NewERA

Annual Financial Review

2016

2017

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Important Notice

This report (the "**Report**") has been prepared by the New Economy and Recovery Authority ("**NewERA**") for the purposes of providing an overview of the combined financial performance of the portfolio of designated bodies (as defined in the National Treasury Management Agency (Amendment) Act 2014 (the "**NTMA Act**") and listed individually below), (individually the "**Designated Body**" and collectively the "**Designated Bodies**" or the "**Portfolio**" or the "**Entities**") for their latest respective reported financial year (the **"Relevant Financial Year"**).

The Relevant Financial Year for each of the Designated Bodies for the purpose of this Report, collectively "**2016/17**" is the year ended on the following dates:

Bord na Móna ("**BnM**")	29 March 2017;
Coillte Cuideachta Ghníomhaíochta Ainmnithe ("**Coillte**")	31 December 2016;
EirGrid plc ("**EirGrid**")	30 September 2016;
Ervia	31 December 2016;
Irish Water ("**IW**")	31 December 2016; and
The Electricity Supply Board ("**ESB**")	31 December 2016.

This Report is issued by NewERA for information purposes. The contents of this Report do not constitute investment, legal, business or tax advice and should not be read as such. This Report has been prepared by NewERA on the basis of publicly available information relating to the Designated Bodies including, without limitation, their respective most recently published annual reports. With respect to each Designated Body, this Report does not include any financial information relating to periods after, or, save as expressly stated otherwise in this Report, take account of any developments subsequent to, the last day of the Relevant Financial Year of each of the relevant Designated Bodies. Financial performance measures utilised by NewERA and presented in this Report (see Appendix B) have been applied by NewERA on a standardised basis across each of the Designated Bodies; the financial performance measures applied by each entity for its own purposes may differ.

This Report also includes some general and non-exhaustive observations by NewERA arising out of its work with the Designated Bodies which may be of relevance to the historical and future performance of the Designated Bodies. These observations are made from a financial/commercial perspective only; any legal, regulatory and/or policy implications which may also be relevant to these observations are not addressed in this Report.

Under the NTMA Act, NewERA may also provide financial and commercial advice in relation to other State bodies when it is requested to do so by Government Ministers; any such bodies are not Designated Bodies for the purposes of the NTMA Act and this Report, while it does allude to them, does not cover any such body.

The accuracy and completeness of the information on which this Report is based has not been independently audited, tested or verified by NewERA and no undertaking, representation or warranty (express or implied) is given as to, and no responsibility or liability, whether in negligence or otherwise howsoever, is accepted by NewERA in respect of the fairness, reasonableness, adequacy, accuracy, completeness, fitness for use or use of the consents of this Report. Furthermore, NewERA makes no representation that use of this Report or any of its content would not infringe other proprietary rights.

28 November 2017

Glossary of Terms

AES	Advanced Environmental Solutions (Ireland) Limited
BGE	Bord Gáis Energy
BnM	Bord na Móna
CRU	Commission for Regulation of Utilities
Coillte	Coillte Cuideachta Ghníomhaíochta Ainmnithe
DB	Defined benefit
DCCAE	Department of Communications, Climate Action and Environment
DFIN	Department of Finance
DHPLG	Department of Housing, Planning and Local Government
DPER	Department of Public Expenditure and Reform
EBIT	Earnings before interest and taxation
EBITDA	Earnings before interest, taxation, depreciation and amortisation
EEL	Electricity Exchange Ltd
EirGrid	EirGrid plc
EPL	Edenderry Power Ltd
ESB	The Electricity Supply Board
ESOP	Employee Share Ownership Plan
ESOT	Employee Share Ownership Trust
EU	European Union
EWIC	East West Interconnector
FFO	Funds from operations
GNI	Gas Networks Ireland
GW	Gigawatt
GWM	Generation and wholesale market
IMF	International Monetary Fund
I-SEM	Integrated single electricity market
IW	Irish Water
JV	Joint venture
MDF	Medium-density fibreboard
MW	Megawatt
NIE	Northern Ireland electricity networks
OECD	Organisation for Economic Co-operation and Development
OSB	Oriented strand board
PAT	Profit after taxation
PBT	Profit before taxation
PSO	Public service obligation
RCF	Revolving Credit Facility
SEM	Single electricity market
SEMO	Single electricity market operator
SONI	System operator for Northern Ireland
T&D	Transmission and distribution
TSO	Transmission system operator
UK	United Kingdom
URegNI	Utility Regulator Northern Ireland
WACC	Weighted average cost of capital

1. Introduction

Under its legislation, NewERA has specific responsibility to provide financial and commercial advice to Government Ministers in relation to some of the leading State entities in the energy, water and forestry sectors. An overview of NewERA's advisory functions is set out graphically below:

NewERA Advisory Functions

- **Financial performance, return on capital & dividend policy**
- **Effective & efficient use of capital**
- **Corporate Strategy**
- **Capital & investment plans**
- **Board appointments** (Chairperson, Directors, CEO) **& remuneration**
- **Acquisitions, disposals, reorganisations & restructurings**

During 2016/17, NewERA provided its services on a broad range of matters set out below including capital expenditure, borrowings, corporate plans and the appointment of chairpersons and directors:

Borrowings

BnM	RCF €125m
Coillte	€90m EIB, RCF €220m
Ervia (GNI)	€625m bond issue
IW	€1.3bn facilities
ESB	€600m bond issue

Capital Budgets & Commitments

€2.8bn

across the Portfolio, the majority relating to regulated electricity, gas and water network assets.

Specific Capital Projects

€0.35bn

GNI	pipeline twinning project
IW	water infrastructure projects
Coillte	JV wind farms

Financial Targets

Profitability, dividend and gearing targets reviewed by NewERA for Coillte, Ervia and ESB. Dividend target reviewed for BnM. Profitability and dividend target reviewed for EirGrid.

Board Appointments

Chairperson appointment and three director appointments for Ervia; Two director appointments for ESB.

Financial Reports & Corporate Plans

Review of the interim and annual financial reports of the Portfolio entities and rolling five-year corporate plans.

Most of the commercial and financial advice NewERA provides relates to the Portfolio consisting of BnM, Coillte, EirGrid, Ervia, IW and ESB.

In 2016/17 there was significant growth in the number and complexity of corporate finance assignments which NewERA undertook relating to other State bodies that covered a broad range of sectors including transport, communications, and health. The table below shows some selected advisory projects.

Selected NewERA Advisory Projects

Project	Description of NewERA's role
post	Carried out a financial review and analysis of An Post, with ongoing assistance to shareholding Ministers regarding the monitoring of its financial position.
CIE	Provided financial analysis to the shareholding Ministers in relation to the business plans of the following entities in the CIÉ Group – Bus Éireann and Irish Rail.
Climate Action and Renewable Energy	Provided reviews from a financial perspective of the financial modelling developed by the relevant Government Departments and agencies in relation to climate action measures. NewERA also participated in a number of projects in this area including the planned new renewable electricity support scheme, the renewable heat incentive and the assessment of costs and benefits of biogas and biomethane.
daa	A financial review and analysis of daa plc was undertaken and provided to the shareholding Ministers with a particular focus on the capital structure and consideration of a revised dividend policy.
Comhlacht Chalafort Átha Cliath Dublin Port Company	A financial review of Dublin Port on behalf of the shareholding Ministers was commenced during 2016 with a focus on whether a revised dividend policy ought to be considered given, in particular, Dublin Port's major capital investment plans.
Forestry	Advised the shareholding Ministers in relation to a €90m long-term loan from the European Investment Bank to finance the cost of planting, forest management and forest road construction and maintenance on the Coillte estate. NewERA also took part in initiatives under the Government's Forestry Programme aimed at increasing investment in the sector. During the year, NewERA worked with Coillte and Bord na Móna and the relevant Government Departments to progress the BioEnergy Ireland activities.
IAA	A financial review and analysis of IAA was undertaken and provided to the shareholding Ministers with a focus on a revised dividend policy.
Port of Cork	The redevelopment of existing port facilities at Ringaskiddy, Co Cork is necessary to allow the Port of Cork to overcome the existing physical constraints in handling larger vessels and to adapt to the changing nature of port activities. NewERA's financial review and analysis of the financing structure of the Ringaskiddy investment project commenced in 2016.
IRB Rugby World Cup 2023	Engaged by DTTAS, DPER and DFIN to provide specialist financial and commercial advice and assistance in relation to certain aspects of the State's support of the bid to host Rugby World Cup 2023.
Vhi	Provided financial analysis and assistance to the Minister of Health in relation to a review of Vhi's strategic and financial plan.

One of the aims of NewERA is to facilitate an enhanced level of active ownership by the State as shareholder. Active ownership by the State is particularly important given the critical role the Portfolio entities play in the economy including through investment in enabling infrastructure such as energy and water networks.

2. The Portfolio at a Glance

On a combined basis for 2016/17, the Portfolio generated **€6.0bn** in revenues, employed invested capital of some **€16.0bn** and undertook gross capital expenditure of c. **€1.5bn** supported by a workforce of some **12,400** employees, underlining its importance to the economy.

KEY ASSETS

LAND MANAGEMENT

520,000ha.

of forest and peatland under management, equivalent to c. **7.5%** of the land cover of Ireland

INSTALLED GENERATION CAPACITY

6,200MW

12% of this comprises renewable generation (wind, biomass, landfill gas). The Portfolio's installed wind capacity can power the equivalent of approximately **346,000** average EU homes

WATER INFRASTRUCTURE

1,155

wastewater treatment plants

900

water treatment plants

REGULATED NETWORK ASSETS

229,000km

of electricity lines including the interconnector to the UK

63,000km

of water pipelines

25,000km

of wastewater pipelines

14,000km

of gas pipelines including the interconnectors to the UK

EMPLOYEE NUMBERS

AVERAGE EMPLOYEE NUMBERS

12,433

employed across the Portfolio

KEY FINANCIALS

OPERATING PROFIT

€994m

(2015/16: €1,044m)

€994m of operating profit generated by the Portfolio in 2016/17 with an operating profit margin of **16.6%**

INVESTED CAPITAL

€16,032m

(2015/16: €15,535m)

€16,032m in capital invested in the Portfolio with a return on invested capital of **5.6%** in 2016/17

EQUITY VALUATION

€10,126m

(2015/16: €10,169m)

€10,126m is the combined indicative[1] commercial equity value of the Portfolio (including employee shares of ESB and BnM) on an ongoing trading basis

DIVIDENDS

€236m

(2015/16: €441m)

€236m of combined dividends paid by the Portfolio in 2016/17, **€232m** of that to the Exchequer. Over the past five years **€1,458m** of combined dividends have been paid by the Portfolio, **€1,412m** of that to the Exchequer

GROSS CAPEX

€1,498m

(2015/16: €1,572m)

€1,498m of capital investment spend in 2016/17, **69%** of that on regulated network assets

BOARD COMPOSITION

GENDER BALANCE

76%: 24%

ratio of male to female board members on a combined Portfolio basis

1 Based on the latest valuations submitted to NewERA.

3. Brief Overview of the Entities

BORD NA MÓNA

KEY ACTIVITIES

- Management of peatlands and peat supply. Peat primarily located in Ireland's midlands (**80,000** hectares)
- Electricity generation capacity in the all-island market (windfarms, peat power stations, peaking plant and landfill gas)
- Other activities include BnM's waste collection and landfill activities (Resource Recovery) and retail supply of peat products

KEY FIGURES (year end 29 March 2017)

Turnover: **€406m**

Operating profit: **€40m**

Net debt: **€171m**

Net cashflow from operations: **€49m**

Gross capex: **€36m**

Pension liabilities: **€16m**

Total dividends paid: **€4m**

Average employee numbers: **1,998**

TURNOVER BY ACTIVITY

COILLTE

KEY ACTIVITIES

- Management of forestry estate which covers approximately **7%** of the land mass in Ireland (over **440,000** hectares)
- Provides commercial land solutions that support the delivery of Government policies in areas such as Renewable Energy, Infrastructure and Tourism
- Manufactures innovative, market led Medium Density Fibreboard ("**MDF**") and Oriented Strand Board ("**OSB**") value-added, timber construction panels under the MEDITE SMARTPLY brand that are exported to over 30 countries

KEY FIGURES (year end 31 December 2016)

Turnover: **€288m**

Operating profit: **€66m**

Net debt: **€168m**

Net cashflow from operations: **€26m**

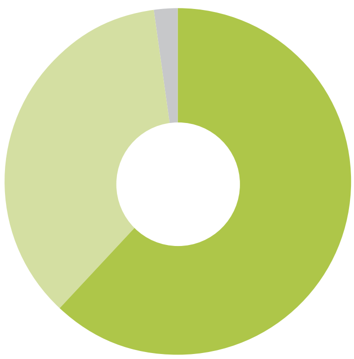
Gross capex: **€53m**

Pension liabilities: **€108m**

Total dividends paid: **€7m**

Average employee numbers: **862**

TURNOVER BY ACTIVITY



EIRGRID GROUP

KEY ACTIVITIES

- Transmission System Operator ("**TSO**") for Ireland ("**EirGrid TSO**") and for Northern Ireland ("**SONI TSO**") and operator of the all-island Single Electricity Market ("**SEMO**")
- Owns and operates the 500MW East West Interconnector ("**EWIC**")

KEY FIGURES (year end 30 September 2016)

Turnover: **€673m**

Operating profit: **€26m**

Net debt: **€182m**

Net cashflow from operations: **€62m**

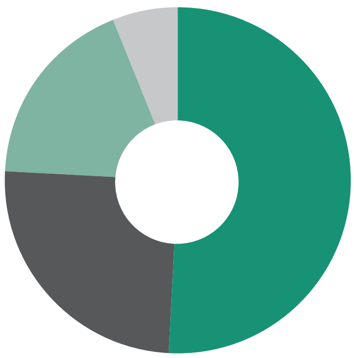
Gross capex: **€32m**

Pension liabilities: **€54m**

Total dividends paid: **€4m**

Average employee numbers: **480**

TURNOVER BY ACTIVITY



ervia Gas Networks Ireland

KEY ACTIVITIES

- Owner of natural gas Transmission and Distribution Network ("**T&D**") (Ireland), owner of gas interconnector pipelines (Ireland-Scotland) and gas transmission pipelines in Northern Ireland
- Provides wholesale telecom fibre services

KEY FIGURES (year end 31 December 2016)

Turnover: **€498m**

Operating profit: **€195m**

Net debt: **€1,028m**

Net cashflow from operations: **€278m**

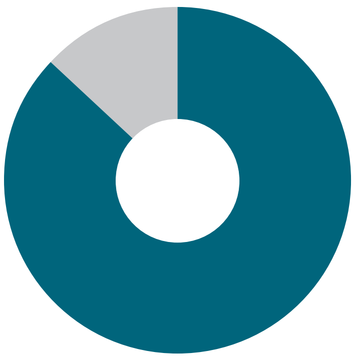
Gross capex: **€135m**

Pension liabilities: **€129m**

Total dividends paid: **€135m**

Average employee numbers: **904**

TURNOVER BY ACTIVITY



Regulated **87%**
Unregulated **13%**

ervia Uisce Éireann · Irish Water

KEY ACTIVITIES

- Responsible for delivery of water and wastewater services to households and businesses, and strategic investment in Ireland's water infrastructure for the long term

KEY FIGURES (year end 31 December 2016)

Turnover: **€906m**

Operating profit: **€69m**

Net debt: **€917m**

Net cashflow from operations: **€168m**

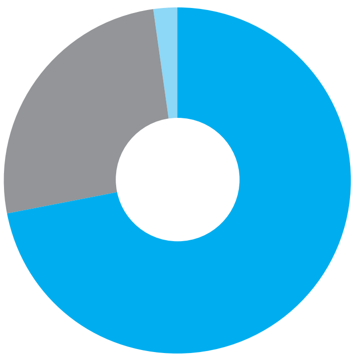
Gross capex: **€471m**

Pension liabilities: **€26m**

Total dividends paid: **nil**

Average employee numbers: **592**

TURNOVER BY ACTIVITY



Subvention **72%**
Non-Domestic Revenue **26%**
Domestic Revenue **2%**

ESB Energy for generations

KEY ACTIVITIES

- Owner of the electricity T&D network on the island of Ireland (ESB Networks and Northern Ireland Electricity Networks ("**NIE**"))
- Installed capacity 4.3GW in the Single Electricity Market ("**SEM**") and 1.4GW in Great Britain (ESB Generation & Wholesale Markets ("**GWM**"))
- Supplier of electricity and gas throughout island of Ireland
- Other activities include ESB International, Novusmodus fund, fibre-optic broadband JV, telecoms and eCars

KEY FIGURES (year end 31 December 2016)

Turnover: **€3,212m**

Operating profit: **€597m**

Net debt: **€4,524m**

Net cashflow from operations: **€1,011m**

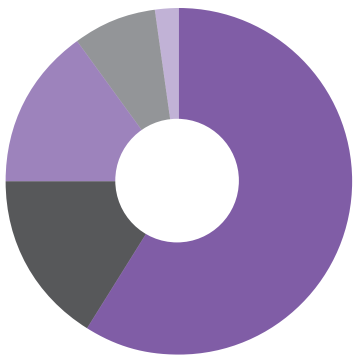
Gross capex: **€771m**

Pension liabilities: **€695m**

Total dividends paid: **€86m**

Average employee numbers: **7,597**

TURNOVER BY ACTIVITY



Electric Ireland **59%**
Generation **16%**
Networks **15%**
NIE **8%**
Other **2%**

4. Shareholder Framework: Approach and Considerations

4.1 NewERA approach to the Portfolio: Active Ownership via the Shareholder Expectations Framework

4.1.1 Overview

NewERA's approach is to facilitate an enhanced level of active ownership by the State as shareholder in the Entities via the Shareholder Expectations Framework (the "**Framework**").

The purpose of the Framework developed by NewERA is to provide formal clarity and guidance to the Chairperson and Board of each of the Entities in relation to the Government's strategic priorities, policy objectives, financial performance and reporting requirements. These are communicated to the Chairperson and Board of each of the Entities by way of annual/biennial letters ("**Framework Letters**") from the relevant Government Ministers.

In this regard, the Framework and the use of Framework Letters is now included in the Code of Practice for the Governance of State Bodies ("**the Code**") which states that:

> *"Clear accountability underpins effective relations between Government Departments and the State bodies under their aegis" and sets out that "For commercial State bodies the oversight agreement is the Shareholder Letter of Expectation".*

4.1.2 Financial Performance – Areas of Focus

In the Framework Letters issued to date, the three primary areas of focus for NewERA from a financial performance perspective have been:

1. **Financial performance measurement:** setting out the methodology used by NewERA to assess financial performance. This is applied by NewERA in augmenting measurement and monitoring of financial performance of the Portfolio by the State in its role as shareholder. See Appendix B for further detail.
2. **Commercial equity valuations:** to facilitate the measurement of shareholder returns, the Framework includes a requirement for the relevant Entities to undertake a commercial equity valuation on an annual basis.
3. **Financial targets:** formulating financial targets in conjunction with the relevant Entities with the objective of ensuring that the targets should be: (i) used to assist in balancing value creation and maintenance of financial risks at a reasonable level, without incentivising increased business risk; (ii) high-quality targets that are ambitious but realistic; and (iii) well defined and clear and thus capable of being monitored on an ongoing basis.

During 2016/17 work on further enhancing the Framework has focused on developing formal financial targets for the Portfolio, where appropriate. These typically include a:

- Capital structure target, reflecting the underlying business mix;
- Profitability target, reflecting the risk profile of the expected business mix; and
- Dividend target.

Return on invested capital ("**ROIC**") is one of the most appropriate metrics to use from a shareholder/investor perspective. If ROIC is greater than the weighted average cost of capital ("**WACC**") then this could assist in creating shareholder value over time. During 2016/17 NewERA developed methodologies to calculate both ROIC and WACC on a consistent basis across the Portfolio.

4.2 Shareholder Considerations in relation to the Portfolio

4.2.1 Strategic, Business and Financial Plans

The Code aims to ensure commercial and non-commercial State bodies meet the highest standards of corporate governance. Extracts from the Code, setting out the requirements in relation to strategic plans and business and financial plans (corporate plans), are set out below:

EXTRACT FROM THE CODE – STATEMENT OF STRATEGY

- **Strategic Plan:** The preparation and adoption of a strategic plan is a primary responsibility of the Board of a State body. Such plans should set appropriate objectives and goals and identify relevant indicators and targets against which performance can be clearly measured. All State bodies, whether they are commercial, non-commercial or, for example, regulatory bodies, should have a formal process in place for setting strategy.
- **Commercial State Body:** The Board of a commercial State body should within the first six months of each financial year approve the submission of a draft annual rolling five-year business and financial plan, encompassing strategy (taking account of general sectoral policy as determined by the relevant Minister), planned investment and appropriate financial targets to the relevant Minister and, where appropriate, the Minister for Public Expenditure and Reform and NewERA (see Ministerial Views below).
- **Ministerial Views:** A copy of the draft strategic plan (including, where relevant, plans for levy setting or own income generation) and the draft annual rolling five-year business and financial plan should be sent to the relevant Minister, and, where appropriate, the Minister for Public Expenditure and Reform and NewERA before the plan(s) are/is finalised and adopted by the Board. While final responsibility for the content of the plan rests with the Board in each case, the views of the Ministers and consideration of the public interest should be carefully weighed by the Board.
- **Implementation:** Implementation of the strategy by the management of each State body should be supported through an annual planning and budgeting cycle. The Board of each State body should approve an annual plan and/or budget and should formally undertake an evaluation of actual performance by reference to the plan and/or budget on an annual basis.

In the context of NewERA's review of the corporate plans of the Entities, there are a range of areas or themes which are of relevance from a shareholder perspective in the current market environment.

The common areas or themes which we wish to highlight in this year's report include the following:

- Brexit remains a concern given the uncertainty of the terms of the UK's withdrawal;
- The delivery of investment and transformation plans for Irish Water;
- Ireland's transition to a low-carbon energy system and the role of State-owned entities; and
- Observations on board appointments within NewERA's Portfolio.

4. Shareholder Framework Approach and Considerations (continued)

The common areas and themes identified in our Annual Financial Review 2015/16 also continue to be of relevance. For instance:

- During 2016, the State, through its State-owned bodies[2] invested around **€1.6bn**[3] in core national infrastructure which included **€1.3bn**[4] by Portfolio entities. In the context of deployment of that capital, we set out in last year's report that it might be helpful for the State to develop an overarching framework of principles through which to consider on a consistent basis the ownership of and investment by State-owned bodies. This process is ongoing between the relevant Departments and NewERA to develop an overarching framework of principles through which the ownership of, and investment by, State-owned bodies can be considered on a consistent basis.
- From the Portfolio perspective, a key challenge is the impact the continued low interest rate environment has on the defined benefit ("**DB**") pension schemes which are operated by the Entities. The trend since 2010 has been a continual decline in yields, which increases the current value of liabilities. The total DB pension liabilities on the balance sheets of the Entities increased by approximately €20m over the Relevant Financial Year, despite total employer contributions of approximately €200m. Although investment returns were favourable, the value of liabilities grew faster than the value of assets, mainly as a result of lower discount rates at year end.

4.2.2. Brexit

In last year's Annual Financial Review, we identified Brexit as one of the themes relevant to the Portfolio. Brexit remains a concern given the concentration of the Entities operating in the energy sector, the range of Portfolio investments in the UK (existing and planned) and the extent of the Portfolio's bilateral trade with the UK.

An overview of Portfolio revenue generated in the UK, the book value or Portfolio assets in the UK and associated sterling denominated debt is set out below along with a summary outline of the major UK energy assets held by certain of the Entities:

UK assets and debt held by Portfolio entities (2016 book value, €m)

	BnM	Coillte	EirGrid	GNI	ESB
Revenue					
UK revenue	nd	118	162	41	449
Total group revenue	406	288	673	498	3,212
UK proportion	nd	41%	24%	8%	14%
UK fixed assets					
UK fixed assets	2	na	22	318	3,274
Total group fixed assets	403	1,424	592	2,546	11,097
UK proportion	na	na	4%	12%	30%
Sterling denominated debt					
GBP debt	0	0	0	117	1,906
Total debt	187	170	354	1,172	4,887
GBP proportion	0%	0%	0%	10%	39%

Source: Annual Reports, na = not applicable, nd = not disclosed

2 These include the Portfolio entities, and State-owned entities in the transport, communications, broadcasting and postal sectors.
3 Source: Report prepared by DPER entitled *"Review of the Capital Plan 2016-2021, Building on Recovery"* August 2017
4 Source: NewERA analysis

Major UK energy assets held by Portfolio		
EirGrid	**Ervia**	**ESB**
▶ Electricity transmission system operator in NI ▶ Electricity interconnector between Ireland and the UK	▶ Two gas interconnectors between Ireland and the UK ▶ Gas transmission network in NI	▶ Electricity transmission network in NI ▶ Electricity distribution network in NI ▶ 2 thermal power plants ▶ 1 biomass power plant ▶ 3 wind farms

Source: Annual Reports

Of the entities in the Portfolio who reported the geographic source of revenue, Coillte generated the largest share of revenue from the UK. ESB has the largest proportion of its fixed assets in the UK with these assets primarily consisting of the T&D electricity network in NI, two thermal power plants and three wind farms. ESB's UK investments are funded with sterling debt which will be repaid from sterling earnings – the effect of ESB's financial management policies is that, taken together, the offsetting effects of lower reported earnings and lower reported debt have protected key credit rating metrics to date.

