



**All-Island Fuel Mix Disclosure and CO2
Emissions 2023**

Information Paper

SEM-24-080

04December 2024

Executive Summary

The fuel mix and carbon dioxide (CO₂) emissions disclosure for 2023 provides information on overall fuel mix and CO₂ emissions of electricity generation in the Single Electricity Market (SEM).

The carbon trading products used by suppliers for offsetting their emissions are electronic certificates called Guarantee of Origin Certificates (GOs) in Ireland and Renewable Energy Guarantee of Origin Certificates (REGOs) in Northern Ireland. Each type of certificate counts as 1 MWh of electricity generated from renewable sources which can be bought by electricity suppliers and then be used to offset against non-renewable fuel source electricity. It must be noted that the fuel mix is calculated after accounting for these certificates and thus, not an indication of the actual amount of electricity produced from each fuel type. This is because electricity suppliers are allowed to use carbon trading products to offset emissions and assign these certificates to different fuels based on their consumption. The main fuel types listed in the annual report are coal, oil, gas and renewables.

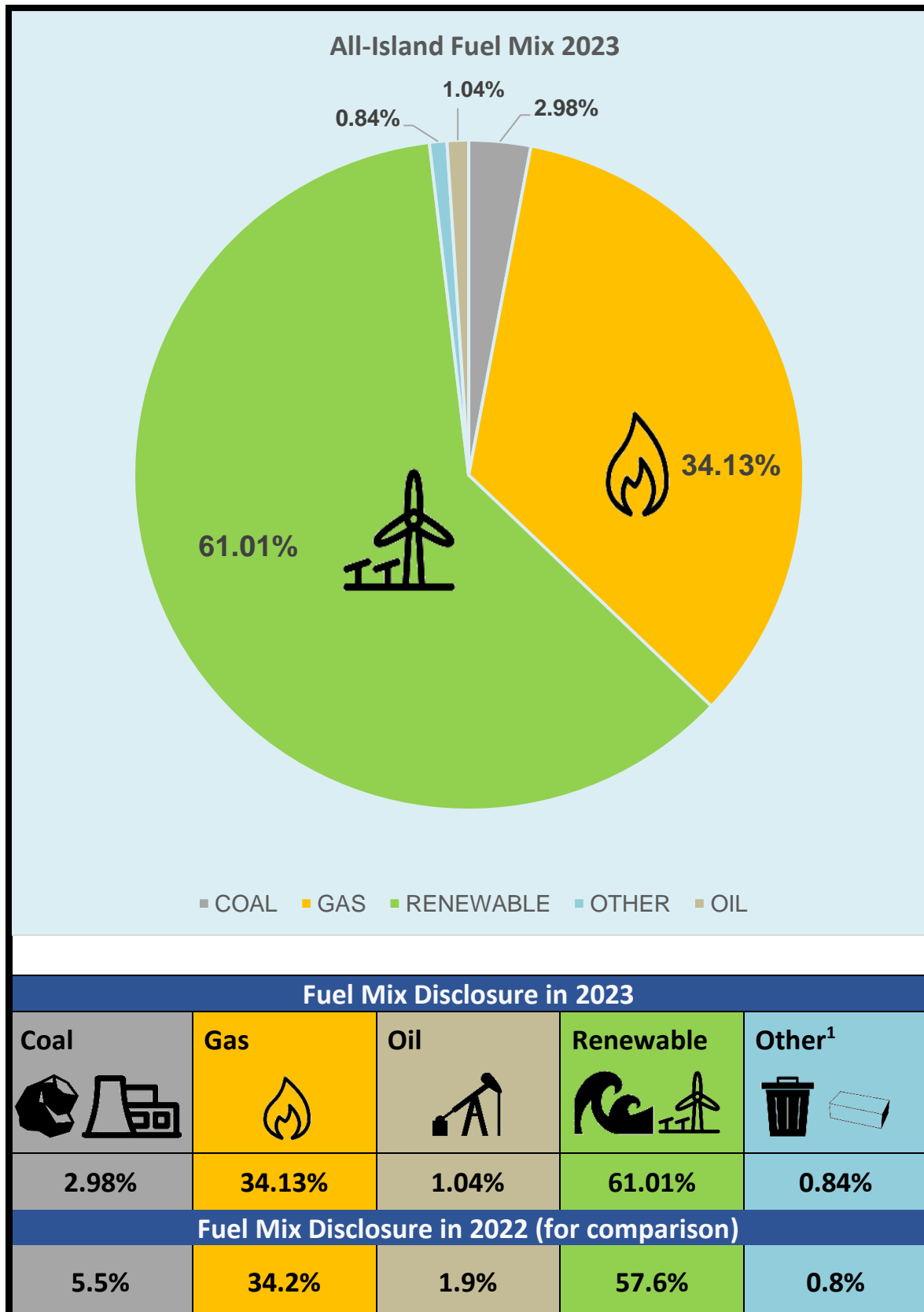
The annual Fuel Mix Disclosure (FMD) is published following a process carried out by the Single Electricity Market Operator (SEMO) based on the procedure set out by a SEM Committee decision paper, [SEM/11/095](#). The SEM Committee decision paper [SEM/11/095](#) outlines the calculation methodology and assumptions that have been used to calculate the fuel mix and CO₂ emissions for 2023. It should be noted that the fuel mix of each electricity supplier (outlined in this paper) does not necessarily represent metered generation in Ireland or Northern Ireland (NI), as suppliers may claim the attributes of renewable electricity generated outside of the SEM through GOs or REGOs.

