the Department of Enterprise, Trade and Investment, January 2008, by ESB International, available at <http://www.dcenr.gov.ie/NR/rdoonlyres/1CC7BE35-C821-4E2A-8433-7B7826E9B9CF/0/Workstream1.pdf>.

<sup>8</sup> Low Carbon Generation Options For The All-Island Market, A report to EirGrid, March 2010, by Pöyry Energy Consulting, available at <http://www.eirgrid.com/>.

<sup>9</sup> The study carried out by Oxera showed discount rates for onshore wind between 7% and 10%, for hydro power between 6% and 9% and for biomass between 9% and 13%. (<http://hmccc.s3.amazonaws.com/Renewables%20Review/Oxera%20low%20carbon%20discount%20rates%20180411.pdf>).

25. A synthesis of these calculations, showing that the proposed technology prices correspond to the specific technology generations costs, is presented in the table 2 below<sup>10</sup>. A more detailed calculation is provided in Annex 1.

<i>per EUR/MWh</i>	<b>CAPEX</b>	<b>OPEX</b>	<b>Total Levelised Generation Cost</b>
<i>Onshore Wind (above 5MW)</i>	EUR 49.78	EUR16.57	EUR 66.35
<i>Onshore Wind (5MW or below)</i>	EUR 52.11	EUR 16.57	EUR 68.68
<i>Landfill Gas</i>	EUR 44.56	EUR 36.93	EUR 81.49
<i>Hydro</i>	EUR 60.77	EUR 23.04	EUR 83.81

*Table 2: Overview levelised costs per technology (source Irish authorities)*

26. The Irish authorities confirmed that beneficiaries are eligible for 15 years of support from the connection date which does not exceed the economic lifetime of the installations.
27. With respect to the balancing costs, the Irish authorities emphasize that the participating suppliers are required to purchase all the RES-E produced by the generators with whom they have concluded contracts, at the PPA prices, regardless of their commercial concerns about the alternative open market price at any particular time.
28. The supplier also assumes the market interaction role between the individual generator and the pool market and incurs additional costs. Renewable resources can be intermittent and actual generation and dispatch cannot follow the pattern of load demand<sup>11</sup>. To ensure suppliers' participation in the scheme and given the additional costs incurred in acting as market intermediary and in dealing with intermittency costs, a balancing payment of 9,9 EUR/MWh purchased was established<sup>12</sup>.
29. The technology prices will be adjusted by way of indexation annually (with the annual increase in the consumer price index in Ireland). On the contrary, the balancing payment will remain fixed over the support period.

<sup>10</sup> The costs for onshore wind projects are based on actual industry data (in the 2 year period to end 2009), industry projection costs in the case of landfill gas and small hydro developments. These data were compared with studies carried out by ESBI Engineering & Facility Management Ltd (January 2008), Pöyry Energy (Oxford) Ltd (March 2010) and Ecofys (January 2011).

<sup>11</sup> To emphasise the costs involved in managing an intermittent renewable resource, the Irish authorities provided an example showing the half hour by half hour earnings for a 50 MW wind farm using the actual capacity factor for that half hour which was subsequently compared to the half hour by half hour earnings of a 50MW CCGas plant. A 50 MW gas plant could earn EUR 29,380 in the high period while it earns EUR 9,625 in the low market price period, despite having the same fuel input costs in both periods. A 50MW wind farm could earn EUR 4,746 during the high period and EUR 3,102 during the low period, despite having a higher capacity outturn during the low market price period. The Irish authorities argued the difference in earning power is very clear as gas plants can benefit all the time from the high market peak prices because they are dispatchable, whereas wind cannot and can only earn in the marketplace when the weather allows.

<sup>12</sup> In the original scheme, the balancing payment was 15% of the base reference price. However, the Irish authorities decided that it will now remain fixed over the period of the contract as supply companies start to gain economies of scale in this area.