There are the obvious macroeconomic implications which will affect all entities which are exposed to the UK, including currency and economic growth implications. We do not address these in this Report. However, given the concentration of the Portfolio in the energy sector, there is one issue arising from Brexit of particular note:

Energy supply and interconnection

Ireland is a net importer of gas and electricity although, as a result of indigenous gas from the Corrib field, Ireland's dependency on gas imports has reduced and will continue to reduce in the short-term. The imports come almost exclusively from the UK, delivered by the following interconnections:

- Ireland and NI interconnected electricity grid (ESB);
- Electricity interconnectors Ireland/UK (EirGrid) and NI/UK (not owned by ESB); and
- Gas interconnectors Ireland/UK (GNI) and NI/UK (not owned by GNI).

The SEM is the wholesale electricity market for the island of Ireland meaning the electricity market in Ireland is fundamentally integrated with a part of the UK. The SEM is undergoing significant change and, thus far, EU legislation has been driving the coming together of energy markets across Europe with the aim of creating a fully liberalised internal electricity market. The new wholesale market will be known as the Integrated Single Electricity Market ("**I-SEM**") and is targeted to be in place by mid-2018. It is unclear at this point whether, or the extent to which, Brexit will impact on this process. With this uncertainty the development of the proposed electricity interconnector between Ireland and France, if approved to proceed, could become increasingly important.

The UK itself is a net-importer of gas and electricity[5] and interconnection between the UK and the EU is already high. While it is not clear what impact Brexit will have, within the UK Government's Brexit White Paper, published in May 2017, the UK notes that there are plans for further electricity interconnection with the EU. And from an Irish perspective, there was some reassurance in this paper that identified avoiding 'disruption to the all-Ireland single electricity market' as an area of focus.

Although the details and ultimate economic impact of Brexit remain unknown until the terms of the UK's withdrawal are clear, Brexit will continue to be monitored and assessed by the Portfolio.

5 Source: UK Energy in Brief 2016, UK Department of Energy and Climate Change

4.2.3 Irish Water – delivery of investment and transformation plans

It is widely accepted that Ireland's water infrastructure requires significant investment over a sustained period, to deliver services to communities and businesses that meet the needs of a modern economy and facilitate future economic development of the country over the long-term. In 2015, IW published its business plan to 2021 which includes a **€5.5bn** capital investment programme. A further significant programme of investment will be required beyond 2021, including investment in a number of key large-scale national strategic projects both to continue improvements in compliance with drinking water supply and wastewater discharge regulations and to expand capacity to meet economic growth needs.

The scale of investment is very substantial. Irish Water has estimated that some **€13bn** of investment is required to address all known deficits[6]. IW has been tasked with addressing the historical inefficiencies in the water industry in Ireland by implementing a transformation plan to reduce its cost base over time benchmarked against comparable water and waste water utilities and delivering the significant level of capital investment needed in Ireland's national water infrastructure as efficiently as possible. Following the significant challenges that IW has faced since its establishment, IW, in our view, now needs a period of stability to prioritise and focus on the delivery of its investment programme and transformation over the medium term to become a high performing regulated public utility.

There will be some challenges for IW in delivering its business plan targets as it remains on the State's balance sheet and it competes with other State spending priorities. It will be critical that IW retains an appropriate level of certainty and flexibility in relation to its funding arrangements with the State to help facilitate delivery by IW of its business plan targets for increased investment and efficiencies.

4.2.4 Ireland's transition to a low-carbon energy system and deployment of State capital

The first National Mitigation Plan ("**NM Plan**") was published in July 2017. It emphasises the importance of addressing climate change (noting that "confronting climate change is the global imperative of our generation"). The commercial State sector has a key role to play in relation to many of the measures set out in the NM Plan, which are cross sectoral and long term in nature.

Over the period of the State's Capital Plan entitled *'Building on Recovery: Infrastructure and Capital Investment 2016-2021'*, which was published in 2015, the commercial State sector was projected to invest approximately **€5.8bn** in core national energy infrastructure. As noted in the mid- term review of the capital plan (August 2017) c. **€0.8bn**[7] of the €5.8bn was invested by the end of 2016.

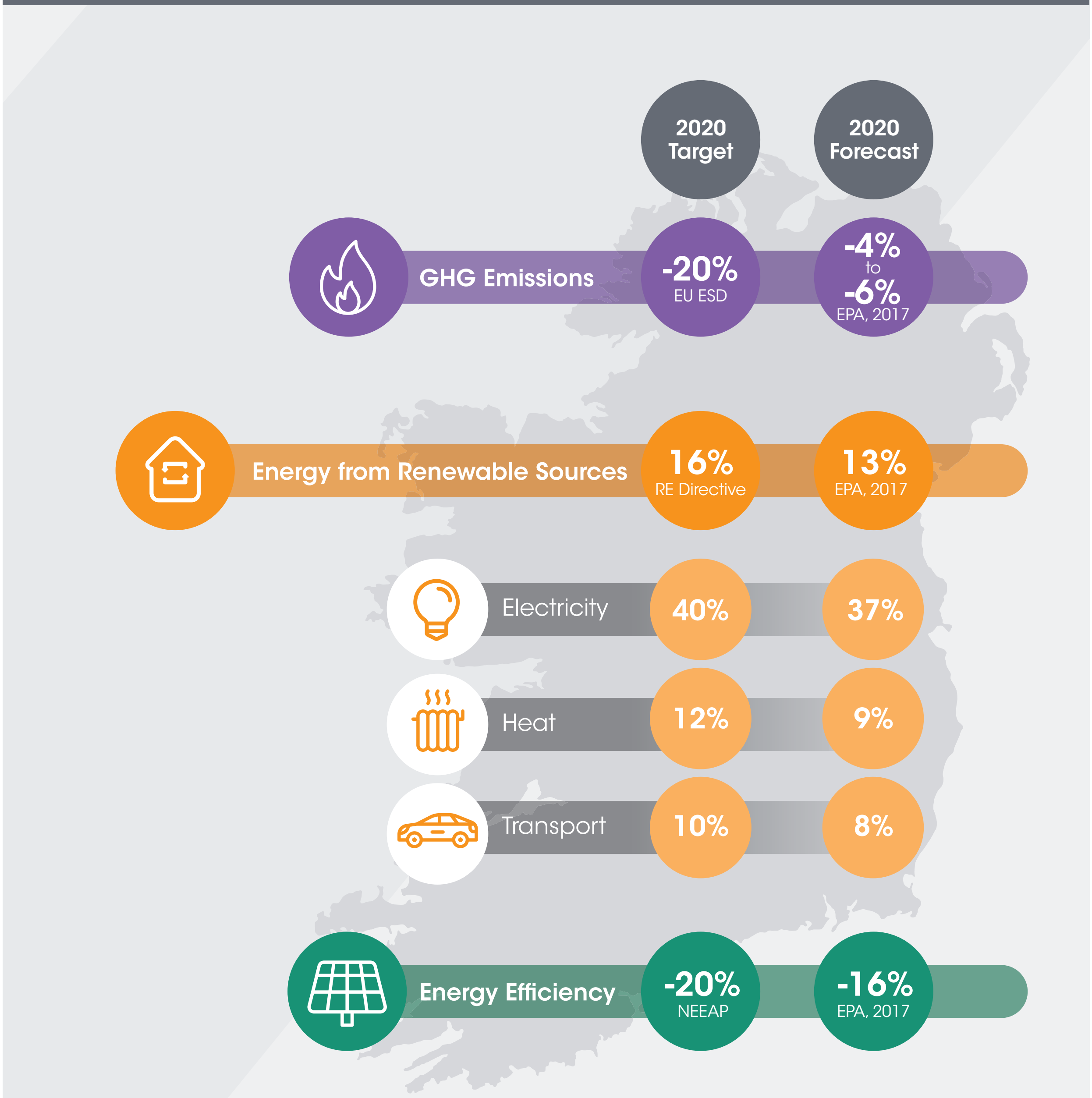
This includes investment in the national electricity and gas networks, conventional and renewable power generation assets and the electricity market system. Investment in these assets is acknowledged as an important enabler of economic growth and, as such, the relevant Entities have a critical role to play in meeting priority infrastructural needs.

Ireland is committed to the long-term, progressive decarbonisation of its energy system with targets in place for reducing greenhouse gas emissions, increasing the proportion of energy from renewable sources across the electricity, heat and transport sectors and delivering energy efficiency improvements.

6 Source: Ervia Annual Report 2016
7 Source: page 48 of Report of the Mid-Term Review of the Capital Plan: Building on Recovery 2016-2021

This graphic illustrates where Ireland is forecast to be in relation to its 2020 climate targets in the areas of greenhouse gas emissions, energy from renewable sources and energy efficiency.

CLIMATE AND ENERGY TARGETS FOR IRELAND



Sources:
EU ESD = Effort Sharing Decision, 2009
EPA = Environmental Protection Agency, April 2017: Ireland's Greenhouse Gas Emissions Projections 2016-2035
RE Directive = EU Renewable Energy Directive (2009/28/EC)
NEEAP = National Energy Efficiency Action Plan 2009 (not legally binding)

4. Shareholder Framework: Approach and Considerations (continued)

The Portfolio is contributing to achieving these targets, noting that those Entities which are directly involved in the energy sector will likely make the largest contribution to decarbonisation. There are several ways in which the Portfolio is contributing to Ireland's climate change goals. These are outlined below:

Ongoing investment in renewable energy technologies	The relevant Entities that are active in the power generation sector continue to invest in renewable energy technologies. The harnessing of these technologies will play a key role in decarbonising Ireland's electricity generation. The main renewable energy technology that the Entities have invested in is on-shore wind. The Entities had **438MW** at the end of 2016 which are estimated to be c. 15% of the overall operational wind farm fleet in the State. The Entities plan to continue to invest in these technologies over the coming years, with some investments being delivered on a JV basis. This investment is predominantly in wind generation assets but certain Entities are also exploring other renewable technology options such as solar, biomass and hydro.
Potential to reconfigure existing power generation assets to lower carbon fuel sources	Certain large scale thermal power generation assets within the ESB and BnM fleet will reach the end of their useful lives in their current configuration over the medium term. With further investment, there may be the potential for some of these assets to be reconfigured to generate electricity from lower emission fuel options which would contribute positively to the decarbonisation of electricity. For example, the most suitable replacement low-carbon technology will need to be identified for the ESB-owned coal plant at Moneypoint before the end of its useful life in its current configuration in 2025, with indications that key decisions will be taken by 2020[8]. BnM is also currently co-firing its peat station at Edenderry with biomass in line with its stated ambition to replace large scale peat production with alternative energy sources by 2030. As stated in the NM Plan, the two ESB peat plants at West Offaly and Lough Ree may, like Edenderry, also move to co-firing with biomass.
Continued investment in Ireland's network infrastructure to support increasing levels of renewable energy generation	Investment in renewable energy necessitates: (i) increased electricity network investment to ensure that this renewable power generation can be safely and securely accommodated on the existing electricity network; and (ii) continued investment in the gas network. In relation to the latter, any further investment in the gas network over and above maintenance levels will primarily be driven by future gas consumption levels. A high proportion of Ireland's electricity needs have historically been met through gas-fired power generation and although this is reducing primarily due to the increase in wind power generation in the system, the intermittent nature of that technology means that it will be necessary for a certain level of gas fired generation to continue to be available to ensure continuity of supply and the integrity of the electricity grid during the transition towards a low-carbon energy system. Over the remaining period of the Capital Plan 2017-2021 up to **€4bn** is projected to be invested in regulated energy network infrastructure in the State, of which c. **€3bn** is estimated be spent on electricity infrastructure and c. **€1bn** is estimated to be spent on gas infrastructure.

8 Source: NM Plan page 150, action 23

Decarbonising transport	Through support for increased electric vehicle adoption (ESB) and delivering fuel alternatives for commercial transport such as compressed natural gas or renewable gas (GNI), the Entities are playing a role. GNI is to study the impact of installing 14 compressed natural gas refuelling stations and a large scale renewable gas injection point on the gas network in Ireland.
Carbon sequestration	Coillte is responsible for sustainably managing a large proportion of Ireland's forest estate and it plays a key role in mitigating the impact of greenhouse gases via carbon sequestration in its forests and land and also through the supply of harvested wood and wood residues to the processing sector and its own panel manufacturing plants for use in sustainable construction, other long-lived uses and as a substitute for fossil fuels in power generation.
Development of biomass	The Draft Bioenergy Plan, published in 2014, identifies that while biomass will play a role in renewable electricity, it is likely to make a more significant contribution to the heating and transport sectors where fewer alternative technologies are available. The sustainability of the biomass supply chain and its interaction with air quality performance standards will continue to be a critical consideration in formulating bioenergy policy. From a State sector perspective, Coillte and BnM are both actively involved in the development of this sector and, in this regard, BnM have recently announced the establishment of Bioenergy Ireland. Bioenergy expands into a number of other sectors and IW has indicated that advanced anaerobic digestion provides the most economically feasible option and the lowest carbon footprint for wastewater sludge treatment.

As set out above, the entities in the Portfolio, and particularly those which are directly involved in the energy sector, will likely make a material contribution to decarbonisation. The State owns and operates the electricity grid, gas grid, power generation – renewable and thermal, biomass – and waste and is in a strong position relative to other countries in this respect. Its ownership confers expertise in a number of elements of the energy chain. This presents both the opportunity and challenge to consider how best to leverage this expertise to meet a global ambition of generating large scale, non-intermittent low carbon free energy from a commercially driven perspective.

4.2.5 Board Appointments

As noted in Section 1 NewERA provides financial and commercial advice to Government in relation to its shareholdings in a range of State bodies, and we have been examining practices as part of our role in relation to oversight in other OECD countries. Within the OECD many countries have centralised the oversight function into one unit which oversees all State-owned assets from a commercial and financial perspective in a consistent manner. These units in many OECD countries have a role in the appointment of chairpersons and directors. Indeed, this role is seen as integral to the effective operation of such a unit, the appropriate composition and proper functioning of the board being a key element in ensuring proper oversight of the State-owned entity and delivery of the State's commercial and financial objectives.

Accordingly, the role assigned to NewERA under section 19(2)(h) of the NTMA Act whereby NewERA provides advice to the relevant Ministers on "the appointment of the chairperson, members, directors or chief executive" of certain State bodies is a role that is carried out internationally by similar bodies. Moreover, this statutory role in advising on board appointments is important in the context of our overall role of providing financial and commercial advice to the relevant Ministers in relation to the Portfolio.

4. Shareholder Framework: Approach and Considerations (continued)

In Ireland, Guidelines on Appointments to State Boards ("**Guidelines**") are in place and all appointments are advertised openly on www.stateboards.ie, operated by the Public Appointments Service ("**PAS**"). All appointments are processed by way of an assessment system designed and implemented by PAS leveraging off their longstanding experience and expertise in carrying out assessment processes to support the relevant Minister in making appointments to boards under his/her remit. The Guidelines set out how NewERA (in light of its statutory function) and PAS collaborate together in relation to appointments to State companies within NewERA's remit.

Since their introduction, the Guidelines have assisted in ensuring a more transparent and consistent approach to State board appointments. Based on our experience with the process to date, it has been very effective in particular regarding appointment of directors where there are relatively large numbers of well qualified candidates with the appropriate competencies applying for the roles.

In respect of the appointment of chairpersons we note that, while the process to date has resulted in excellent candidates emerging, the number of suitably qualified candidates applying for the position is small. Highly experienced candidates with suitable competencies who are happy to serve the State are, in our experience, sometimes reluctant to come forward. There may be a variety of reasons for this, such as the time/commitment required, the fact that in some cases these positions may attract adverse publicity, the level of remuneration and the nature of the process.

The appointment of a chairperson is crucial for the Minister as he/she is reliant on the chairperson having the ability and authority as well as specific competencies to ensure the board understands and implements the objectives of the Shareholder. In addition, the chairperson is important in determining the quality of Chief Executive Officers who are attracted to State bodies. Therefore, in order to examine ways of strengthening the pipeline of potential candidates for the position of chairperson, while maintaining the transparency and integrity of the process, the shareholding departments may wish to convene a relevant group inclusive of NewERA and PAS to give consideration to this.

5. The Portfolio – Key Challenges, Opportunities and Business Developments

An overview of the key challenges, opportunities and business developments relating to each Entity is set out below:

BORD NA MÓNA	Key Challenges and Opportunities
Sustainability	▶ The greatest challenge facing BnM is to identify sustainable business growth opportunities in view of its stated ambition of working towards phasing out the use of peat for energy by 2030[9].
Biomass	▶ BnM's establishment of "**Bioenergy Ireland**" presents an opportunity for BnM's Biomass division. ▶ Bioenergy Ireland is an initiative which will seek to stimulate the supply side of the biomass market by decreasing supply chain risk for potential market entrants through the creation of a credit worthy market aggregator with the intention of developing a steady supply and distribution network of biomass such as timber products or energy crops.
Renewable Energy	▶ In 2016/17 BnM provided enough renewable energy to provide **141,000** homes with electricity. BnM has identified opportunities of growth in renewable energy and aim to provide **616,000** homes with renewable energy by 2030 which will consist of solar farms and wind farms with battery storage also being considered.
Acquisition of White Moss	▶ BnM has to manage the issues following the acquisition of White Moss Horticulture Limited ("**White Moss**").
Regulatory Change	▶ The changing regulatory environment will impact on BnM's future performance. These include the potential impending ban on the sale of bituminous coal, increased carbon taxes, the trend towards peat dilution in retail horticultural products in the UK and the implementation of the I-SEM in May 2018.

BORD NA MÓNA	Key Business Developments
Biomass	▶ 2016/17 was the first full year of co-firing biomass with peat in Edenderry power station after the PSO subsidy it had received was phased out. In 2016/17 a co-firing rate of **42%** was achieved.
Powergen	▶ Planning permission was granted for Edenderry Power Limited ("**EPL**") to continue operations at the power plant until December 2023. ▶ Sliabh Bawn windfarm, a JV with Coillte, was commissioned during the year. Powergen also received planning permission for the construction of a **70MW** wind farm at Cloncreen, Co. Offaly.
Resource Recovery	▶ BnM invested in a dry mixed recycling plant at AES Tullamore, Co. Offaly.
Horticulture	▶ BnM completed the acquisition of White Moss in December 2016. ▶ The division achieved market share of **34%** in the UK growing media retail market in March 2017.

9 As outlined in BnM's Sustainability 2030 report.

5. Key Challenges, Opportunities and Business Developments (continued)

COILLTE	Key Challenges and Opportunities
Cost Saving Initiatives	▶ Following the refinancing and restructuring of its banking facilities on more favourable terms, Coillte now has the opportunity to benefit from expected annual interest expense savings of greater than **€3m** and targeted restructuring savings of **€15m** per annum to optimise the returns on its core forestry business following the transition to three autonomous divisions. ▶ Coillte plans to become actively involved in providing sustainable solutions to private forestry owners that will drive the mobilisation of private forestry supply in Ireland. In April 2017 Coillte introduced a private forestry partnership initiative – Coillte Premium Partners - that is providing private forestry owners with an annual premium income and sustainable forestry management services.
Wind Asset Portfolio	▶ Coillte has a portfolio of wind assets (**320MW**) at various stages of planning, construction and operation in tandem with its partners. There is potential for further development of up to **1GW**. ▶ This asset portfolio presents a variety of opportunities through which Coillte can realise value to facilitate financial, social and environmental returns to the State. Options are being considered by the board on the optimal position of Coillte in the value chain.

COILLTE	Key Business Developments
Forests	▶ Sales of sawlog exceeded **1.6m m^3** for the first time in ten years in 2016, representing an increase of **25%** on prior year. ▶ Planting of **19m** trees over **7,800** hectares represents the highest level of forest establishment in over ten years and an increase of **15%** on prior year.
MEDITE SMARTPLY	▶ Commencement of commercial operations at the new **€59m** Smartply OSB manufacturing facility at Waterford Port.
Land Solutions	▶ Commercial operations commenced at the **35MW** wind farm at Raheenleagh in Wicklow, a JV project with the ESB. ▶ Commissioned the **64MW** Sliabh Bawn wind farm in Co. Roscommon, a JV project with BnM, which became fully operational on 31st March 2017.
Other	▶ Refinancing of commercial borrowings with new financing agreements put in place for up to **€260m**, which are expected to result in interest cost savings of over **€3m** per annum. Coillte's core borrowing facilities were due to mature in July 2018. These were replaced with new debt facilities with a later maturity and more favourable financing terms. ▶ Adjusted operating cashflow increased to **€15.2m** in 2016 from **€6.5m** in 2015 as Coillte continued on its path towards a consistent cash yield of **5%** on its **€1,400m** asset base from 2020 onwards.

EIRGRID GROUP — Key Challenges and Opportunities

I-SEM	▶ Work continues to progress on the design and development of new market systems and new electricity trading arrangements required for I-SEM, scheduled to go live in May 2018. I-SEM is intended to meet the requirements of the EU Target Model, creating a single internal market for electricity in Europe.
Renewable Energy Requirements	▶ EirGrid has responded to binding national and European renewable energy targets through the Delivering a Secure and Sustainable Electricity System ("**DS3**") programme, thereby helping to prepare the grid for increased renewable energy generation. Successful implementation of the DS3 programme will ensure that EirGrid can securely operate the power system with increasing amounts of renewable generation in future years. The programme marks EirGrid out as a leader in the field of integrating renewable electricity generation to the grid.
North South Interconnector	▶ This important project will strengthen the links between the grids of Ireland and Northern Ireland. The element of the project in Ireland was granted planning approval by An Bord Pleanála in December 2016.
Further Interconnection	▶ Successful development of the Celtic Interconnector will assist in ensuring secure supply of electricity in both Ireland and France but also enable increased competition in the all island SEM while supporting further development of renewable energy initiatives. With an anticipated "go live" date of 2025, the complexity and scale of the interconnector will likely impact on EirGrid from both a financial and operational perspective.

EIRGRID GROUP — Key Business Developments

Transmission System Operation	▶ In March 2016, the new all-island Energy Management System ("**EMS**") was introduced. This system integrated the EirGrid and SONI EMS platforms such that EirGrid now has all-island control of the transmission system from either of its Dublin or Belfast control centres.
Grid Development and Market Interconnection	▶ An Bord Pleanála concluded its oral hearing into the North South interconnector in May 2016 and granted planning for the southern element of the interconnector in December 2016. In Northern Ireland, a public enquiry into the project was held in June 2016 and the project then moved into full enquiry stage in that jurisdiction in February 2017. ▶ In July 2016, EirGrid and Réseau de Transport d'Électricité, the French transmission system operator, signed a memorandum of understanding to progress the initial design and pre-consultation phase of the Celtic Interconnector. This is the project to link the electricity grids of France and Ireland via an undersea cable.
Electricity Market Operation and European Integration	▶ During 2016, EirGrid continued to work closely with the regulators in Ireland and Northern Ireland to progress the delivery of the I-SEM which is a new wholesale electricity market arrangement for Ireland and Northern Ireland which will integrate the SEM with electricity markets in Europe. The I-SEM project is currently in its final phase, being the detailed design and implementation work that is required before the market can go live.

5. Key Challenges, Opportunities and Business Developments (continued)

Key Challenges and Opportunities

ervia Gas Networks Ireland	Key Challenges and Opportunities
Managing Organisational Change, Addressing Challenges and Delivering Value	▶ Ervia is responsible for managing two key parts of the national infrastructure, namely, the gas and water networks. It is Ervia's role to ensure that both IW and GNI deliver on their respective objectives and that Ervia adds value above what could be delivered by IW and GNI individually on a standalone basis, while maintaining flexibility to deliver on future Government policy objectives. The outcome of the review of the funding model for IW also presents challenges for Ervia in how to adapt its approach to delivering business plan targets within the regulated utility model for the additional challenges that IW faces in its reliance on State funding.
Review of Regulatory Price Control	▶ GNI is a regulated business and is subject to economic regulation by the Commission for Regulation of Utilities ("**CRU**"). GNI's revenue is determined by the CRU and is set out in a five-year regulatory price control process. GNI has recently entered a new regulatory revenue control for the period October 2017 to September 2022. A key challenge for GNI will be seeking to deliver its strategy and Government's policy objectives within its revised revenue allowance and delivering on the efficiency targets set by the CRU.
Decarbonisation	▶ There are proposed targets to reduce greenhouse gas emissions in Ireland by at least **30%** by 2030, compared with 1990 levels. Natural gas as a fossil fuel may be impacted by these national targets. It is GNI's role to ensure that gas and the gas network plays a leading role in the long-term decarbonisation initiative in Ireland. To this end GNI is actively developing and investigating the use of compressed natural gas for large vehicles, the injection of indigenous renewable gas into the gas network, carbon capture and storage for electricity and industry and the use of carbon-free hydrogen in the gas network. Managing these growth opportunities, while being cognisant of the risk of investment in long-term infrastructure in the context of the long term move to a low carbon energy system, will be the key long-term challenge for GNI.

Key Business Developments

ervia Gas Networks Ireland	Key Business Developments
Gas Networks	▶ In April 2016, the CRU certified GNI as a fully unbundled gas transmission system operator, in accordance with the EU's Third Energy Package. ▶ The volume of gas imported from the UK via the interconnectors reduced substantially, from **93%** in 2015 to **39%** in 2016 reflecting the impact of supplies from the Corrib gas field, which commenced the delivery of gas onto the network at the end of 2015. ▶ Construction commenced on the pipeline twinning project which involves installing a second pipeline to create two separate and independent pipelines between Ireland and the UK. ▶ GNI established a new euro medium term loans program under which the company raised **€625m** on the Eurobond market in December 2016 at a weighted average yield of **1.6%.** The **€625m** was split across a 10 year **€500m** bond and a 20 year **€125m** bond with the majority of the proceeds used to buy back in full an existing **€500m** bond which was due to mature in 2017.