For 2023, the predominant fuels in the final residual mix were renewables, gas and coal. The share of oil in the fuel mix constitutes a relatively small part of the fuel mix. The share of coal has dropped to 2.98%, similar to 2020 levels, from 5.5% observed in 2022. The share of renewables for 2023 has increased modestly by 3.41% bringing it to 61.01%. Peat has declined steadily since 2018 and represents 0.22% in the 2023 fuel mix. A significant proportion of the renewables were made up of imports of GOs and REGOs from outside of the SEM. That said, it should be noted that the overall trends in terms of fuel mix are following the generation portfolio of the market and system closely.

In total, 18,130,181 GO certificates were imported into the SEM in 2023, a 2.36% increase from the previous year. It should be noted that all the fuel mix figures presented in this information paper are inclusive of GOs. **The inclusion of GOs in calculating the SEM Fuel Mix has the effect of increasing the figure for renewables and reducing the figures for non-renewables in the fuel mix when compared to the actual metered generation.**

Figure 1: All Island Fuel Mix 2023

Figure 2: All-Island Fuel Mix 2008-2023 (inclusive of GOs & REGOs)



¹ For this report in 2023 Waste to Energy and Peat meet the criteria for inclusion in the "Other" category.

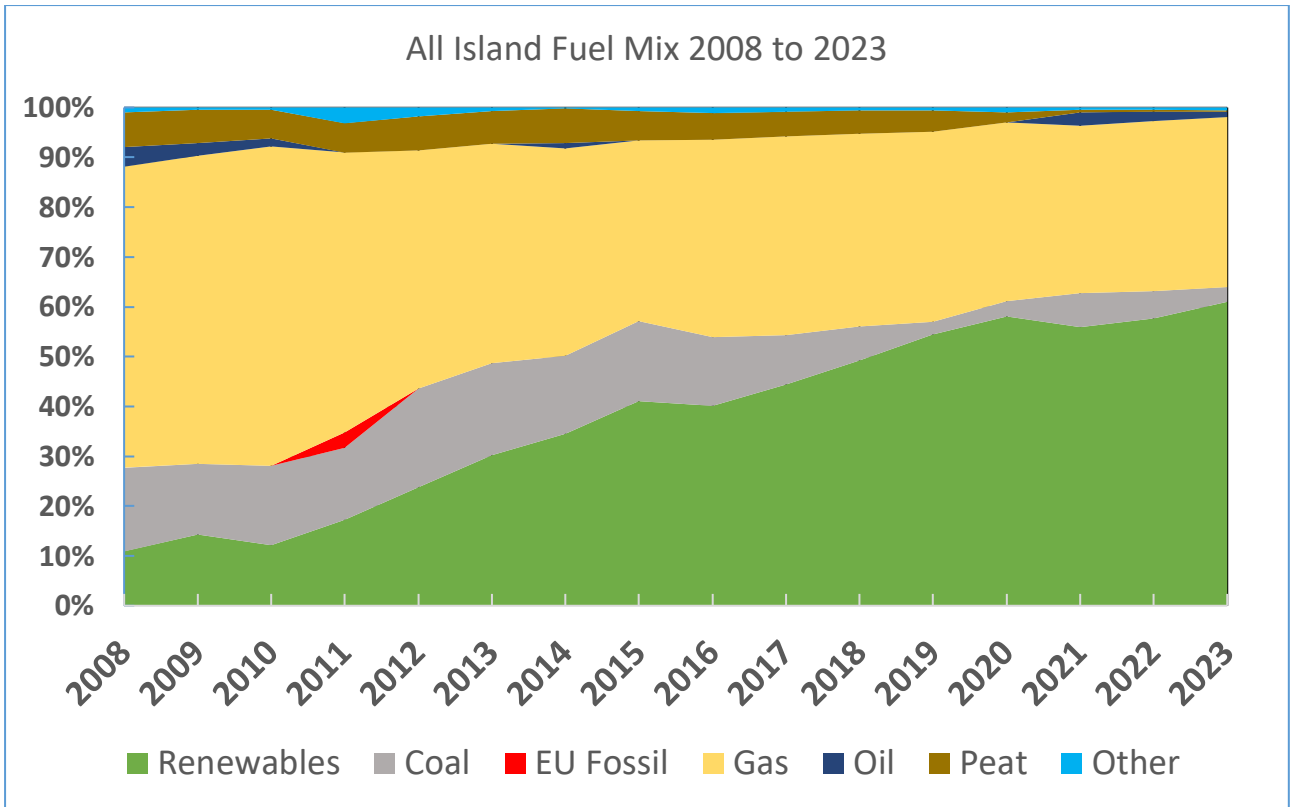


Figure 3: Average All-Island CO2 Emissions 2008-2023 inclusive of GOs and REGOs.

