

Last updated: date (17/06/2015)

1 Implementation of Tracking Systems

1.1 Electricity Disclosure

A disclosure scheme has been in place in Ireland since 2005 (Regulation 25 of S.I. 60 of 2005 which transposes Art. 3.6 (a) of the Directive 2003/54/EC). Since November 2007, the Single Electricity Market (SEM) that encompasses Ireland and Northern Ireland has been fully operational.

The fuel-mix disclosure has been calculated in Ireland since 2005. However with the introduction of the SEM in 2007 the methodology used from 2005 until 2007, was no longer applicable and thus it was revised. The Commission for Energy Regulations (CER) set out an enduring solution in its Fuel-Mix Disclosure in the Single Electricity Market: Calculation Methodology Decision Paper (SEM/11/095) in which it transposed the requisites of the RES Directive referent to disclosure. The proposed methodology seems quite advanced in terms of reliability and accuracy, including the introduction of a Residual Mix Calculation. This methodology has been used since the calculation of the 2011 disclosure figures.

In Ireland the attributes that have been disclosed are:

- Energy source in the fuel-mix (share);
- Environmental information: CO₂ emissions (g/kWh) and radioactive waste;

In terms of energy sources, the following are distinguished within the Disclosure Statement:

- Coal;
- Natural Gas;
- Nuclear;
- Renewable (wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases);
- Peat,
- Oil; and
- Other (energy sources, including those listed which represent less than 1% of the total contribution to meeting the island's demand)

Disclosure of fuel-mix information and associated environmental information is mandatory for:

- All-Island markets; and
- Supplier's company portfolio.

The transposing legislation in Ireland requires the Regulatory Authority to ensure suppliers provide reliable fuel-mix information on all bills issued to customers. As per the Fuel-Mix Disclosure in the Single Electricity Market: Calculation Methodology Decision Paper (SEM/11/095) suppliers have two months from the publication of the Fuel-Mix Disclosure (FMD) to include the required information on all bills issued to customers. Fuel-mix and environmental impact information must be provided by all suppliers in the format set out in Appendix B of the referred methodology and must be supplied on either the front or back of all bills to customers (or communicated at least annually where bills are not used). This information can be augmented with the approval of the relevant licensing Regulatory Authority. Where this information is provided on the back of bills to customers, clear reference must be made to this on the front of all such bills. The form and detail of such information on bills will be subject to approval by the licensing Regulatory Authority, prior to its issue to final customers.

The default label format for presentation of fuel-mix and associated environmental information to final customers includes: a) the average fuel-mix; and b) information regarding CO₂ emissions and radioactive waste for both the supplier and the All-Island Market for comparative purposes. The labels are set out in



Appendix B of the Fuel–Mix Disclosure in the Single Electricity Market: Calculation Methodology Decision Paper (SEM/11/095) and includes all the attributed supra-referred.

It is a matter for each respective Regulatory Authorities to determine the necessity for and nature of information requested from licensed suppliers in relation to fuel mix or CO₂ emission information provided to customers, in particular where suppliers offer specific differentiated products to customers based on particular fuel mixes or CO₂ emissions.

Disclosure is performed annually for the calendar year period (starting 01 January and ending 31 December each year). Disclosure is set for 18 working days after the date on which the Single Electricity Market Operator (SEMO) issues indicative suppliers' mixes. SEMO are scheduled to send these on the 01 June each year.

The suppliers' company portfolio is determined for Ireland, Northern Ireland or Ireland plus Northern Ireland (called All-Island in the suppliers' fuel-mix disclosure figures presented below) as applicable.

1.1.1 Disclosure Figures

Table 1 summarises All-Island fuel-mix disclosure figures from 2005 until 2013 as well as the average CO₂ emissions for 2008 until 2013. Table 2 shows the suppliers' fuel-mix by fuel type in 2013 as well as the CO₂ emissions for the same year.

