



Eandis System Operator cvba

Investor Presentation

May 2018





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The term 'Eandis' refers either to Eandis System Operator cvba (abbreviated ESO) or to the consolidated group (i.e. Eandis System Operator cvba + its consolidated subsidiaries De Stroomlijn cvba, Atrias cvba and Synductis cvba). ESO's subsidiaries Warmte@Vlaanderen cvba and Fluvius cvba are not consolidated. The term 'Eandis Economic Group' refers to Eandis (consolidated group) + 7 distribution system operators*. The Eandis Economic Group is not a legal entity, but for accounting and consolidation purposes the Eandis Economic Group can be considered as if it were a single entity.

Forward-looking statements in this presentation do not guarantee future performance. Actual results may differ materially from such forward-looking statements as a result of a number of uncertainties or risks, many of which are out of control of Eandis System Operator cvba, its subsidiaries and shareholders [*see Risk Factors in the Prospectus dated 2 June 2017*]. Forward-looking statements speak only as at the date of this document.

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Due to rounding, numbers presented in this document may not add up precisely to the totals provided and percentages may not exactly reflect the absolute figures.

* *These 7 distribution system operators (DSOs) are: Gaselwest, IMEA, Imewo, Intergem, Iveka, Iverlek and Sibelgas.*

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1. Executive Summary & Recent Developments

Executive Summary

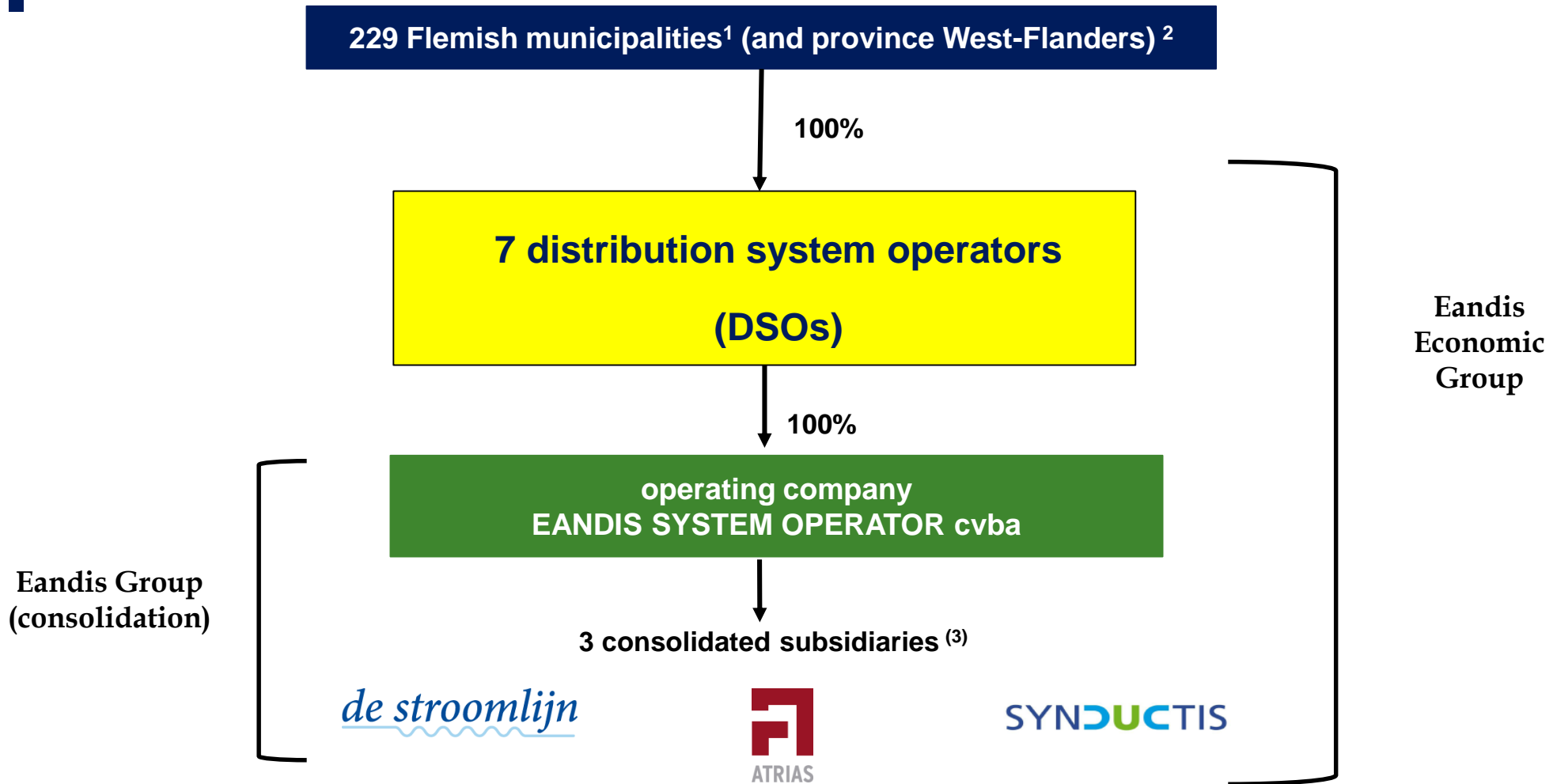
Eandis is the overall name for 7 Flemish electricity and gas distribution grid operators and Eandis System Operator (ESO), their operating company.