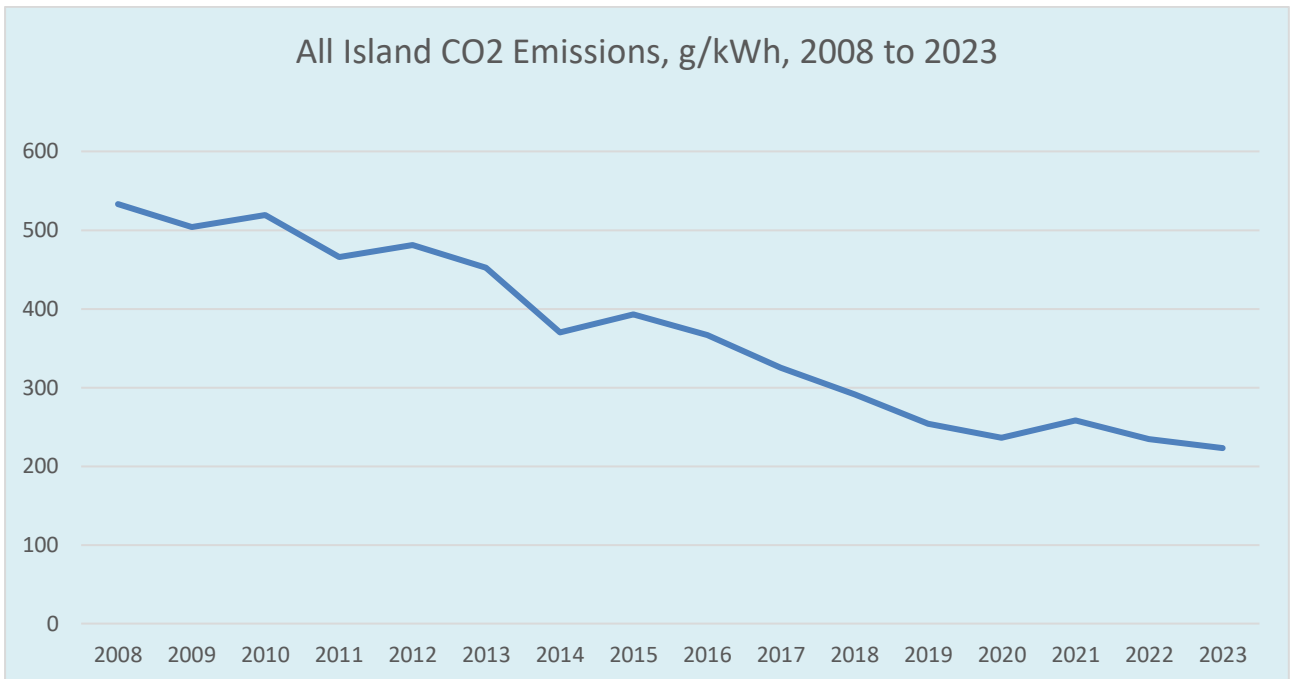


Table of Contents

Executive Summary	1
Glossary of Terms and Abbreviations	5
1. Introduction	6
1.1 Background	6
1.2 Guarantees of Origin (GOs)	6
1.3 The calculation process of the final All-Island Fuel-Mix.....	6
1.4 Fuel Mix and Metered Generation.....	7
1.5 Recognition of REGOs and GOs in Ireland and Northern Ireland	8
1.6 Publication of Fuel Mix by Suppliers	8
2. Average All-Island Fuel Mix 2023	10
3. Average All-Island CO2 Emissions 2023.....	13
4. Suppliers' Fuel Mix and CO2 Emissions 2023.....	14
Appendix 1: Presentation of Information on Bills	17
Appendix 2: All-Island Fuel Mix 2005-2023.....	18

Glossary of Terms and Abbreviations

Abbreviation or term	Definition or meaning
AIB	Association of Issuing Bodies
BEIS	Department for Business, Energy and Industrial Strategy
CO2	Carbon dioxide
DAERA	Department of Agriculture, Environment and Rural Affairs
EEA	European Economic Area
EPA	Environmental Protection Agency
EU	European Union
FMD	Fuel Mix Disclosure
GO	Guarantees of Origin
GB	Great Britain
gCO2/kWh	grams of carbon dioxide per kilowatt hour
MWh	Megawatt hour
NBDFW	Non-Biodegradable Fraction of Waste
NI	Northern Ireland
Q	Quarter
RA	Regulatory Authority
REGO	Renewable Energy Guarantees of Origin
SEM	Single Electricity Market
SEMO	Single Electricity Market Operator
UK	United Kingdom

1. Introduction

1.1 Background

The purpose of this Information paper from the Regulatory Authorities (RAs) is to set out the 2023 fuel mix and carbon dioxide (CO₂) emissions figures for electricity suppliers operating in the all-island wholesale Single Electricity Market (SEM). This is shown on average across the island in Sections 2 and 3 of this information paper, along with year-on-year trends, and per supplier in Section 4. The fuel mix and CO₂ emissions disclosures are taken from data provided to the RAs by the Single Electricity Market Operator ([SEMO](#)).

1.2 Guarantees of Origin (GOs)

Guarantees of Origin (GOs) are electronic certificates issued for energy generated from renewable sources in the EEA Member States and are issued to renewable generators that are not in support schemes². These are tradeable instruments at the European level and do not need to follow the physical flow of energy. The Association of Issuing Bodies ([AIB](#))³ operates a hub where such certificates can be traded between countries. This allows suppliers to purchase the renewable benefit of certain generators across Europe and include it in their total fuel mix. GOs are both exported from SEM and imported into SEM, to and from the rest of Europe.

Renewable generators that are signed up to the AIB's GO scheme are issued GOs per megawatt hour (MWh) of generation which can then be transferred to suppliers to use in their fuel mix disclosure. Each GO (or REGO in NI) can be used to offset against one MWh of non-renewable generation or add to the figure for renewable generation. Each year, electricity suppliers submit a completed fuel mix declaration form to SEMO which then performs the fuel mix disclosure (FMD) calculations on behalf of the RAs.

1.3 The calculation process of the final All-Island Fuel-Mix

It is the role of SEMO to administer and calculate the fuel mix figures from the information provided by suppliers. The supplier fuel mix and associated environmental impact information (emissions) are calculated by SEMO in accordance with the SEM Committee's methodology. This methodology can be found in the SEM Committee Decision Paper "*Fuel Mix Disclosure in the Single Electricity Market: Calculation Methodology Decision Paper*" ([SEM/11/095](#)) and is used to calculate the fuel mix and CO₂ emissions for 2023.

² Note that in NI generators who accredited for the Northern Ireland Renewables Obligation (NIRO) scheme can also receive REGOs/GOs.

³ The EU Residual Mix was calculated by REDISS from 2011 to 2014, and by AIB from 2015.

At a high level, and in accordance with SEM/11/095, the final fuel mix figure for a supplier consists of the following:

- non-renewable generation attributes;
- Guarantees of Origin (GOs) or Renewable Energy Guarantees of Origin (REGOs);
- renewable generation attributes assigned to a supplier that is not included in the GO scheme; and
- the Residual Mix⁴ or European Union (EU) Residual Mix⁵.