Table 1: All-Island Fuel-Mix Disclosure Figures 2005-2013 (%) and Average CO₂ emissions 2008-2013 (tCO₂/MWh)

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Coal	24%	19%	18%	17%	14%	16%	14%	20%	18.4%
EU Fossil	N/A	N/A	N/A	0%	0%	0%	3%	0%	N.A
Gas	46%	50%	55%	61%	62%	64%	56%	48%	44.1%
Oil	12%	9%	6%	4%	3%	2%	*	*	0%
Renewables	9%	11%	11%	11%	14%	12%	17%	24%	30.2%
Peat	8%	7%	6%	7%	7%	6%	6%	7%	6.5%
Other	1%	4%	4%	1%	0%	0%	3%	2%	0.8%
Average CO₂ emissions (tCO₂/MWh)	N.A	N.A	N.A	0.533	0.504	0.519	0.466	0.481	0.452

Notes:

The figures for 2005, 2006 and 2007 relate to Ireland and calculations were based on the pre-SEM methodology (no longer applicable).

In 2005, 2006 and 2007 disclosure figures "Other" related to CHP. CHP is not counted as a fuel source from 2008 onwards.

The figures for 2008, 2009 and 2010 relate to Ireland and Northern Ireland and are based on the Interim Arrangements methodology (SEM-09-081).

The figures for 2011 and 2012 relate to Ireland and Northern Ireland and are based on the SEM Committee Decision Paper (SEM-11-095).

**The oil contribution is included in the "other" section, given it is below the 2.5% threshold of the final overall generation applied for 2011 and below the 1% threshold of the final overall generation applied for 2012 (SEM-11-095).*

For 2013 the "Other" category consists of Oil and Non-Biodegradable Fraction of Waste (NBDFW).

Table 2: Suppliers' Fuel-Mix by Fuel Type (%) and Suppliers' CO₂ emissions in 2013

Supplier*	Coal (%)	Gas (%)	Peat (%)	Renewables (%)	Other (%)	CO ₂ emissions (tCO ₂ /MWh)
Airtricity (Ireland)	21.6	19.3	7.6	50.4	1.1	0.386
Airtricity (Northern Ireland)	37.2	33.2	13.1	15.3	1.2	0.659
Airtricity (All-Island)	26.2	23.3	9.2	40.1	1.2	0.467
Bord Gáis (Ireland)	7.7	67.1	2.7	22.3	0.2	0.407
Bord Gáis (Northern Ireland)	43.9	39.2	15.4	0.1	1.4	0.777
Bord Gáis (All-Island)	8.3	66.6	2.9	21.9	0.3	0.414
Electric Ireland (Ireland)	22.7	54.2	7.9	14.5	0.7	0.554
Electric Ireland (Northern Ireland)	0.0	85.0	0.0	15.0	0.0	0.383
Electric Ireland (All-Island)	20.2	57.5	7.1	14.6	0.6	0.535
Energia (Ireland)	0.0	6.0	0.0	94.0	0.0	0.027
Energia (Northern Ireland)	0.0	100.0	0.0	0.0	0.0	0.450
Energia (All-Island)	0.0	25.6	0.0	74.4	0.0	0.115
LCC Power (Northern Ireland)	12.5	11.2	4.4	71.5	0.4	0.222
Power NI (Northern Ireland)	27.3	60.5	9.6	1.7	0.9	0.646
Vayu (Ireland)	0.0	0.0	0.0	100.0	0.0	0.000
Vayu (Northern Ireland)	0.0	0.0	0.0	100.0	0.0	0.000
Vayu (All-Island)	0.0	0.0	0.0	100.0	0.0	0.000
All Island	18.4	44.1	6.5	30.2	0.8	0.452

* Where suppliers operate on an All-Island basis their combined Irish and Northern Irish fuel-mix is listed along with the fuel-mixes associated with their Irish and Northern Irish electricity supply licences.