- Eandis System Operator CVBA is fully owned by 7 DSOs. ESO is the **operating arm of the 100% regulated electricity and gas distribution networks owned by these DSOs**, authorised in that role by decision of the Flemish energy regulator VREG (24 February 2015). As such, it is entrusted with a number of quasi-government public service tasks.
- The 7 DSOs are **intermunicipal companies** and **100% publicly owned** (i.e. by municipalities and 1 province) since the exit of Electrabel NV on 29 December 2014.
- Eandis serves approx. **2,7 million access points for electricity** and **1,8 million access points for gas**. Its distribution services cover **229 Flemish municipalities** (approx. 78 % of all Flemish municipalities). Its operating revenue and pre-tax profit (*Eandis Economic Group – IFRS*) were respectively **3,0 bn €** and **423,3 mio €** for 2017.
- The company is of **strategic importance to the Flemish Region** (Moody's: Aa2 stable) and its general policy aim of realising Europe's climate and energy objectives.
- Moody's identifies Eandis as a **government-related issuer** given its ownership by Flemish municipalities (and 1 province) and the high probability of systemic support to the DSOs from the Flemish Region. Eandis System Operator's current credit rating with Moody's is **A3 (stable outlook)** and with **Creditreform Rating A+ (stable outlook)**.

Executive Summary

Strategic Importance to the Flemish Region		<ul style="list-style-type: none"> ■ Eandis covers about 78 % of the municipalities of the Flemish region ■ Electricity and natural gas are the two most important energy sources in Flanders/Belgium ■ Local authorities own 100% of the DSOs' share capital since end 2014
Very Favourable Regulatory Environment (Revenue Cap)		<ul style="list-style-type: none"> ■ The DSOs have a legally based regional monopoly for electricity and gas distribution to residential customers and SMEs ■ Multi-annual tariff mechanism with a 4 year regulatory period along the principles of a revenue cap model, including a fair profit margin as remuneration on invested capital ■ 2018 regulatory tariffs approved by the Flemish energy regulator VREG, based on the tariff methodology for the tariff period 2017-2020
Efficient Operating Scheme		<ul style="list-style-type: none"> ■ The associated structure of 7 DSOs with 1 operating company (ESO) allows for an efficient operating scheme and benefits of scale ■ Pooling of operational, financial and management activities; all staff at ESO ■ Several cost optimisation initiatives launched
Strong Cash Flow Visibility		<ul style="list-style-type: none"> ■ Predictable revenue streams based on regulatory framework for the DSOs ■ Each DSO has its own separate tariffs for E & G ■ Tariffs are fixed for long periods (4 years as from 2017)
Legal Monopoly and Low Risk Electricity & Gas Distribution		<ul style="list-style-type: none"> ■ Low business risk – the DSOs are not involved in the competitive energy generation, trading or sales activities ■ DSOs own 78% of the distribution network in Flanders ■ Legally, competitors may not participate in distribution activities in the designated operating areas
Conservative Capital Structure		<ul style="list-style-type: none"> ■ Leverage: equity at 36,7% of RAB (BE-GAAP, as per 31 December 2017) ■ The VREG tariff methodology 2017-2020 recommends DSO balance sheet structure with equity/RAB ratio at 40% ■ Regulator provides for a WACC-based fair profit margin
Very Favourable Economic Dynamics		<ul style="list-style-type: none"> ■ The Flemish region is Belgium's most populated region (6,52 million on 1 Jan 2017 – 57,7% of national population) ■ Moody's on Flanders: "The region's high GDP and income per capita, both from a pan-European perspective and compared with other Belgian federated entities, supports the Flemish Community's capacity to generate revenues and, ultimately, the region's creditworthiness." "The ratings reflect the entity's strong fiscal performance, expected to continue in to the medium-term; and a debt burden which is low relative to Belgian and Aa-rated peers." Flanders' credit strengths: (1) strong track record of budgetary discipline and continued commitment to fiscal consolidation, (2) modest debt burden and ample access to liquidity and (3) strong and diversified economic base." (<i>Moody's Rating Action 10 Nov 2017 & Moody's Credit Opinion 15 Sep 2017</i>) ■ GDP per capita = 37.200 EUR (2016), which is 20% higher than the EU-28 average. Unemployment in Flanders 2016 at 4,9%, well below the EU28 level. (<i>Flemish Regional Indicators, ed. 2017</i>)