Key Challenges and Opportunities

Delivery of Business Plan	▶ IW has been tasked with addressing the historical inefficiencies in the water industry in Ireland by implementing a transformation plan to reduce its cost base over time towards comparable water industry benchmarks and delivering the significant level of capital investment needed in Ireland's national water infrastructure as efficiently as possible. There will be some challenges for IW in delivering its business plan targets as it competes with other State spending priorities. As part of the State's future funding of IW, it will be important that IW retains an appropriate level of certainty and flexibility in relation to its funding arrangements to help facilitate delivery by IW of its business plan targets for increased investment and efficiencies through the regulated utility model.
Major Projects	▶ IW is developing a number of large-scale infrastructure projects that are important for maintaining services to communities over the long-term and the future economic development of the country, such as the Greater Dublin Drainage, New Water Supply for the Eastern and Midlands Region and Ringsend Wastewater Treatment Plant. Given the very large scale and multi-annual investment requirements of these projects, specific funding arrangements will need to be developed by IW and agreed with Government to ensure these projects can be delivered.

Key Business Developments

Irish Water	▶ Domestic water charges were suspended in July 2016. The impact of this decrease in revenue in 2016 has been offset by increased Government subvention income. ▶ Investment of **€459m** in capital projects focused on improving drinking water quality, reducing leakage, and improving the treatment of wastewater. Key achievements included: – majority of remaining long-term boil water notices were removed; – over **77.3m** litres of water have been saved by the First Fix programme; – over **890km** of new water mains have been laid (since 2014), eliminating significant leakage and improving reliability and supply pressure; – completion of the Shanbally Wastewater Treatment Plant has halved the volume of untreated raw sewage being discharged into Cork Lower Harbour; and – **37** water treatment plants were removed from the EPA's Remedial Action List in 2016.

5. Key Challenges, Opportunities and Business Developments (continued)

Energy for generations	Key Challenges and Opportunities
The Market	▶ The European power utilities sector continues to experience uncertainty with reduced economic growth and energy efficiency impacting on the market. Recent improvements in the Irish economy have not fully filtered through to the sector with electricity demand growth not as strong as general economic growth. For ESB, the uncertainty and changes in the energy market will require continued cost efficiency enabling it to deliver value to its customers and shareholders and maintain its financial credit rating.
Regulatory Environment	▶ European energy legislation has been set up to harmonise cross-border trading arrangements across all European electricity markets, leading to the establishment of a European Electricity Target Model with the objective of facilitating the formation of the I-SEM, a fully integrated single European market. ▶ The I-SEM will transform the competitive environment within which ESB operates, changing the generation and supply businesses from being relatively large players within the Irish SEM, to a player with much smaller shares in an all-islands market dominated by much larger pan-European utilities. It is currently envisaged that the I-SEM will go live in May 2018. ▶ To ensure the future viability of ESB's businesses in the face of this challenge, the Group has stated its strategic objective of increasing its scale, capabilities and cost competitiveness.
Decarbonisation	▶ ESB advises that its strategy is broadly aligned with the long-term decarbonisation vision set out in the Irish Government's December 2015 white paper on energy, "Ireland's Transition to a Low Carbon Energy Future 2015-2030". Decarbonisation is expected to require a significant increase in the level of investment in generation and networks infrastructure across the European utility industry, which will present challenges and opportunities for the Group. ▶ Given the importance of Moneypoint's contribution to the Irish market (total capacity of **915MW**), ESB is exploring affordable and secure options for the most suitable replacement generation technology to reduce its carbon intensity with key decisions on the station to be taken before 2020. In addition, there are a number of power plants and peat stations which will need to amend their current configurations in the coming years for which ESB is currently exploring repowering options.

ESB Energy for generations — Key Business Developments

Electricity Networks	▶ ESB continued to progress its capital and maintenance programmes pursuant to the current regulatory price control (known as PR4), with growth in the regulated asset base of **€122m** in 2016. ▶ A total of **540MW** of renewable generation was connected to the electricity network in 2016, bringing the level of renewable generation capacity connected to the grid to over **3,200MW**.
Power Generation	▶ ESB reports that in 2016 it had a **47%** share of the SEM from a power generation perspective. ▶ Generation Asset delivery during 2016 – Commercial operations at ESB's **885MW** Combined Cycle Gas Turbine plant located at Carrington near Manchester commenced in September 2016. – ESB successfully completed the Raheenleagh **35MW** wind farm in Wicklow in partnership with Coillte during 2016. – Through a JV, ESB Kingspan, over **1,200 kW** of new rooftop solar projects were installed in 2016. ESB has also partnered with Kingspan in the installation of its first commercial battery storage project which will be operated to provide time-of-use energy savings for one of ESB's customers whilst also providing system services.
Customer Supply	▶ Electric Ireland had a **37%** share of the SEM in 2016 with over **1.4m** customers (2015: **38%**). This includes residential customers to large industrial and commercial businesses in both Ireland and Northern Ireland.
Other	▶ SIRO, ESB's JV with Vodafone, rolled out high speed fibre broadband technology to over 50,000 premises during 2016 as part of its first phase deployment of the fibre-to-the-building ("**FTTB**") broadband and ESB reports that SIRO is now the largest FTTB supplier in Ireland. ▶ ESB issued a 15-year **€600m** fixed rate bond in May 2016 at a coupon of **1.875%.** Post financial year-end, ESB also issued a 12-year **€500m** fixed rate bond in January 2017 at a coupon of **1.75%**.

6. Key Financial Information and Metrics

Financial Performance Overview

In 2016/17 the combined adjusted operating profitability of the Portfolio decreased slightly to **€994m** from **€1,044m** in 2015/16 reflecting underlying turnover decline coupled with increased depreciation charges. A significant proportion of operating profit continues to be derived from the Portfolio's regulated electricity and gas networks (2016/17: **64%**, 2015/16: **58%**) and power generation assets (2016/17: **25%**, 2015/16: **24%**). ROIC decreased from **6.1%** to **5.6%** in 2016/17, indicative of the underlying decrease in the profitability of the Portfolio. However, in our view, this return is reasonable at portfolio level given the challenges in some of the underlying businesses.

Exceptional items and certain remeasurements totalling **€235m** were reported across the Portfolio entities which consisted of:

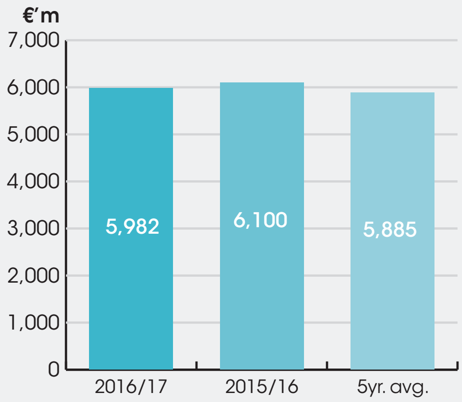
- exceptional costs of **€17m** of which €16m consisted of an impairment reported by BnM relating to the acquisition of White Moss;
- fair value losses of **€190m** from negative movements on inflation linked swaps and interest rate swaps in ESB; and
- a **€28m** net exceptional charge to Ervia, mainly relating to a bond issuance and buy-back transaction which GNI completed during the year where the bonds were redeemed in excess of par.

The net gearing of the Portfolio decreased from **53%** in 2015/16 to **50%** in 2016/17.

Total dividends of **€236m** were paid, of which **€232m** was to the Exchequer, with the balance paid to the Employee Share Ownership Plans ("**ESOP**") of the relevant Entities (ESB and BnM). Total dividends paid comprised:

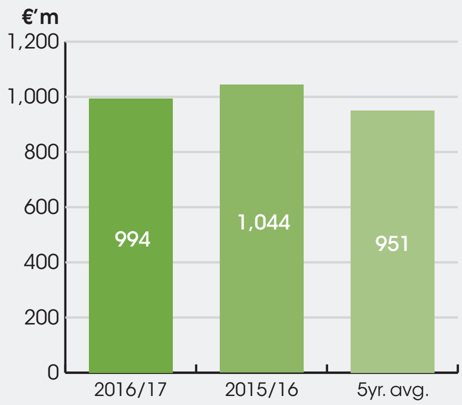
- special dividends of **€100m** from Ervia; and
- normal dividends of **€136m**, **63%** of which was from ESB and **26%** from Ervia.

Turnover



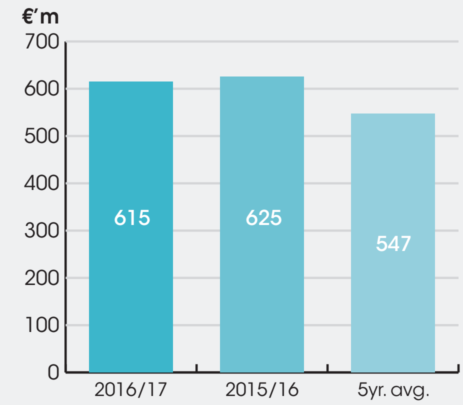
A slight decline in annual turnover of **2%** in 2016/17 with turnover decreasing from **€6.1bn** in 2015/16 to **€6.0bn** in 2016/17. This decline was due predominantly to a decline in ESB (lower Electric Ireland revenue due to lower volumes and prices) and EirGrid's turnover (lower EWIC revenues)

Adjusted Operating Profit



The majority of the Portfolio's operating profit (as measured by adjusted EBIT) is derived from regulated network (2016/17: **64%**) and power generation assets (2016/17: **24%**) held by the Entities. Decreased adjusted operating profit of **5%** in 2016/17 largely reflects the lower combined turnover position and increased depreciation charges. The decline is largely related to: ESB (foreign exchange losses and higher operating costs); and EirGrid (lower revenues, impairment charge of SONI TSO licence and return of over recoveries).

Adjusted PAT

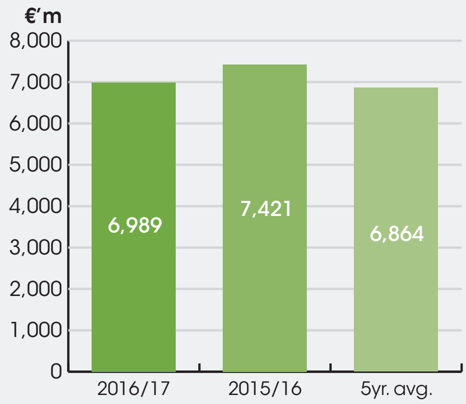


Lower adjusted PAT due to decreased operating profit (for reasons outlined above), partially offset by reduced net finance costs (excl. fair value gains/losses on financial instruments) and lower tax charge.

The reduced net finance costs are reflective of the current low interest rate environment.

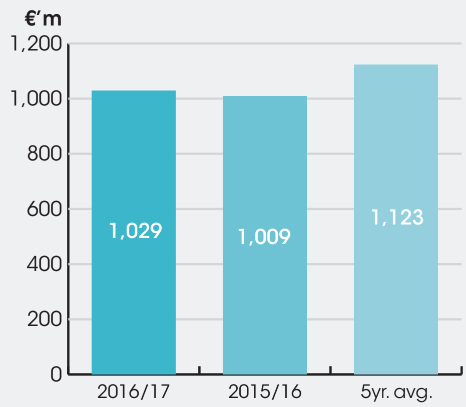
6. Key Financial Information and Metrics (continued)

Net Debt



The net debt position has decreased by **6%** to **€6,989m** in 2016/17 with lower combined gross borrowings **(-€313m)** coupled with an increased combined cash position **(€119m)**. Most of the decrease in gross debt relates to ESB **(€222m)** mainly arising from weaker sterling.

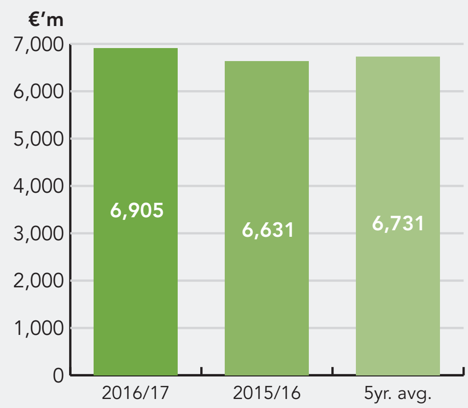
Pension Liabilities



There was a relatively small increase (**€20m / 2%**) in the recognised pension liabilities within the Portfolio. For most of the DB pension schemes within the Portfolio, investment returns were healthy but did not keep pace with the increase in liabilities, which was mainly caused by decreases in the discount rates used to value liabilities. However, there are some significant exceptions to this:

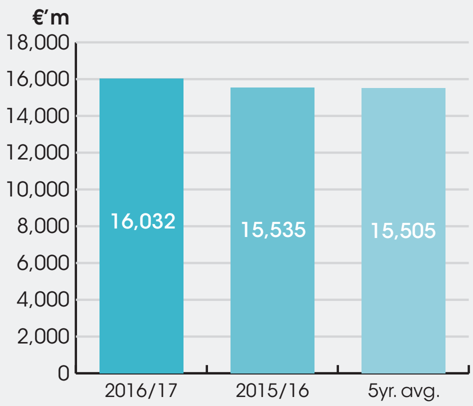
- As noted in the Annual Financial Review 2015/16, the ESB DB Pension Scheme is not accounted for as a typical 'balance of cost' scheme. The accounting treatment of this scheme means that the liability on ESB's balance sheet is not sensitive to interest rates in the same way as the other DB schemes in the Portfolio. The balance sheet liability decreased by **€123m** as a result of ESB's cash contributions to the scheme.
- The euro value of both assets and liabilities of the Northern Ireland Electricity Networks Pension Scheme (sponsored by ESB) decreased due to foreign exchange differences.
- Between the financial year end for the other Entities and BnM's later financial year end in March 2017, the interest rate changed. Thus, while the discount rate used by the other Entities to value liabilities mainly decreased, BnM's discount rate increased leading to a decrease in BnM's pension liabilities over 2016/17.

Net Assets



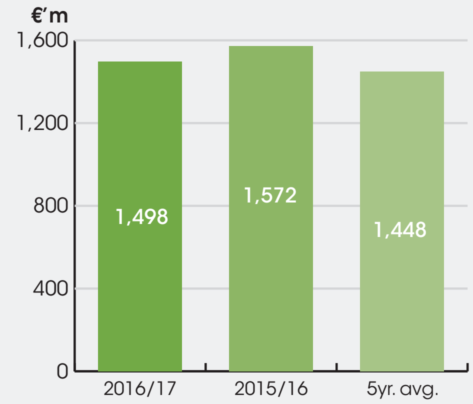
Net assets have increased by **€274m** in 2016/17 primarily due to additional profits retained.

Invested Capital



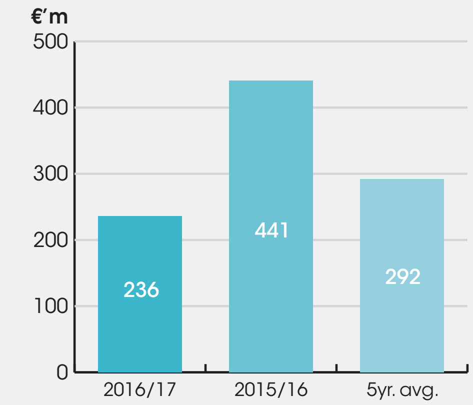
The total invested capital in the Portfolio increased by **€497m** mainly due to higher levels of total combined adjusted equity (i.e. higher levels of retained profits).

Gross Capital Expenditure



Gross capital expenditure represents significant ongoing investment at a Portfolio level (most of which is spent in the State) averaging **€1,448m** p.a. over each of the last five years. The slight reduction in 2016/17 is mostly due to reduced levels of spend by IW (lower level of metering in 2016/17) and Coillte (higher investment in Smartply in 2015/16). A significant portion of the total Portfolio gross capex relates to its regulated electricity, gas and water networks (c. **69%** on an accrual basis).

Dividends Paid (Total)



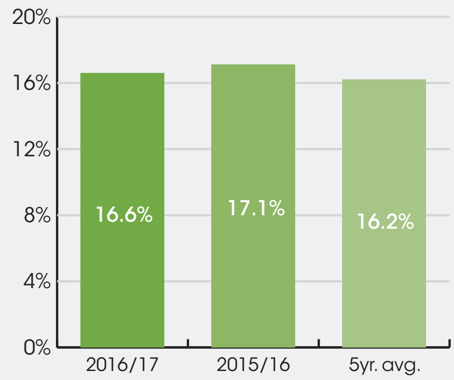
Total combined dividends (comprising special and normal dividends) paid in 2016/17 reduced versus 2015/16 and were below the 5 year average due to lower special dividend payments.

Special dividends totalling **€100m** were paid in 2016/17 by Ervia relating to the sale of Bord Gáis Energy. The equivalent figure in 2015/16 was **€314m**, of which **€214m** related to ESB.

Normal dividends paid in 2016/17 were **€136m**, an increase of **€9m** on 2015/16.

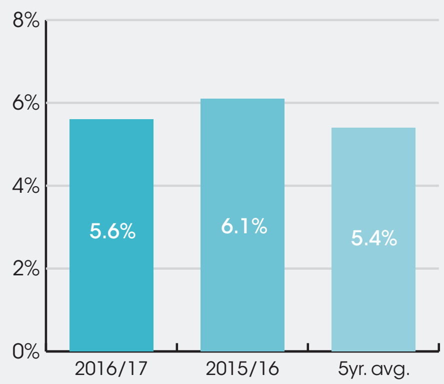
6. Key Financial Information and Metrics (continued)

Operating Profit Margin



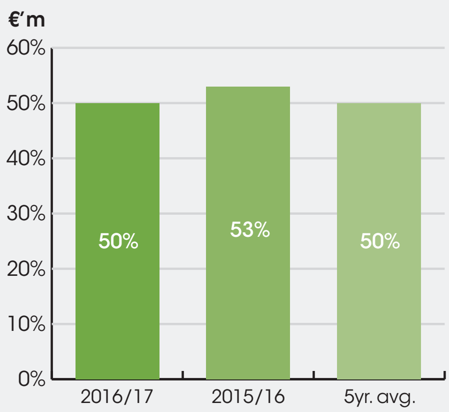
Operating profit margin declined from 2015/16 but remains slightly ahead of the five-year average.

ROIC



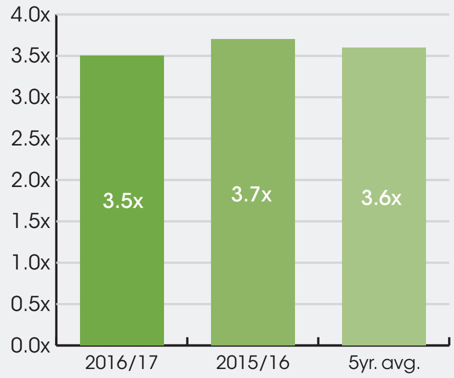
ROIC, a key measure of Entity performance for NewERA, has decreased from **6.1%** in 2015/16 to **5.6%** in 2016/17 reflecting the decreased operating profitability of the Portfolio. ROIC in 2016/17 is somewhat above its five year average. In our view, given the characteristics of the Portfolio, a ROIC of **5.6%** can be viewed as a reasonable return.

Net Gearing (Excl. Pension & Employee Related Liabilities)



Net gearing is down marginally on 2015/16 (**-3%**) due to the impact of the decreased gross borrowings. A net gearing level of c. **50%** is not excessive, in our view, for this Portfolio.

Net Debt/EBITDA



Net debt/EBITDA for 2016/17 is slightly lower than 2015/16 due to the reduction in net debt on stable EBITDA.

Definitions of NewERA's standardised performance measures are set out in Appendix B. Detailed combined five-year historical financial information for the Portfolio is provided in Appendix C. In Section 7 the financial performance of the individual Portfolio entities is considered, noting that the financial performance measures presented are applied by NewERA on a standardised basis across each of the Entities. It is recognised by NewERA that the financial performance measures applied by each entity for their own purposes may differ. Detailed five-year historical financial information for the Entities is set out in Appendix D.

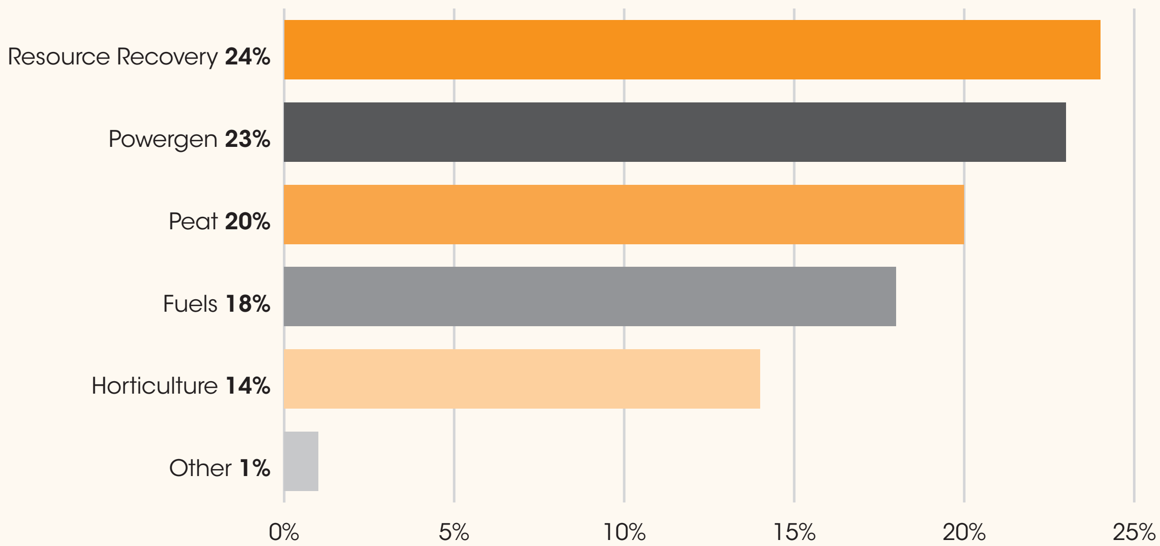
7. Financial Performance of the Portfolio Entities

BORD NA MÓNA

KEY ACTIVITIES

- **RESOURCE RECOVERY** division provides domestic and commercial non-hazardous waste collection and disposal services and operates BnM's landfill facility at Drehid in Kildare.
- **POWERGEN** division manages and operates BnM's power generation assets (Edenderry, Cushaling peaking plant, the Drehid landfill gas facility and a number of wind farms). There are a number of power generation projects at various stages of development.
- **PEAT** division harvests and transports peat from BnM's bogs. It supplies milled peat to Powergen for the generation of electricity at BnM's Edenderry power station and to the two ESB power stations. Peat is also supplied to the Horticulture and Fuels divisions.
- **BIOMASS** division was established as a separate business unit in 2015/16 and is responsible for the development of the biomass supply chain sourcing supply both domestically and internationally. Like the Peat division, this division supplies biomass materials to the Powergen, Fuels and Horticulture divisions and to the ESB power stations.
- **HORTICULTURE** division sells growing media and other horticultural products to Irish and UK retail markets and professional markets primarily in Ireland, the UK and Europe.
- **FUELS** division manufactures and distributes solid fuel products within the residential heating market in Ireland.

Turnover by Activity 2016/17



Operating Profit by Activity 2016/17

Operating profit not disclosed by activity in the annual report.

BORD NA MÓNA

Financial Performance (Financial year ended 29 March 2017)

BnM had a challenging year in 2016/17 as it was the first full year of operation since the exit of the Edenderry power station from the PSO support. The Group also faced challenges resulting from another mild winter, which impacted fuel sales. Revenue dropped from **€433m** in 2015/16 to **€406m** in 2016/17. The Group delivered lower levels of adjusted operating profit (2016/17: **€40m**, 2015/16: **€59m**) and adjusted PAT (2016/17: **€21m**, 2015/16: **€36m**) which resulted in a **4%** reduction in adjusted operating profit margin.

In 2016/17 BnM reported exceptional costs of **€16m** (2015/16: **€21m**) which comprised asset impairment and restructuring costs. Asset impairments related to the goodwill arising on BnM's acquisition of White Moss horticultural business in the UK. This was as a result of an impairment test carried out post acquisition during which issues were noted with respect to inventory and plant manufacturing capacity.

Net debt levels remained largely unchanged in 2016/17. Although it is noted that **€76m** of debt repayment was made during the year using cash reserves.

There was a reduction of **€18m** in the net pension deficit for a number of reasons, the biggest single contribution of which was improved investment returns.

There was a reduced level of capital investment in 2016/17 (2016/17: **€36m**, 2015/16: **€72m**) as BnM made higher investments in JV wind projects with other semi-State entities in 2015/16.

The Group also made a number of acquisitions (**€13m**) including White Moss and the Pacon skip hire business.

BnM paid **€4m** in dividends in 2016/17, which is lower than 2015/16 (**€10m**) driven by a reduction in normalised PAT for dividend purposes with the underlying dividend payout rate remaining at **33%**.