1.1.2 Environmental Information

Environmental impact information is set up according to the Decision Paper SEM/11/095. This includes both information on CO₂ emissions and radioactive waste.

The Calculating Body (SEMO) calculates the CO₂ emission factors for each fuel type, based on information received from the EPA and DETI and on metered data for the disclosure period. The calculated emissions factors are then applied to the suppliers' fuel mixes to produce a figure for X g of CO₂ emissions per kWh, which is then published alongside the fuel-mix figures. Radioactive waste is published as X g per kWh as well.

The publication of fuel-mix and environmental impact information on either the front or back of bills must be concluded within two months from the date on which the required information is made available to suppliers.

1.1.3 Suppliers Fuel-Mix Calculations

The Fuel-Mix Disclosure in the Single Electricity Market: Calculation Methodology (SEM/11/095) outlines the methodology used in Ireland for calculation of the suppliers' fuel-mix.

SEMO is the body responsible for calculating the fuel-mix figures and the CER is responsible for disclosing them once a year. The fuel-mix disclosure figures calculated by SEMO are approved and published by Regulators.

The suppliers' fuel-mix information for a given disclosure period (starting in the 01 January and ending on the 31 December of a given year) is calculated based on evidence of the source of energy according to the following procedure¹:

1. SEMO informs each supplier of their demand and the generation attributes assigned to them.
2. Each licensed supplier then provides SEMO with their disclosure submission, which includes all GOs they wish to use for the relevant disclosure period and confirmation that the generation attributes assigned to them are correct.
3. The total generation attributes as set out in the supplier's submission are used to meet the suppliers' demand.
 - Where the supplier has more generation attributes than demand the surplus will be put into the Residual Mix (renewable generation attributes will be assigned to the supplier first followed by thermal generation attributes in ascending order of emissions per MWh). The supplier is notified if its submission exceeds its demand.
 - Where the supplier has more demand than contained in the submission, the Residual Mix will be used to meet the remaining demand.

Thus the suppliers' fuel-mix is made up of the total number of valid GOs and generator assignments plus a proportionate amount of the Residual Mix. The suppliers' fuel-mix is calculated only once a year using all data considered in aggregate over the disclosure period and not in smaller time intervals for the calculations of the fuel-mixes.

The Residual Mix is calculated by the following procedure:

1. Any generation attributes not assigned to (including exported generation attributes), and submitted by a supplier;
2. Surplus GOs declared by suppliers;
3. Unused and expired certificates which were active in the relevant disclosure period; and
4. Where the All-Island demand is greater than the sum of all the suppliers' declarations plus the Residual Mix (based on the above inputs) the European Residual Mix is applied to the remaining demand and included in the Residual Mix. In the case that demand is less than the sum of all the suppliers' declarations, the surplus is to be included in the European Residual Mix.

For these calculations, and to ensure harmonisation with other European countries, suppliers should submit their GOs three months after the end of the disclosure period (31 March each year). By the end of April, All-Island surplus or deficit will be calculated and applied to the European Residual Mix calculation. The publication of the All-Island disclosure figures takes place eighteen working days from the date the Calculating Body issues the indicative fuel-mixes to suppliers.

The calculations use the most up-to-date available data at the time of the calculations, sourced from meter data providers. Emission figures, which are expected to be available in May each year, will be sourced from the EPA in Ireland and from the DETI in Northern Ireland, except for those plants that do not require information to be submitted to the EPA or DETI. These figures are expected to be available each year in May.

As disclosure is completed for All-Island, and as Northern Ireland has a different disclosure period (fiscal year instead of calendar year), there are administrative procedures in place in relation to the GOs for Northern Ireland: Northern Irish suppliers must "retire" their GOs before submitting them to the SEMO. Nineteen months after the month of the relevant generation, Northern Irish GOs will be cancelled on Ofgem's register at which point the GOs cannot be used for fuel-mix disclosure. SEMO will check the Ofgem register on 31 March each year to verify the information on the register with the suppliers' submissions. Only retired GOs on the Ofgem register prior to 31 March will be included in the fuel-mix disclosure calculation.

