MOODY'S INVESTORS SERVICE

CREDIT OPINION
29 May 2020

Update

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RATINGS

Electricity Supply Board (ESB)

Domicile	Dublin, Ireland
Long Term Rating	A3
Type	LT Issuer Rating
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Electricity Supply Board (ESB)

Update to credit analysis following 2019 results

Summary

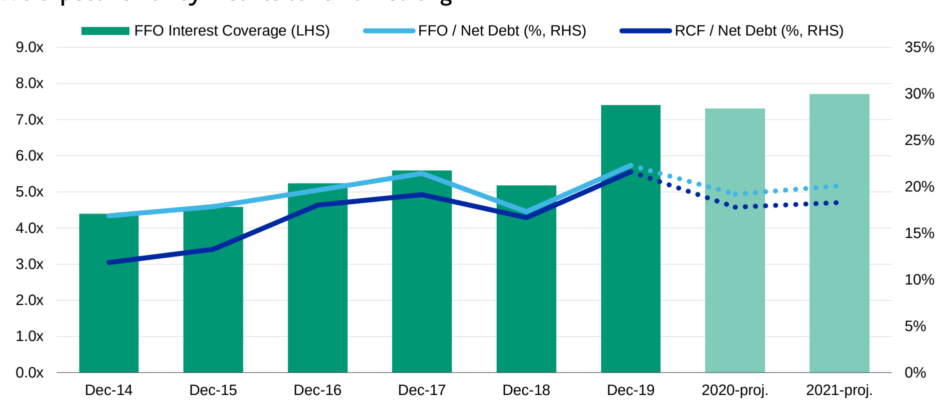
Electricity Supply Board (ESB)'s robust credit quality is supported by: (1) the significant share of earnings derived from regulated transmission and distribution in the Republic of Ireland (RoI, A2 stable) and Northern Ireland and the low business risk profile of these businesses; (2) its solid financial profile, as reflected in its funds from operations (FFO)/net debt of 20.4% over the last three years and sound liquidity; and (3) the likelihood of support from its government shareholder, should it become necessary.

ESB's credit quality is, however, constrained by (1) the higher business risk profile of its generation activities, which contributed 23% of 2019 EBITDA; (2) lower capacity revenue following market reforms in October 2018; and (3) the challenges of a large capital investment programme, although this is concentrated in lower-risk regulated activities.

ESB faces several near-term uncertainties. Covonavirus-related reductions in demand are likely to reduce network cash flow in 2020, although under the Irish regulatory framework the majority if these will be recovered beginning in October 2021. In addition, ESB Networks will receive its final determination for the 2021-25 period in the third quarter of 2020, and this will have a significant influence on ESB's profitability over the period.

Exhibit 1

We expect ESB's key metrics to remain strong



Moody's projections (proj.) are Moody's opinion and do not represent the views of the issuer. Following the company's adoption of IFRS15, customer contributions are included within Moody's FFO, increasing metrics from 2018 onwards.
Sources: Moody's Financial Metrics, Moody's Investors Service forecasts

Credit strengths

» Around 70% of earnings from monopoly networks businesses operating under consistent and transparent regulatory frameworks

» Solid financial performance

» Prudent financial policy

» Diversified funding sources and sound liquidity

Credit challenges

» Uncertainty around PR5 determination, expected in Q3/2020

» Relatively higher business risk profile of generation and wholesale activities,

» Large capital investment programme

Rating outlook

The stable outlook on ESB's ratings reflects our expectation that ESB will maintain credit metrics that are strongly-positioned for the current rating, supported stable cash flow and a supportive financial policy.

Factors that could lead to an upgrade

» FFO interest cover and FFO/net debt maintained above 4.5x and 20%, respectively, on a sustained basis,

» Any upgrade would take into account the rating of the Republic of Ireland

Factors that could lead to a downgrade

» FFO interest cover persistently below 3.5x,

» FFO/net debt below the mid-teens in, percentage terms,

» A material debt-funded acquisition or capital investment that erodes ESB's financial flexibility or increases the proportion of non-regulated activities within ESB's business mix,

» Any downgrade would take into account the rating of the Republic of Ireland

Key indicators

Exhibit 2

Electricity Supply Board (ESB)