30. The REFIT payment depends also on the average annual market payment<sup>13</sup>, as only the difference between the total costs (technology price + balancing cost) and the market payment is covered by aid. Generators sell energy into the gross pool Single Electricity Market (SEM) and are paid for this energy at the prevailing market clearing price. These generators have a fixed price contract with supply companies. Typically, suppliers pay generators for their output on a weekly or monthly basis, but only receive the final metered REFIT payment at the end of the following market year. While suppliers receive a REFIT payment for these units in the appropriate market year, this payment is based on an average market price estimated in advance and as such is subject to forecast error. This payment is then corrected once actual, audited costs are verified and the true market price and generation levels are known by the Irish Commission for Energy Regulation.
31. The Irish authorities explained that the wholesale electricity prices vary considerably from trading period to trading period (as can be seen from the data presented in table 3 below). The Irish Single Electricity Market (SEM) consists of a gross mandatory pool market, with the pool price calculated at half hourly intervals, into which all electricity must be sold, and from which all wholesale electricity for consumption must be purchased. There are two basic income flows (energy price and capacity price) which the electricity generators can be paid. The wholesale bid price of the electricity is calculated every half hour. The capacity payment is a fixed revenue system of payment for participants offering generation capacity in the SEM. Table 3 below shows the average monthly energy price (SEM price) and the average monthly capacity payment for the 12 month period to September 2009. The figures show that the average annual overall market payment for the 12 month period was 60.99 EUR/MWh<sup>14</sup>.

	Average monthly SEM price	Average monthly capacity payment	Overall average - market payment
Oct 08	82.45	10.12	92.57
Nov 08	72.03	10.70	82.73
Dec 08	63.60	10.70	74.30
Jan 09	63.74	10.27	74.01
Feb 09	55.83	11.04	66.87
Mar 09	38.89	8.94	47.83
Apr 09	40.74	8.06	48.80
May 09	38.29	7.78	46.07
June 09	44.85	7.64	52.49
July 09	38.50	8.87	47.37
Aug 09	42.58	7.83	50.41
Sept 09	40.14	8.40	48.54
<i>12 month average</i>	<i>51.80</i>	<i>9.19</i>	<b>60.99</b>

Table 3: Average monthly market payments October 2008 – September 2009 (EUR) (source: Irish authorities)

<sup>13</sup> “Market payment” means in respect of any half hour trading period, the market payments for that period, determined in accordance with the relevant Commission for Energy Regulation (CER) decision in the context of the trading arrangements and any further decisions the CER may make in this regard. As currently defined, the average annual market payment is taken as the combination of the average annual wholesale electricity price and the capacity payment.

<sup>14</sup> This example is provided for illustrative purposes, as the actual figures will vary over time in particular depending on the market payment. For instance, the Public Service Obligation (PSO) levy 2010/2011 decision paper (July 2010) forecasted for the period 1 October 2010 – 30 September 2011 a SEM market price of 60.84 EUR/MWh (excluding capacity). The forecasted market price for the PSO period of 1 October 2011 - 30th September 2012 is 72.72 EUR/MWh.

32. Given the difference between technology costs and market payments, the Irish authorities underlined that in the absence of the notified support measure, the suppliers would have no incentive to enter into the type of long term (15 year) fixed price contracts with renewable energy generators that these generators require to invest and operate such plants.
33. If, in respect of any year, the average annual market payment is less than the REFIT technology price for the category to which the electricity belongs plus the balancing payment, the supplier shall be paid the difference between the two for every kWh purchased under the PPA. If, in respect of any year, the market payment is equal to or greater than the REFIT technology price for the category to which the electricity belongs plus the balancing payment, then no REFIT payment shall be made. The PPA price must be at least equal to the REFIT technology price for that category.

## **2.6. Cumulation**

34. The aid to be granted under the notified measure cannot be cumulated with other forms of aid, for covering the same eligible expenses. The notified measure will coexist and interact with a tax relief, granted on the basis of section 486B of the Tax Consolidation Act (TCA) 1997 which allows an investor to claim the lesser of 50% of all capital expenditure (excluding lands) or EUR 9.525 million for a single project. Investment by a company or group under this scheme is capped at EUR12.7 million per annum. However, the Irish authorities explained and provided detailed calculations for each technology that prove that costs used to determine the REFIT technology price (table 2 above) are net of the tax relief. As shown in Annex 1, first the maximum tax relief for each technology is deducted from the capital cost EUR/MW. Subsequently, the capital cost including the tax relief (EUR/MW) is used to calculate the total levelised generation costs (EUR/MW) which are subsequently compared with the REFIT tariff.