¹ SEM/11/095, Fuel Mix Disclosure in the Single Electricity Market: Calculation Methodology SEM/11/095

Table 3 summarises the information that needs to be submitted to SEMO, for SEMO to calculate the suppliers' fuel-mix and the All-Island fuel-mix.

Table 3: Information to be supplied to SEMO by party²

Party	Information to be supplied to SEMO
Single Electricity Market Operator	<ul style="list-style-type: none"> Total amount of electricity (MWh) sold into the SEM pool for the disclosure period by all generating stations (and Intermediaries). Total generation purchased from the SEM pool by each supplier (MWh) for the disclosure period. Total demand (MWh) by supplier for the Disclosure Period.
Meter Data Providers	<ul style="list-style-type: none"> Total amount of generation (MWh) associated with all out-of-market purchases for the disclosure period.
Suppliers	<ul style="list-style-type: none"> A list of all GO that the suppliers wish to use for the disclosure period. A list of all generation attributes assigned to the supplier that the supplier wishes to use for the disclosure period, including the relevant information outlined in this decision paper that is required in relation to imported non-renewable generation. Any further information that may be required by the Calculating Body to verify the supplier's claims in relation to their fuel-mix disclosure.
All generators not restricted to report emissions for the purposes of the Emissions Trading Scheme (ETS)	<ul style="list-style-type: none"> A list of fuels used by the generator over the disclosure period. Where more than one fuel was used, the total fuel usage, by fuel type. The meter data providers will assist the Calculating Body in collating this data.
Other	<ul style="list-style-type: none"> Emissions figures will be sourced from the EPA in Ireland and the DETI in Northern Ireland. The Regulatory Authorities will facilitate the provision of this information.

The losses are accounted for only at the point of calculating the fuel-mix, not before, and will not apply to any GO at the point of issue or at the point of export. The SEM Committee has decided that a uniform factor is applied to demand used in the disclosure calculation that represents the difference between total metered generation (adjusted for net imports) and total metered demand occurring during the disclosure period. The Calculating Body informs the suppliers of this factor at the time it issues suppliers' fuel-mixes for their review.

1.1.4 Acceptance of GOs

As already referred, Ireland has a disclosure system in place which transposes the RES Directive, with an electronic register for the issuance, transfer and cancellation of issued RE-GO.

Although Ireland was a non-EECS Member (up to May 2015), Ireland had procedures in place for assessing the reliability and accuracy of the GO issued and had manual systems in place for electronic transfer of GO. In Ireland the import and export of GO are tracked. Ireland has received transfers from Northern Ireland and Norway, and has marked GO as exported to the UK.

In 2015 SEMO implemented CMOgrexel as the national registry for GO. In May 2015 Ireland was approved as a member of the Association of Issuing Bodies (AIB). From July 1st 2015 Ireland will be able to transfer GO to and from other EECS Members via the AIB hub.

As per the GO Framework³ in place:

² Information extracted from: Fuel Mix Disclosure in the Single Electricity Market: Calculation Methodology SEM/11/095

³ GO Framework available at: <http://www.dcenr.gov.ie/NR/ronlyres/D020B24D-EC0A-437F-90E1-A596B4F91C26/0/SupervisoryFrameworkGOs.pdf>

- "GOs can be imported by participants in the Irish GO scheme from other Member States. The SEMO will confirm that the GO is valid with the relevant competent authority before accepting that GO for the purposes of disclosure. The participant must inform the SEMO of imported GO certificates in advance of the participant's relevant fuel-mix declaration in accordance with the SEMO's process and procedures."
- "If a participant wishes to include imported GOs in their fuel-mix the participant should inform the SEMO of imported GO certificates in advance of the participant's relevant fuel-mix declaration in accordance with timelines to be set out in the SEMO's procedures and processes as approved by the CER".
- "Before an imported GO is accepted into the Irish register the SEMO must confirm it is a valid GO with the relevant issuing authority in the country of origin." Thus, if the GO is valid under the Directive, and has not been used for disclosure, it will be accepted.