	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	2020-proj.	2021-proj.
FFO Interest Coverage	4.6x	5.2x	5.6x	5.2x	7.4x	7.3x	7.7x
Net Debt / Fixed Assets	53.9%	51.0%	50.1%	51.1%	51.4%	51.8%	50.2%
FFO / Net Debt	17.9%	19.6%	21.4%	17.3%	22.3%	19.2%	20.1%
RCF / Net Debt	13.3%	18.0%	19.2%	16.7%	21.6%	17.8%	18.3%

All ratios are based on Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Moody's Projections (proj.) are Moody's opinion and do not represent the views of the issuer. For definitions of Moody's most common ratio terms please see the accompanying User's Guide.
Sources: Moody's Financial Metrics, Moody's Investors Service estimates

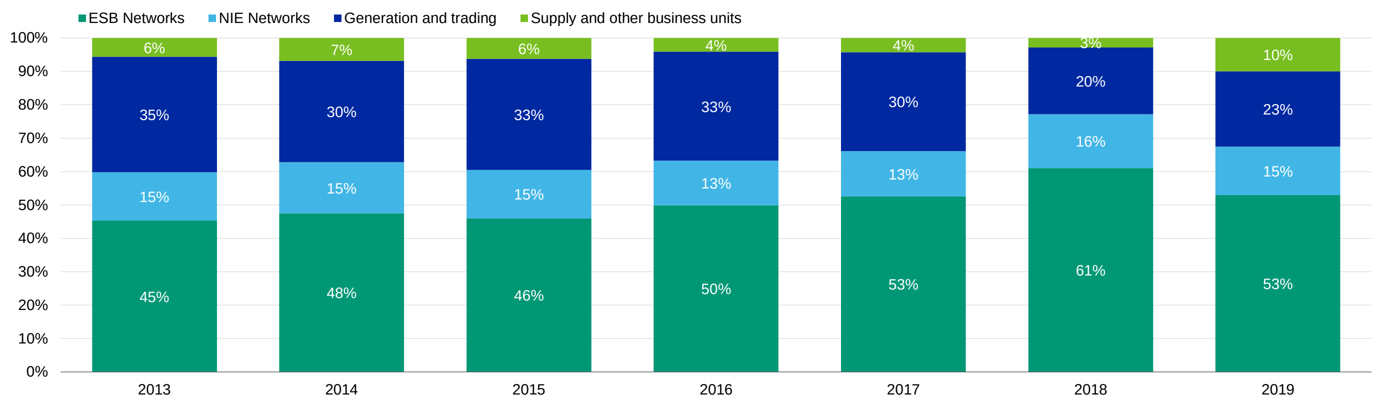
Profile

Electricity Supply Board (ESB) is the former incumbent vertically integrated electric utility in the RoI. It holds leading market positions in power generation and electricity supply, and is the monopoly owner of electricity distribution and transmission networks across RoI and Northern Ireland.

The group's regulated businesses contribute the most of its earnings. Across RoI and Northern Ireland, ESB's network assets (which include over 229,000 km of power lines) had a Regulatory Asset Base (RAB) of €8.1 billion in RoI and £1.6 billion in NI as of the end of December 2019. In addition, the group had a generation market share of 30% across the all-island Irish Single Electricity Market in 2019 and served 1.4 million electricity and gas customer accounts across Ireland, which equated to a 34% retail market share.

Exhibit 3

Regulated networks earnings accounted for two-thirds of ESB's EBITDA in 2019



EBITDA breakdown before exceptional items and impairments. Networks earnings include the amortisation of supply contributions following the company's adoption of IFRS15.
Source: Company reports

ESB is majority owned (95.7%) by the Government of Ireland through the Minister for Public Expenditure and Reform (85.6%) and the Minister for Communications, Climate Action and Environment (10.1%). The remaining 4.3% stake is held by an employee share ownership trust.

Detailed credit considerations

Solid financial performance

ESB's FFO/net debt increased to 22.3% in 2019 from 17.3% in 2018. Following the refinancing of older expensive debt with new issuances in 2019, interest expense fell from €232 million to €200 million, while FFO has increased in line with improved EBITDA, which grew to €1.3 billion in 2019 from €1.1 billion in 2018.

Following adoption of the IFRS 15 accounting standard in 2018, customer contributions toward capital expenditure are included in cash from operations and Moody's FFO. This change increased ESB's FFO/Net Debt by 2.6 percentage points in 2019 and 2.0 percentage points in 2018, compared to previous years.

We estimate that gearing, as measured by Net Debt / Fixed Assets, will remain broadly stable, with planned capex above €1 billion per annum offset by the growing asset base.