1.4 Fuel Mix and Metered Generation

Attention should be drawn to the following when considering the fuel mixes and CO2 emission intensities set out in this information paper:

- Firstly, **the all-island and jurisdictional fuel mixes - resulting from the application of trading in GOs and REGOs - have the potential to vary significantly from the actual renewable generation produced within each jurisdiction.** This depends on the quantity of GOs and REGOs imported or exported⁶ to or from Ireland and Northern Ireland in respect of the 12-month period for which the calculated fuel mix applies.
- The key function of the GO is to demonstrate that a given share of quantity of energy was produced from a renewable source in the EEA member states. A single GO is issued per MWh of electricity generated and this one GO can only be used once for the purposes of the fuel mix disclosure. Therefore, there is no double-counting of the same unit of European renewable electricity generation in the fuel mix disclosure.
- Secondly, in the event that there is a deficit of generation attributes to meet overall All-Island demand, the European Residual Mix will be used to meet the deficit. This also – but to a lesser extent - has the ability to lead to a fuel mix that differs from actual metered generation. It must be noted that since few year, SEM was not in deficit of generation attributes and thus has not used European Residual Mix in SEM fuel mix.

For the reasons above, the FMD and CO2 emission figures for a given disclosure period may not necessarily be reflective of the actual all-island electricity generation for a given calendar year.

⁴ The Residual Mix is the mix of all unclaimed electricity in the system. It is measured by taking the total metered generation both In-SEM and Out-of-SEM, and deducting from this the four categories of energy that can be claimed by a supplier, in the following order: Public Service Obligation (PSO) energy; Guarantees of Origin (GOs); Renewable Energy Guarantees of Origin (REGOs); Generator Attributes – total amount of non-renewable generation from a fossil-fuelled unit registered by a supplier to be tracked by the calculating body.

⁵ The EU Residual Mix is the mix of all unclaimed electricity at the European level.

⁶ A total of 17.711 million imported GO certificates were declared by suppliers for disclosure in the 2022 fuel mix. One GO represents 1 MWh of electricity produced from a renewable source.

1.5 Recognition of REGOs and GOs in Ireland and Northern Ireland

As a result of Brexit, Renewable Energy Guarantees of Origin (REGOs) from the United Kingdom (UK) are not useable as renewable certificates within European Union (EU) Member States (including Ireland) since 1 January 2021.⁷

In the previous All-Island FMD, SEMO, in conjunction with both RAs, provided an update on GOs and REGOs arrangements in the EU, NI and UK. The latest arrangements on GOs and REGOs in the EU, NI and UK are summarised as follows:

- **For Suppliers licensed in Northern Ireland:** The UK Government announced in July 2022 its intention to cease the recognition of EU GOs from April 2023. The Government will ensure Ofgem will continue to issue REGOs to allow electricity suppliers in NI to comply with their FMD obligations.⁸
It should be noted that the NI Government has not made a decision to disallow the use of EU GOs in NI. However, market participants should monitor communications or agreements from either the EU, NI or UK authorities with regards to this position.
- **For Suppliers licensed in Ireland:** From 1 January 2021, UK REGOs are not accepted for import or cancellation for FMD in Ireland.

The above arrangements are currently in place, should subsequent communications or agreements from either the EU, NI or UK authorities indicate a change in this position, both RAs in conjunction with SEMO, will as far as is practicable, provide market participants with an update on any changes to any future FMD processes. The SEM Committee aims to do a review of SEM/11/095 in light of these arrangements in the coming year.

1.6 Publication of Fuel Mix by Suppliers

The publication of the fuel mix of suppliers and the provision of information regarding the environmental impact of electricity produced from that fuel mix is required by Article 18(6) and point 5 of Annex I of Directive (EU) 2019/944⁹. It should be noted that the fuel mix and CO2 disclosures have to be published on bills from electricity suppliers to customers in Ireland and Northern Ireland (NI) no later than two months from the publication of this paper. The fuel mix information should be presented (“disclosed”) on electricity bills in accordance with SEM/11/095. A template for this purpose is reproduced in Appendix 1 of this paper. In particular the RA would like to remind suppliers of the following:

⁷ [Notification](#) from the European Commission, issued on 7 March 2018.

⁸ <https://www.ofgem.gov.uk/environmental-and-social-schemes/renewable-energy-guarantees-origin-rego/renewable-energy-guarantees-origin-rego-electricity-suppliers-and-generators/guarantees-origin-goos>

⁹ The requirements in Article 3(9) of [Directive 2009/72/EC](#), which is now repealed, is recast as [Directive \(EU\) 2019/944](#).

- Where fuel mix information is on the back of a bill, reference must be made to it on the front of the bill;
- While radioactive waste information is required by of Directive (EU) 2019/944, this figure is zero for all suppliers in 2023 and therefore need not be included with the 2023 FMD information on bills;
- To ensure consistency across suppliers, percentages should be rounded to one decimal place;
- CO2 emissions information should be given in the unit grams of CO2 per kilowatt hour (gCO2/kWh);
- Where separate products associated with a particular fuel mix are offered to certain customers, all the supplier's customers should receive information, on request, regarding the fuel mix associated with their electricity (not simply the supplier's average fuel mix) in accordance with SEM/11/095; and
- The 2023 fuel mix and CO2 emissions information must be on all bills within two months of the publication of this paper.