Thus the criteria in place for acceptance of GOs in Ireland are the following:

- Electronic database in place: it has an electronic database in place – Microsoft Access Databases were used until 2014 - CMOgrexel was implemented in 2015;
- One competent body appointed by law: SEMO is the issuing body;
- All GOs linked to disclosure: in Ireland the sole purpose of GOs is for use in fuel-mix disclosure;
- CO₂ emissions and radioactive waste included in disclosure display: the following is detailed on bills from suppliers:
 - Electricity supplied has been sourced from the following fuels: (Coal, Natural Gas, Nuclear, Renewable, Peat, Oil, Other) % of total; and
 - Environmental Impact: CO₂ Emissions X g per kWh, Radioactive Waste X g per kWh.
- Transparent publication of disclosure information: As per the Fuel-Mix Disclosure in the Single Electricity Market: Calculation Methodology Decision Paper (SEM/11/095) Suppliers shall include the fuel-mix disclosure information in Appendix B on the back of all bills to customers. The fuel-mix disclosure information shall be provided on all promotional material in so far as reasonably practical. Suppliers have two months from the publication of the fuel-mix disclosure to include the required information on all bills issued to customers. In terms of the *"timely publication of the All-Island disclosure figures, such publication shall take place eighteen working days from the date the Calculating Body issues the indicative fuel-mixes to suppliers."* The Regulators publish the Annual All-Island Fuel-Mix Disclosure on the Allislandproject.org website⁴. The supplier fuel-mix for 2013 is available on page 10 of the 2013 FMD report⁵. Fuel-Mix information is also published on the CER website⁶ and UReg website⁷.

All these criteria are transparently published in the legislation and framework documentation:

- EU Directive;
- SI 147 of 2011 - Supervision and Issuance of Guarantees of Origin (GOs) – which transposes the EU Directive to Ireland (<http://www.irishstatutebook.ie/pdf/2011/en.si.2011.0147.pdf>); and

⁴Allislandproject.org website:

http://www.allislandproject.org/en/renewable_decision_documents.aspx?article=71d3ec92-3bc1-46e4-ba79-e7951c28504e

⁵2012 All-Island Fuel Mix Disclosure Information Note (SEM-14-058) is available on the allislandproject.org website: <http://www.allislandproject.org/GetAttachment.aspx?id=1e599d8d-60f7-422c-b8a1-809010c3bd93>

⁶Fuel Mix Disclosure and CO₂ Emissions 2013 Information Document (CER/14/297) is available on the CER website: [http://www.cer.ie/docs/000414/CER14297%20CER%20Fuel%20Mix%20Disclosure%202013%20Information%20Document%20\(1\).pdf](http://www.cer.ie/docs/000414/CER14297%20CER%20Fuel%20Mix%20Disclosure%202013%20Information%20Document%20(1).pdf)

⁷2013 All-Island Fuel Mix Disclosure is available on the UReg website: http://www.ureg.gov.uk/uploads/publications/FMD_2013.pdf

- SI 483 of 2014 - <http://www.irishstatutebook.ie/2014/en/si/0483.pdf>
- Supervisory Framework for Administration of GO – Decision Paper CER/11/824 of 17 November 2011 (<http://www.dcenr.gov.ie/NR/rdonlyres/D020B24D-EC0A-437F-90E1-A596B4F91C26/0/SupervisoryFrameworkGOs.pdf>); and
- Fuel-Mix Disclosure in the Single Electricity Market: Calculation Methodology Decision Paper SEM/11/095 of 18 November 2011 (<http://www.allislandproject.org/GetAttachment.aspx?id=d5e906e1-ba21-40e0-afa8-96f8633f1935>).

