# Ireland

## **Key issues**

Irish authorities and their Northern Irish counterparts should continue efforts to align the SEM market design with the European target model. The TSO certification process needs to be completed to ensure compliance with the Electricity Directive<sup>266</sup>.

Efforts for the diversification of its gas supplies should continue as power generation relies heavily on gas imports from the UK and both interconnectors experienced outages in winter 2012/13. The limited sourcing options have also resulted in the lack of a liquid gas wholesale market (trading is in the highly liquid UK market instead). Gas field development, greater storage and LNG capacity have all been proposed, but developments keep being delayed. A revision of the permitting process for these projects may help ensure they can be developed more rapidly.

Ireland should continue developing networks and systems to accommodate a large proportion of wind generation, which is particularly challenging in a small system.

Retail market competition in the case of gas remains below the required level for retail price deregulation while in electricity the incumbent's market shares remain high. Further efforts are required to improve competition in the retail sector and encourage customers to switch.

# **General overview**

Energy consumption in 2012 (14.0 Mtoe) was based largely on fossil fuels, notably petroleum products, natural gas, and to a lesser extent solid fuels. The contribution from renewable energy sources was less significant in the overall energy mix at 7.2%.<sup>267</sup> The 2020 renewable target for the energy sector is 16%, which is lower than the EU-27 average (20%).

<sup>&</sup>lt;sup>266</sup> Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC.

<sup>&</sup>lt;sup>267</sup> http://epp.eurostat.ec.europa.eu/cache/ITY\_PUBLIC/8-10032014-AP/EN/8-10032014-AP-EN.PDF.



Figure 1: Gross inland consumption mix 2008 – 2012 (source: Eurostat)

The power generation mix in 2011 (27.5 TWh) remained dominated by gas-fired power generation (with a share of 54.2%) and solid fuels (25.2%). The renewable share of power generation increased to 19.8% and cogeneration<sup>268</sup> provided 7.1% of the total electricity generation in 2011.<sup>269</sup> For 2012 the estimated electricity fuel production mix in Ireland is as below – gas continues to be the biggest fuel source, with renewable generation (mostly wind) now accounting for approximately 20% of the mix in Ireland.





<sup>&</sup>lt;sup>268</sup> The share of electricity produced in combined heat and power plants (CHP).

<sup>&</sup>lt;sup>269</sup> Eurostat.

## **Regulatory framework**

### General

In January 2012, the European Commission referred Ireland to the European Court of Justice for failure to adopt EU gas market rules. This was resolved in 2012, when the access conditions to the Irish gas network at the Moffat Interconnection Point and the South-North gas pipeline were amended to include a reverse flow.

In January 2014, Ireland was referred to the European Court of Justice for failing to fully transpose the EU's renewable energy directive. The aspects of the EU directive not yet transposed include the commitment that 10% of all transport energy would come from renewable sources by 2020, the management of grid access for renewable electricity and sustainability criteria for biofuels and bioliquids.<sup>270</sup>

An infringement procedure for partial transposition of the Third Energy Package Electricity Directive is still on-going and has been referred to the Court of Justice of the EU in February 2014. Ireland had failed to adopt provisions related to unbundling of transmission system operators.<sup>271</sup>

## **National Energy Regulator**

The Commission for Energy Regulation (CER) is Ireland's energy regulator with a range of economic, safety and customer functions. In 2014 the CER was also appointed as Ireland's economic water regulator. The CER's economic responsibilities in energy are to regulate the Irish electricity and natural gas sectors. As part of this role, CER jointly regulates the all-island wholesale Single Electricity Market (SEM) with its counterpart in Northern Ireland, the Utility Regulator (NIAUR) as part of the SEM Committee. The Committee consists of three NIAUR representatives, three CER representatives, an independent member and his deputy.

The number of staff at CER is currently about 90, though many of these staff works in non-energy economic areas, for example energy safety and water. The CER's actual expenditure in 2012 was EUR 10.8 million across the range of its functions.