Around 70% of earnings from price-regulated networks business supported by consistent and transparent regulation

67% of ESB's EBITDA in 2019 came from the group's price-regulated transmission and distribution businesses. Regulated revenue, cost allowances and operational incentives are subject to multiyear price controls imposed by regulators in RoI (Commission for the Regulation of Utilities, CRU) and in Northern Ireland (Utility Regulator, UR).

Exhibit 4

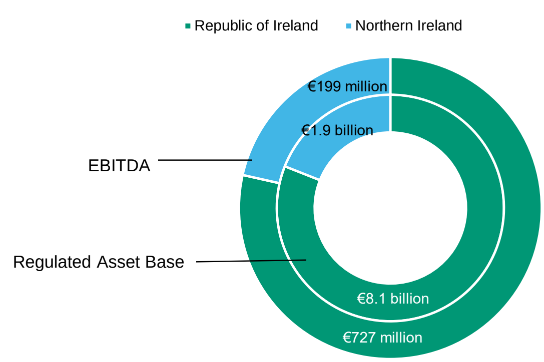
Price control summary

Republic of Ireland	
Regulated Business	ESB Networks
Regulator/Price Control	CRU / PR4
Price control term	Jan 2016 - Dec 2020
Allowed return	4.95% pre-tax real
Regulated Asset Base	€8.1 billion (2019)
Northern Ireland	
Regulated Business	NIE Networks
Regulator/Price Control	Utility Regulator / RP6
Price control term	Oct 2017- Mar 2024
Allowed return	3.18% vanilla real
Regulated Asset Base	£1.6 billion / €1.9 billion (2019)

Source: ESB, CRU, UR

Exhibit 5

Relative size of networks



Source: ESB

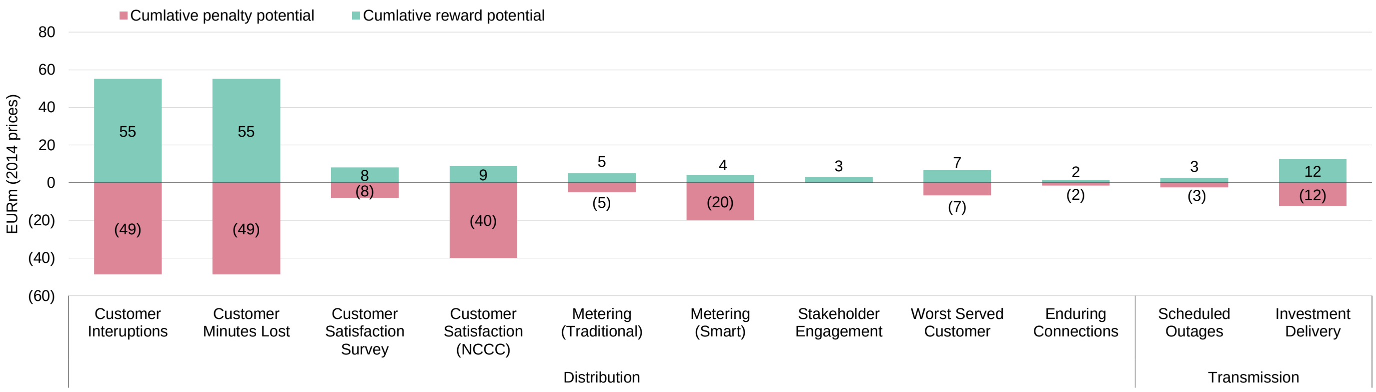
The current five-year regulatory period in RoI, PR4, represents an extension of a consistent and predictable regulatory framework, with no material changes to the regulatory principles implemented in previous price controls. CRU set an allowed cost of capital of 4.95% (pretax, real), and there is potential upside from incentive mechanisms.

In May 2018, the CRU published its decision on reporting and incentives under PR4, which confirmed the financial rewards/penalties available to ESB over the remaining years of the control period until the end of 2020. In total, the potential financial incentives available range from penalties of €194 million to rewards of €163 million (both 2014 prices), with over half of the potential rewards/penalties relating to continuity of supply incentives (measured by customer interruptions and minutes lost). This represents around +/-1% of the RAB per annum for the distribution network and +/- 0.1% of RAB per annum for transmission over the three years 2018-20.

Exhibit 6

Financial incentives are concentrated in the distribution network business

Potential rewards and penalties in PR4, € millions (2014 prices)



Notes: "Customer satisfaction NCCC" refers to the incentive relating to the National Customer Contact Centre (NCCC) targets; (2) the "Investment delivery" incentive includes the "Issue PIP" and "Construction and Energisation" incentives that were available in the first two years of PR4.