1.2 Guarantees of Origin for Electricity from Renewable Energy Sources and High-Efficient Cogeneration

For Ireland, legislation on the Supervision and Issuance of Guarantees of Origin (GOs) for RES has been enacted by the SI N°. 147 of 2011, European Communities (Renewable Energy) Regulations 2011, which transposes Article 15 of the Renewables Directive. For CHP-GO European Union (Energy Efficiency) Regulations 2014 has been enacted by the SI N°. 426 of 2014. Both legislations appoint SEMO as the competent body to issue, register, transfer and cancel GO for electricity from renewable energy sources and electricity from High Efficient CHP and CER as the responsible body for establishing the supervisory framework for GO.

The issuing of GO is carried out by SEMO in accordance with the European Communities (Renewable Energy) Regulations 2011 and with a supervisory framework that has been established by CER in the Decision Paper CER/11/824: Supervisory Framework for Administration of GOs for the purposes of fuel-mix disclosure. Framework CER/11/824 establishes that:

- A GO is as an electronic document which has the sole function of providing proof to a final customer that a given share or quantity of energy was produced from renewable sources.
- Any eligible producer of renewable energy which is registered within the scheme may request to be issued with a GO which may be transferred and used in any Member State in Europe.
- The lifetime of a GO is 12 months, therefore, a GO must be used for a disclosure period that is within twelve months of the production of the associated energy.
- Each GO can only be used once and 1MWh can only be issued with one GO.

In terms of the procedures for issuing, transferring and cancelling GO the framework establishes the following:

- A GO should be issued for each MWh of metered generations not previously issued with a GO. The GO will be valid from the date of production and will be expired within 12 months from the production date;
- The issuance of GOs will take place on a quarterly basis by the appointed competent body SEMO;
- Any market participant can request or transfer a GO in accordance with SEMO's timelines (at a minimum of once per quarter);
- GOs can be transferred and used after expiring (i.e. 12 calendar months after the date of production of the associated electricity);
- GOs are not issued to electricity that receives Public Service Obligation (PSO) support;
- SEMO may refuse to recognise a GO issued by another Member State where there are doubts about the accuracy, reliability or veracity of the GO in accordance with the Supervisory Framework and its processes and procedures;
- If a market participant wishes to include imported GOs in their fuel-mix the participant should inform the SEMO of imported GO certificates in advance of the participant's relevant fuel-mix declaration in accordance with timelines to be set out in the SEMO's procedures and processes as approved by the CER; and
- Also, participants in the Irish GO scheme must inform SEMO of the export of any GOs.

The scheme for GO of electricity from renewable energy sources, is already established and running in Ireland. The first period of issuing GOs took place early in 2012 with respect to the period of 01 January 2011 to 31 December 2011. Until January 2015 the quarterly cycle was applied. SEMO published on their website the periods in which GOs are issued (<http://www.semo.com/guaranteesoforigin/Pages/goo.aspx>).

The CHP-GO system in Ireland is quite recent and at the date of writing of this country profile no CHP-GO had been issued.

The system in place to issue, transfer and cancel GOs is an electronic system that until the end of 2014 used Access Databases. From 2015 onwards the system is an electronic system provided by CMOGrexel.com which facilitates the issuing of both RES and CHP-GO, and the system now is established according to EECS. In May 2015 Ireland was approved as a member of the Association of Issuing Bodies (AIB) and from July 1st will use the AIB Hub for electronic transfers of GO.

1.2.1 EECS

In Ireland, two companies are members of EECS, and thus EECS is used for the creation, issuance, transfer and use of RECS Certificates by these companies. IRECS members are Airtricity and First Electric Limited. According to AIB statistics from November 2011, Ireland has only issued RECS in 2007 and 2008 and transferred RECS (exported) in 2007. Since 2008, RECS have not been issued, transferred or cancelled.