## **2.7. Complaint**

35. On 1 July 2010 the Commission received a complaint, which was later supplemented, concerning an alleged unlawful aid granted by the Irish authorities through the REFIT scheme to encourage renewable energy projects in Ireland. The complainant also referred to the application by the Irish authorities for an extension of this REFIT scheme.
36. The complainant essentially argues that the notified scheme will introduce more renewable generators to the market (SEM) than it is capable of supporting on a commercial basis which will distort market prices and crowd out non subsidised generators (including existing wind farms). As a result the REFIT scheme forces generators to enter into PPA with an electricity supplier.
37. This will lead to higher electricity prices, as conventional suppliers will operate fewer hours, but need the installed capacity to supply peak demand. In addition, according to the complainant, the Irish electricity consumer is forced to guarantee and finance the REFIT floor price for 15 years, potentially even subsidising British electricity consumers (through exported electricity).

38. Finally, the complainant submits that the electricity supplier is the main beneficiary and not the generator. The latter only receives a flat price, while the former takes the upside potential. In this respect, the complainant argues that the balancing payment is excessive, suggesting a different set up for making the balancing payment.
39. The Irish authorities rejected the allegations made by the complainant stressing, firstly, that the scheme is a voluntary scheme and does not force new generators to take part. According to the Irish authorities, generators do take part in the scheme as the wholesale market price is volatile and new projects would otherwise find it virtually impossible to find financing.
40. Furthermore, the notified REFIT scheme alters, compared to the previous scheme, the operation of the balancing payment in two ways. First, it is fixed at the current rate of 9,9 EUR/MWh and it is included in the REFIT payment calculations so that in the case of high prices, no REFIT payment or balancing payment is made. However, in the total absence of a balancing payment, no supply company would be prepared to offer a fixed price contract to a new renewable generator.
41. Furthermore, the Irish authorities submitted two studies<sup>15</sup> on the impact of increased wind generation on the Single Electricity Market (SEM) in Ireland. Both studies, find that the market is capable of operating successfully with increasing amounts of wind and that the cost to consumers in terms of the levy tends to be cancelled out by cost savings in the wholesale market. When wind is added to the system the production costs of electricity in Ireland are expected to reduce by EUR 74 million. Wind generation has no short term production costs. In the expected 2011 wind scenario, wind generation replaces fossil fuel generators with short term fuel and operating costs. Hence the wholesale cost of electricity production is reduced.
42. In addition, the Irish authorities note that the renewable energy directive (2009/28/EC) sets Ireland a target of 16% of all our energy (electricity, heating/cooling and transport sectors) to come from renewable sources by 2020. The existing National targets for these sectors, electricity 40%, heating/cooling 12% and transport 10%, together are broadly in line with achieving the directive target.

## **2.8. Other information**

43. The Irish authorities confirm that they will comply with the annual reporting and monitoring obligations as laid down in Sections 7.1 and 7.3 of the Environmental aid guidelines.

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<sup>15</sup> In January 2009, the Commission for Energy Regulation (CER) and the Northern Ireland Authority for Energy Regulation (NIAER) published a study entitled “*Impact of High Levels of Wind Penetration in 2020 on the Single Electricity Market (SEM)*” and in February 2011, Eirgrid (National TSO company) and the Sustainable Energy Authority of Ireland published a study entitled “*Impact of Wind Generation on Wholesale Electricity Costs in 2011*”.



### **3. ASSESSMENT**

#### **3.1. State aid within the meaning of Article 107(1) TFEU**

44. State aid is defined in Article 107(1) TFEU as any aid granted by a Member State or through State resources in any form whatsoever, which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods in so far as it affects trade between Member States.
45. The notified scheme is financed through a fund collected from all subscribers to the electricity network. This same fund has been found to constitute State resources in previous State aid decisions taken by the Commission<sup>16</sup>. The scheme affects the electricity trade, which can take place between Member States, and distorts the competition between RES-E and electricity from traditional energy sources, in conformity with its objectives.
46. In so far as the selectivity of the notified scheme is concerned, the Commission notes that the compensation paid to suppliers is indirectly benefiting the producers of RES-E, who are thereby able to sell their electricity at a price that the suppliers would not have paid without the compensation.
47. Concerning the direct recipients of the notified compensation, i.e. the suppliers entering PPAs, the Commission notes that the selected RES-E generators are free to enter PPAs with any supplier and are thus in a position to negotiate the best possible PPA prices. It can therefore be presumed that the PPA prices will reflect the market conditions, taking into account factors like the commercial risk of entering 15 year contracts to purchase all the electricity of a given RES-E generator, the development of prices on electricity from traditional sources and the estimated value of being able to sell electricity under a green label. However, the price will also reflect the suppliers' entitlement to the State financed REFIT compensation, and the contracts could turn out to be more advantageous than foreseen at the time when they were concluded. The Commission concludes that the notified compensation could confer an advantage to those suppliers who enter PPAs, and thus involve State aid within the meaning of Article 107(1) TFEU to those operators as well.
48. The Commission therefore concludes that the notified measure constitutes State aid within the meaning of Article 107(1) TFEU.