Source: CRU, Moody's Investors Service

Allowed revenue for 2020 has been reduced by net €7 million to reflect operational underperformance in 2018, the first year PR4 incentives were operational. The largest impacts were -€4.9 million for customer minutes lost and -€4.0 million for customer interruptions, partially offset by +€1.3 million for customer satisfaction (NCCCC) and +€0.9 million for worst served customers, as well as a number of smaller items.

The next price control in RoI, PR5, begins on 1 January 2021 and runs for five years. ESB submitted their business plan to the CRU in November 2019. We expect a draft determination to published in the second quarter of this year and a final determination in Q3. These are likely to incorporate a significant cut in allowed returns, as we have seen in recent regulatory determinations across Europe.

We regard the current five-year regulatory period in NI, RP6, as challenging for Northern Ireland Electricity Networks (NIE). Following an appeal of the UR's original decision, NIE received allowance for direct network investment capex that was 5.8% lower than its business plan and the allowed return of 3.18% (vanilla real, equivalent to 3.8% on a pretax basis) was a significant cut from the prior period.

More positively, the allowed cost of debt in the RP6 allowed return covers the actual cost of existing debt and an allowance for the cost of new debt is substantially adjusted to reflect the expected prevailing market rate, as per the iBoxx BBB corporate index, at the time of issue of new debt, and (2) the UR increased NIE's operating expenditure allowances by £51 million, meaning that the final operating expenditure allowance is just 1.8% below NIE's business plan, compared with 13.7% below in the draft determination.

Power generation and supply are higher risk

Most of the group earnings not derived from regulated networks come from ESB's power generation business, which accounted for 23% of EBITDA in 2019. Retail energy supply and other businesses contributed 10% of 2019 EBITDA. Cash flow from these segments are affected by volatility in electricity prices and demand.

Power prices in Ireland decreased to an average of €50/MWh in 2019, down from €65/MWh reflecting fewer outages at key plants. Spark spreads for gas increased in 2019 relative to 2018, but the spread for coal decreased. Since the beginning of 2020, prices have fallen below €30/MWh.

As part of the I-SEM market reforms in October 2018, the previous availability-based capacity payment mechanism was replaced with a series of competitive capacity auctions, reducing the revenue available to electricity generators by around €180 million (around 35%) per annum. The shift to competitive capacity auctions has resulted in older "out-of-merit" generators becoming uneconomic and plant closures. Since the I-SEM went live, ESB has closed a number of its older plants including: the steam turbine unit at Aghada (221 MW), the Marina OCGT plant (78 MW), and the gas plant at North Wall (104 MW). In November 2019, ESB announced that it would cease the generation of electricity from burning peat by the end of 2020 (at Lough Ree 91 MW and West Offaly 137 MW) and will cease coal-fired generation at Moneypoint (855 MW) by 2025.

Exhibit 7
Most of ESB's incumbent plant has been successful, but unsuccessful plants are now closing
Results for ESB generating units in I-SEM capacity auctions

		2018-19 T-1	2019-20 T-1	2022-23 T-4	2020-21 T-1	2021-22 T-2	2023-24 T-4
Date auction held		Dec-17	Dec-18	Mar-19	Nov-19	Dec-19	Apr-20
Capacity delivery dates		Oct 2018 - Sept 2019	Oct 2019 - Sept 2020	Oct 2022 - Sept 2023	Oct 2020 - Sept 2021	Oct 2021 - Sept 2022	Oct 2023 - Sept 2024
Clearing price							
Main auction	€/MW/year	41,800	40,646	46,150	46,150	45,950	46,149
Locational constraints	€/MW/year	42,990	50,270	N/A	N/A	N/A	N/A
Existing capacity							
Qualified de-rated capacity	MW	3,594	3,201	3,112	3,225	2,861	2,798
Capacity awarded	MW	3,295	3,201	2,756	2,732	2,596	2,579
% successful	%	92%	100%	89%	85%	91%	92%
New capacity							
Qualified de-rated capacity	MW	20	6	711	22	11	310
Capacity awarded	MW	0	0	489	11	0	11
% successful	%	0%	0%	69%	50%	0%	4%