The following table shows the EECs issued, transferred and cancelled for Ireland from 2007 onwards.

Table 4: EECs issued, transferred and cancelled in Ireland (AIB statistics Nov2014)

	Issued	Transferred			Cancelled
		Internal	Export	Import	
2007	11,163	-	10,001	-	-
2008	151,251	-	-	-	-
2009-2013	-	-	-	-	-
Total	162,414	-	10,001	-	-

1.3 RES-E Support Schemes

Ireland has been supporting RES-E generation first through the Alternative Energy Requirement (AER) support programme and from May 2006 onwards through the Renewable Energy Feed in Tariff (REFIT). With the introduction of the REFIT, the AER programme came to an end.

Under the previous "AER" support programme, project developers bid on prices at which they were willing to sell electricity from renewable energy powered electricity generating stations to the ESB for 15 years. The lowest priced bids up to capacity limits, announced in the competition notes, received contracts with the ESB. The contracts obliged the ESB to purchase the electricity produced for 15 years at the bid prices. The associated revenue stream was sufficient to allow developers to secure bank debt to finance the capital costs⁸. The ESB was compensated for the net additional costs it incurred from a PSO levy funded by electricity consumers.

Under REFIT, the purchase price is negotiated between the generator and supplier directly. The consumer interest is protected by imposing reference prices beyond which compensation to suppliers will not be paid. Contracting suppliers will be compensated for the net additional costs incurred (up to the price caps notified in the programme notes) from the PSO levy funded by electricity consumers. This type of support is associated with the "fixed feed in tariffs" which has proven successful in many EU states. The REFIT scheme, since it was established in 2006, has undergone 3 applications:

- REFIT 1 – The original REFIT scheme covered: small and large scale onshore wind, biomass landfill gas, other biomass and hydro ($\leq 5\text{MW}$). The original REFIT scheme, announced in 2006,

⁸ Typical debt is 75% of €1.1 million / MW built

received state aid clearance in 2007. Under the terms of the state aid clearance, no new applications have been accepted since 31 December 2009. The balancing payment per megawatt hour in REFIT 1 in 2012 is €10.212.

- REFIT 2 – The application for REFIT 2 scheme (onshore wind, small hydro and landfill gas) was opened in March 2012. The REFIT 2 scheme is intended to cover small and large scale onshore wind, biomass landfill gas and small hydro ($\leq 5\text{MW}$.) To be eligible for REFIT 2, the various requirements that will be set out in the terms and conditions must be fulfilled, including proof of planning permission and grid-connected plants must be new plants, neither fully commissioned nor operational on 01 January 2010. The balancing payment per megawatt hour in REFIT 2 in 2012 is €9.90.
- REFIT 3 – The application for REFIT 3 for biomass technologies received state aid clearance from the European Commission in October 2011 and the scheme was launched in February 2012. REFIT 3 is a scheme to cover 310MW of certain biomass related REFIT categories.

Both REFIT 2 and REFIT 3 schemes are for projects built and operational between 01 January 2010 and 31 December 2015.

The following table shows the price support caps for 2014 and 2015.

Table 5: Reference prices for 2014 and 2015⁹

RE Technology	2014	2015
Large Scale Wind	€69.581	€69.720
Small Scale Wind category	€72.023	€72.167
Hydro	€87.892	€88.068
Biomass Landfill Gas	€85.451	€85.622
Other Biomass	€87.892	€88.068

2 Proposals for Improvement of the Tracking System

2.1 Proposals regarding general regulation on tracking systems

The tracking system in place in Ireland is in line with the RE-DISS BPR v2.2 of August 2014.

2.2 Proposals regarding Disclosure

In terms of disclosure, the GO system in place for Ireland is in line with the RE-DISS BPR. Although GO in Ireland and Northern Ireland have different register holders, as well as different lifetimes, a system has been put in place so that RE-GO issued by Northern Ireland can be disclosed for All-Island in the SEM, by SEMO.