#### Unbundling

ESB owns the electricity transmission network assets and owns and operates the distribution network. EirGrid is responsible for the operation and development of the transmission system. ESB and Eirgrid are both state-owned. EirGrid has been certified as an independent transmission system operator for Ireland in 2013. The certification followed the decision of the European Commission<sup>272</sup> that the arrangements in place, if effectively implemented; clearly guarantee more effective independence of the TSO than would be the case under the other unbundling options<sup>273</sup>. However, to ensure their effective implementation and as set out in both the European Commission's and CER's decisions, CER now needs to monitor and assess these arrangements. CER expects to receive an application from EIL (East-West Interconnector Ltd) in due course for certification of the East-West interconnector between Ireland and Britain.

<sup>&</sup>lt;sup>270</sup> <u>http://europa.eu/rapid/press-release IP-14-44 en.htm.</u>

<sup>&</sup>lt;sup>271</sup> http://europa.eu/rapid/press-release IP-14-155 en.htm.

<sup>&</sup>lt;sup>272</sup> Pursuant Article 9(9) of the Electricity Directive.

<sup>&</sup>lt;sup>273</sup> Set out in Chapter V of the Electricity Directive.

Bord Gáis Éireann is a vertically integrated state owned company, with both transmission and distribution gas infrastructure (Bord Gáis Networks) and retail supply of gas and electricity (Bord Gáis Energy), although it has no interests in production activities. The system operator Gaslink is an independent subsidiary of Bord Gáis Éireann.

In 2010, BGE confirmed its intention to adopt the "Independent Transmission Operator model" by amalgamating Gaslink and Bord Gáis Networks, to form a new independent subsidiary. In 2013, CER certified BGE as an ITO subject to the completion of outstanding work items.<sup>274</sup> The Irish Government is in negotiations to sell the retail arm of the business, and in December 2013 they announced their preferred bidder: a consortium of Centrica, Brookfield Renewable Power and iCON Infrastructure<sup>275</sup>. The State will retain ownership of the gas network (both transmission and distribution). Following the transaction, Bord Gáis Éireann will be fully ownership unbundled.

## Wholesale markets

## **Electricity**

Since 2007, the SEM has been the electricity market for Ireland and Northern Ireland. The SEM includes a centralised all-island gross mandatory pool market. All electricity is bought and sold through a market clearing mechanism. Generators receive the System Marginal Price (SMP), payments through a capacity mechanism and constraint payments.

SMP closely follows the gas price, since gas is the key fuel for electricity generation. In recent years, the average SMP fell from over EUR 80/MWh in October 2008 to under EUR 40/MWh for most of 2009, and then increased to over EUR 50/MWh in 2010 and EUR 60/MWh in 2011 and 2012. <sup>276</sup>

To help ensure that there is no abuse of market power, the Regulatory Authorities' Market Modelling Group has the power to require any market participant deemed able to independently influence market prices to issue "Directed Contracts". Currently, only ESB Power Generation is required to sell Directed Contracts (2013)<sup>277</sup> since they have circa 45% share of the SEM spot market. Without action the spot market would be quite highly concentrated; Directed Contracts are set to achieve a concentration level of 1.150.

The close relationship between SMP and the biggest fuel input (gas) is an indication that there has been no significant exercise of market power in SEM.

The Moyle and East-West interconnectors make capacity available through explicit long-term, daily and intraday auctions. "Use-it-or-sell-it" conditions apply to long-term capacity.

European market integration creates some unique challenges for Ireland. The EU Target Model was not designed with centralised pool markets like the SEM in mind. The more common European market design is decentralised bilateral trading with self-dispatch and the Target Model generally

<sup>&</sup>lt;sup>274</sup> CER/13/161, CER's ITO Certification Decision.

<sup>&</sup>lt;sup>275</sup> There was no update on progress by 17 March 2014.

<sup>&</sup>lt;sup>276</sup> CER, 2012 Ireland National Report to the European Commission, July 2013.