#### **3.2. Lawfulness of the aid**

49. By notifying the aid measure before its implementation, the Irish authorities fulfilled their obligation according to Article 108(3) of the TFEU.

#### **3.3. Compatibility of the aid**

50. The Commission has assessed the compatibility of the notified scheme according to Article 107(3)(c) TFEU and in the light of the 2008 Community Guidelines on

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<sup>16</sup> Most recently by a Commission decision in case SA.31861.

State Aid for Environmental Protection currently applicable (hereinafter referred to as "the Environmental aid guidelines")<sup>17</sup>.

51. Given the fact that the notified measure concerns operating aid for energy produced from renewable energy sources (wind energy, hydro power and land fill gas), based on the difference between RES-E production costs and the market price, the compatibility conditions laid down in Section 3.1.6.2 (operating aid for renewable energy sources) apply.
52. First, the Commission notes that the Irish authorities have confirmed that the aid is only granted to renewable energy sources as defined in point 70(5) of the Environmental aid guidelines.
53. In accordance with points 107 and 109 of the Environmental aid guidelines, the aid is granted in order to compensate for the difference between the costs of producing energy from renewable energy sources and the market price of the energy concerned.
54. Point 109 of the Environmental aid guidelines lays down three conditions for the compatibility of operating aid<sup>18</sup>, which to the extent relevant are examined below.
55. As required by point 109(a) (absence of overcompensation), the Irish authorities demonstrated, as explained in section 2.5. above, that the REFIT mechanism is designed in such a way as to compensate only the difference between the production costs of energy from the renewable energy sources concerned and the market price. The Irish authorities submitted a detailed calculation example for each technology including a breakdown of the different cost categories, for determining the production costs, as summarised in table 2.
56. The tax relief was also taken into account. As explained in point 34 above, the maximum tax relief for each technology is deducted from the capital cost (EUR/MW), before the total levelised generation costs (EUR/MW) are calculated. The resulting total levelised generation costs are shown in table 2. When these costs are compared to the REFIT tariff as shown in table 1, it follows that the proposed technology prices (on which basis the operating aid is determined) do not exceed the production costs. It was also explained that whenever the market price is higher

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<sup>17</sup> OJ C 82 of 1.4.2008, p. 1. With reference to point 50 of the Environmental aid guidelines, the Commission reminds the Irish authorities that the development of small-scale hydropower installations should be in accordance with the principles set out in the Water Framework Directive (2000/60/EC).

<sup>18</sup> Point (109) Option 1:

a) Member States may grant operating aid to compensate for the difference between the cost of producing energy from renewable sources, including depreciation of extra investments for environmental protection, and the market price of the form of energy concerned. Operating aid may then be granted until the plant has been fully depreciated according to normal accounting rules. Any further energy produced by the plant will not qualify for any assistance. However, the aid may also cover a normal return on capital.

b) Where aid is granted in accordance with point (a) any investment aid granted to the undertaking in question in respect of the new plant must be deducted from production costs when determining the amount of operating aid. When notifying aid schemes to the Commission, Member States must state the precise support mechanisms and in particular the methods of calculating the amount of aid.

c) Unlike most other renewable sources of energy, biomass requires relatively low investment costs, but higher operating costs. The Commission will, therefore, be amenable to operating aid for the production of renewable energy from biomass exceeding the amount of investment where Member States can show that the aggregate costs borne by the undertakings after plant depreciation are still higher than the market prices of the energy.

than the technology plus balancing costs, no payments will be made under the scheme (see point 32).