Higher clearing prices for areas with locational constraints are only shown where ESB was awarded a higher price. A higher price was awarded for North Wall in the 2018-19 T-1 auction and for Shellybanks in the 2019-20 T-1 auction, to satisfy the Greater Dublin locational constraint. Greater Dublin's locational constraints were satisfied at the main clearing price for the 2022-23 T-4 auction and later auctions.
Sources: SEMO, Moody's Investors Service

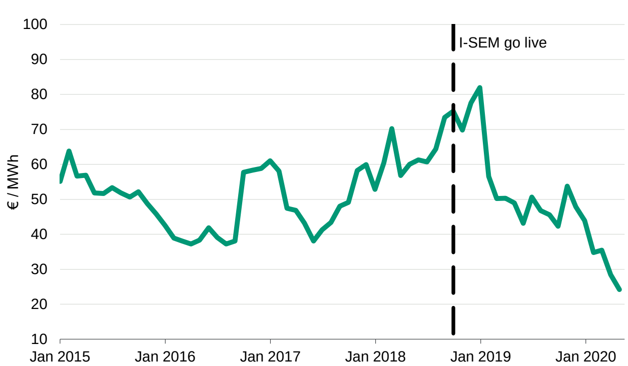
As its old thermal plants close, ESB has invested to expand its renewable generation portfolio. The 89 MW Oweninny wind farm, a joint venture with Bord na Mona, began generating at the end of 2019 and the 114 MW Grousemount wind farm is due to be commissioned in the summer of 2020. ESB has announced further joint ventures with Coillte, EDF (A3 negative) and Equinor ASA (Aa2 negative) focused on both onshore and offshore wind opportunities in Ireland and Great Britain.

Alongside capacity payments, ESB can also generate revenue through the provision of ancillary services, which are needed to manage increasing intermittent renewable generation. The overall ancillary service market is growing on a glide path from an initial pot of €75 million in 2016 up to a cap of €235 million in 2020.

Limited risk from coronavirus outbreak

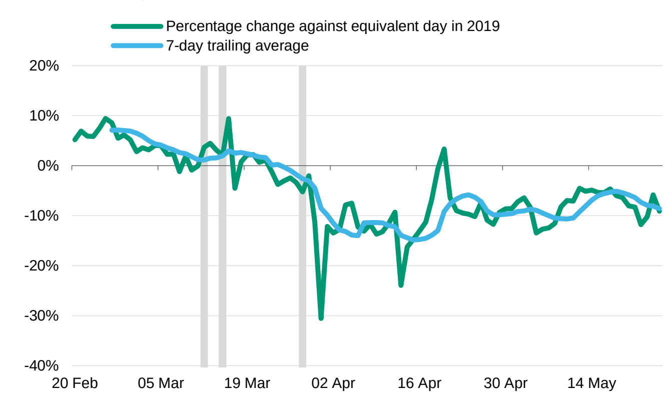
Ireland began initial lockdown measures in early March, closing schools on 12 March and pubs and restaurants on 15 March, before issuing a full lockdown on 27 March. Electricity demand has fallen by around 10% when compared to last year, a smaller fall than many European countries, in part due to the significant electricity usage of the data center and pharmaceutical industries which have continued to operate during the crises. Electricity prices have reached multiyear lows, largely because of the declining price of gas.

Exhibit 8
Irish electricity prices have fallen sharply
I-SEM day-ahead electricity price, monthly averages



Sources: SEMO, Moody's Investors Service

Exhibit 9
Demand has fallen by around 10%
I-SEM electricity demand



Note: Comparisons near 12 April 2020 and 21 April 2019 are distorted due to the different timing of the Easter bank holidays. Grey bars denote the various stages of lockdown.
Sources: ENTSO-E, Moody's Investors Service

We believe ESB has relatively low exposure to the outbreak given its high proportion of earnings from regulated networks. Although the revenues of ESB's networks are directly related to electricity consumption, we estimate that each 1% reduction would reduce 2020 FFO by around £13 million and FFO/net debt by less than 0.2 percentage points. Revenue under-recoveries in the year to September 2020 will be recovered starting in October 2021.

While the outbreak will negatively impact the generation business, ESB has limited merchant exposure. There may also been some downside exposure through ESB's retail divisions, where business failures and unemployment are likely to increase bad debt, particularly from SMEs. In addition, some customers may delay paying their bills, resulting in working capital outflows for ESB. In ROI, a moratorium on domestic disconnections is in place until at least 16 June 2020, which may encourage households to prioritise the payment of other bills.