<sup>&</sup>lt;sup>277</sup> <u>http://www.allislandproject.org/en/market\_decision\_documents.aspx?article=2d921c38-f249-49ea-aba7-a78e04f9a99c</u>.

reflects this. Therefore the change required to implement the Target Model with SEM is substantially greater than for most other Member States. ACER and ENTSO-E therefore proposed to include for Ireland a two year transitional period in the Network Code on Capacity Allocation and Congestion Management (CACM). The SEM Committee has committed itself to implementing the Target Model by the end of 2016. This commitment is not only based on compliance with EU legal requirements. The SEM Committee views the implementation of the Target Model as a positive development that will bring significant benefits, especially in light of the developments that have occurred since the creation of the SEM in 2007. These include increased interconnection with the market in Great Britain, increased generation from renewable resources and the potential for more active involvement of the demand side in market arrangements.<sup>278</sup>

#### Gas

Ireland currently sources most of its gas from Great Britain. Great Britain provided 91% of Ireland's gas demand in 2012/13.<sup>279</sup> There is production at the Kinsale and satellite fields, but it is declining. The Southwest Kinsale Gas Field was adapted for gas storage in October 2001.

In the 10 year forecast, the Irish gas market is expected to continue to be heavily reliant on interconnection with the UK market for the foreseeable future, and gas demand is forecast to rise by 12% over the period to 2021/22.<sup>280</sup> The capacity limits of Moffat are expected to be approached in 2014/15 and any subsequent years that Corrib is delayed. Bord Gáis Networks and Gaslink have recommended reinforcements in Scotland to improve capacity, and the EU has identified this reinforcement project in the UK as a potential "Project of Common Interest" in improving supply to Ireland. To decrease Ireland's dependence on import from Britain, potential new sources of supply will include the Corrib gas field, which is currently expected to begin commercial flows in 2015, and the Shannon Liquefied Natural Gas (LNG) terminal (also a "Project of Common Interest"), which could become operational in 2017. Unfortunately development of both projects has been significantly delayed due to planning permission issues with the Corrib field and disputes over levies that Shannon LNG should pay (on this latter issue, the High Court in Ireland found in favour of the CER).

Most gas for Ireland is sourced from Great Britain's National Balancing Point (NBP) which is characterised by high levels of liquidity. Trades in Ireland can take place at a notional balancing point called the Irish Balancing Point (IBP), however the IBP is extremely illiquid. Elements of the revised guidelines on Congestion Management Procedures (CMP<sup>281</sup>) were implemented on the GB-Irish interconnectors on 1 October 2013 (some other elements remain to be implemented), and the network code on Capacity Allocation Mechanisms (CAM<sup>282</sup>) is required to be implemented by November 2015.<sup>283</sup> Since 2008, the two regulators on the island (CER and NIAUR) have been working together to develop Common Arrangements for Gas (CAG). This would allow the gas transmission systems in Ireland and Northern Ireland to operate on an all-island basis.<sup>284</sup> However, there have

<sup>&</sup>lt;sup>278</sup> <u>http://www.allislandproject.org/en/wholesale\_overview.aspx?article=d3cf03a9-b4ab-44af-8cc0-ee1b4e251d0f</u>.

<sup>&</sup>lt;sup>279</sup> <u>http://www.gaslink.ie/media/GaslinkNetworkDevlopmentPlan20131.pdf</u>.

<sup>&</sup>lt;sup>280</sup> http://www.gaslink.ie/media/GaslinkNetworkDevlopmentPlan20131.pdf.

<sup>&</sup>lt;sup>281</sup> http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:231:0016:0020:en:PDF.

<sup>&</sup>lt;sup>282</sup> http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:273:0005:0017:EN:PDF.

<sup>&</sup>lt;sup>283</sup> <u>http://www.gaslink.ie/media/GaslinkNetworkDevlopmentPlan20131.pdf</u>.

<sup>&</sup>lt;sup>284</sup> http://www.niassembly.gov.uk/Documents/RaISe/Publications/2013/north\_south/13213.pdf.

been challenging issues raised including physical capacity limitations to the operation of a single physical balancing regime, so implementation has been delayed.

# **Retail markets**

# **Electricity**

In electricity, Electric Ireland continues to be the largest supplier in terms of customers across all segments and in terms of energy supplied in the domestic (residential) and Large Energy User (LEU) markets. The domestic market share (MWh) of Electric Ireland is just under the threshold at which it was deregulated at 60%, while CMP measures introduced in 2013 will require review to ensure that they remain compatible with CAM rules when introduced in 2015.