57. The aid is granted for 15 years, which corresponds to the economic lifetime of the capital assets under the scheme. Finally, the Commission considers that the rate of return retained by the Irish authorities corresponds to a reasonable return on capital as follows from the information provided by the Irish authorities (see point 24).
58. The Commission notes that the proposed technology prices are not higher than the costs incurred by the RES-E generators. With respect to the absence of overcompensation in time, the Commission notes that the REFIT mechanism is designed in such a way that the level of support is based on the evolution of the market price. Furthermore, the duration of the notified measure is only until 31 December 2015, which limits the risk that technology development may reduce the investment costs of future projects below the guaranteed level of support.
59. In light of the foregoing considerations, the Commission finds that the notified measure is in line with the condition of absence of overcompensation.
60. The Irish authorities confirmed the respect of annual reporting and monitoring provisions of the Environmental aid guidelines as laid down in Sections 7.1 and 7.3. The Commission reminds the Irish authorities that in case the resulting renewable electricity generation capacity of a particular installation will exceed 125 MW, the aid will need to be notified individually to the Commission<sup>19</sup>.
61. As regards the incentive effect of the aid to be granted, the Commission notes that the calculations provided by the Irish authorities show that the production costs of RES-E are higher than the market price for electricity. In this respect it is referred to table 2 and 3 indicating that the average market price is EUR 60,99 MWh (see also footnote 14) , whereas the technology costs (excluding balancing costs) amount to at least EUR 66,35 MWh. Hence, without the notified aid, there would be an insufficient incentive to undertake or carry on generation of RES-E from wind power, hydro power and landfill gas, as that activity would be unlikely to be economically viable.
62. Accordingly, the Commission comes to the conclusion that the notified scheme complies with the Environmental guidelines and is therefore compatible with the internal market in accordance with Article 107(3)(c) TFEU.

#### **4. COMPLAINT SUBMITTED TO THE COMMISSION WITH RESPECT TO THE NOTIFIED MEASURE**

63. As regards the potential discrimination between new and existing plants, the Commission assesses support measures based on the notification of Member States, which are free to decide on the content of their State aid notifications, notably the categories of beneficiaries, subject to the respect of the general principles of law including the principle of equal treatment. The Environmental aid guidelines are neutral as regards the treatment of new and existing installations, i.e. neither they formally distinguish between the existing and new installations nor impose that these installations are treated alike. In the present case, the Irish authorities have decided to include in the scope of the notified measure only the new installations

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<sup>19</sup> EAG, point 160.

with the legitimate aim of expanding the renewable electricity generation. Therefore, new and existing installations cannot be deemed to be in a similar situation and there is no violation of principle of equal treatment. It is noted that the Commission previously approved schemes to support energy from renewable sources from which currently existing plants may benefit<sup>20</sup>.

64. As for the claim that the REFIT scheme would introduce substantially more wind generating capacity than the open competitive electricity market will have the ability to cater for, the Irish authorities submitted credible reports that the market is capable of including the additional renewable energy. In this respect it is recalled that the notified measure aims to allocate up to a quantitative capacity limit of an additional 4000 MW (see point 13). Also, it is expected that the cost to consumers in terms of the levy tends to be cancelled out by cost savings in the wholesale market (see point 8). However, in addition, it is noted that a limited distortion of competition is compatible with the internal market as the measure contributes to achieving the EU objective and increases environmental protection. As indicated by the Irish authorities, the measure aims to facilitate the delivery of the renewable electricity component of Ireland's 2020 renewable energy target and seeks to contribute to Ireland's obligation under the Renewable's Directive.
65. As regards the balancing payment, the Irish authorities substantiated the need for a balancing payment in their notification (in particular it is referred to point 27 and 28). In addition the Irish authorities pointed to the fact that the balancing payment was amended as compared to the previous scheme. Indeed, the balancing payment is not indexed and may effectively be degressive over time. Moreover, in case of high market payments, no balancing payment and REFIT payment will be made (see point 29).
66. The Commission recently approved such balancing payment in a scheme concerning REFIT for biomass and considers that the Irish authorities demonstrated the need for a balancing payment for the notified categories of renewable energy. The complainant's concerns inter alia referred to the previous 15% balancing payment which is however not applied for the notified measure. Moreover, the different set up suggested is based on a different way of compensating for the balancing costs compared to the previously approved REFIT scheme (N 571/2006)<sup>21</sup> and seems to in particular address the situation of high market payments (in which case no balancing payment will be made under the notified measure).
67. Considering the above, the Commission finds that the arguments put forward in the complaint do not alter the conclusion expressed in point 62 above that the notified scheme complies with the Environmental aid guidelines and is therefore compatible with the internal market in accordance with Article 107(3)(c) TFEU.

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<sup>20</sup> See cases N 571/2009, N553/2001 and 826/2001.

<sup>21</sup> The balancing payment has changed in two ways. Firstly, it is fixed at a rate of 9,9 EUR/MWh and secondly it is included in the REFIT payment calculations so that in the case of high prices, no REFIT payment or balancing payment is made.