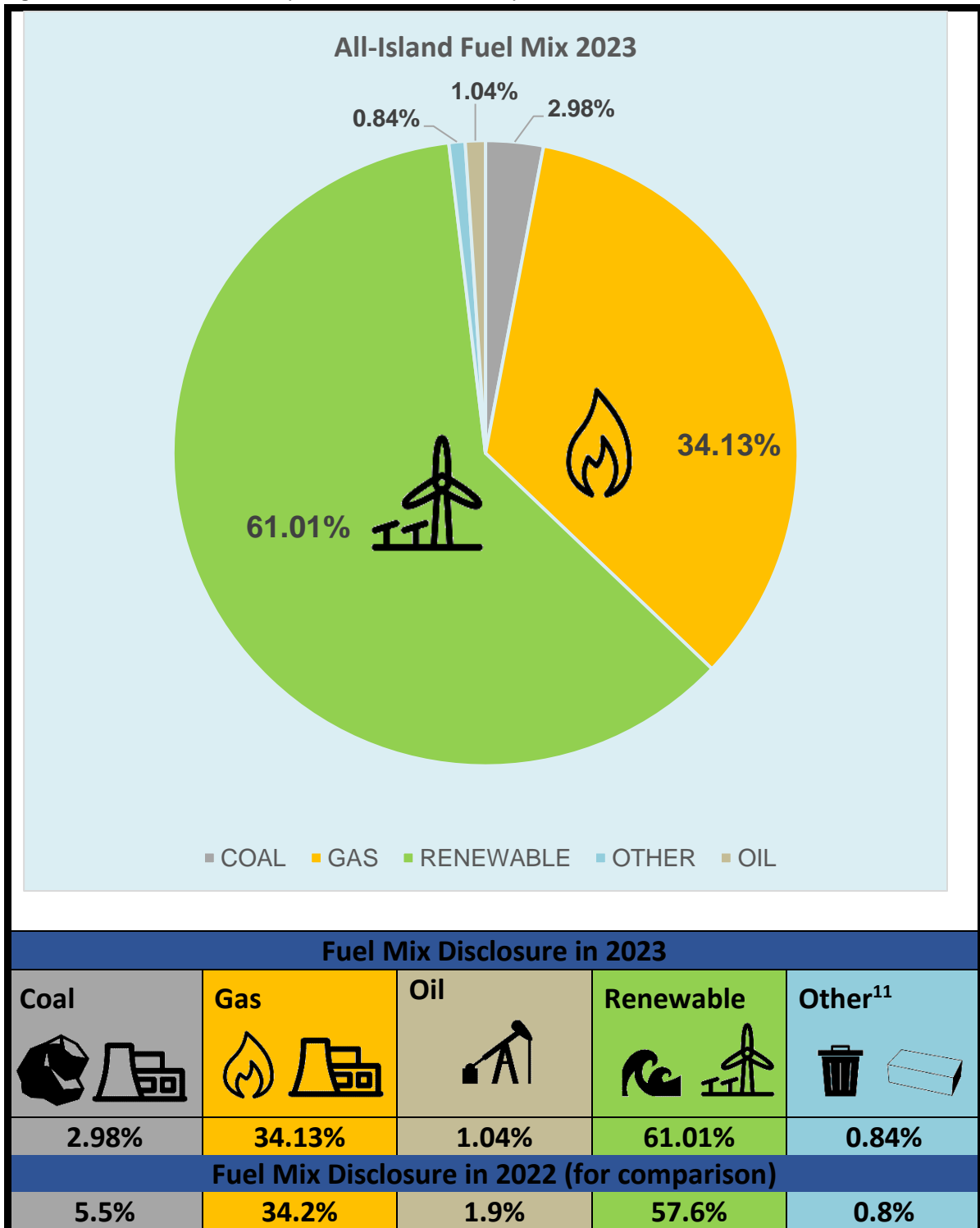
The widely used unit of measure¹⁰ gCO2/kWh is the preferred unit of measure for reporting on emissions intensity associated with electricity generation. For consistency, the unit gCO2/kWh should be used in billing, advertising, and promotional material of suppliers, including on website presentations, customer bills, infographics, annual reports, etc.

¹⁰ The unit of measure tCO2/MWh was used in the 2018 report and for some years before that. Use of the unit gCO2/kWh was re-introduced for the 2019 report for disclosures and continues.

2. Average All-Island Fuel Mix 2023

This section sets out the 2023 and year-on-year fuel mix for the all-island SEM.

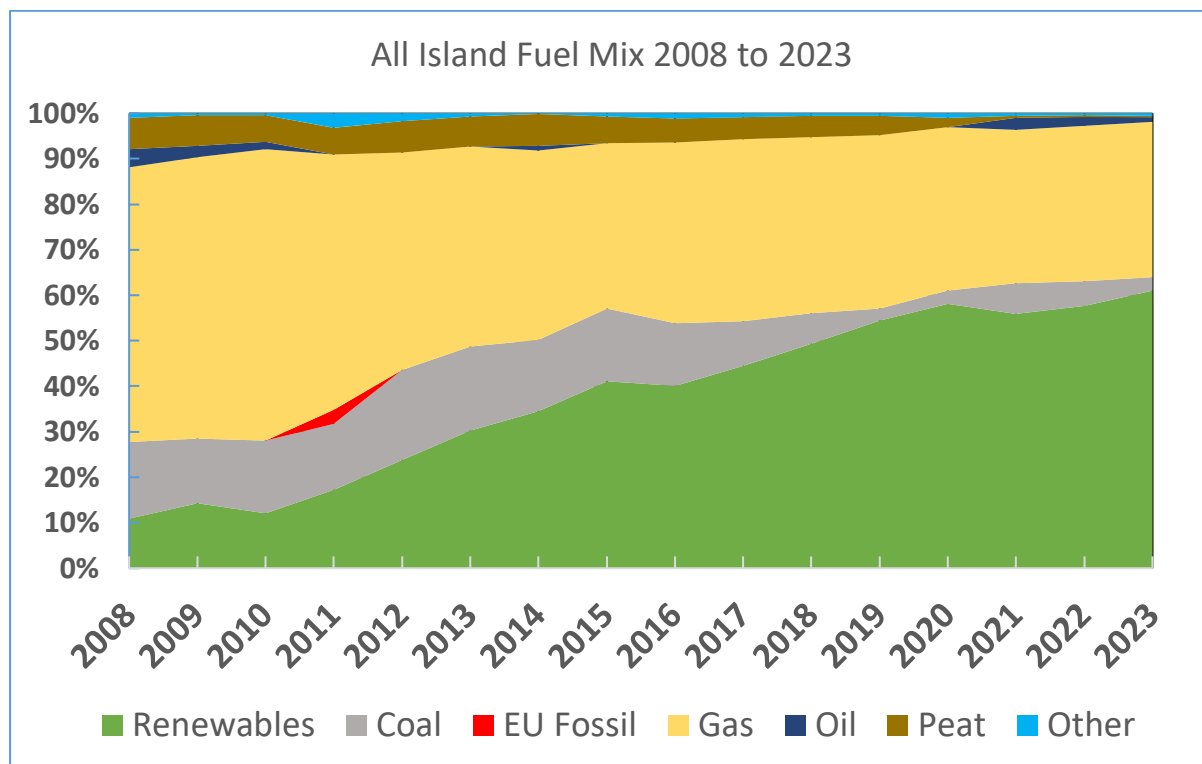
Figure 4: All-Island Fuel Mix 2023 (inclusive of GOs & REGOs). Source: SEMO Data