Prudent financial policy means leverage will remain moderate despite significant capital expenditure programme

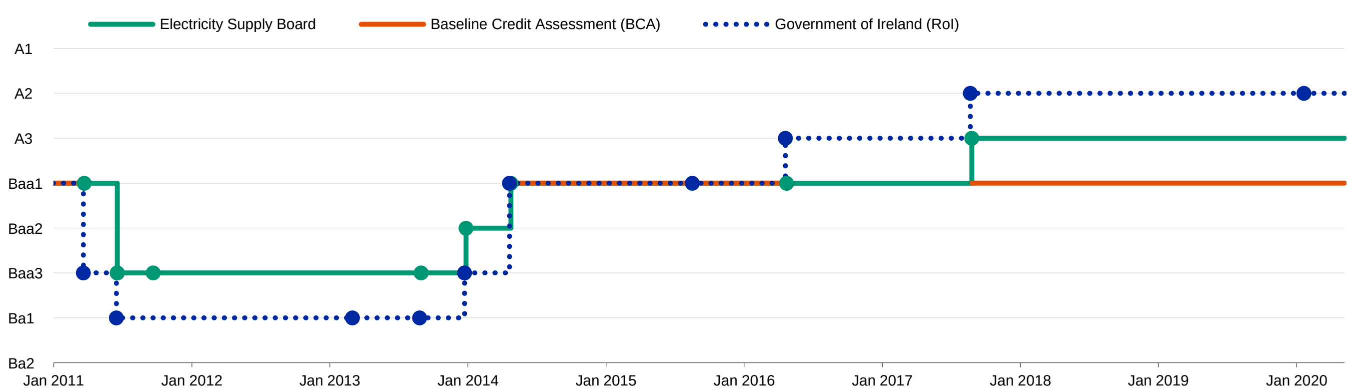
ESB's dividend policy, agreed with the Irish Government in 2013, is to target a payout ratio of 40% of normalised profit after tax. In January 2015, ESB completed the payment of €421 million of special dividends to its shareholders, which it agreed in 2013 to fund through the sale of non-core assets. The company will need regular access to capital markets to fund its investment programme.

We expect the Irish government to act in a flexible manner and to support ESB in its explicit aim to sustain a standalone minimum Baa1 rating (before uplift for government ownership). To this end, we expect the company to remain moderately levered (with net debt/fixed assets below 60%) for the foreseeable future.

Government-Related Issuer methodology considerations

ESB is 95% owned by the Irish government, and as such we consider the company's rating according to our methodology for Government-Related Issuers (GRIs), published in February 2020. At A3, ESB's rating is based on our evaluation of the company's standalone credit strength, the Baseline Credit Assessment (BCA) of baa1, and incorporates a one-notch uplift for potential government support. The stable outlook on ESB's A3 ratings mirrors the stable outlook on the government's bond rating.

Exhibit 10
ESB's rating remains one notch above its BCA and one notch below the sovereign rating
Moody's rating history



Dots indicate rating action dates, including changes of outlook and affirmations.
Source: Moody's Investors Service

ESG considerations

Moderate risk from decarbonisation of the power sector

The European Union has committed to reduce greenhouse gas emissions by 40% from 1990 levels by 2030 and the Government of Ireland has set a target of 40% of electricity consumption to come from renewable energy by 2020 (Ireland achieved 33.2% in 2018). These targets are designed to significantly decarbonise the regional/national economy. Achieving these reductions will create a variety of risks and opportunities for ESB's generation and trading business.