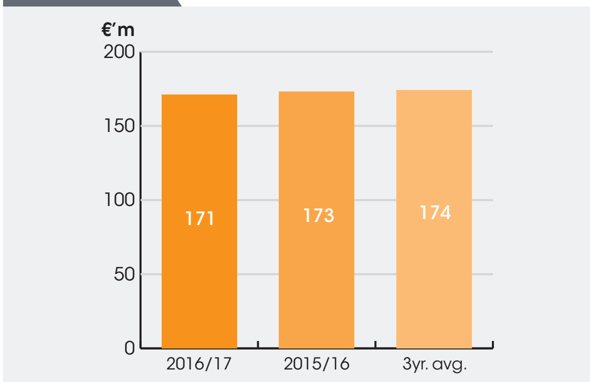
7. Financial Performance of the Portfolio Entities (continued)

Bord na Móna

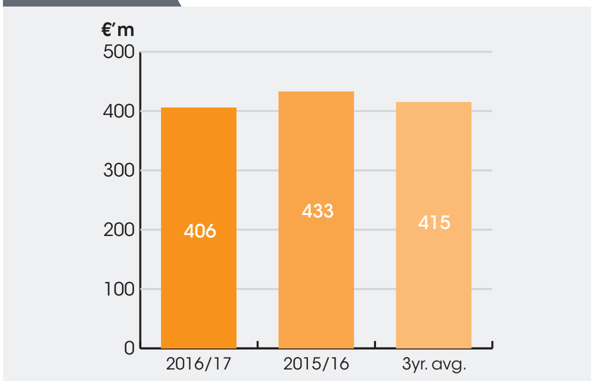
Selected income statement and balance sheet financial data are set out below, along with some high-level observations:

- Adjusted operating profit and adjusted PAT decreased significantly year on year reflecting a challenging year for BnM.

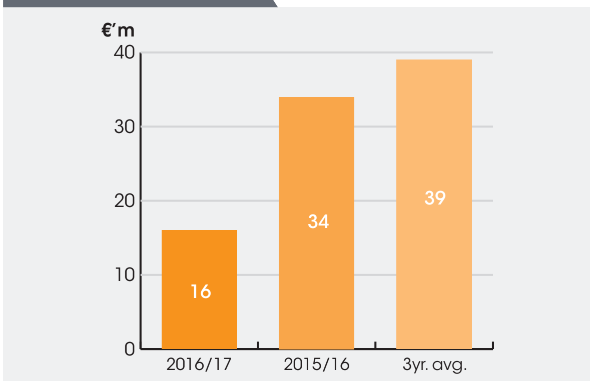
Net Debt



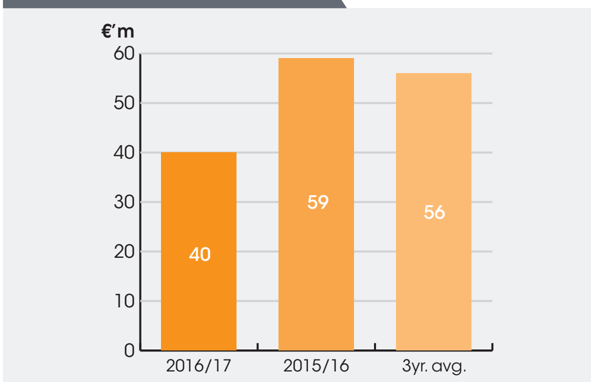
Turnover



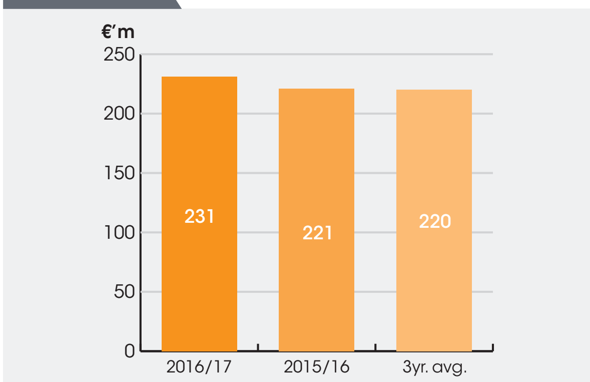
Pension Liabilities



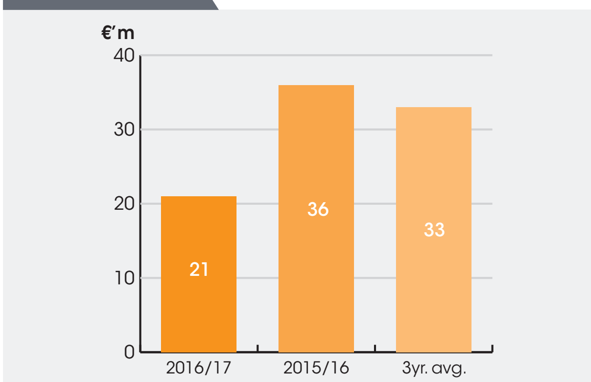
Adjusted Operating Profit



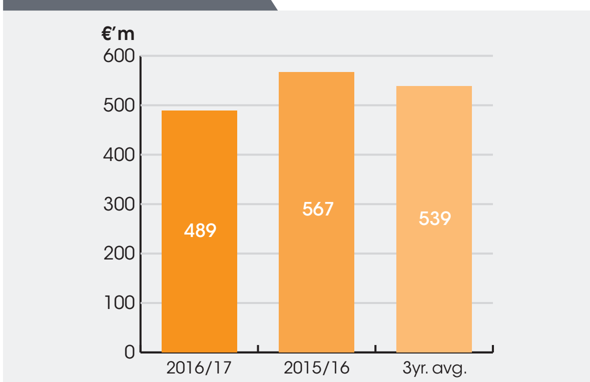
Net Assets



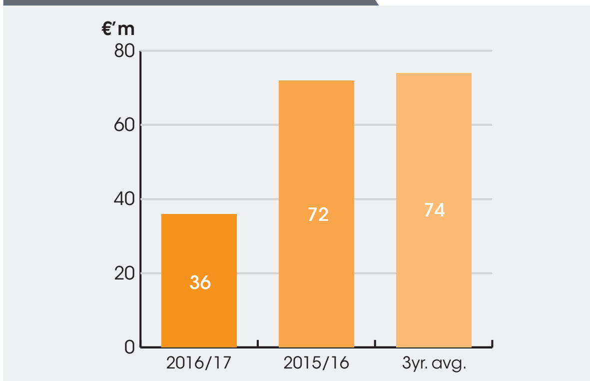
Adjusted PAT



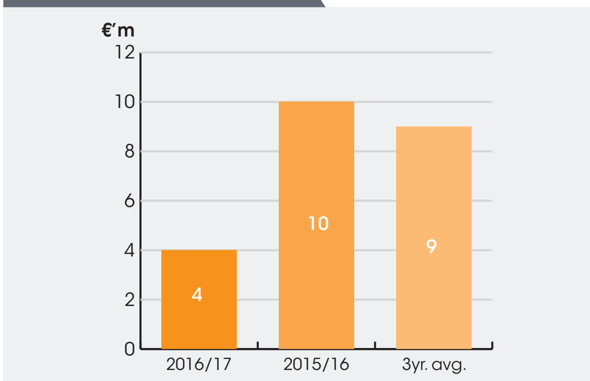
Invested Capital



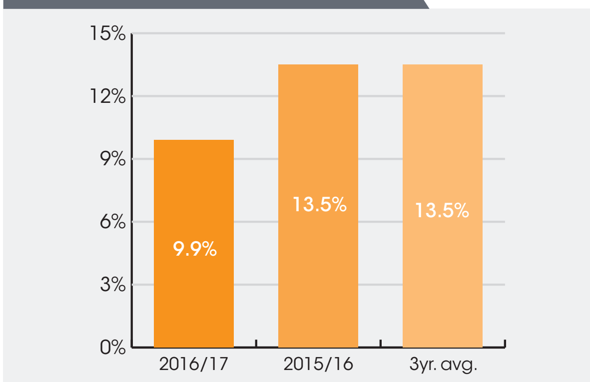
Gross Capital Expenditure



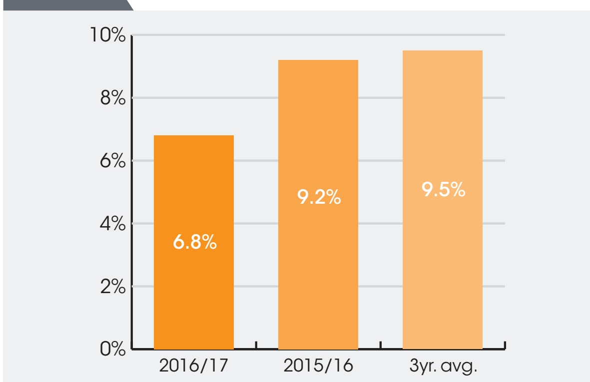
Dividends Paid (Total)



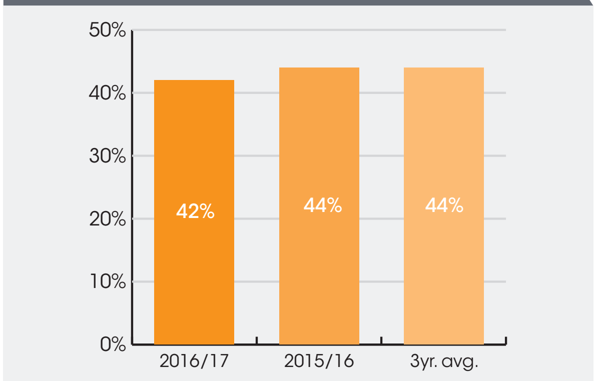
Adjusted Operating Profit Margin



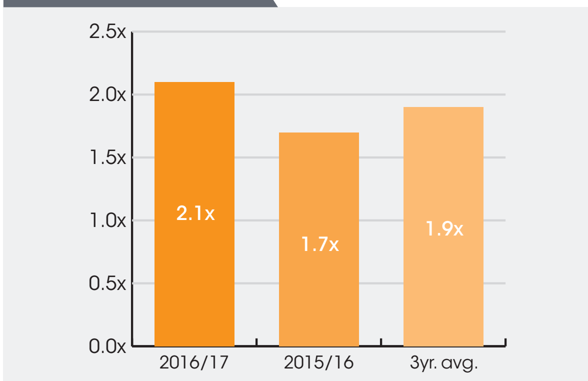
ROIC



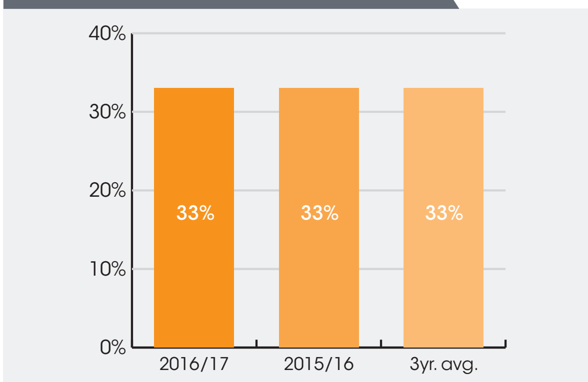
Net Gearing (Excl. Pension & Employee Related Liabilities)



Net Debt/EBITDA



Dividend Payout (Normal Dividends)



Selected cashflow statement and key metrics are set out above, along with some high-level observations on 2016/17 performance:

- Gross capex decreased by c. 50%;
- Dividends paid decreased due to lower profits but recognising that dividend payout (%) has remained the same; and
- Adjusted operating profit margin and ROIC decreased due to the decline in profitability.

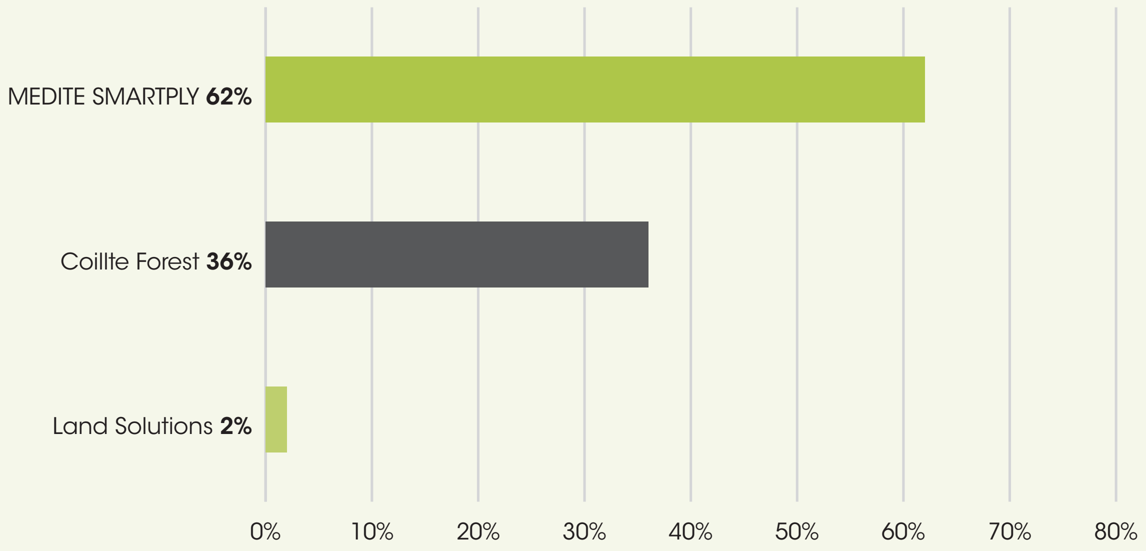
7. Financial Performance of the Portfolio Entities (continued)

COILLTE

KEY ACTIVITIES

- **COILLTE FOREST** manages all aspects of the Group's core forestry business including the planting, growing, managing, protecting, and harvesting of forests. It provides a range of wood products from its forests along with public goods such as nature conservation, landscape management and recreation.
- **MEDITE SMARTPLY** manufactures innovative, market led MDF and OSB value-added, sustainable timber construction panels from its plants in Waterford and Clonmel that are exported to over 30 countries worldwide.
- **LAND SOLUTIONS** is responsible for adding value to every hectare of Coillte land, whilst protecting the integrity of its core productive forest estate. It provides commercial land solutions that support the delivery of Government policies in areas such as renewable energy, infrastructure and tourism.

Turnover by Activity 2016



Operating Profit by Activity 2016

Operating profit not disclosed by activity in the annual report.

COILLTE

Financial Performance (Financial year ended 31 December 2016)

Coillte's underlying trading performance in terms of turnover, adjusted EBITDA and adjusted operating cashflow have been improving, in part due to the fundamental restructuring of the business resulting in a significant shift in the cost base which will help generate targeted overhead savings of **€15m** per annum by 2020.

Excluding the impact of revaluation gains relating to investment property assets (land rented on long term leases to JV or third-party wind farm operators), Coillte delivered an improved trading performance in 2016 generating adjusted operating profits of **€64m** (uplift of **€3m** over 2015).

When these revaluation gains are included, adjusted operating profit declined by **€13m** year-on-year (2016: **€66m**, 2015: **€79m**) which is reflected in a lower ROIC (2016: **4.3%**, 2015: **5.2%**).

Net debt increased by **€14m** to **€168m** in 2016 with a reduction in gross borrowings of **€18m** offset by the utilisation of cash during the year to meet investment, dividend payments and other funding needs. This is reflected in a slightly higher net gearing level (2016: **14%**, 2015: **12%**) noting that net debt/EBITDA was consistent year-on-year at **1.7** times due to the increase in EBITDA in 2016.

Capital expenditure in 2016 was **€53m** with almost half of this relating to Coillte's forest assets. Investment levels were **33%** lower than in 2015 reflecting that the bulk of the investment in the new Smartply facility was incurred in 2015.

Coillte made dividend payments of **€7.2m** during 2016, which comprised a final dividend of **€1.0m** in respect of 2015 and a dividend of **€6.2m** in respect of 2016 which compared with a dividend payment of €4m in 2015.

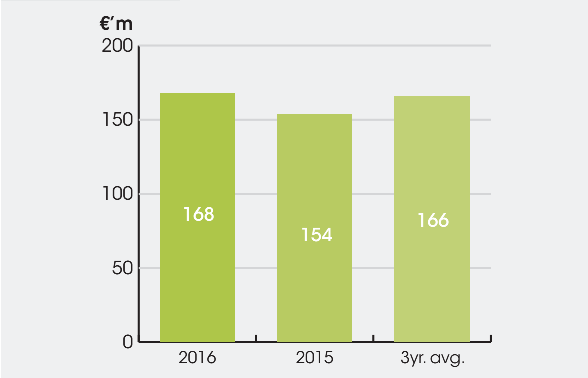
7. Financial Performance of the Portfolio Entities (continued)

COILLTE

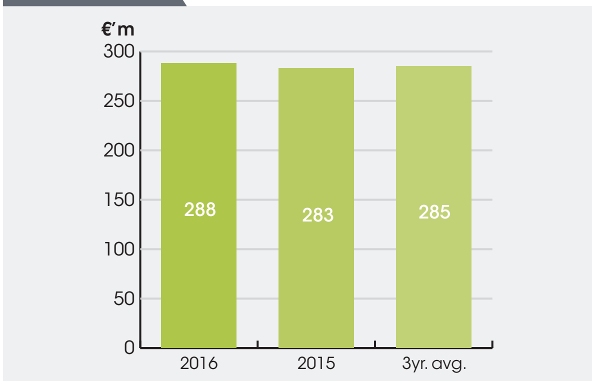
Selected income statement and balance sheet financial data are set out below, along with some high-level observations:

- Adjusted operating profit, excluding the impact of revaluation gains, increased in 2016 reflecting continuing improved trading performance from its core business; and
- Pension liabilities increased, mainly as a result of a reduced discount rate.

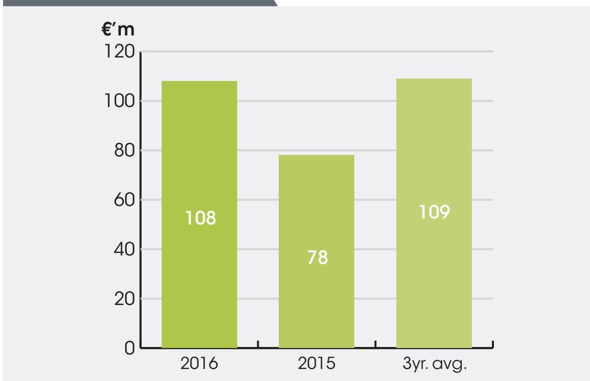
Net Debt



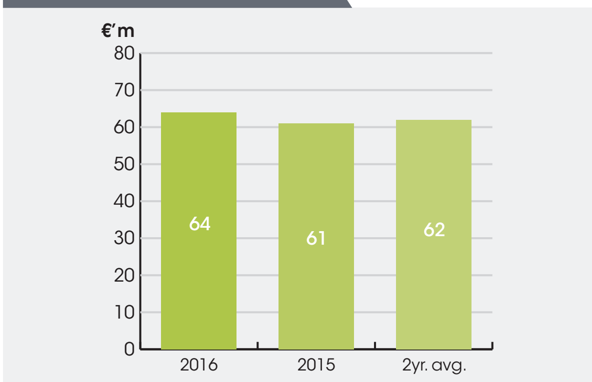
Turnover



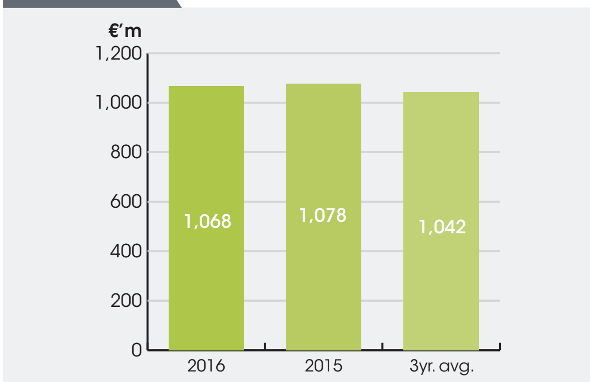
Pension Liabilities



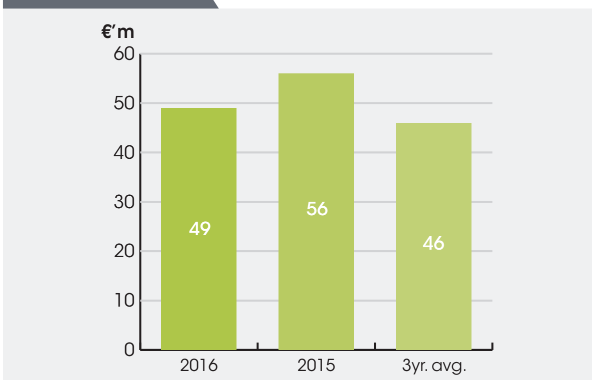
Adjusted Operating Profit[10]



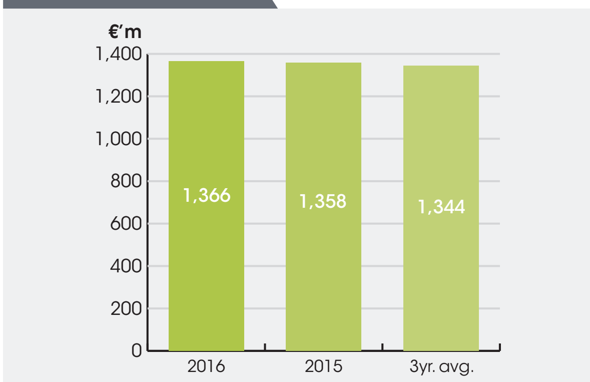
Net Assets



Adjusted PAT

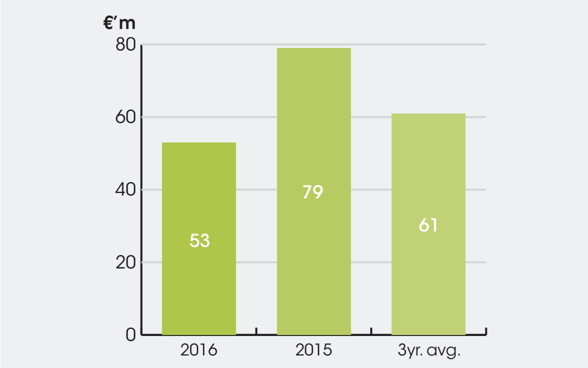


Invested Capital

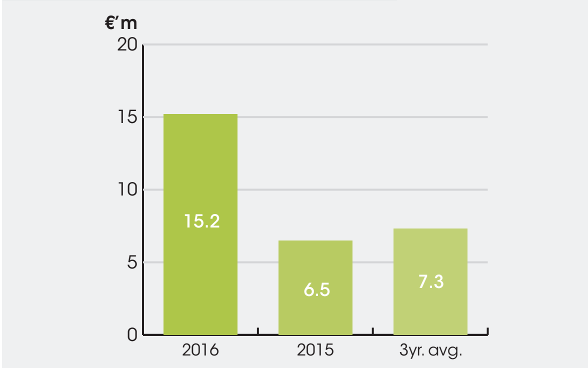


10 Adjusted operating profit excluding revaluation gains

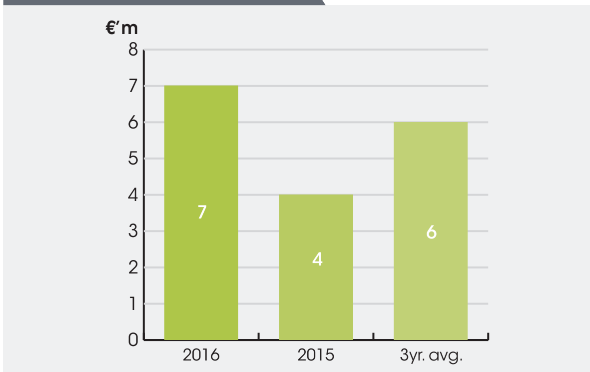
Gross Capital Expenditure



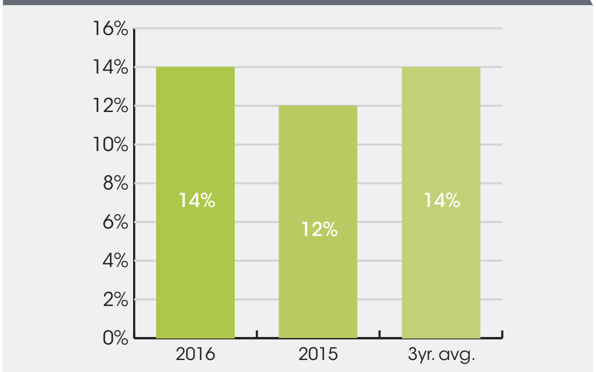
Adjusted Operating Cashflow



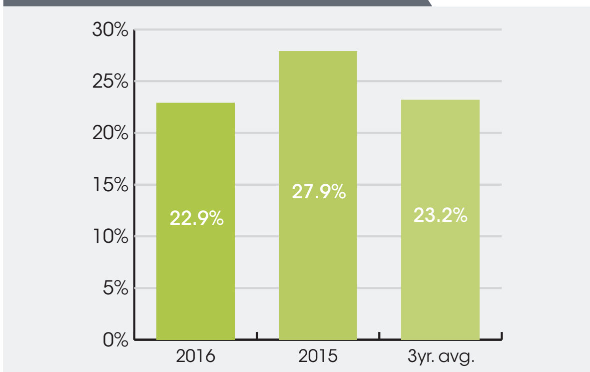
Dividends Paid (Total)



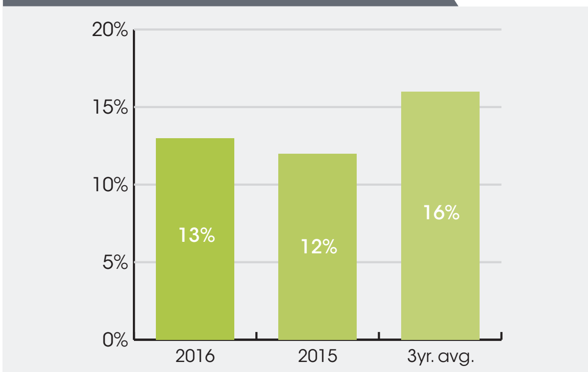
Net Gearing (Excl. Pension & Employee Related Liabilities)



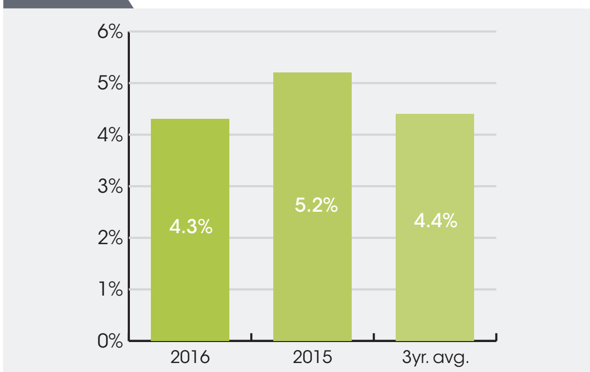
Adjusted Operating Profit Margin[11]



Dividend Payout (Normal Dividends)



ROIC[12]



Selected cashflow statement and key metrics are set out above, along with some high-level observations:

- Gross capital expenditure was significantly lower in 2016 reflecting the completion of the Smartply investment in 2015;
- ROIC fell as adjusted operating profit declined; and
- Significant increase in adjusted operating cashflow reflecting improved underlying trading and delivery of overhead savings from implementation of its transformation strategy.