## 5. DECISION

68. The Commission finds that the aid scheme "Renewable Energy Feed in Tariff" scheme is compatible with the internal market in accordance with Article 107(3)(c) TFEU and has therefore decided not to raise objections to the notified measure.
69. The Commission reminds the Irish authorities that, in accordance with Article 108(3) TFEU, plans to refinance, alter or change this scheme have to be notified to the Commission pursuant to provisions of Commission Regulation (EC) No 794/2004 implementing Council Regulation (EC) No 659/1999 laying down detailed rules for the application of Article 93 [*now 108*] of the EC Treaty<sup>22</sup>.
70. If this letter contains confidential information, which should not be disclosed to third parties, please inform the Commission within fifteen working days of the date of receipt. If the Commission does not receive a reasoned request by that deadline, you will be deemed to agree to the disclosure to third parties and to the publication of the full text of the letter in the authentic language on the Internet site: [http://ec.europa.eu/eu\\_law/state\\_aids/state\\_aids\\_texts\\_en.htm](http://ec.europa.eu/eu_law/state_aids/state_aids_texts_en.htm).

Your request should be sent by registered letter or fax to:

European Commission  
Directorate-General for Competition  
State Aid Greffe  
B-1049 Brussels  
Fax No: 32 2 296 12 42

Yours faithfully,  
For the Commission

Joaquín ALMUNIA  
Vice-President

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<sup>22</sup> OJ L 140 of 30.4. 2004, p.1.

## ANNEX 1: Cost Calculations for REFIT categories

	Typical Size MW	Load Factor %	Annual Output MWh
Onshore Large Wind	20	31%	2,715
Onshore Small Wind	5	31%	2,715
Hydro	1	36%	3,176
Landfill Gas	1	60%	5,256

	Capital Cost EUR/MW	Capital Cost incl tax Relief EUR/MW	Fixed O&M Costs EUR/MW	Variable O&M Costs EUR/MWh	Economic Life Years	Discount Rate %
Onshore Large Wind	1,290,800	1,231,269	45,000	0	15	7%
Onshore Small Wind	1,374,800	1,288,875	45,000	0	15	7%
Hydro	2,000,000	1,875,000	72,600	0.2	15	6%
Landfill Gas	1,900,000	1,781,250	183,600	2	15	10%

	CAPEX EUR/MWh	OPEX EUR/MWh	Total Levelised Cost EUR/MWh	REFIT Tariff EUR/MWh
Onshore Large Wind	EUR 49.78	EUR 16.57	EUR 66.35	EUR 66.35
Onshore Small Wind	EUR 52.11	EUR 16.57	EUR 68.68	EUR 68.68
Hydro	EUR 60.77	EUR 23.04	EUR 83.81	EUR 83.81
Landfill Gas	EUR 44.56	EUR 36.93	EUR 81.49	EUR 81.48

These generation types are assumed to have the same generation output in each year and that maintenance costs and fixed costs are the same in each year. It follows that the levelised cost of electricity generation (*LOCE*) is then:

$$LCOE \left( \frac{\text{€}}{\text{MWh}} \right) = \frac{I \cdot \frac{r(1+r)^n}{(1+r)^n - 1} + M + F}{E_y}$$

Where *I* is the upfront investment cost, *r* is the discount rate, *n* is the economic life, *M* are the variable maintenance costs, *F* are the fixed maintenance costs and *E<sub>y</sub>* is the annual electricity output. Using the large onshore wind category as an example:

$$LCOE \left( \frac{\text{€}}{\text{MWh}} \right) = \frac{\text{€}1,231,269 \cdot \frac{0.07(1+0.07)^{15}}{(1+0.07)^{15}-1} + \text{€}45,000 + 0}{2,715 \text{ MWh}}$$

$$LCOE \left( \frac{\text{€}}{\text{MWh}} \right) = \frac{\text{€}1,231,269 \cdot 0.1098 + \text{€}45,000 + 0}{2,715 \text{ MWh}}$$

$$LCOE \left( \frac{\text{€}}{\text{MWh}} \right) = \frac{\text{€}135,193 + \text{€}45,000 + 0}{2,715 \text{ MWh}}$$

$$LCOE \left( \frac{\text{€}}{\text{MWh}} \right) = \text{€}49.78 + 16.57$$

$$LCOE \left( \frac{\text{€}}{\text{MWh}} \right) = 66.35$$