Eandis Economic Group's Corporate Structure



(1) 4 Walloon municipalities belonging to Gaselwest are not included in this number,
 (2) According to Flemish legislation, provinces allowed in DSO's capital until 31 December 2018 at the latest.
 (3) Warmte@Vlaanderen and Fluvius not consolidated as per 31 December 2017,

Corporate Structure for the Eandis Economic Group

Transparent and flexible corporate structure

- flexible decision-making structure allows for maintaining close links with 229 municipalities
- structure reflects clear bottom-up division of powers within the Eandis Economic Group:



Eandis vs other Belgian distribution grid operators

Eandis System Operator versus its peers in Belgium (Infrax, Sibelga, ORES and Resa) ⁽¹⁾

Eandis System Operator, Sibelga and ORES exclusively operate electricity and gas networks (**regulated activities**); Infrax also operates cable television and sewerage systems. Resa is part of the Nethys Group, a multi-utility for energy distribution, telecom infrastructure and telecom content, financial investments, ICT services and renewable energies.

Eandis System Operator is by far the largest E & G operator in Belgium, with an integrated operating area, enabling the company to **maximise benefits of scale** [figures as per 31 Dec 2016]:

	Eandis	Infrax	Sibelga	ORES	Resa
municipalities served (E/G)	229	94	19	198	73
operating area	Flanders	Flanders	Brussels	Wallonia	Wallonia
employees	3.967	1.517	993	2.229 FTE	± 900
connections E	2.664.391	748.625	706.020	1.437.093	671.062 (E+G)
connections G	1.773.585	363.834	506.328	525.196	
Regulated Asset Base 2015 E+G (incl. Net Working Capital) – in m€	7.902,5 ⁽²⁾	1.792	1.125,2	3.324,9	1.267

(1) Source: companies' information (annual reports and websites)

(2) Excl. NWC: 7.840,2 m€

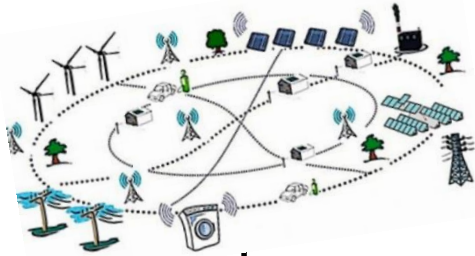
Corporate Strategy (1)



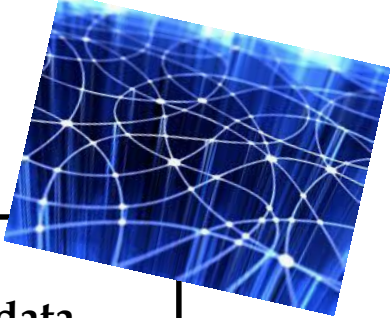
regulated core activities: *operational excellence in delivering high quality services to our customers*

non-regulated activities: *make active use of opportunities which support our strategic focus and enhance our strengths [e.g. district heating projects, asset management services etc.]*


Corporate Strategy (2): our 4 value propositions



manage grids in a safe, cost-efficient and reliable way




as an independent data manager, promote the smooth functioning of the energy market



as a Flemish expertise centre for energy, contribute to the climate objectives

reduce energy poverty in collaboration with all parties concerned



Executive Summary

Moody's Corporate Rating for Eandis System Operator

A3 (stable)

Credit Strengths:

- a strong linkage with the region through provision of essential energy network services
- strong underlying business risk profile from operation of monopoly network assets
- transparent and supportive regulatory framework, but relatively short track record

Credit Challenges:

- financial metrics have deteriorated over recent years with increasing levels of debt. Absent balance sheet strengthening, recovery will likely be slow
- cut in allowed returns and continuing high dividend payout will weigh on financial flexibility, albeit impact somewhat softened by recovery of outstanding regulatory balances through to 2020
- Ongoing restructuring of Flemish energy market creates some uncertainty around future capital structure