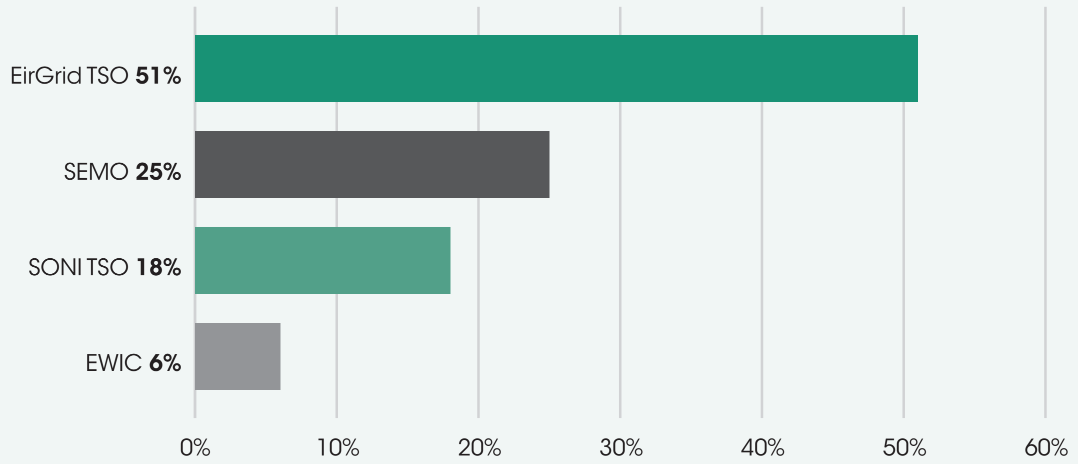
11 Adjusted operating profit including revaluation gains. Excluding revaluations gains results in adjusted operating profit margin of: 2016: 22.2% 2015: 21.6%.
12 Adjusted operating profit including revaluation gains.

7. Financial Performance of the Portfolio Entities (continued)

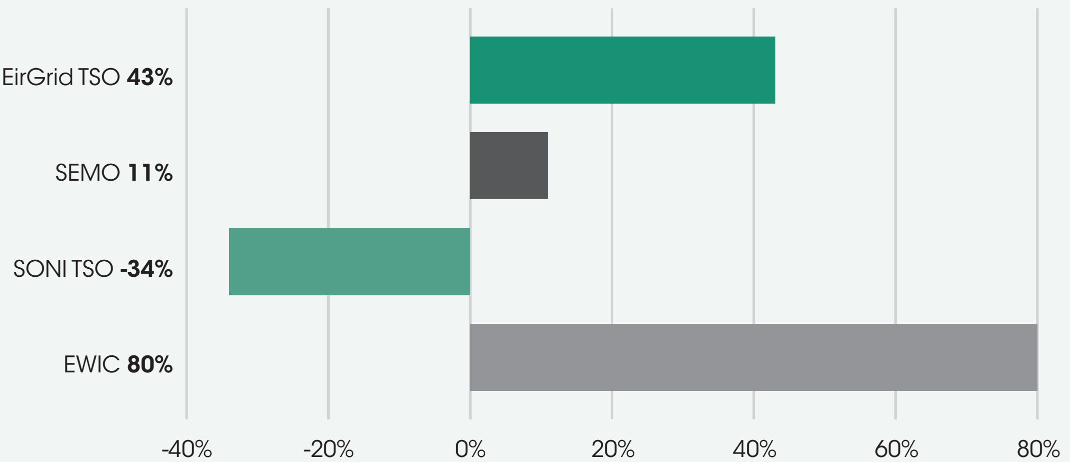
KEY ACTIVITIES

- **EIRGRID TSO** develops, manages and operates the high voltage electricity transmission grid in Ireland and is regulated by the CRU.
- **SEMO** operates the SEM across Ireland and Northern Ireland and is regulated by the SEM Committee.
- **SONI** develops, manages and operates the high voltage electricity transmission grid in Northern Ireland and is regulated by the Utility Regulator Northern Ireland ("**URegNI**").
- **EWIC** owns and operates a high-voltage electricity link between Ireland and the UK selling capacity through auctions.
- **OTHER** EirGrid is also responsible for implementing the systems and process needed for the introduction of new market arrangements under I-SEM. In addition, the Group is working to help deliver on 2020 renewable electricity targets through the programme for Delivering a Secure and Sustainable Electricity System (known as DS3).

Turnover by Activity 2016



Operating Profit by Activity 2016



Financial Performance (Financial year ended 30 September 2016)

EirGrid's activities are predominantly regulated and its reported profits and returns can vary from year to year due to over and under-recoveries of regulatory income. In accordance with normal regulatory practice, over and under-recoveries of regulatory income are corrected for in future tariffs. Additionally, a significant element of its turnover is pass-through in nature as it comprises regulatory tariffs which it collects on behalf of the transmission asset owners. These two factors make it difficult to fully assess the underlying operating performance of the entity.

A financial measure which is more useful to use in reviewing its financial performance is management's estimate for underlying profit before tax (this estimate excludes such adjustments of prior year over and under recoveries). Management's reported estimate for underlying profit before tax, which excludes regulatory income adjustments, was **€16m** for 2016 (2015: **€17m**), indicating a steady financial performance for 2016.

Net debt was **€182m** at year end, a reduction of **€25m** on prior year, reflecting the ongoing payment of EWIC related borrowings and an increase in unrestricted cash balances (EirGrid's overall cash position includes restricted cash balances relating to the SEM collateral reserve accounts and amounts held on trust for SEM market participants).

EirGrid operates two DB schemes for qualifying employees, the main scheme being in Ireland with a second scheme in Northern Ireland. The Group's combined net pension liability doubled from **€27m** at the end of 2015 to **€54m** by the end of 2016. This was mainly due to an increase in the present value of liabilities due to a reduced discount rate (reduction in the discount rate reflects a continued decline in long-term corporate bond yields) partly offset by an increase in the fair value of the assets.

EirGrid paid a dividend to the Exchequer of **€4.0m** in 2017 in respect of 2016 and **€3.4m** in 2016 in respect of 2015.

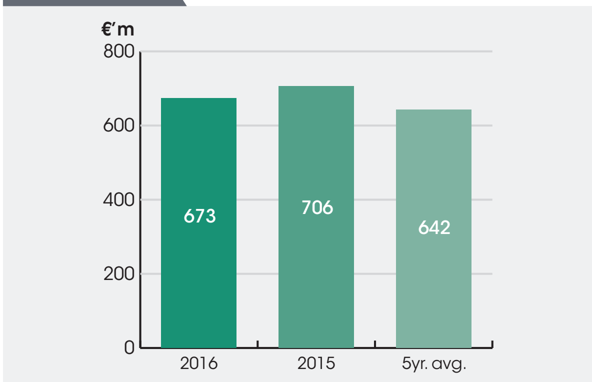
7. Financial Performance of the Portfolio Entities (continued)

EIRGRID GROUP

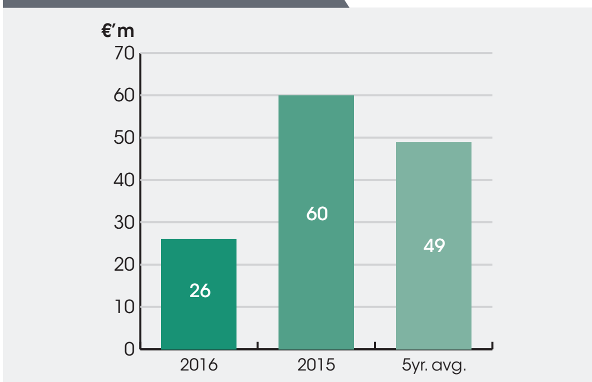
Selected income statement and balance sheet financial data are set out below, along with some high-level observations:

- Large decrease in adjusted operating profit and adjusted PAT between 2015 and 2016 but as noted previously underlying profit before tax remained steady between 2016 and 2015;
- Net debt continues to fall; and
- Increase in pension liabilities in 2016.

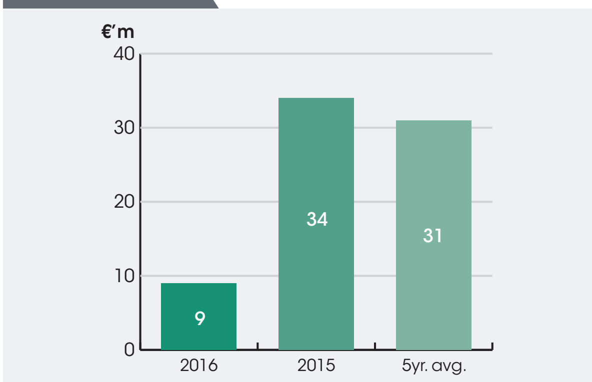
Turnover



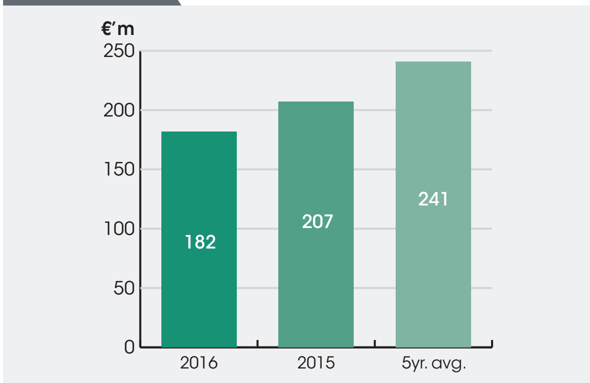
Adjusted Operating Profit



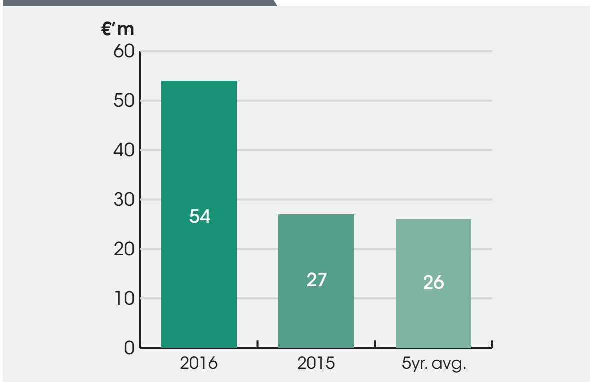
Adjusted PAT



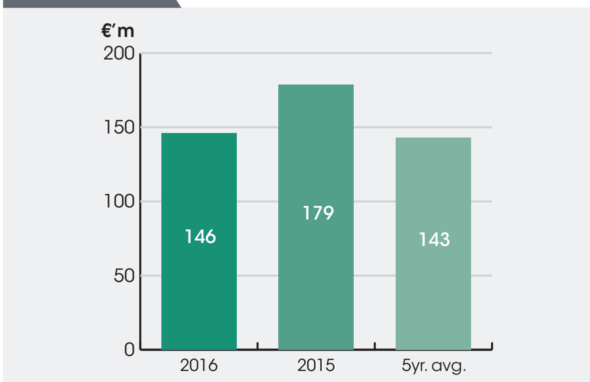
Net Debt



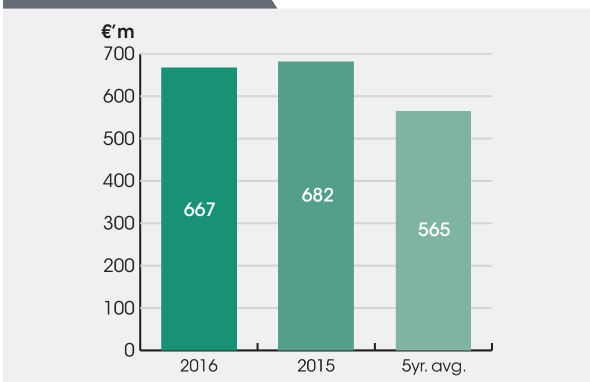
Pension Liabilities



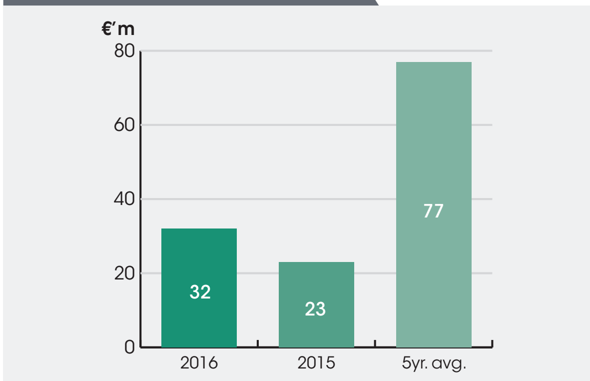
Net Assets



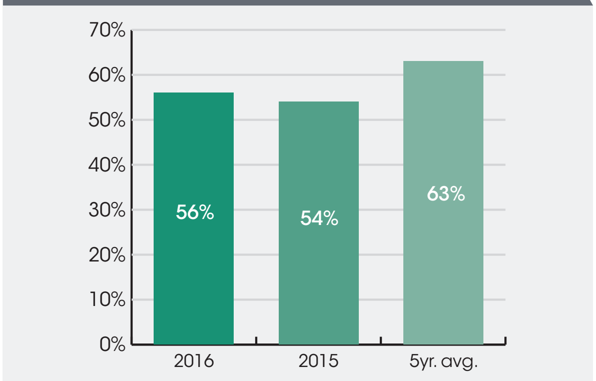
Invested Capital



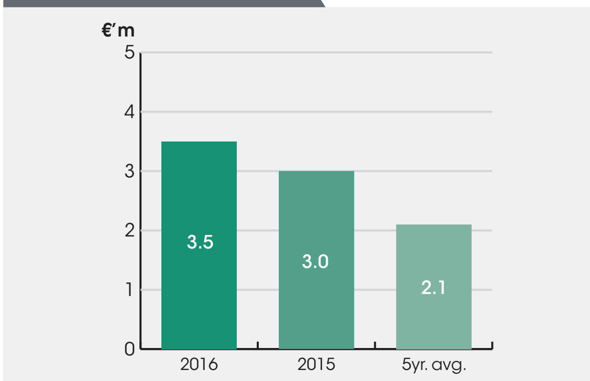
Gross Capital Expenditure



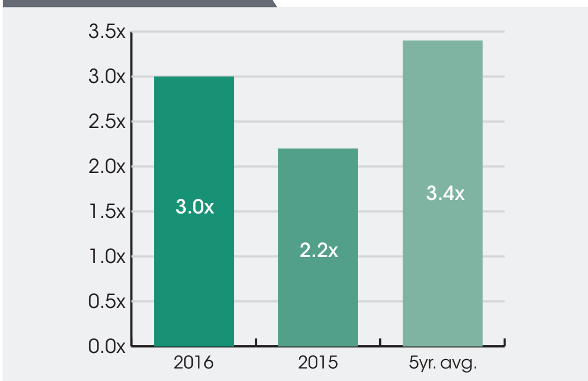
Net Gearing (Excl. Pension & Employee Related Liabilities)



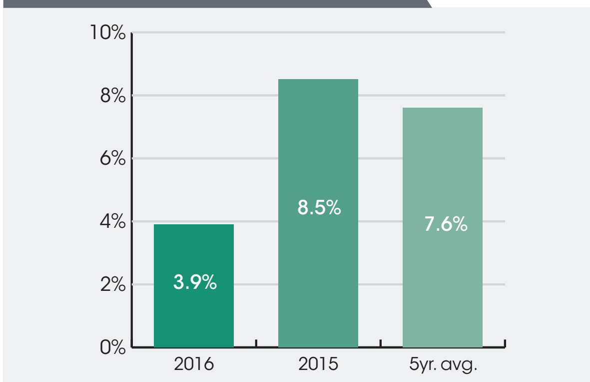
Dividends Paid (Total)



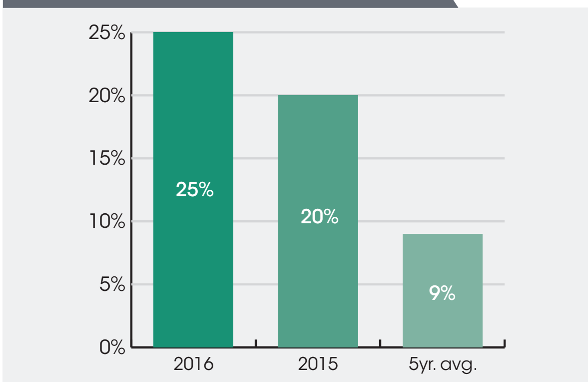
Net Debt/EBITDA



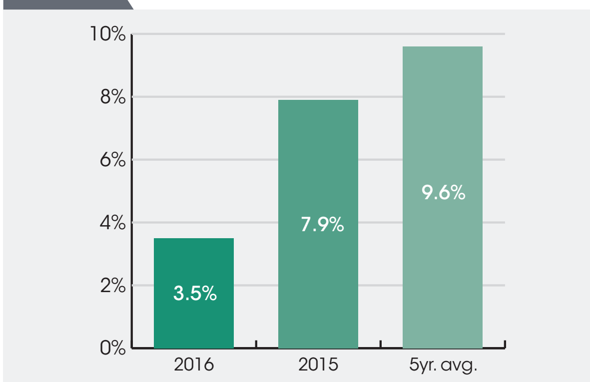
Adjusted Operating Profit Margin



Dividend Payout (Normal Dividends)



ROIC



Selected cashflow statement and key metrics are set out above, along with some high-level observations:

- Gross capex higher than last year but significantly below 5 year average; and
- Dividend payout ratio rose to 25%.

7. Financial Performance of the Portfolio Entities (continued)

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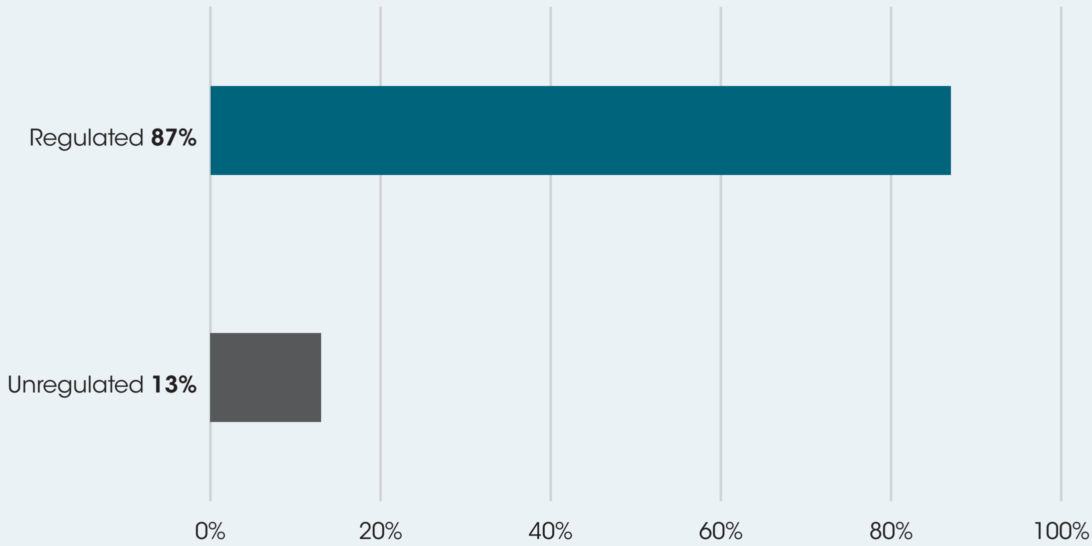
KEY ACTIVITIES

- **GAS NETWORKS IRELAND** provides gas transportation services, and invests in, operates and maintains the national gas network. This network includes the natural gas T&D network in Ireland, the gas interconnector pipelines between Ireland and Scotland and the gas transmission pipelines in Northern Ireland. Within GNI, Aurora Telecom is a wholesale, open-access service provider of dark fibre and managed bandwidth services.

Turnover by Activity 2016



Operating Profit by Activity 2016

Operating profit relates substantially to GNI activities but is not split between regulated and unregulated activities.

ervia Gas Networks Ireland

Financial Performance (Financial year ended 31 December 2016)

Ervia's reported profits and returns are derived substantially from GNI which is mainly regulated (**87%** of 2016 revenue) and its results can vary from year to year due to over and under-recoveries in respect of allowable regulatory income. In 2016 GNI delivered a strong performance with both revenue (2016: **€498m**, 2015: **€491m**) and adjusted operating profit (2016: **€195m**, 2015: **€182m**) increasing on prior year mainly due to higher regulated revenue. Adjusted PAT increased (2016: **€129m**, 2015: **€116m**) reflecting the increase in operating profit.

Net pension liabilities increased by **€78m** (2016: **€129m**, 2015: **€51m**). This was mainly due to an increase in the present value of liabilities arising from a reduced discount rate, noting that the reduced discount rate reflects a continued decline in long-term corporate bond yields.

Net debt increased marginally year-on-year (2016: **€1,028m**, 2015: **€1,022m**) with operating cashflows primarily utilised to meet capital investment needs and dividend payments.

Ervia continued to progress its regulatory capital investment programme in 2016 with gross capital expenditure of **€135m** in 2016 (cash basis), an increase on prior year (2015: **€100m**) and the historical four-year average (**€108m**). This increased level of spend was mainly related to the commencement of the pipeline twinning project in 2016.

Of the **€135m** in dividend payments in 2016, **€100m** comprised a special dividend paid to the Exchequer in respect of a further installment of the sale proceeds of the Bord Gáis Energy ("**BGE**") business. The remaining sales proceeds from that transaction to be paid by Ervia to the Exchequer were **€280m** as at the end of 2016. The balance of dividend payments in 2016 comprised the annual dividend in respect of 2015 profit before exceptional items of **€35m**.

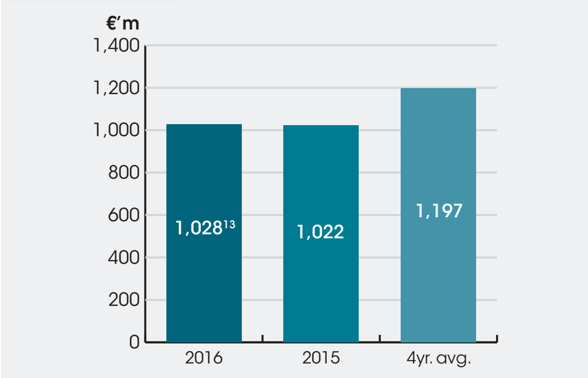
Its ROIC increased from **6.5%** to **7.0%** indicating its strong financial performance in 2016.

7. Financial Performance of the Portfolio Entities (continued)

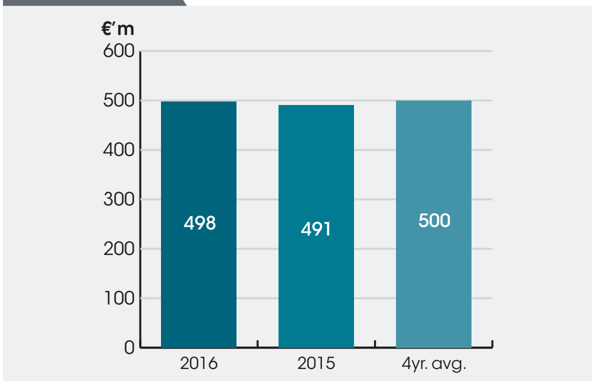
Selected income statement and balance sheet financial data are set out below, along with some high-level observations:

- Strong growth in adjusted operating profit and adjusted PAT in 2016 versus 2015;
- Significant increase in pension liabilities in 2016 due to a number of factors including changes in actuarial assumptions; and
- Net debt and invested capital broadly in line with prior year.