¹¹ For this report in 2032 Waste to Energy and Peat meet the criteria for inclusion in the “Other” category.

For 2023, the predominant fuels in the final residual mix were renewables, gas and coal. The share of coal has decreased from 5.5% in 2022 to 2.98% in 2023 and the share of renewables has increased by 3.41% to 61.01%. A large proportion of the renewables were made up of imports claimed from outside of the SEM. In total, 18,130,181 GO certificates were imported into the SEM in 2023, a 2.36% increase from the previous year.

Figure 5: All-Island Fuel Mix 2008-2023 (inclusive of GOs & REGOs). Source: SEMO Data



In accordance with [SEM/11/095](#), the “Other” category consists of the aggregate of all fuels in a given year that individually represent less than 1% of the final overall generation. In 2023, waste to energy (0.63%) and peat (0.22%) meets the criteria for inclusion in the “Other” category.

Table 1 below compares the “Other” category by year.

Table 1: Fuel-Types Comprising “Other” Category by Year. Source: SEMO Data

Year	Fuel Type
2015	Waste to Energy, Oil
2016	Waste to Energy, Oil
2017	Waste to Energy, Oil
2018	Waste to Energy, Oil
2019	Waste to Energy, Oil
2020	Waste to Energy, Oil
2021	Waste to Energy, Peat
2022	Waste to Energy, Peat
2023	Waste to Energy, Peat

As for previous years, the significant renewable and gas claims meant that there was a surplus of claims and indigenous generation compared to supplier demand leading to a net surplus of Residual Demand. This meant that there was no need to use the EU Residual Mix for 2023 leading to zero values for Nuclear and EU Fossil which are components of the EU Residual Mix. Table 2 below provides the All-Island Mix by year.

Table 2: All-Island Mix by Year. Source: SEMO Data

Fuel	2023	2022	2021	2020	2019	2018	2017	2016
Coal	2.98%	5.50%	6.80%	2.98%	2.63%	6.77%	9.83%	13.76%
EU Fossil	0.00%	0.0%	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%
Gas	34.13%	34.20%	33.60%	35.75%	37.86%	38.51%	39.96%	39.66%
Nuclear	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Oil	1.04%	1.90%	2.70%	0.41%	0.66%	0.59%	0.60%	0.99%
Peat	0.22%	0.40%	0.50%	2.07%	4.25%	4.63%	4.86%	5.35%
Renewable	61.01%	57.60%	55.90%	57.86%	54.04%	48.95%	44.47%	40.09%
Waste to Energy	0.63%	0.40%	0.50%	0.94%	0.56%	0.55%	0.28%	0.15%

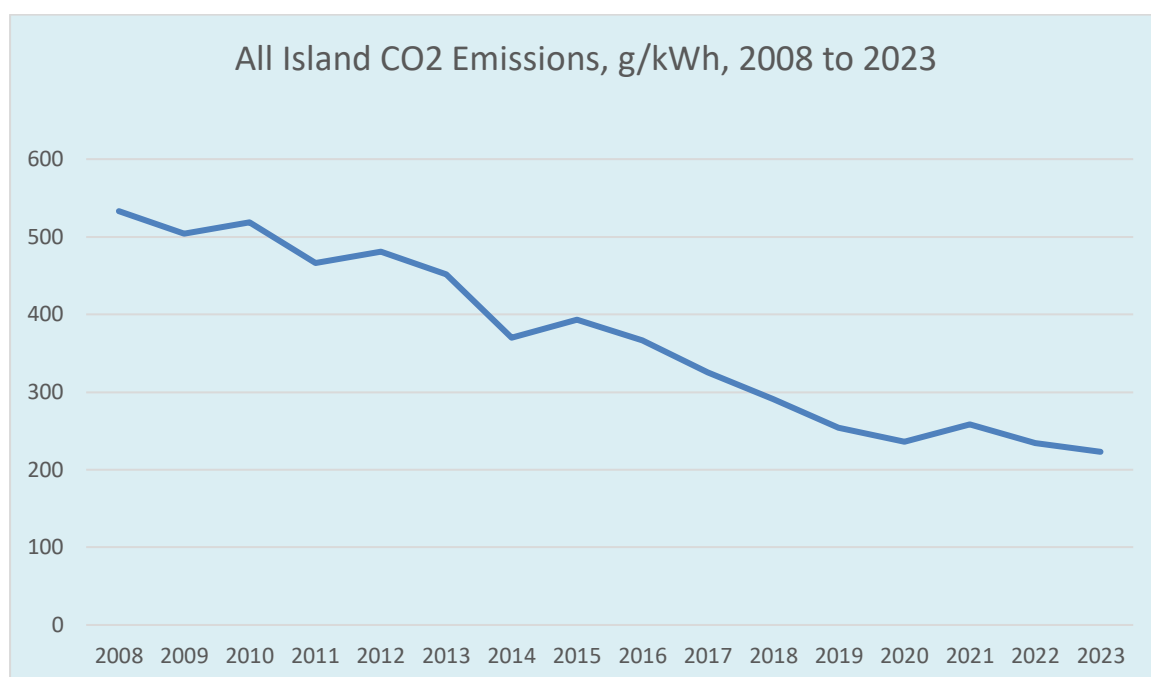
3. Average All-Island CO2 Emissions 2023