*from: Moody's Credit Opinion
(17 Nov 2017)*



CREDIT OPINION

17 November 2017

Update

Rate this Research >>

RATINGS

Eandis System Operator CVBA	
Domicile	Belgium
Long Term Rating	A3
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the [rating section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Eandis System Operator CVBA

Update on developments in Flemish energy market

Summary

The robust credit quality of Eandis System Operator CVBA (Eandis, A3 stable) reflects that of the seven distribution system operators (DSOs), which own the company and severally guarantee its liabilities. This is underpinned by the low business risk profile of their regulated electricity and gas distribution network operations in Flanders, Belgium. The regulatory framework is supportive and transparent, albeit relatively new and untested in the context of European regulated network peers following the transition of tariff setting responsibilities from the national to the regional regulators in 2014.

Eandis's credit quality is constrained by high gearing and weak cash flow generation. Recent financial results showed net debt to regulated assets of around 80% and funds from operations (FFO) to net debt below 10%, evidencing limited financial flexibility. While improving since FYE 2016, as a result of recovering outstanding regulatory receivables, key credit metrics are weak in the context of rated peers.

Rating history:

- 12 Oct 2011-13 Mar 2014 : A1 (negative)
- 13 Mar 2014-2 Dec 2014: A1 (stable)
- 2 Dec 2014 - 14 Dec 2016: A1 (negative)
- as from 14 Dec 2016: A3 (stable)

Executive Summary

Creditreform's Corporate Rating for Eandis System Operator

A+ (stable)

Credit Strengths:

- government-related company
- strategic importance of the company for the region – crucial market player in the energy distribution in Flanders
- transparent and supportive regulatory framework
- Predictable revenues and cash flows
- low business risk profile for DSOs
- probable and assumed support of regional authorities if needed
- guarantee of the DSOs for debt taken by ESO

Credit Challenges:

- ongoing investments required
- capital-intensive business, high fixed costs
- Limited upside potential given the revenue cap

*from: Creditreform Rating Report (Abstract)
(19 Jan 2018)*

Creditreform corporate rating update
Eandis System Operator cvba (Group) based on
Eandis Economic Group

www.creditreform-rating.de

Rating object		Rating information	
Eandis System Operator cvba (Group) based on Eandis Economic Group		Rating: A+	Outlook: stable
Creditreform ID:	0477445084	Prepared on:	January 17 th , 2018
Incorporation:	March 30 th , 2006	Monitoring period until:	January 16 th , 2020
(Main) Industry:	Operating company of seven DSOs	Date of release:	January 19 th , 2018
Management:	Walter Van den Bossche, CEO	Rating methodology:	Corporate ratings Government-related companies
		Rating history:	www.creditreform-rating.de

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Abstract

Company

Eandis System Operator cvba (Group¹) (*Elektriciteit, Aardgas, Netten en Distributie* - ESO) is the Belgian operating company of seven Flemish distribution system operators² (DSOs). They constitute together the Eandis Economic Group (EEG - the Group). The Group owns and operates 2.7 million access points for electricity and 1.8 million access points for gas in a territory comprising 229 Flemish and 4 Walloon cities and municipalities. ESO was established in 2006 and is responsible for the distribution of the electricity and gas to private households and SMEs (low or medium voltage/pressure). As ESO operates on a cost-price basis on behalf of the seven DSOs, which are the

Rating history:
as from 18 Jan 2017: A+ (stable)

- 18 January: rating agency **Creditreform Rating AG** assigns an **A+ (stable) rating** to Eandis System Operator
- 3 February: Flemish Government takes decision on **smart metering roll-out** for the Flemish region: starting in 2019, a gradual roll-out will kick off with priority for new or renovated houses, owners of solar panels and budget meter customers – Eandis System Operator can now start preparations for roll-out
- 28 March: **Eandis System Operator and Infrax** confirm that they are working on the integration of both operating companies after such announcement was made by the Flemish Energy minister –
- 10 May: all shareholders have approved the plans for future **integration of Eandis System Operator and Infrax**
- 23 June: new **retail bond** issued (200 mEUR - 8 year maturity - 2,00% fixed annual coupon), mainly for refinancing of the 2010-2017 bond (150 mEUR - 4,00% coupon) repaid at the same date
- November: ESG rating agency **Oekom Research** awards **Prime status** to Eandis for its corporate responsibility & sustainability policies and performance