Figure 3: Electricity price change by component 2008 – 2013 (source: Eurostat, energy statistics)

# Gas

The incumbent supplier in the gas retail market is Bord Gáis Energy, who is the largest supplier. The Irish gas market has not yet been price deregulated as CER judge that Bord Gáis is still in too dominant a position (January 2014). The threshold market shares for deregulation are 60% with rebranding and the 55% without rebranding. Although the market is close to these levels, it has not yet reached that point, suggesting that retail competition is still too low in Ireland.

CER is leading the implementation of the smart meters roll-out. Phase 1 consisted of trials and cost benefit analysis carried out from 2008 to 2011. ESB Networks installed 10,000 meters and provided over 1000 in-home displays as part of the smart metering trial.<sup>285</sup> In July 2012, CER announced its decision to approve the rollout of smart meters. Since then, CER has worked with stakeholders to formally initiate Phase 2. While not yet decided, the roll-out is expected between circa 2016 and 2019.

<sup>&</sup>lt;sup>285</sup> <u>http://www.esb.ie/main/sustainability/smart-meters.jsp</u>.

#### Consumers

Irish consumers assess the performance of their retail electricity and gas markets above the EU average with the difference being very small for the latter (75.1 points compared to 72.0 and 74.6 compared to 74.1<sup>286</sup>), which corresponds to 13<sup>th</sup> and 14<sup>th</sup> place in the EU ranking. In addition, both markets show a score slightly above the one seen for the average of all domestic services markets (electricity is in the 14<sup>th</sup> position and gas in the 15<sup>th</sup> position out of 31 markets). While the performance of electricity market has stayed relatively stable since 2012, the gas market has decreased its score by 2.3 points. Both markets are assessed particularly well on the ease of switching (electricity 3<sup>rd</sup> and gas 5<sup>th</sup> highest in the EU) and switching gas providers/tariffs is 5<sup>th</sup> highest in the EU.<sup>287</sup>

Competition continued to develop in the electricity and gas retail markets in 2012 and switching rates were above 10% in both markets. The total number of switches completed in the electricity market in 2012 was 252,056 (a decline of 25% from 2011 levels).<sup>288</sup> While good by EU standards, this still means a large number of customers have never switched. To support switching, CER has set-up an accreditation process for price comparison websites.<sup>289</sup>

CER's Energy Customers Team<sup>290</sup> acts as single contact point providing consumers with information on electricity and gas. They also provide a free dispute resolution service. In 2012 the Energy Customers Team received 3,067 contacts from customers, an increase of almost 11% on 2011.<sup>291</sup> The reasons that customers contact the ECT vary, from straightforward requests for information to complex complaints. Although complex complaints made up just 10% of the customer contacts in 2012, they made up the majority of the team's work.

In 2012, CER set out the minimum service levels that suppliers must provide their customers with. CER has also put obligations on suppliers to ensure that disconnections are a last resort. Prior to disconnection, all suppliers are required to offer customers a free Pay-As-You-Go meter.<sup>292</sup>

#### Infrastructure

The Planning Board has been appointed as the one-stop-shop (OSS) for the permitting of energy infrastructure Projects of Common Interest (PCI).

#### Electricity

The new 500 MW EirGrid East-West electricity interconnector to the UK began full commercial operation in May 2013. It received an EU funding of EUR 110 million from the TEN-E Initiative. Investment in the onshore electricity network has also been necessary, for the connection of expanding wind power as well as system security and efficient distribution.

<sup>&</sup>lt;sup>286</sup> However the difference is not statistically significant.

<sup>&</sup>lt;sup>287</sup> 10th Consumer Markets Scoreboard,

http://ec.europa.eu/consumers/consumer\_evidence/consumer\_scoreboards/10\_edition/index\_en.htm <sup>288</sup> CER, 2013 Ireland National Report to the European Commission, July 2013.

<sup>&</sup>lt;sup>289</sup> <u>http://www.cer.ie/docs/000884/cer11144.pdf</u>.