Emissions data for each generator in the SEM is supplied annually to SEMO by the EPA (Environmental Protection Agency) for Ireland and the DAERA (Department of Agriculture, Environment and Rural Affairs) for Northern Ireland.

The emission figures are grouped according to fuel type and divided by metered generation to give specific emission factors for each fuel. These values and imported GOs are then used to calculate the average all-island CO2 Emissions Factor and each individual supplier's CO2 Emissions Factor.¹²

The average All-Island CO2 emissions per kWh of electricity has decreased by 4.7% between 2022 and 2023, from 234 g/kWh in 2022 to 223 g/kWh in 2023. This decrease is predominantly driven by an increase in renewable generation and reduced coal, oil, and peat generation in 2023 with peat generation near zero.

Figure 6: Average All-Island CO2 Emissions 2008-20223 (inclusive of GOs & REGOs). Source: SEMO data.



¹² This is done in line with the existing EU legislation.


4. Suppliers' Fuel Mix and CO2 Emissions 2023

Following the information in Section 2 and Section 3 above, this section sets out the fuel mix and CO2 emissions for each electricity supplier.

The fuel mix calculation is carried out on an individual licence basis. Up to and including the 2023 year, where a supplier operates as a single company but holds separate licences (such as a supplier that operates in both jurisdictions), those licences that have excess generation attributes are distributed among the licences with excess demand: the generation attributes can be distributed to the excess demand within the single company prior to using the Residual Mix if the company holds multiple licences.

Table 3 below shows the individual fuel mixes and CO2 emissions in grams per kWh of electricity for each supplier. Those which are below the All-Island Emissions Factor are highlighted in Green. Suppliers with an Emissions Factor above the All-Island Emissions Factor are highlighted in Red. The average All-Island fuel mix, as declared by the supply companies, (as per section 2) is also provided for reference.

Table 3: Declared Suppliers' Fuel Mix by Fuel Type in 2023 (inclusive of GOs & REGOs). Source: SEMO Data

Supplier	Jurisdiction	Coal	Gas	Renewable	Oil	Other	gCO2 /kWh
 All-Island		2.98%	34.13%	61.01%	1.04%	0.63%	223
Bord Gais Energy	ROI	0.00%	61.64%	38.36%	0.00%	0.00%	312
Budget Energy	NI	0.00%	0.00%	100.00%	0.00%	0.00%	0
Electric Ireland¹³	All-Island	2.87%	36.54%	58.77%	1.01%	0.81%	234
	ROI ¹⁴	3.27%	34.11%	60.56%	1.14%	0.92%	228
	NI ¹⁵	0.00%	54.23%	45.77%	0.00%	0.00%	274

¹³ Note that all of ESB's electricity supply licences (both ROI and NI) are branded as Electric Ireland.

¹⁴ ESB Customer Supply and ESB ROI Independent Energy combined

¹⁵ ESB NI Independent Energy

Energia	ROI	2.98%	20.01%	75.13%	1.08%	0.80%	152
Panda Power	ROI	0.00%	0.00%	100.00%	0.00%	0.00%	0
Go Power¹⁶	ROI	0.00%	0.00%	100.00%	0.00%	0.00%	0
	NI	6.30%	42.37%	47.34%	2.20%	1.79%	322
Power NI¹⁷	NI	0.00%	67.70%	32.30%	0.00%	0.00%	342
Click Energy	NI	4.47%	30.04%	62.66%	1.56%	1.27%	228
SSE Airtricity	ROI	0.00%	0.00%	100.00%	0.00%	0.00%	0
	NI	0.00%	11.91%	88.09%	0.0%	0.0%	60
Flogas Enterprise Solutions¹⁸	ROI	0.00%	0.00%	100.00%	0.00%	0.00%	0
	NI	0.00%	0.00%	100.00%	0.00%	0.00%	0
Pinergy	ROI	0.00%	0.00%	100.00%	0.00%	0.00%	0
Arden Energy	ROI	8.59%	57.33%	28.69%	2.99%	2.40%	436
Orsted Ireland Green Energy¹⁹	ROI	0.53%	3.59%	95.54%	0.19%	0.15%	27
Captured Carbon	ROI	0.00%	0.00%	100.00%	0.00%	0.00%	0
Cenergise Trading	ROI	0.00%	0.00%	100.00%	0.00%	0.00%	0
Ecopower	ROI	0.00%	0.00%	100.00%	0.00%	0.00%	0

¹⁶ LCC ROI and NI are branded as GO Power.

¹⁷ Power NI is a combination of the Power NI and Energia NI licences which are all under the Power NI brand and considered together for FMD.

¹⁸ Naturgy has rebranded as Flogas Enterprise Solutions NI and ROI. This is different again from Flogas Natural Gas Limited.

¹⁹ BRI Green Energy was bought by Orsted and now go by the name Orsted Ireland Green Energy.