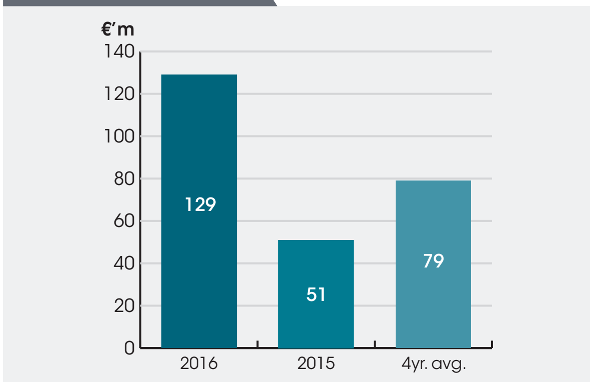
Net Debt



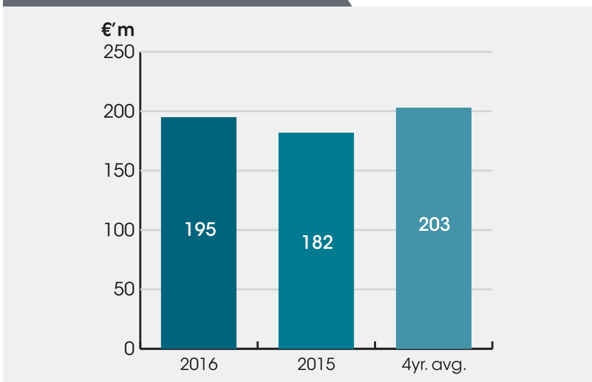
Turnover



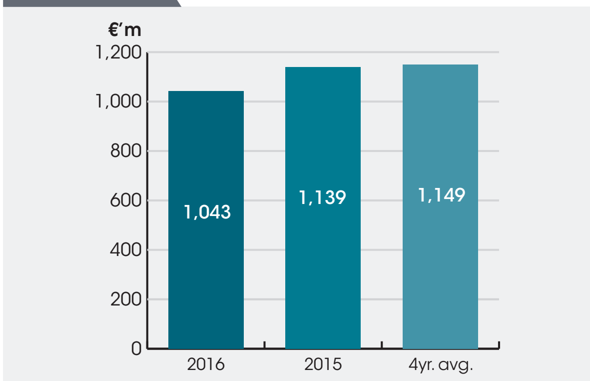
Pension Liabilities



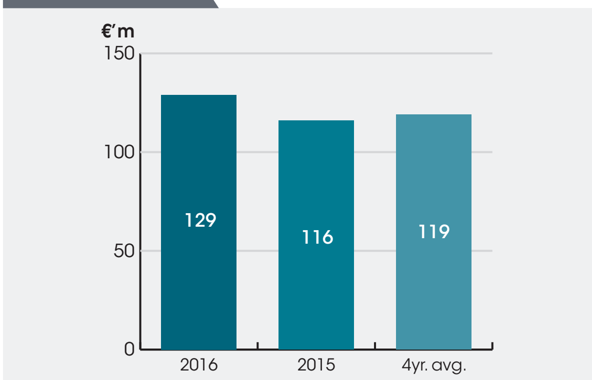
Adjusted Operating Profit



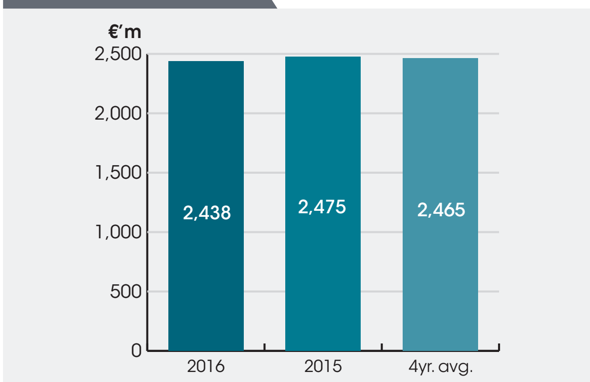
Net Assets



Adjusted PAT

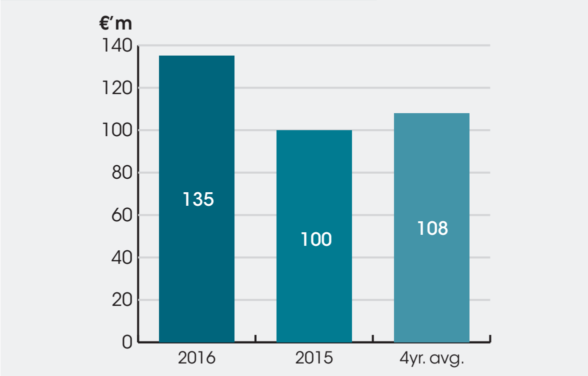


Invested Capital

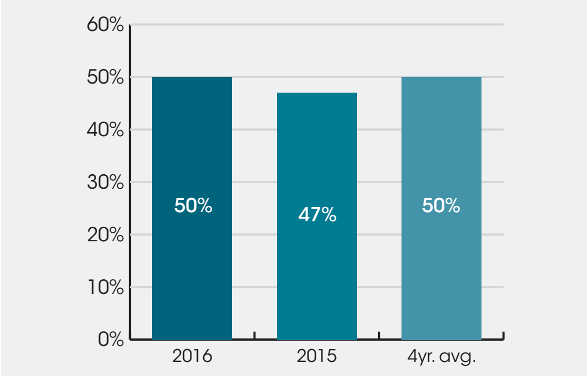


13 Includes adjustments for fair value hedges (€56m in 2016 and €57m in 2015).

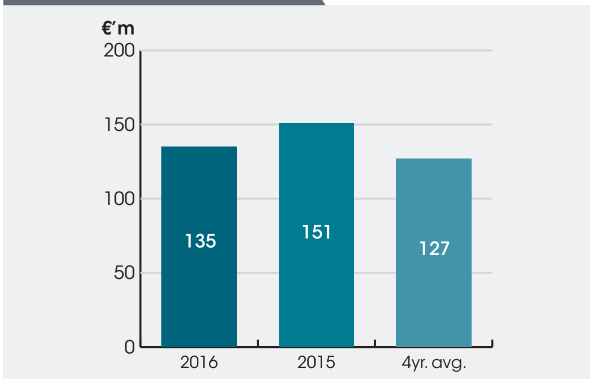
Gross Capital Expenditure



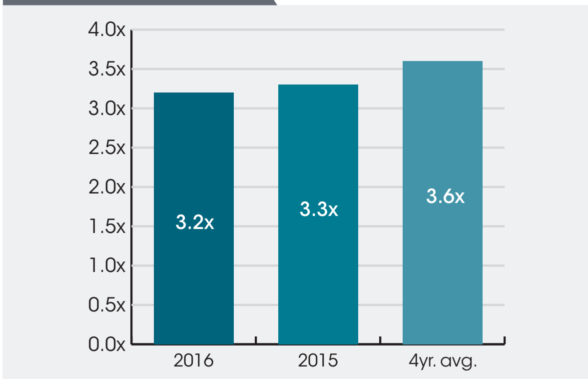
Net Gearing (Excl. Pension & Employee Related Liabilities)



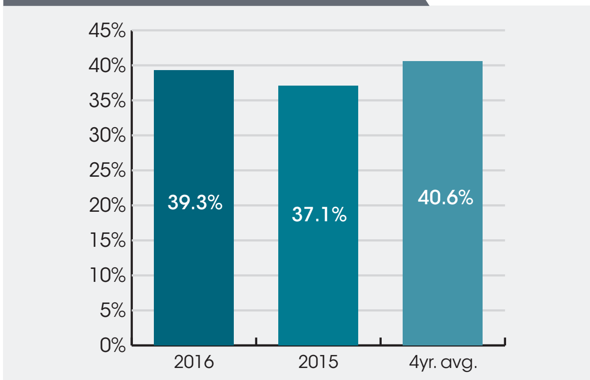
Dividends Paid (Total)



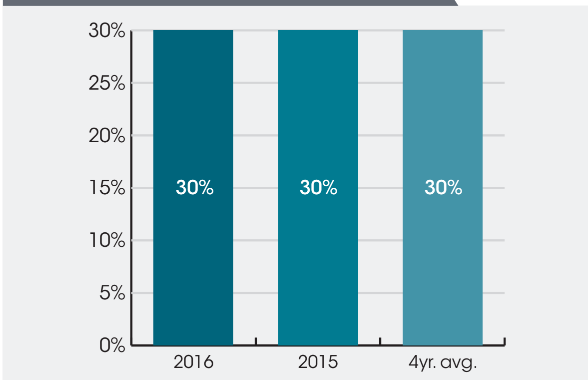
Net Debt/EBITDA



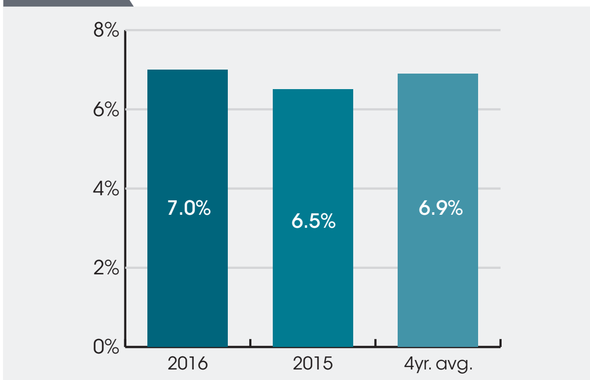
Adjusted Operating Profit Margin



Dividend Payout (Normal Dividends)



ROIC



Selected cashflow statement and key metrics are set out above, along with some high-level observations:

- Gross capex 35% higher than last year and above the five year average; and
- Adjusted operating profit margin and ROIC have increased reflecting strong performance.

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Credit Rating

To facilitate the raising of finance Ervia has credit ratings attributed to it by the main credit rating agencies

S&P – August 2017 – corporate credit rating maintained at A reflecting strong cash flow coverage supported by stable sovereign rating.

- "The stable outlook on GNI reflects the stable outlook for Ireland, the majority shareholder of its parent Ervia. In our assessment of GNI's group, we exclude any loss or contribution from Ervia's Irish Water, which we view as being sufficiently ring-fenced from the group. We are now more certain that GNI will maintain strong cash flow coverage ratios as the company has agreed its dividend payout policy with its shareholder, the Irish government. We have more visibility regarding the regulatory tariffs for the next regulatory period running from October 2017 to September 2022, as the company has received the regulator's preliminary position. Factoring in the dividend policy, GNI's moderate debt levels, and preliminary tariffs, we expect that GNI will be able to sustain adjusted Funds From Operations ("**FFO**") to Debt of 15%-16%, allowing significant headroom to our rating trigger for an 'A-' stand-alone credit profile of 12%. Debt to EBITDA will range from 4.5x-5.5x. Our assessment of GNI's business risk profile is underpinned by the company's monopoly position as the only gas transmission and distribution network operator in the natural gas market in Ireland. The assessment also reflects that the majority of the company's cash flows are stable and predictable as they stem from its low-risk regulated gas transportation and distribution network operations".

Moody's – September 2017 – upgrade to A3 with stable outlook maintained

- "GNI's A3 ratings reflect: (i) the low business risk profile of its gas transmission and distribution businesses, operating under a stable and predictable regulatory framework in the Republic of Ireland (A2, stable); (ii) operating performance broadly in line with regulatory assumptions, with a mature asset base and modest level of capital expenditure; and (iii) the company's moderate leverage with Net Debt to Regulated Asset Value expected to remain very comfortably below 60%. The rating action follows Moody's upgrade of Ireland's long-term government bond rating to A2 with a stable outlook from A3 with a positive outlook. GNI is 100% owned by the Irish Government, via its parent company Ervia, and as such Moody's considers the company's rating according to its methodology for Government-Related Issuers."

GNI Bond Performance

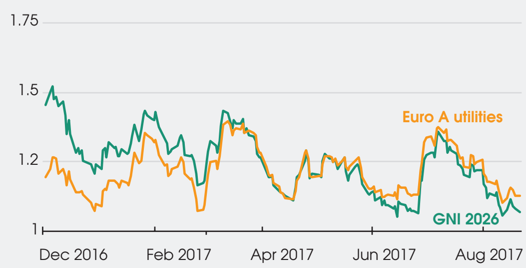
- GNI's yield fell between December 2016 and August 2017 in line with the yield reduction in Government bonds.
- In 2017 (year to date), GNI's yield has fallen relative to the yields of European utility A bonds (see graph below).

Issuer	Issued	Coupon %	Maturity Date	Issued Amount
GNI	Dec-16	1.375	2026	€500m
GNI	Dec-16	2.25	2036	€125m

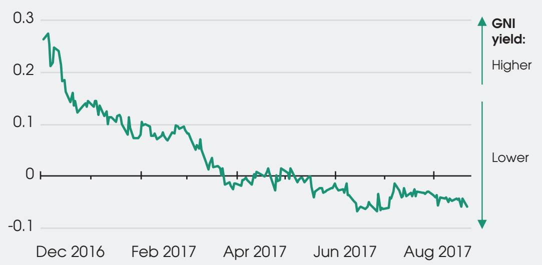
	S&P	Moody's
GNI – Rating	A	A3
GNI – Outlook	Stable	Stable

Source: public market information, Ervia

Yield: GNI 2026 bond and Euro Utilities A bond of same maturity (%)



Yield spread: GNI 2026 bond versus Euro Utilities A bond of same maturity

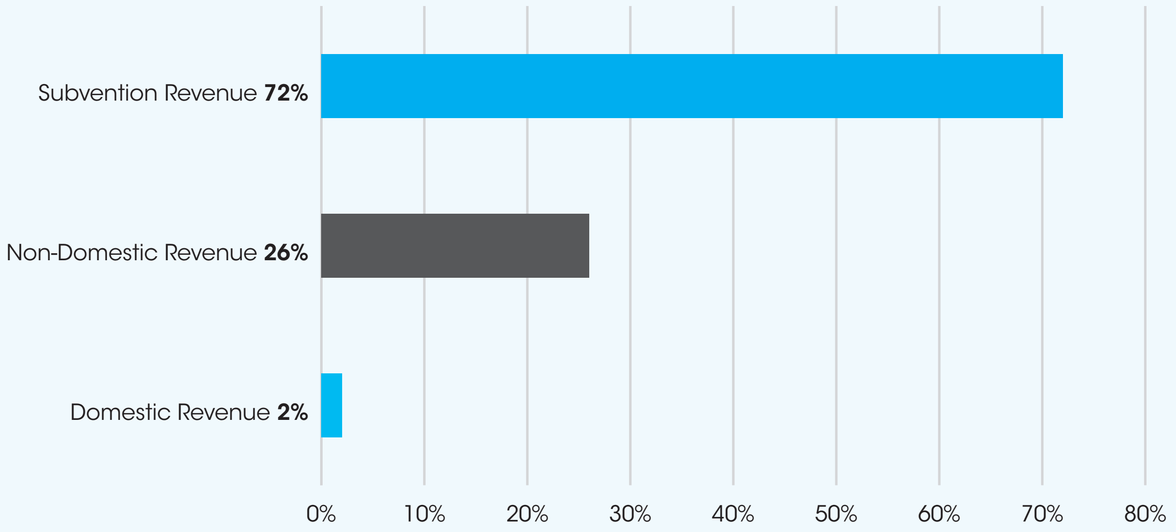


Underlying data source: public market information. Note: Euro Utilities A group comprises entities with a A+, A, A- credit rating, Analysis: NewERA ervia UISCE ÉIREANN : IRISH WATER

KEY ACTIVITIES

- **IRISH WATER** is Ireland's national water utility, responsible for the delivery of all public water services including the supply of drinking water and the collection, treatment and disposal of waste water.

Turnover by Activity 2016



7. Financial Performance of the Portfolio Entities (continued)

Financial Performance (Financial year ended 31 December 2016)

During 2016, IW reported revenue of €906m (2015: **€851m**) and adjusted operating profit of **€69m**, (2015: **€29m**). In 2016, legislation was introduced to suspend domestic water charges. Arising from this, domestic revenue decreased from **€232m** in 2015 to **€22m** in 2016. This was offset by a Government subvention increase from **€399m** in 2015 to **€652m** in 2016.

Adjusted profit after tax also increased (2016: **€54m**, 2015: **€17m**) with any surplus generated by IW to be reinvested in water infrastructure.

Net pension liabilities decreased slightly from **€27m** in 2015 to **€26m** in 2016.

Operating cashflow increased from **-€56m** in 2015 to **€168m** in 2016. It was the first year of positive cash flow from operating activities for IW. This resulted from increased EBITDA, working capital movements and lower interest payments.

Net debt increased from **€890m** in 2015 to **€917m** in 2016 (excluding restricted deposits) driven by an increase in borrowings of **€29m**.

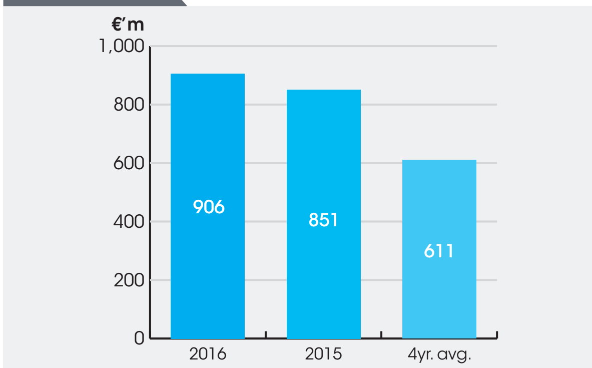
Net assets more than trebled from **€156m** in 2015 to **€493m** in 2016. This was caused by IW's retained surplus, a cash capital contribution of **€184m** to fund capital investment and the conversion of a **€96m** loan facility to a capital contribution.

IW is a highly capital-intensive company and has indicated in its Water Services Strategic Plan that a multi-billion euro programme will continue through several successive investment cycles. In 2016, gross capital expenditure was **€471m** on a cash basis, a decrease from **€511m** in 2015 due to a reduction in expenditure on metering. IW will continue to deliver significant capital investment programme to transform the water industry and to provide reliable, high quality water and wastewater infrastructure and services.

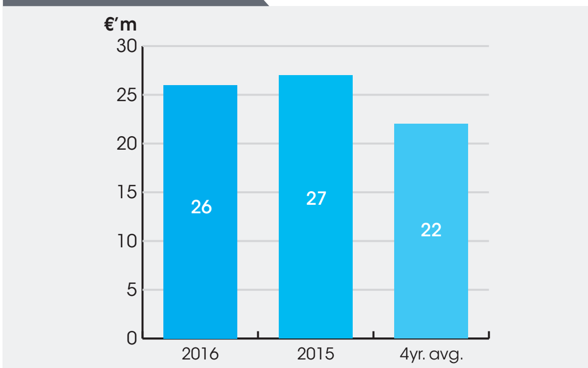
Selected income statement, balance sheet and cashflow statement financial data are set out below, along with some high-level observations:

- Adjusted operating profit and adjusted PAT continue to increase; and
- Net debt and pension liabilities broadly in line with 2015.

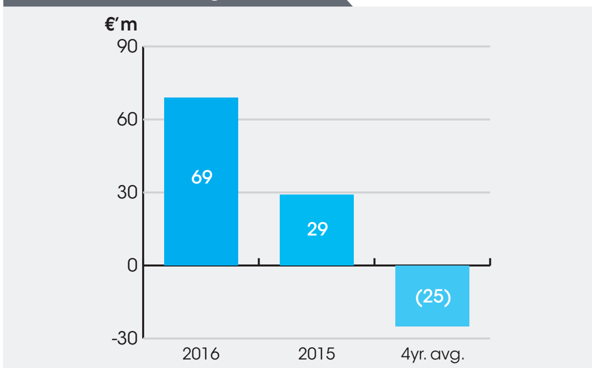
Turnover



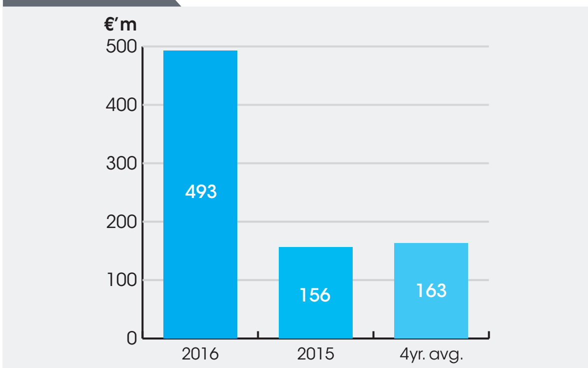
Pension Liabilities



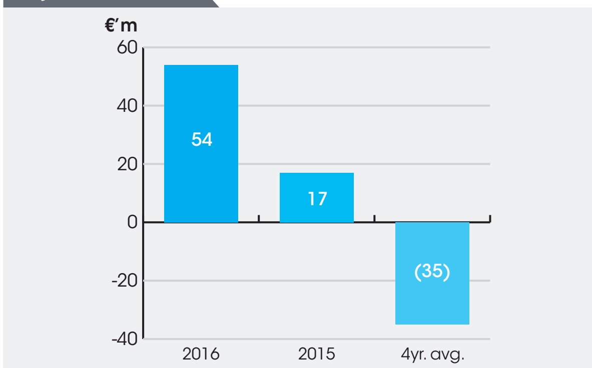
Adjusted Operating Profit



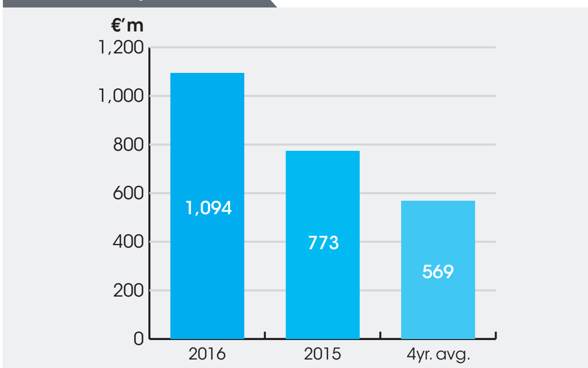
Net Assets



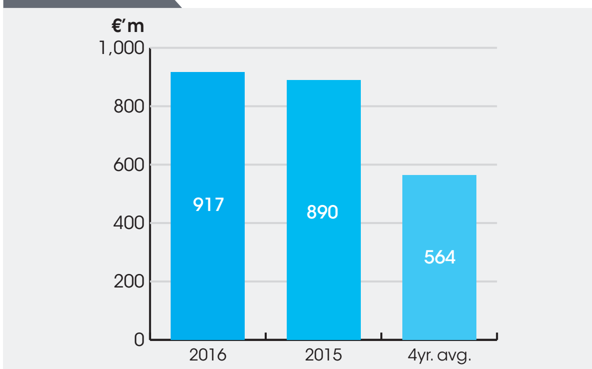
Adjusted PAT



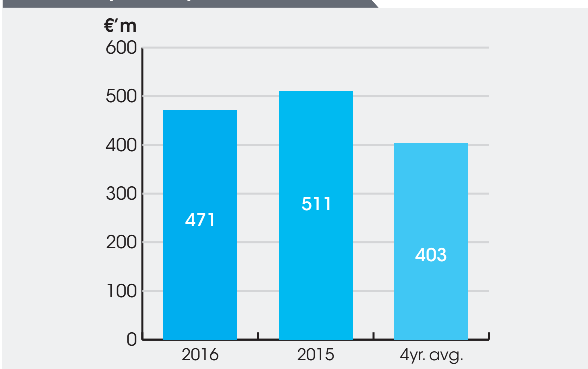
Invested Capital



Net Debt



Gross Capital Expenditure



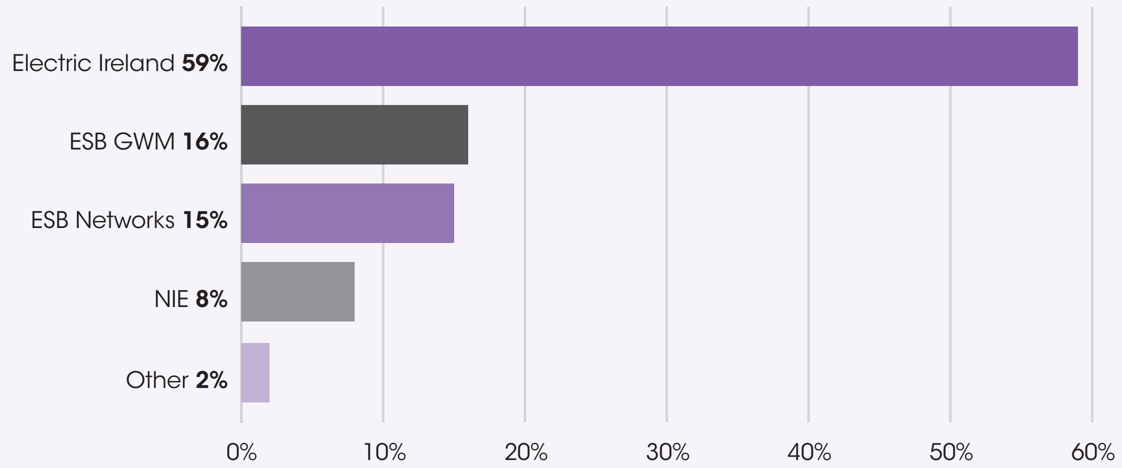
7. Financial Performance of the Portfolio Entities (continued)

Energy for generations

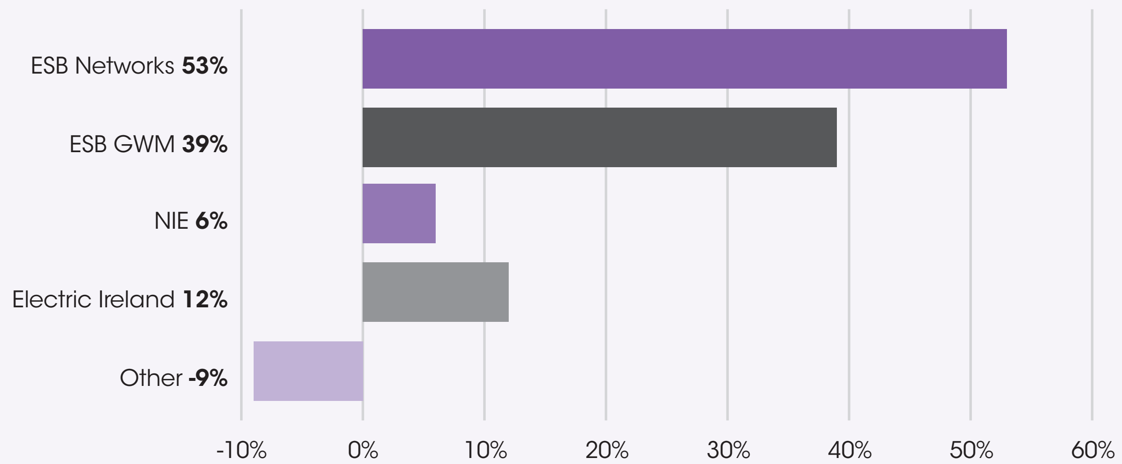
KEY ACTIVITIES

- **ELECTRIC IRELAND** is the retail arm of the Group supplying electricity, gas and energy services to all market segments.
- **ESB GENERATION & WHOLESALE MARKETS** comprises ESB's generation, trading and asset development activities in Ireland and the UK.
- **ESB NETWORKS** owns the electricity T&D system network in Ireland and operates the electricity distribution system network in Ireland. It is regulated by the CRU.
- **NORTHERN IRELAND ELECTRICITY NETWORKS** owns the electricity T&D system network in NI and operates the electricity distribution system network in NI. It is regulated by URegNI.
- **OTHER** includes internal services providers along with Innovation (which comprises ESB International, the Novusmodus fund, fibre-optic broadband JV, telecoms and eCars.