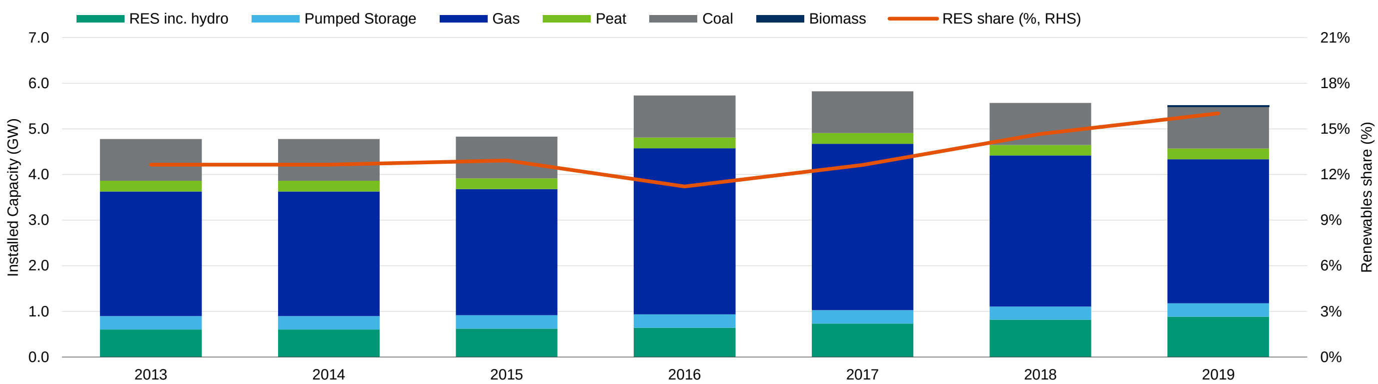
In June 2019, the Government of Ireland published its Climate Action Plan which set out the measures required to meet the 2030 targets and to achieve net zero emissions by 2050. The plan includes a target of 70% of electricity generation from renewable sources, 1 million electric vehicles and 600,000 heat pumps installed; all by 2030.

We believe ESB is moderately well positioned to manage the challenges related to these targets. Around 70% of ESB's EBITDA comes from regulated networks, which will provide resilient earnings under a variety of decarbonisation scenarios. In its generation business, renewables accounted for 16% of generation capacity in 2019, up from 13% in 2013. We expect the majority of ESB's non-networks capital expenditure to be focused on renewables, some of which should benefit from the Government's delayed Renewable Electricity Support Scheme, with the initial auction occurring in summer 2020. ESB is targeting 50% of its electricity production from renewables by 2030.

Exhibit 11

We expect the share of renewables to increase as older polluting plants close and as ESB continues its capex programme

Generation capacity by technology



Sources: Company reports, Moody's Investors Service

Liquidity analysis

ESB has a sound liquidity position. As of 31 December 2019, the company reported €125 million of cash and cash equivalents and a €1.40 billion revolving credit facility, which was recently extended to mature no sooner than 2025.

ESB has since raised a £325 million bond in January 2020 to repay the existing March 2020 maturity. The company has approximately €150 million of remaining maturities in 2020.

Rating methodology and scorecard factors

Our rating assessment of ESB is based on our methodology for Regulated Electric & Gas Networks, published in March 2017, and our Government-Related Issuers methodology, published in February 2020. While the methodology grid maps ESB to A2 based on three years of historical metrics and A1 based on our forward view of financial metrics, the BCA of baa1 is lower. This reflects the additional risk compared with peers rated under the methodology posed by the material contribution to group earnings from unregulated businesses, such as power generation and electricity supply.

Exhibit 12

Rating factors

Electricity Supply Board (ESB)

Regulated Electric and Gas Networks Industry Grid [1][2]	Current FY 31/12/2019		Moody's 12-18 Month Forward View As of May 2020 [3]	
Factor 1 : Regulatory Environment and Asset Ownership Model (40%)	**Measure**	**Score**	**Measure**	**Score**
a) Stability and Predictability of Regulatory Regime	Aa	Aa	Aa	Aa
b) Asset Ownership Model	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Ability and Timeliness)	A	A	A	A
d) Revenue Risk	Aa	Aa	Aa	Aa
Factor 2 : Scale and Complexity of Capital Program (10%)				
a) Scale and Complexity of Capital Program	Baa	Baa	Baa	Baa
Factor 3 : Financial Policy (10%)				
a) Financial Policy	Baa	Baa	Baa	Baa
Factor 4 : Leverage and Coverage (40%)				
a) FFO Interest Coverage (3 Year Avg)	6.0x	Aa	7.2x - 7.8x	Aaa
b) Net Debt / Fixed Assets (3 Year Avg)	50.9%	A	49% - 53%	A
c) FFO / Net Debt (3 Year Avg)	20.4%	A	19% - 21%	A
d) RCF / Net Debt (3 Year Avg)	19.2%	A	17% - 19%	A
Rating:				
Scorecard-indicated Outcome from Grid Factors 1-4		A2		A1
Rating Lift	**0**	**0**	**0**	**0**
a) Scorecard-indicated Outcome from Grid		A2		A1
b) Actual Rating Assigned				baa1
Government-Related Issuer	**Factor**			
a) Baseline Credit Assessment	baa1			
b) Government Local Currency Rating	A2 Stable			
c) Default Dependence	High			
d) Support	Moderate			
e) Final Rating Outcome	A3			