Community Power	ROI	5.42%	36.49%	54.69%	1.90%	1.50%	277
ElectroRoute Energy Supply	ROI	0.00%	0.00%	100.00%	0.00%	0.00%	0
Flogas Natural Gas	ROI	0.00%	0.00%	100.00%	0.00%	0.00%	0
3T Power	NI	0.00%	0.00%	100.00%	0.00%	0.00%	0
Axpo	ROI	0.10%	0.56%	99.30%	0.04%	0.00%	4
PrePay Power	ROI	8.39%	56.36%	29.95%	2.90%	2.40%	428
Edenderry Supply Company	ROI	0.00%	0.00%	100.00%	0.00%	0.00%	0

The Residual Mix CO2 Emissions Factor has decreased from 485 gCO2/kWh in 2022 to 461 g/kWh in 2023. It should be noted that suppliers who did not submit a fuel mix declaration to SEMO for this FMD have been assigned the Residual Mix and are highlighted as such in Table 4.

Table 4: Suppliers assigned the Residual Mix in 2023 (inclusive of GOs & REGOs). Source: SEMO Data

Suppliers assigned All Island Residual Mix	Jurisdiction	Coal	Gas	Renewable	Oil	Other	gCO2 /kWh
Waterpower Engineering	ROI	8.83%	59.38%	26.20%	3.09%	2.50%	451

Two self-suppliers²⁰ made a declaration for the purposes of fuel mix disclosure. These associated fuel mixes have been included in Table 5 below.²¹

Table 5: Self-Suppliers' Fuel Mix by Fuel Type in 2023 (inclusive of GOs & REGOs). Source: SEMO Data

Self-Supplier	Jurisdiction	Coal	Gas	Renewable	Oil	Other	gCO2 /kWh
Dublin Waste to Energy Supply	ROI	0.0%	0.0%	100.0%	0.0%	0.0%	0
Statkraft Markets GmbH	ROI	0.0%	0.0%	100.0%	0.0%	0.0%	0

²⁰ A self-supplier is a supply company which supplies electricity only to its own site and which does not compete to supply energy to any third party.

²¹ It should be noted that the purpose of this paper is to provide information to customers on the fuel mix and CO2 emissions of their electricity supply. Only suppliers serving electricity customers are required to disclose their assigned fuel mix.

Appendix 1: Presentation of Information on Bills

Default Presentation of Information²²

The fuel mix information should be presented on electricity bills in accordance with [SEM/11/095](#). For this purpose, a template from this decision paper is reproduced below.²³

Suppliers who offer green source products in Ireland should refer to Section 3.5.3 of the CRU's Decision paper, [CER/15/205](#), on the "*Regulation of Green Source Products in the Electricity Retail Market*".

SUPPLIER Z Disclosure Label		
Applicable Period: January 2022 to December 2022		
Electricity supplied has been sourced from the following fuels:	% of total	
	Electricity supplied by SUPPLIER Z	Average for All Island Market (for comparison)
Coal	X %	X %
Natural Gas	X %	X %
Nuclear	X %	X %
Renewable	X %	X %
Peat	X %	X %
Oil	X %	X %
EU Fossil	X %	X %
Other	X %	X %
Total	100 %	100 %
Environmental Impact		
CO2 Emissions	X g/kWh	X g/kWh
Your specific fuel mix may differ from the fuel mix shown because SUPPLIER Z offers green source products. For information on your fuel mix and on the environmental impact of your electricity supply visit www.SUPPLIER Z.ie or, for further details call 00XXX X XXX XXXX		

²² Refer to [SEM/11/095](#) for further detail on presentation requirements. Note that the fuel categories used each year can vary.

²³ Please refer to Section 1.7 of [SEM/11/095](#) for further details.

Appendix 2: All-Island Fuel Mix 2005-2023

Table 5: Fuel Mix 2005-2022 (Percentage share of total inclusive of GOs & REGOs).

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Coal %	24.00	19.00	18.00	17.00	14.24	15.98	14.44	19.89	18.42	15.71	16.02	13.76	9.83	6.77	2.63	2.98	6.80	5.50	2.98
EU Fossil %	0.00	0.00	0.00	0.00	0.00	0.00	3.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gas %	46.00	50.00	55.00	61.00	61.85	64.06	56.16	47.74	44.09	41.60	36.36	39.66	39.96	38.51	37.86	35.75	33.60	34.20	34.13
Oil %	12.00	9.00	6.00	4.00	2.53	1.59	0.00	0.00	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	2.70	1.90	1.04
Renewables %	9.00	11.00	11.00	11.00	14.23	12.11	17.21	23.74	30.24	34.46	41.06	40.09	44.47	48.95	54.04	57.86	55.90	57.60	61.23
Peat %	8.00	7.00	6.00	7.00	6.70	5.78	5.88	6.86	6.49	6.95	5.90	5.35	4.86	4.63	4.25	2.07	0.50	0.40	0.22
Other %	1.00	4.00	4.00	1.00	0.45	0.48	3.18	1.77	0.75	0.17	0.17	0.15	0.28	0.55	0.56	0.94	0.50	0.40	0.63

Note:

- Figures from 2005 to 2007 relate to Ireland-only and calculations are based on a pre-SEM methodology.
- Figures for 2008, 2009 and 2010 relate to Ireland and Northern Ireland and are based on the Interim Arrangements Methodology ([SEM/09/081](#)).
- Figures for 2011 onwards relate to Ireland and Northern Ireland and are based on the SEM Committee Decision Paper Fuel Mix Disclosure in the Single Electricity Market: Calculation Methodology Decision Paper ([SEM/11/095](#)), referenced in the Related Documents section of this paper.
- The threshold for a fuel-types inclusion in the “Other” category is <1% of Final All-Island Mix. The “Other” category consists of Non-Biodegradable Fraction of Waste (NBDFW) and EU Fossil (only for 2011).