Characteristics of the disclosure system in place for All-Island:

- Disclosure is made based on calendar year.
- The current disclosure system is based on GO, RES-E Support Schemes (AER & REFIT) and a tracking scheme linked to fossil fuel generation (referred to as Generator Attributes in SEM-11-095). All products with claims regarding the origin of electricity should be based exclusively on cancelled GOs.
- A full disclosure scheme that includes CO₂ emissions and radioactive waste is implemented (radioactive waste is zero in Ireland).

⁹ DCENR website, consulted in April 2015 at:
<http://www.dcenr.gov.ie/Energy/Sustainable+and+Renewable+Energy+Division/REFIT.htm>

- There is a system in place which enables tracking of issuing, transfer, import and export and cancellation of GOs.
- In terms of timing for disclosure:
 - The deadline for cancelling GOs for purposes of disclosure of a given year is the 31 March of the following year.
 - The timing for the calculation of Residual Mixes takes account for the current timelines for the provision of the EU Residual Mix under the RE-DISS project:
 - By 30 April X+1 Ireland will have determined its preliminary domestic Residual Mix and whether they have a surplus or deficit of attributes.
 - By 15 May X+1, the European Attribute Mix should be determined and will be used by SEMO for the calculation of the Residual Mix.
 - By 31 May X+1, the final domain Residual Mixes should be published.
 - As of 1 July X+1 the disclosure figures relating to year X will be published by SEMO.
- In terms of the Residual Mix calculations, the new SEM/11/095 decision paper states that the Regulatory Authorities and the Calculating Body (SEMO) shall participate in the calculation of the European Residual Mix and that the European Residual Mix shall be included in the calculation of the Residual Mix as appropriate. This calculation is in line with the RE-DISS BPR.

2.3 Proposals regarding RE-GO and CHP-GO

The RE-GO and CHP-GO systems in place for Ireland is very much in line with the RE-DISS BPR recommendations.

To improve the RE-GO system in place for Ireland, the following BPR should be implemented:

- BPR [4] An extension to this lifetime could be granted if a GO could not be issued for more than [six] months after the end of the production period for reasons which were not fully under the control of the plant operator. In this case, the lifetime of the GO might be extended to [six] months after issuing the GO.
- BPR [11a] The GO system should be extended beyond RES & cogeneration to all types of electricity generation.
- BPR [11c] Ireland should consider to make the use of GOs mandatory for all electricity supplied to final consumers.
- BPR [12.1] All types of GO should be handled in one comprehensive registry system per country. GO are handled in different registers for Ireland and Northern Ireland (SEMO is the Competent Body for GO in Ireland and Ofgem is the Competent Body for GO in Northern Ireland)
- BPR [15b] GO should "ideally" combine the functionalities of a RES-GO and a high efficiency CHP-GO.

2.4 Proposals regarding Acceptance of GO

The system in place in Ireland is in line with the RES Directive and with the BPRs on acceptance of GO.

2.5 Further proposals regarding disclosure

The system in Ireland is almost in line with all further proposals regarding disclosure. To make it fully in line all, the steps for the calculation of their disclosure should be followed, namely statements 9 and 10 of BPR [44].

2.6 Matrix of disclosure related problems and country-specific proposals

Problem	Country-specific proposal
Possible double counting in different explicit tracking instruments	BPRs: [11a], [12.1]
Double counting of attributes in implicit tracking mechanisms	BPRs: [11a], [44]
Double counting within individual supplier's portfolio	-
Loss of disclosure information	BPRs: [11a], [15b]
Intransparency for consumers	BPRs: [11a], [11c]
Leakage of attributes and/or arbitrage	-
Unintended market barriers	BPRs: [4], [11c]

Disclaimer:

The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EACI nor the European Commission is responsible for any use that may be made of the information contained therein.