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations; [2] As of 31/12/2019; [3] This represents Moody's forward view, not the view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Source: Moody's Investors Service

Ratings

Exhibit 13

Category	Moody's Rating
ELECTRICITY SUPPLY BOARD (ESB)	
Outlook	Stable
Issuer Rating	A3
Senior Unsecured MTN -Dom Curr	(P)A3
ST Issuer Rating -Dom Curr	P-2
ESB FINANCE DESIGNATED ACTIVITY COMPANY	
Outlook	Stable
Bkd Senior Unsecured	A3

Source: Moody's Investors Service

Appendix

Exhibit 14

Peer comparison
Electricity Supply Board (ESB)

	Electricity Supply Board (ESB) A3 Stable		Gas Networks Ireland A3 Stable			National Grid Electricity Transmission plc A3 Stable		
(in EUR million)	FYE Dec-18	FYE Dec-19	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Mar-17	FYE Mar-18	FYE Mar-19
Revenue	3,368	3,641	498	473	487	4,439	4,158	3,353
EBITDA	1,174	1,353	333	311	307	1,780	1,525	1,387
Total Debt	5,773	5,873	1,492	1,412	1,355	7,781	7,642	7,532
Net Debt	5,544	5,748	1,431	1,361	1,238	7,764	7,631	7,515
(FFO + Interest Expense) / Interest Expense	5.2x	7.4x	6.9x	12.0x	12.1x	9.4x	10.9x	9.8x
Net Debt / Fixed Assets	51.1%	51.4%	55.7%	52.8%	48.1%	63.3%	59.8%	58.1%
FFO / Net Debt	17.4%	22.3%	18.8%	18.9%	20.3%	19.3%	16.2%	16.3%
RCF / Net Debt	16.8%	21.6%	16.4%	15.4%	16.3%	17.4%	7.0%	16.3%

All figures are calculated using Moody's estimates and standard adjustments.
Source: Moody's Financial Metrics™

Exhibit 15

Moody's-adjusted debt breakdown
Electricity Supply Board (ESB)

(in EUR million)	FYE Dec-18	FYE Dec-19
As Reported Total Debt	5,144	5,364
Pensions	506	509
Leases	123	0
Moody's Adjusted Total Debt	5,773	5,873
Cash & Cash Equivalents	(229)	(125)
Moody's Adjusted Net Debt	5,544	5,748

Source: Moody's Financial Metrics™

Exhibit 16

Moody's-adjusted funds from operations breakdown

Electricity Supply Board (ESB)

(in EUR million)	FYE Dec-18	FYE Dec-19
As Reported Funds from Operations (FFO)	794	1,125
Pensions	24	23
Leases	16	0
Capitalized Interest	(25)	(28)
Alignment FFO	48	(9)
Non-Standard Public Adjustments	109	172
Moody's Adjusted Funds from Operations (FFO)	965	1,283

Source: Moody's Financial Metrics™

Exhibit 17

Select historical Moody's-adjusted financial data

Electricity Supply Board (ESB)

(in EUR million)	FYE Dec-18	FYE Dec-19
INCOME STATEMENT		
Revenue	3,368	3,641
EBITDA	1,174	1,353
EBITDA margin %	34.9%	37.2%
EBIT	378	547
EBIT margin %	11.2%	15.0%
Interest Expense	232	200
Net income	56	297
BALANCE SHEET		
Total Debt	5,773	5,873
Cash & Cash Equivalents	229	125
Net Debt	5,544	5,748
Net Property Plant and Equipment	10,853	11,183
Total Assets	13,402	14,131
CASH FLOW		
Funds from Operations (FFO)	965	1,283
Cash Flow From Operations (CFO)	858	1,087
Dividends	35	43
Retained Cash Flow (RCF)	930	1,240
Capital Expenditures	(898)	(945)
Free Cash Flow (FCF)	(75)	100
INTEREST COVERAGE		
(FFO + Interest Expense) / Interest Expense	5.2x	7.4x
LEVERAGE		
FFO / Net Debt	17.4%	22.3%
RCF / Net Debt	16.8%	21.6%
FCF / Net Debt	-1.3%	1.7%
Debt / EBITDA	4.9x	4.3x
Net Debt / EBITDA	4.7x	4.2x
Net Debt / Fixed Assets	51.1%	51.4%

All figures are calculated using Moody's estimates and standard adjustments.
Source: Moody's Financial Metrics™

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