Turnover by Activity 2016



Operating Profit by Activity 2016



7. Financial Performance of the Portfolio Entities (continued)

ESB Energy for generations

Financial Performance (Financial year ended 31 December 2016)

ESB generated an improved energy margin in 2016 due to the Carrington plant in the UK coming on stream during the year, the positive impact of lower gas costs and wholesale electricity costs and increased regulatory income in ESB Networks. However, operating profit reduced year on year (2016: **€597m**, 2015: **€635m**) due to higher operating costs and negative foreign exchange translation losses on sterling denominated intercompany positions arising from a weaker sterling during 2016.

The reduction in operating profitability (2016: **€597m**, 2015: **€635m**) is reflected in a slightly lower adjusted operating margin (2016: **18.6%**, 2015: **19.0%**) and decreased ROIC (2016: **5.4%**, 2015: **5.8%**). However, overall, it was another solid trading performance for ESB noting that the adjusted operating profit margin in 2016 was broadly in line with the five-year average (**18.6%** versus **18.5%**).

Net debt decreased to **€4,524m** in 2016 from **€4,975m** in 2015 reflecting reduced borrowings and an improved cash position.

ESB's net pension liability and employee related liabilities reduced by **€98m** from **€935m** to **€838m** due mainly to ongoing payments under pre-2012 voluntary severance schemes and the 2010 Pension Agreement.

Dividends of **€86m** were paid in 2016 comprising a **€30m** final dividend for 2015 and a **€56m** interim dividend in relation to 2016. A final dividend of **€60m** has been recommended by the Board of ESB in respect of 2016, which was paid in the first half of 2017. Dividend payout for normal dividends was **38%** which is in line with ESB's revised dividend policy and is being increased gradually such that, from 2017, an annual target dividend payout ratio of **40%** of normalised profits after tax will apply.

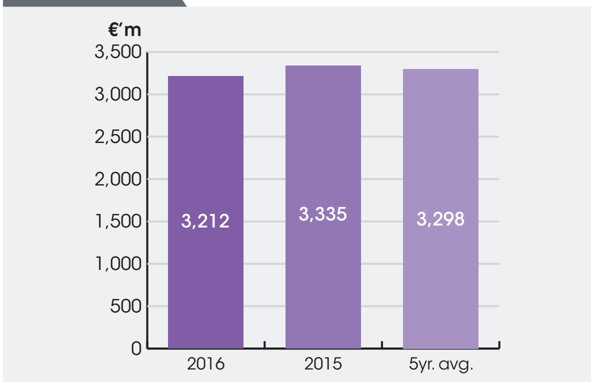
7. Financial Performance of the Portfolio Entities (continued)

Energy for generations

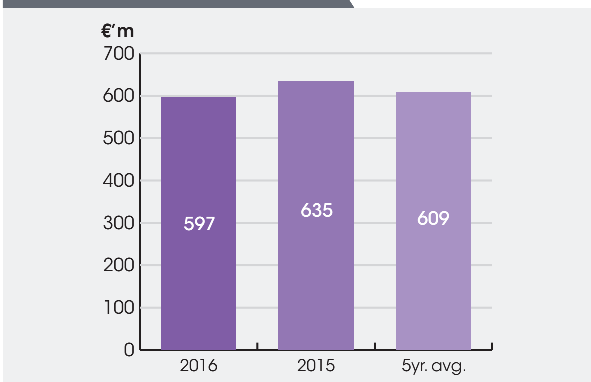
Selected income statement and balance sheet financial data are set out below, along with some high-level observations on 2016 performance:

- Very modest decline in adjusted operating profit and adjusted PAT;
- Net debt at the end of 2016 fell by 10% from 2015 and is broadly at the five year average;
- Pension liabilities continue to decline; and
- Net assets and invested capital slightly higher than 2015.

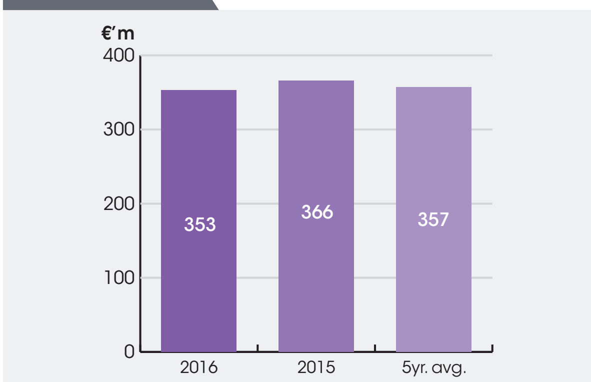
Turnover



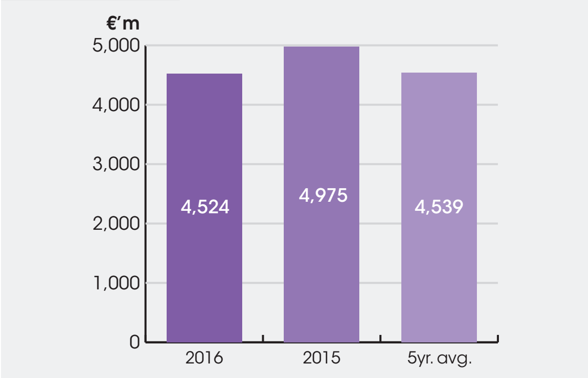
Adjusted Operating Profit



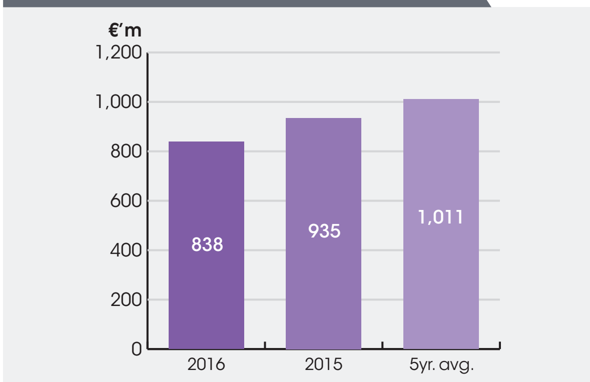
Adjusted PAT



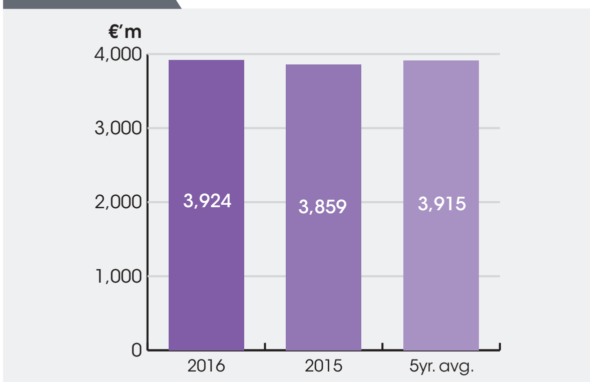
Net Debt



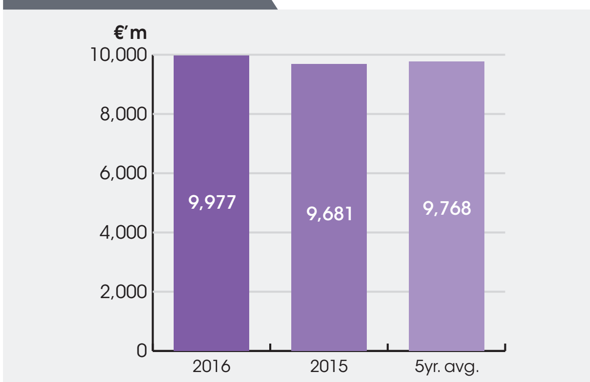
Pension & Employee Related Liabilities



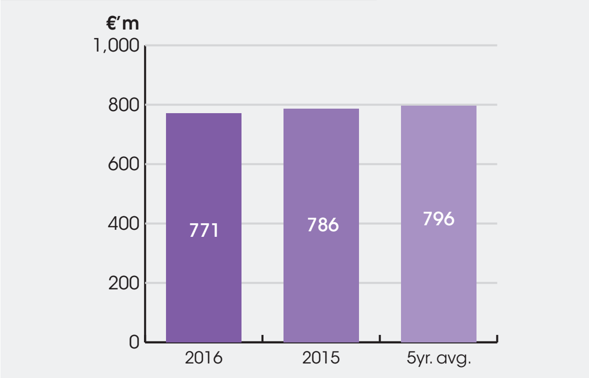
Net Assets



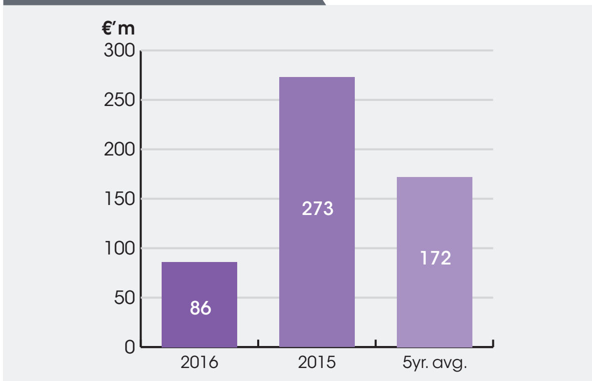
Invested Capital



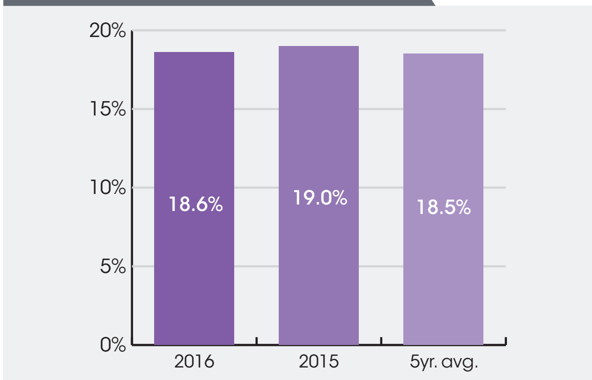
Gross Capital Expenditure



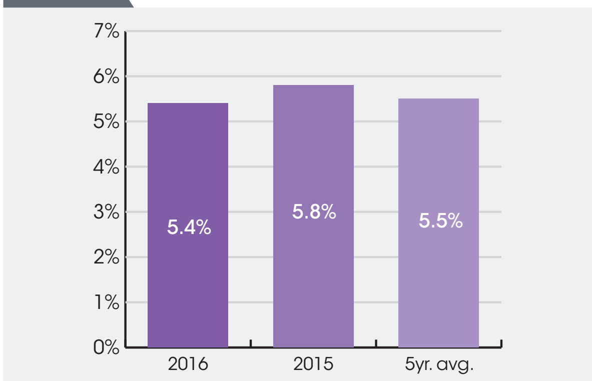
Dividends Paid (Total)



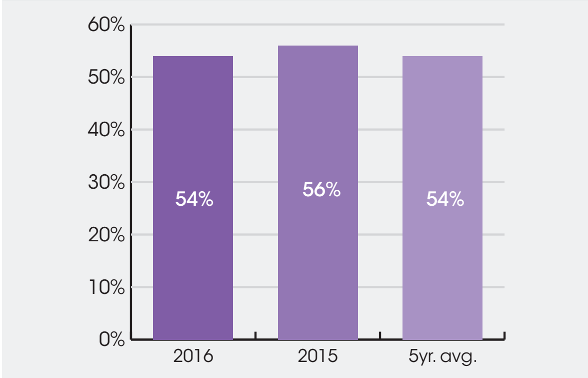
Adjusted Operating Profit Margin



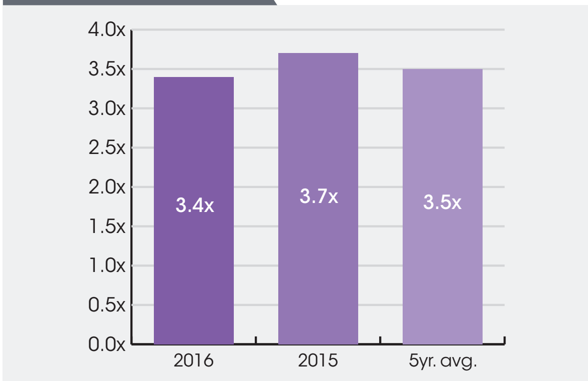
ROIC



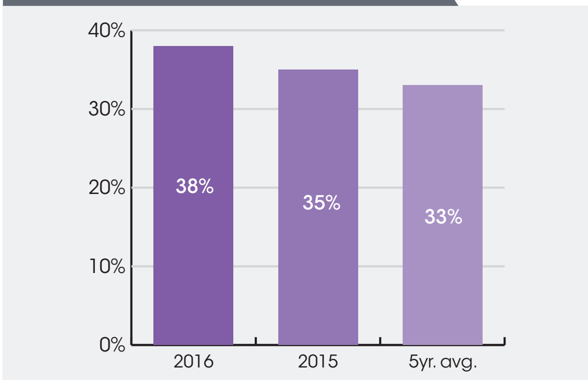
Net Gearing (Excl. Pension & Employee Related Liabilities)



Net Debt/EBITDA



Dividend Payout (Normal Dividends)



Selected cashflow statement and key metrics are set out above, along with some high-level observations:

- Gross capex continues to be significant with 2016 levels broadly similar to 2015;
- Dividends paid have decreased significantly due to special dividends paid in 2015; and
- Dividend payout (for normal dividends) continues to increase in line with dividend policy.

Energy for generations

Credit Rating

To facilitate the raising of finance ESB has credit ratings attributed to it by the main credit rating agencies

S&P – May 2017 – maintained A- (stable outlook)

- "The stable outlook reflects the stable outlook on Ireland. It also reflects our view that the ESB group will maintain headroom under its cash flow coverage ratios, namely funds from operations to debt of 17%, on average".

Moody's – September 2017 – upgrade of ESB's rating to A3 (stable outlook)

- "The one notch upgrade reflects the improved credit quality of the Irish government and Moody's assessment of the likelihood of the government providing support to ESB, should it become necessary...ESB's A3 ratings positively reflect (1) the significant proportion of earnings that the company generates through its regulated transmission and distribution operations, which contributed 63% of EBITDA in 2016; (2) the low business risk profile of these networks, and stable returns under well-established and transparent regulatory frameworks; and (3) the company's diversified funding sources and sound liquidity position."

ESB Bond Performance

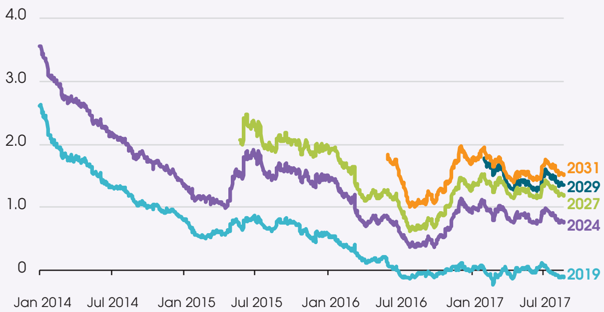
- ESB's yield has fallen over the last 36 months in parallel with the yield reduction on Government bonds.
- Between 2014 and 2016 ESB's bonds had a higher yield than the yields of European utility BBB bonds. For much of 2017 the differential has gone with ESB's yield now below the peer grouping (see charts below).

Issuer	Issued	Coupon %	Maturity Date	Issued Amount
ESB Finance DAC	Jan-17	1.750	2029	€500m
ESB Finance DAC	May-16	1.875	2031	€600m
ESB Finance DAC	Jun-15	2.125	2027	€500m
ESB Finance DAC	Nov-13	3.494	2024	€300m
ESB Finance DAC	Nov-12	4.375	2019	€500m
ESB Finance DAC	Sep-12	6.250	2017	€600m
NIE Finance Plc	Jun-11	6.375	2026	£400m
ES B Finance Ltd.	Mar-10	6.500	2020	£275m
ESB	Jun-09	7.530	2019	$226m
NIE Ltd.	Mar-98	6.875	2018	£175m

	S&P	Fitch	Moody's
ESB – rating	A-	BBB+	A3
ESB – outlook	Stable	Stable	Positive

Source: public market information, ESB

Yield: All active ESB bonds (%)



Yield spread: ESB 2027 bond versus Euro Utilities BBB bond of same maturity

Underlying data source: public market information. Note: Euro Utilities BBB group comprises entities with a BBB+, BBB, BBB- credit rating, Analysis: NewERA

Appendices

Appendix A
Shareholdings/Stockholdings of the Portfolio

Shareholdings/stockholdings in the Designated Bodies (excl. IW) as at the Relevant Financial Year end						
Designated Body	**Units of capital stock/ordinary shares in issue at Relevant Financial Year end**	**% capital stock/ ordinary shares held by or on behalf of Minister for Public Expenditure and Reform**	**% capital stock/ ordinary shares held by or on behalf of Minister for Housing, Planning and Local Government**	**Number/% capital stock/ordinary shares held by Minister for Communications, Climate Action and Environment**	**Number/% capital stock/ ordinary shares held by Minister for Agriculture, Food and the Marine**	**% capital stock/ ordinary shares held by ESOT**
BnM	65,212,638 ordinary shares	c.95%	n/a	One share	n/a	5%
Coillte	631,000,000 ordinary shares	c.100%	n/a	n/a	One share	n/a
EirGrid	30,000 ordinary shares	c.100%	n/a	One share	n/a	n/a
Ervia	100,000,000 units capital stock Note 1	Note 1	Note 1	Note 1	n/a	Note 1
ESB	1,979,881,855 units capital stock	85%	n/a	10%	n/a	5%

Note 1 In March 2014, an agreement was signed regarding the buy-out of the 3.27% capital stockholding in Ervia held by the ESOP Trustee on behalf of ESOP beneficiaries. The agreement provided for the appropriation and cancellation of the entire capital stock issued to the ESOP, in exchange for promissory notes to be issued by Ervia and redeemed over the period 2014 to 2018. As part of this agreement a number of amendments were made to Ervia's capital stock scheme to provide that all capital stock issued by Ervia (including capital stock issued to the Ministers and the ESOP) ceased to have any voting, dividend or other economic rights. Therefore, while the ESOP held capital stock until January 2017, this capital stock has no dividend or economic rights, which solely rest with the Ministers through legislation. Accordingly, this Report treats Ervia as 100% beneficially owned by the State. Pursuant to the Gas Act 1976 (as amended by the Gas Regulation Act 2013), the Minister for Housing, Planning and Local Government acts as the majority shareholding Minister for Ervia.

Source: NewERA Analysis

Note: The Minister and Secretaries (Amendment) Act 2011 had the effect of transferring ownership of either the stock or shares previously held by the Minister for Finance to the Minister for Public Expenditure and Reform.

Shareholdings/stockholdings in IW as at the Relevant Financial Year end					
Designated Body	**Units of capital stock/ordinary shares in issue at Relevant Financial Year end**	**Units of capital stock/ordinary shares held by or on behalf of Ervia**	**Units of capital stock/ ordinary shares held by the Minister for Housing, Planning and Local Government**	**Units of capital stock/ordinary shares held by the Minister for Finance**	**Units of capital stock/ordinary shares held by the ESOP Trustee**
Irish Water	1 ordinary A share[1]	1 ordinary A share[1]	55 ordinary B shares[2]	55 ordinary B shares[2]	n/a
	110 ordinary B shares[2]	(100% voting rights)	(50% economic rights)	(50% economic rights)	

Source: NewERA Analysis

1 Ordinary A share is a voting share but with no economic rights attaching

2 Ordinary B shares are non-voting shares but with economic rights attaching

Appendix B
Financial Performance Measures

TERM	DEFINITION
Acid Test Ratio	Aggregate of closing balance for trade and other receivables, cash and current tax assets *divided by* aggregate of closing balance for trade and other payables, current borrowings and current tax liabilities
Adjusted EBIT	Earnings before interest and tax, adjusted for exceptional items and certain fair value movements. Also referred to in this report as operating profit
Adjusted EBITDA	Earnings before interest, tax, depreciation and amortisation, adjusted for exceptional items and certain fair value movements
Adjusted PAT	Net profit after tax, adjusted for exceptional items and certain fair value movements
Average Employee Costs	Employee costs *divided by* average number of employees where employee costs: i. Include capitalised payroll, pension costs and social welfare costs and excludes exceptional costs (if any) ii. Include capitalised payroll and excludes exceptional costs (if any), social welfare costs and pension costs
Current Ratio	Aggregate of closing balance for inventories, trade and other receivables, cash and current tax assets *divided by* aggregate of closing balance for trade and other payables, current borrowings and current tax liabilities
Dividends Paid	Dividends paid during the financial year per the cashflow statement (including or excluding special dividends depending on the individual metric)
Dividend Payout Rate	Dividends Paid in line with dividend policy (excl. special dividends) *divided by* prior year net profit after tax calculated for the purposes of dividends
Earnings (adjusted) growth	Year-on-year growth in Adjusted PAT
EBITDA Margin	Adjusted EBITDA *divided by* reported turnover
EBIT Margin/ Operating Margin	Adjusted EBIT *divided by* reported turnover
EBITDA Interest Cover	Adjusted EBITDA *divided by* Interest paid
Equity	Total shareholder(s) equity taken from the balance sheet
Fair Value Movements	Includes unrealised fair value gains/losses on derivatives or all fair value gains/losses on derivatives where the Designated Body does not separately identify unrealised items
Invested Capital (ROIC)	Adjusted total debt *plus* adjusted total equity (per NewERA methodology)
Net Debt/EBITDA	Net debt *divided by* Adjusted EBITDA
Net Gearing	i. Net debt *divided by* net debt *plus* equity ii. Net debt *divided by* net debt *plus* pension liabilities *plus* employee related liabilities *plus* equity
PAT Margin	Adjusted PAT *divided by* turnover
Return on Invested Capital (ROIC)	Net operating profit after tax (NOPAT) *divided by* average invested capital
Total Shareholder Return	(Equity value at the end of the year *less* equity value at the beginning of the year *plus* equity injected plus dividends paid) *divided by* equity value at the beginning of the year
Turnover Growth	Year-on-year growth in reported turnover
WACC	Post tax cost of equity *multiplied by* the proportion of equity *plus* the pre-tax cost of debt multiplied by 1 *minus the* marginal tax rate multiplied by the proportion of debt.