<sup>&</sup>lt;sup>290</sup> http://www.cer.ie/customer-care.

<sup>&</sup>lt;sup>291</sup> http://www.cer.ie/docs/000451/CER13288%20ECT%20Annual%20Report%202012.pdf.

<sup>&</sup>lt;sup>292</sup> CER, 2012 Ireland National Report to the European Commission, July 2013.

Ireland has a grouping process or "Gate" process for connecting the large number of renewable generators, and the next round to be developed will be connected under Gate 3 which is intended to help meet Ireland's 20:20:20 targets from an electricity perspective – in other words to meet an Irish Government target of 40% of Ireland's electricity consumption coming from renewable generation by 2020. The CER is commencing the process of reviewing the connection and access policy for renewable and non-renewable generators to the grid, post Gate 3.

CER authorised over a billion euros of investment in the electricity transmission system over the years 2011 to 2015.<sup>293</sup> To facilitate renewables integration and improve flexibility, several PCIs are on the scope. Some PCIs regard further interconnections with UK (Northern Ireland and Great Britain), and possibly France; Hydro Storage is also addressed under PCI scheme in connection to these developments.

Another cluster of PCIs will facilitate connecting generation from renewable energy sources, both in Ireland and the UK, such as an offshore interconnected electricity grid based on renewable resources (wind, wave and tidal, connecting 3200 MW) consisting of 850 km of HVDC interconnectors with a capacity of 500-1000MW in the northern area.

# Gas

To meet Third Package requirements, in 2013 Gaslink as TSO has submitted a draft Network Development Plan<sup>294</sup> to the CER which was submitted to ENTSO-G. The network plan found that high pressure transmission system currently have sufficient capacity to meet forecast gas demand, although the southern part of the network is anticipated to require reinforcement in the mid-to long term.

In order to provide for more flexibility to the gas supply, a cluster of Project of Common Interest will address implementing of reverse flows between Ireland and UK -as in Moffat-, increased storage in Northern Ireland and the LNG plant in Shannon. The need for greater interconnection (through reinforcements in GB) and LNG investment is highlighted elsewhere in this report.

# Security of supply

CER has a duty to monitor the security of supply of electricity and can take such measures as it considers necessary to oblige the regulated companies to take action. Given the significant reliance on natural gas, CER requires gas generators to hold fuel stocks for between 3 and 5 days.

# **Key indicators**

Electricity				Gas				
Number	of	companies	5	Number	of	entities	bringing	13
representing at least 95% of net				natural gas into country				

<sup>&</sup>lt;sup>293</sup>http://www.ceer.eu/portal/page/portal/EER\_HOME/EER\_PUBLICATIONS/NATIONAL\_REPORTS/National%20 Reporting%202013/NR\_En/C13\_NR\_Ireland-EN.pdf.

<sup>&</sup>lt;sup>294</sup> http://www.gaslink.ie/media/GaslinkNetworkDevlopmentPlan20131.pdf.

power generation			
Number of main power- generation companies	5	Number of main gas entities	5
Market share of the largest power-generation company	55%	Market share of the largest entity bringing natural gas	42%
Number of electricity retailers	6	Number of retailers selling natural gas to final customers	8
Number of main electricity retailers	4	Number of main natural gas retailers	6
Switching rates	10%*	Switching rates for gas (entire retail market)	10%*
Regulated prices for households – electricity	No	Regulated prices for households – gas	Yes
Regulated prices for non- households – electricity	No	Regulated prices for non- households – gas	Yes
HHI in power-generation market	1,150	HHI in gas supply market	N/A
HHI in electricity retail market	4,759	HHI in gas retail market	4,780
Electricity market value <sup>295</sup> (bn€)	3.207	Gas market value <sup>31</sup> (bn€)	0.800
Installed generation capacity (MW, 2011)	8,791		
Peak demand (MW)	4,589		
Number of smart meters installed	10,000		

\* Domestic 10% across gas and electricity

<sup>&</sup>lt;sup>295</sup>Market value is an estimation of the size of the retail electricity and gas markets. It is calculated using data on electricity and gas consumption in the household and non-household sectors (average bands) and annual average retail prices.