Appendix C
Portfolio Financial Information

KEY FINANCIAL INFORMATION – PORTFOLIO	Unit	5yr avg.	2016/17	2015/16	2014/15	2013/14	2012/13
INCOME STATEMENT							
Turnover	€'m	5,885	5,982	6,100	5,812	5,252	6,279
EBITDA (adjusted)	€'m	1,904	2,023	2,012	1,805	1,863	1,818
EBIT (adjusted)	€'m	951	994	1,044	813	1,010	892
PAT (adjusted)	€'m	547	615	625	367	596	531
PAT (reported)	€'m	453	405	518	290	671	381
BALANCE SHEET							
Tangible Fixed Assets	€'m	16,312	16,876	16,919	16,324	15,201	16,238
Gross Debt	€'m	(7,578)	(7,743)	(8,057)	(7,121)	(7,268)	(7,703)
Net Debt	€'m	(6,864)	(6,989)	(7,421)	(6,582)	(6,519)	(6,812)
Pension Liabilities	€'m	(1,123)	(1,029)	(1,009)	(1,240)	(1,109)	(1,229)
Employee Related Liabilities	€'m	(173)	(145)	(148)	(169)	(187)	(214)
Net Assets	€'m	6,731	6,905	6,631	6,421	6,965	6,732
Invested Capital	€'m	15,505	16,032	15,535	14,841	15,088	16,030
CASHFLOWS							
Net Cashflow from Operations	€'m	1,303	1,594	1,324	1,194	1,297	1,104
Gross Capital Expenditure	€'m	(1,448)	(1,498)	(1,572)	(1,743)	(1,174)	(1,252)
Net (Acquisitions)/Disposals Spend	€'m	187	(13)	9	934	3	-
Dividends Paid (total)	€'m	(292)	(236)	(441)	(476)	(204)	(102)
Dividends Paid (normal)	€'m	(132)	(136)	(127)	(114)	(181)	(102)
EMPLOYMENT COSTS							
Employee Numbers		12,167	12,433	12,023	11,718	12,136	12,526
Average Employee Costs – *see note (iii)*	€'000	78	81	81	77	75	74
Average Employee Costs – *see note (iv)*	€'000	66	69	68	65	64	63

Source: Annual Reports, NewERA Analysis

Notes:

(i) *Financial information for 2016/17, 2015/16, 2014/15 and 2013/14 includes Ervia. Prior periods included the Bord Gáis Éireann group as it was constituted prior to the sale of BG Energy.*

(ii) *See Appendix B for NewERA's standardised performance measures.*

(iii) *Includes capitalised payroll, pension costs and social welfare costs and excludes exceptional costs (if any). Capitalised payroll included on a gross basis as breakdown is not available per published accounts.*

(iv) *Includes capitalised payroll and excludes exceptional costs (if any), social welfare costs and pension costs. Capitalised payroll included on a gross basis as breakdown is not available per published accounts.*

KEY METRICS – PORTFOLIO							
	Unit	**5yr avg.**	**2016/17**	**2015/16**	**2014/15**	**2013/14**	**2012/13**
PROFITABILITY AND EFFICIENCY							
Turnover Growth	%	1.7%	(1.9)%	5.0%	10.7%	(16.4)%	11.4%
EBITDA Margin	%	32.5%	33.8%	33.0%	31.1%	35.5%	29.0%
Operating Profit Margin	%	16.2%	16.6%	17.1%	14.0%	19.2%	14.2%
PAT Margin	%	9.3%	10.3%	10.2%	6.3%	11.3%	8.5%
Return on Invested Capital (ROIC)	%	5.4%	5.6%	6.1%	4.8%	5.7%	4.9%
LIQUIDITY							
Current Ratio	times	0.9x	0.7x	0.7x	0.9x	1.1x	1.3x
Acid Test Ratio	times	0.8x	0.7x	0.6x	0.8x	1.0x	1.1x
LEVERAGE AND SOLVENCY							
Net Gearing (excl. pension & empl. liab.)	%	50%	50%	53%	51%	48%	50%
Net Gearing (incl. pension & empl. liab.)	%	55%	54%	56%	55%	53%	55%
Net Debt/EBITDA	times	3.6x	3.5x	3.7x	3.6x	3.5x	3.7x
EBITA Interest Cover (net)	times	5.4x	6.6x	5.6x	5.1x	4.9x	4.6x
SHAREHOLDER RETURNS							
Dividend Payout (normal dividends)	%	35%	31%	42%	29%	45%	27%
Earnings (adjusted) growth	%	15%	(2)%	70%	(38)%	12%	33%

Source: NewERA Analysis

Notes: For full definitions of the financial performance measures please refer to Appendix B. The measures are applied by NewERA on a standardised basis across each of the Designated Bodies. It is recognised by NewERA that the financial measures used by each body for its own purposes may differ.

Appendix D
Financial Information of Portfolio Entities

BORD NA MÓNA

KEY FINANCIAL INFORMATION – year ended March							
			IFRS	IFRS	IFRS	GAAP	GAAP
INCOME STATEMENT	**Unit**	**Avg 3Y**	**2017**	**2016**	**2015**	**2014**	**2013**
Turnover	€'m	415	406	433	407	427	429
EBITDA (adjusted)	€'m	94	82	100	101	91	85
EBIT (adjusted)	€'m	56	40	59	70	50	47
PAT (adjusted)	€'m	33	21	36	43	33	30
PAT (reported)	€'m	21	5	16	43	33	9
BALANCE SHEET							
Tangible Fixed Assets	€'m	312	292	301	342	316	244
Gross Debt	€'m	(244)	(187)	(271)	(274)	(245)	(264)
Net Debt	€'m	(174)	(171)	(173)	(178)	(72)	(17)
Pension Liabilities	€'m	(39)	(16)	(34)	(67)	(43)	(59)
Employee Related Liabilities	€'m	-	-	-	-	(0)	(0)
Net Assets	€'m	220	231	221	208	212	173
Invested Capital	€'m	539	489	567	562	449	523
CASHFLOWS							
Net Cashflow from Operations	€'m	60	49	69	62	28	90
Gross Capital Expenditure	€'m	(74)	(36)	(72)	(115)	(89)	(42)
Net (Acquisitions)/Disposals Spend	€'m	(4)	(13)	-	-	3	-
Dividends Paid (normal)	€'m	(9)	(4)	(10)	(11)	(3)	(3)
Dividends Paid (special)	€'m	-	-	-	-	(2)	-
Dividends Paid (total)	€'m	(9)	(4)	(10)	(11)	(5)	(3)
EMPLOYEE COSTS							
Employee Numbers		1,978	1,998	1,937	1,999	2,061	2,044
Average Cost per Employee (1)	€'000	(53)	(50)	(55)	(56)	(55)	(50)
Average Cost per Employee (2)	€'000	(47)	(44)	(48)	(49)	(48)	(43)

KEY METRICS – year ended March							
PROFITABILITY & EFFICIENCY	**Unit**	**Avg 3Y**	**2017**	**2016**	**2015**	**2014**	**2013**
Operating Margin (EBIT adjusted)	%	13.5	9.9	13.5	17.1	11.8	10.9
Return on Invested Capital (ROIC)	%	9.5	6.8	9.2	12.4	9.2	7.9
LIQUIDITY							
Current Ratio	times	1.6	1.4	1.3	2.1	2.1	3.5
Acid Test Ratio	times	1.0	0.7	0.8	1.3	1.6	3.0
LEVERAGE							
Net Gearing (excl. pension & empl. liab.)	%	44	42	44	46	25	9
Net Gearing (incl. pension & empl. liab.)	%	49	45	48	54	35	30
Net Debt/EBITDA	times	1.9	2.1	1.7	1.8	0.8	0.2
EBITDA Interest Cover (net)	times	7.6	7.4	8.0	7.5	9.0	7.6
SHAREHOLDER RETURNS							
Dividend Payout (normal dividends)	%	33	33	33	33	33	33
Earnings (adjusted) growth	%	(10)	(43)	(15)	27	12	(283)

1 *Average cost per employee (1): includes capitalised payroll and excludes exceptional costs (if any). Capitalised payroll included on a gross basis as breakdown per published accounts.*

2 *Average cost per employee (2): includes capitalised payroll and excludes exceptional costs (if any), pension costs and social welfare costs. Capitalised payroll included on a gross basis as breakdown is not available per published accounts.*

NOTE: The above measures are applied by NewERA on a standardised basis across each of the Designated Bodies. It is recognised by NewERA that the financial measures used by each entity for their own purposes may differ from the above. Breakdown of adjusted profit lines and individual financial performance measures set out on subsequent pages.

COILLTE
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KEY FINANCIAL INFORMATION – year ended 31 December			FRS102	FRS102	FRS102	Old GAAP	Old GAAP
INCOME STATEMENT	**Unit**	**Avg 3Y**	**2016**	**2015**	**2014**	**2013**	**2012**
Turnover	€'m	285	288	283	286	276	262
EBITDA (adjusted)	€'m	90	98	90	81	59	53
EBIT (adjusted)	€'m	66	66	79	54	41	35
PAT (adjusted)	€'m	46	49	56	34	27	21
PAT (reported)	€'m	42	48	48	29	26	15
BALANCE SHEET							
Tangible Fixed Assets (incl. biological)	€'m	1,400	1,415	1,391	1,393	1,512	1,489
Gross Debt	€'m	(178)	(170)	(188)	(176)	(175)	(168)
Net Debt	€'m	(166)	(168)	(154)	(176)	(171)	(162)
Pension Liabilities	€'m	(109)	(108)	(78)	(142)	(130)	(161)
Net Assets	€'m	1,042	1,068	1,078	979	1,242	1,189
Invested Capital	€'m	1,344	1,366	1,358	1,307	1,553	1,524
CASHFLOWS							
Net Cashflow from Operations	€'m	28	26	23	36	21	29
Gross Capital Expenditure	€'m	(61)	(53)	(79)	(49)	(41)	(43)
Net (Acquisitions)/Disposals Spend	€'m	22	-	67	-	-	-
Dividends Paid (normal)	€'m	(6)	(7)	(4)	(6)	-	(2)
Dividends Paid (special)	€'m	-	-	-	-	-	-
Dividends Paid (total)	€'m	(6)	(7)	(4)	(6)	-	(2)
EMPLOYEE COSTS							
Employee Numbers		889	862	897	907	913	960
Average Cost per Employee (2)	€'000	(72)	(72)	(74)	(71)	(70)	(66)
Average Cost per Employee (3)	€'000	(59)	(59)	(60)	(58)	(58)	(56)

KEY METRICS – year ended 31 December							
PROFITABILITY & EFFICIENCY	**Unit**	**Avg 3Y**	**2016**	**2015**	**2014**	**2013**	**2012**
Operating Margin (EBIT adjusted)	%	23.2	22.9	27.9	18.8	15.0	13.4
Return on Invested Capital (ROIC)	%	4.4	4.3	5.2	3.7	2.4	2.1
LIQUIDITY							
Current Ratio	times	1.9	1.9	2.2	1.7	1.6	1.5
Acid Test Ratio	times	1.6	1.5	1.8	1.4	1.3	1.1
LEVERAGE							
Net Gearing (excl. pension & empl. liab.)	%	14	14	12	15	12	12
Net Gearing (incl. pension & empl. liab.)	%	21	21	18	25	20	21
Net Debt/EBITDA	times	1.9	1.7	1.7	2.2	2.9	3.1
EBITDA Interest Cover (net)	times	11.8	15.2	11.9	8.2	6.2	6.3
SHAREHOLDER RETURNS							
Dividend Payout (normal dividends)	%	16	13	12	23	-	7
Earnings (adjusted) growth	%	27	(12)	66	27	29	(26)

Average Cost per Employee (1) – includes capitalised payroll and excludes exceptional costs (if any). Capitalised payroll included on a gross basis as breakdown not available per published accounts.

Average Cost per Employee (2) – Includes capitalised payroll and excludes exceptional costs (if any), pension costs and social welfare costs. Capitalised payroll included on a gross basis as breakdown is not available per published accounts.

NOTE: The above measures are applied by NewERA on a standardised basis across each of the Designated Bodies. It is recognised by NewERA that the financial measures used by each entity for their own purposes may differ from the above. Breakdown of adjusted profit lines and individual financial performance measures set out on subsequent pages.

Appendix D
Financial Information of Portfolio Entities (continued)

EIRGRID GROUP

KEY FINANCIAL INFORMATION – year ended 30 September							
			IFRS	IFRS	IFRS	IFRS	IFRS
INCOME STATEMENT	**Unit**	**Avg 5Y**	**2016**	**2015**	**2014**	**2013**	**2012**
Turnover	€'m	642	673	706	668	622	542
EBITDA (adjusted)	€'m	78	61	96	92	94	45
EBIT (adjusted)	€'m	49	26	60	64	73	23
PAT (adjusted)	€'m	31	9	34	39	53	22
PAT (reported)	€'m	31	9	34	39	53	22
BALANCE SHEET							
Tangible Fixed Assets	€'m	593	590	591	598	610	574
Gross Debt	€'m	(387)	(354)	(367)	(384)	(402)	(427)
Net Debt	€'m	(241)	(182)	(207)	(253)	(276)	(289)
Pension Liabilities	€'m	(26)	(54)	(27)	(18)	(10)	(22)
Net Assets	€'m	143	146	179	159	155	75
Invested Capital	€'m	565	667	682	673	663	142
CASHFLOWS							
Net Cashflow from Operations	€'m	79	62	136	43	115	40
Gross Capital Expenditure	€'m	(77)	(32)	(23)	(17)	(116)	(197)
Net (Acquisitions)/Disposals Spend	€'m	-	-	-	-	-	-
Dividends Paid (normal)	€'m	(1)	(4)	(3)	-	-	-
Dividends Paid (special)	€'m	(1)	-	-	(4)	-	-
Dividends Paid (total)	€'m	(2)	(4)	(3)	(4)	-	-
EMPLOYEE COSTS							
Employee Numbers		459	480	480	460	449	428
Average Cost per Employee (1)	€'000	(100)	(104)	(101)	(102)	(98)	(94)
Average Cost per Employee (2)	€'000	(77)	(77)	(77)	(78)	(78)	(77)

KEY METRICS – year ended 30 September							
PROFITABILITY & EFFICIENCY	**Unit**	**Avg 5Y**	**2016**	**2015**	**2014**	**2013**	**2012**
Operating Margin (EBIT adjusted)	%	7.6	3.9	8.5	9.6	11.8	4.3
Return on Invested Capital (ROIC)	%	9.6	3.5	7.9	8.4	15.9	12.3
LIQUIDITY							
Current Ratio	times	1.4	1.6	1.4	1.4	1.4	1.2
Acid Test Ratio	times	1.4	1.6	1.4	1.4	1.4	1.2
LEVERAGE							
Net Gearing (excl. pension & empl. liab.)	%	63	56	54	62	64	79
Net Gearing (incl. pension & empl. liab.)	%	65	62	57	63	65	81
Net Debt/EBITDA	times	3.4	3.0	2.2	2.8	2.9	6.4
EBITDA Interest Cover (net)	times	3.9	3.3	5.0	4.6	4.1	2.8
SHAREHOLDER RETURNS							
Dividend Payout (normal dividends)	%	9	25	20	-	-	-
Earnings (adjusted) growth	%	2	(74)	(12)	(27)	144	(19)

1 *Average Employee Costs (1): includes capitalised payroll and excludes exceptional costs (if any). Capitalised payroll included on a gross basis as breakdown not available per published accounts.*

2 *Average Employee Costs (2): includes capitalised payroll and excludes exceptional costs (if any), pension costs and social welfare costs. Capitalised payroll included on a gross basis as breakdown is not available per published accounts.*

NOTE: The above measures are applied by NewERA on a standardised basis across each of the Designated Bodies. It is recognised by NewERA that the financial measures used by each entity for their own purposes may differ from the above. Breakdown of adjusted profit lines and individual financial performance measures set out on subsequent pages.

ervia Gas Networks Ireland

KEY FINANCIAL INFORMATION – year ended 31 December			IFRS	IFRS	IFRS	IFRS
INCOME STATEMENT	**Unit**	**Avg 4Y**	**2016**	**2015**	**2014**	**2013**
Turnover	€'m	500	498	491	506	505
EBITDA (adjusted)	€'m	328	323	307	337	346
EBIT (adjusted)	€'m	203	195	182	204	230
PAT (adjusted)	€'m	119	129	116	111	123
PAT (reported)	€'m	111	103	117	103	120
BALANCE SHEET						
Tangible Fixed Assets	€'m	2,531	2,502	2,528	2,537	2,555
Gross Debt	€'m	(1,314)	(1,172)	(1,176)	(1,142)	(1,768)
Net Debt	€'m	(1,197)	(1,028)	(1,022)	(1,010)	(1,730)
Pension Liabilities	€'m	(79)	(129)	(51)	(85)	(49)
Employee Related Liabilities	€'m	(3)	(3)	(3)	(3)	(4)
Net Assets	€'m	1,149	1,043	1,139	1,109	1,304
Invested Capital	€'m	2,465	2,438	2,475	2,412	2,533
CASHFLOWS						
Net Cashflow from Operations	€'m	244	278	263	175	261
Gross Capital Expenditure	€'m	(108)	(135)	(100)	(94)	(103)
Net (Acquisitions)/Disposals Spend	€'m	234	1	2	934	-
Dividends Paid (incl. special dividends)	€'m	(127)	(135)	(151)	(171)	(52)
EMPLOYEE COSTS						
Employee Numbers		909	904	909	914	n/a
Average Cost per Employee (1)	€'000	(91)	(91)	(94)	(87)	n/a
Average Cost per Employee (2)	€'000	(71)	(70)	(71)	(70)	n/a

KEY METRICS – year ended 31 December						
PROFITABILITY & EFFICIENCY	**Unit**	**Avg 4Y**	**2016**	**2015**	**2014**	**2013**
Operating Margin (EBIT adjusted)	%	40.6	39.3	37.1	40.3	45.6
Return on Invested Capital (ROIC)	%	6.9	7.0	6.5	7.2	n/a
LIQUIDITY						
Current Ratio	times	0.6	0.9	0.6	0.9	0.2
Acid Test Ratio	times	0.6	0.9	0.6	0.9	0.2
LEVERAGE						
Net Gearing (excl. pension & empl. liab.)	%	50	50	47	48	57
Net Gearing (incl. pension & empl. liab.)	%	52	53	49	50	58
Net Debt/EBITDA	times	3.6	3.2	3.3	3.0	5.0
EBITDA Interest Cover (net)	times	6.4	7.6	8.2	5.3	4.6
SHAREHOLDER RETURNS						
Dividend Payout (normal dividends)	%	30	30	30	30	30
Earnings (adjusted) growth	%	2	11	5	(10)	n/a

Includes capitalised payroll and excludes exceptional costs (if any). Capitalised payroll included on a gross basis as breakdown per published accounts.

2 *Includes capitalised payroll and excludes exceptional costs (if any), pension costs and social welfare costs. Capitalised payroll included on a gross basis as breakdown is not available per published accounts.*

NOTE: The above measures are applied by NewERA on a standardised basis across each of the Designated Bodies. It is recognised by NewERA that the financial measures used by each entity for their own purposes may differ from the above. Breakdown of adjusted profit lines and individual financial performance measures set out on subsequent pages.

Appendix D
Financial Information of Portfolio Entities (continued)

ervia | UISCE ÉIREANN : IRISH WATER

KEY FINANCIAL INFORMATION – year ended 31 December			IFRS	IFRS	IFRS	IFRS
INCOME STATEMENT	**Unit**	**Avg 4Y**	**2016**	**2015**	**2014**	**2013**
Turnover	€'m	611	906	851	687	-
EBITDA (adjusted)	€'m	7	129	72	(107)	(68)
EBIT (adjusted)	€'m	(25)	69	29	(130)	(69)
PAT (adjusted)	€'m	(35)	54	17	(139)	(71)
PAT (reported)	€'m	(35)	54	17	(139)	(71)
BALANCE SHEET						
Tangible Fixed Assets	€'m	916	1,638	1,235	737	52
Gross Debt	€'m	(611)	(974)	(945)	(362)	(162)
Net Debt	€'m	(564)	(917)	(890)	(325)	(125)
Pension Liabilities	€'m	(22)	(26)	(27)	(33)	-
Net Assets	€'m	163	493	156	76	(71)
Invested Capital	€'m	569	1,094	773	320	90
CASHFLOWS						
Net Cashflow from Operations	€'m	3	168	(56)	(59)	(42)
Gross Capital Expenditure	€'m	(403)	(471)	(511)	(548)	(81)
Net (Acquisitions)/Disposals Spend	€'m	(16)	(2)	(60)	-	-
Dividends Paid (total)	€'m	-	-	-	-	-
EMPLOYEE COSTS						
Employee Numbers		349	592	495	289	20
Average Cost per Employee (1)	€'000	(70)	(72)	(73)	(67)	(70)
Average Cost per Employee (2)	€'000	(61)	(61)	(62)	(60)	(63)

1 *Average employee costs (1): includes capitalised payroll and excludes exceptional costs (if any). Capitalised payroll included on a gross basis as breakdown per published accounts.*

2 *Average employee costs (2): includes capitalised payroll and excludes exceptional costs (if any), pension costs and social welfare costs. Capitalised payroll included on a gross basis as breakdown is not available per published accounts.*

NOTE: The above measures are applied by NewERA on a standardised basis across each of the Designated Bodies. It is recognised by NewERA that the financial measures used by each entity for their own purposes may differ from the above. Breakdown of adjusted profit lines and individual financial performance measures set out on subsequent pages.

ESB Energy for generations

KEY FINANCIAL INFORMATION – year ended 31 December								
			IFRS	IFRS	IFRS	IFRS	IFRS
INCOME STATEMENT	**Unit**	**Avg 5Y**	**2016**	**2015**	**2014**	**2013**	**2012**
Turnover	€'m	3,298	3,212	3,335	3,258	3,422	3,260
EBITDA (adjusted)	€'m	1,315	1,330	1,348	1,301	1,342	1,256
EBIT (adjusted)	€'m	609	597	635	552	684	576
PAT (adjusted)	€'m	357	353	366	280	431	356
PAT (reported)	€'m	278	186	286	215	510	194
BALANCE SHEET							
Tangible Fixed Assets	€'m	10,495	10,439	10,873	10,717	10,157	10,288
Gross Debt	€'m	(4,774)	(4,887)	(5,109)	(4,783)	(4,515)	(4,574)
Net Debt	€'m	(4,539)	(4,524)	(4,975)	(4,639)	(4,145)	(4,414)
Pension Liabilities	€'m	(841)	(695)	(790)	(895)	(876)	(947)
Employee Related Liabilities	€'m	(170)	(143)	(145)	(166)	(183)	(214)
Net Assets	€'m	3,915	3,924	3,859	3,889	4,122	3,780
Invested Capital	€'m	9,768	9,977	9,681	9,567	9,800	9,814
CASHFLOWS							
Net Cashflow from Operations	€'m	894	1,011	889	938	915	717
Gross Capital Expenditure	€'m	(796)	(771)	(786)	(920)	(745)	(759)
Net (Acquisitions)/Disposals Spend	€'m	-	-	-	-	-	-
Dividends Paid (normal)	€'m	(88)	(86)	(59)	(76)	(147)	(73)
Dividends Paid (special)	€'m	(84)	-	(214)	(208)	-	-
Dividends Paid (total)	€'m	(172)	(86)	(273)	(284)	(147)	(73)
EMPLOYEE COSTS							
Employee Numbers		7,507	7,597	7,305	7,149	7,490	7,992
Average Cost per Employee (1)	€'000	(83)	(88)	(86)	(82)	(78)	(79)
Average Cost per Employee (2)	€'000	(71)	(76)	(74)	(70)	(67)	(68)

KEY METRICS – year ended 31 December							
PROFITABILITY & EFFICIENCY	**Unit**	**Avg 5Y**	**2016**	**2015**	**2014**	**2013**	**2012**
Operating Margin (EBIT adjusted)	%	18.5	18.6	19.0	16.9	20.0	17.7
Return on Invested Capital (ROIC)	%	5.5	5.4	5.8	5.0	6.1	5.2
LIQUIDITY							
Current Ratio	times	1.1	0.9	0.9	1.0	1.6	1.0
Acid Test Ratio	times	1.0	0.9	0.8	0.9	1.5	0.9
LEVERAGE							
Net Gearing (excl. pension & empl. liab.)	%	54	54	56	54	50	54
Net Gearing (incl. pension & empl. liab.)	%	59	58	61	59	56	60
Net Debt/EBITDA	times	3.5	3.4	3.7	3.6	3.1	3.5
EBITDA Interest Cover (net)	times	5.5	6.3	5.3	5.6	5.2	4.9
SHAREHOLDER RETURNS							
Dividend Payout (normal dividends)	%	33	38	35	30	30	30
Earnings (adjusted) growth	%	8	(4)	31	(35)	21	28

Average Cost per Employee (1) – includes capitalised payroll and excludes exceptional costs (if any). Capitalised payroll included on a gross basis as breakdown not available per published accounts.

Average Cost per Employee (2) – Includes capitalised payroll and excludes exceptional costs (if any), pension costs and social welfare costs. Capitalised payroll included on a gross basis as breakdown is not available per published accounts.

NOTE: The above measures are applied by NewERA on a standardised basis across each of the Designated Bodies. It is recognised by NewERA that the financial measures used by each entity for their own purposes may differ from the above. Breakdown of adjusted profit lines and individual financial performance measures set out on subsequent pages.

Appendix E
Board Analysis

BOARD						
	COMPOSITION AS AT THE RELEVANT FINANCIAL YEAR END				MOVEMENTS DURING THE RELEVANT FINANCIAL YEAR END	
	Maximum Number of Directors	Actual Number of Directors	Male	Female	New Appointments	Retirements/ Expiry of Term
BnM	12	12[1]	10	2	-	1
Coillte	9	7[2]	5	2	1	-
EirGrid	10	7[3]	5	2	-	3
Ervia	11	11[4]	9	2	4	-
ESB	12	12[5]	8	4	2	1
TOTAL	**54**	**49**	**37**	**12**	**7**	**5**

1 Includes Chairperson, Managing Director, 4 Worker Directors and 6 Non-Executive Directors.

2 Includes Chairperson, CEO, 1 employee director and 4 Non-Executive Directors.

3 Includes Chairperson, CEO, 1 Staff Representative and 4 Non-Executive Directors.

4 Includes Chairperson, CEO, and 9 Non-Executive Directors.

5 Includes Chairperson, CEO, 4 Worker Directors and 6 Non-Executive Directors.

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