- 19 January: rating agency **Creditreform Rating** confirms its **A+ (stable) rating** for Eandis System Operator
- 15 February: **supplying contract for digital meters** awarded to IBM/Sagemcom
- 23 March: announcement of the planned merger of the DSOs **IMEA** (Eandis Economic Group), **Iveg** (Infrac Economic Group) and cable TV network intermunicipality **Integan**, all of these entities being active in the Antwerp region – planned date of merger: 1 April 2019
- 1 April: DSOs Imewo, Gaselwest, Iverlek, Intergem and IMEA take over the financial participations in **Publi-T** (44,96% shareholder of electricity TSO Elia) and **Publigas** (77,62% shareholder of gas TSO Fluxys) previously held by the financing associations Finiwo, Figga, Finilek, Fingem and Finea respectively
- 26 April: **digital meter** presented – roll-out in Flanders to start in 2019
- 27 April: **dissolution of subsidiary Warmte@Vlaanderen cvba** – district heating activities to be continued by the DSOs through their operating companies Eandis/Infrac and Fluvius

Planned merger of Eandis System Operator and Infrax into Fluvius System Operator

- Boards of Directors of Eandis System Operator and Infrax have approved a merger of both operating companies, which is fully in line with Flemish Government's policy. This transaction will create one single multi-utility operating company for the entire Flemish Region
- next steps:
 - to be submitted for formal approval at General Assemblies on 28 June 2018
 - operational kick-off date: 1 July 2018
- legal aspects:
 - Eandis System Operator takes over Infrax and immediately changes its name into Fluvius System Operator
 - current shareholders of Eandis System Operator and Infrax will become shareholders of Fluvius System Operator in a share-based only transaction
 - no other direct impact on DSOs
 - outstanding bonds will remain guaranteed by current DSO guarantors, both at Eandis and Infrax



- operating company for
 - 4 DSOs for E & G distribution: IVEG, Infrax-West, Inter-energa, PBE
 - 4 sewerage intermunicipalities: Riobra, Inter-aqua, Iveg, Infrax-West
 - 3 cable TV infrastructure intermunicipalities: Inter-media, Infrax-West, PBE
- statistics:
 - employees
 - Shareholders: 126 municipalities and 4 provinces (until end 2018)
- website: www.infrax.be

Corporate Social Responsibility

- Strategic focus on **sustainability & corporate social responsibility** with the overall aim to realize the Flemish climate objectives:
 - Eandis positions itself as the **preferred partner of local authorities** in their drive towards energy efficiency - >70% of municipalities have started a project for **Energy Services for Local Authorities**
 - **objective**: reduction of our own CO₂ emissions with 20% by 2020 (compared to 2008)
 - **sustainable mobility**: active promotion of electric mobility, implementation of charging infrastructure, CNG and natural gas vehicles
- **LT Environmental Plan 2015-2019**: implementation through annual Action Plans is on track
- **Solar panels** already on 5 Eandis sites - 672.512 kWh generated in 2017
- Well-defined and documented Corporate Governance policy: **Corporate Governance Charter & Ethical Charter**
- **Integral risk management** and **risk-based internal auditing**; **ISO 9001 certificate** for all core business processes
- Rated '**Prime**' by Oekom Research for its sustainability & corporate responsibility performance



Investment highlights

Key considerations

Strategic importance to the Flemish Region



Legal monopolistic business and low risk electricity & gas distribution



Regulated business with strong and predictable cash flow generation



Attractive financial profile



Favourable & stable regulatory environment



Efficient operating scheme with benefits of scale and highly experienced management



Strength of Eandis System Operator's credit is confirmed by two solid ratings (Moody's and Creditreform).



2. Financial Overview (Economic Group)

- Summary financials FY 2015-2017
- Capex programme 2017 (actuals)
- Short term financing
- Debt and maturity profile
- Investment programme 2017-2019
- Financing needs and funding 2017-2019
- Financial policies and strategy

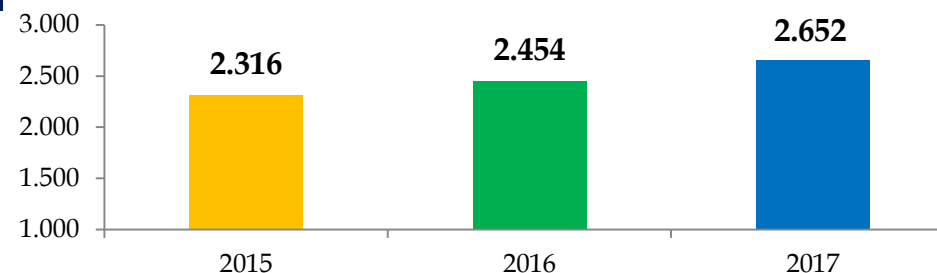
Financial Overview

Summary Financials FY 2015-2017 (actuals) for the Economic Group

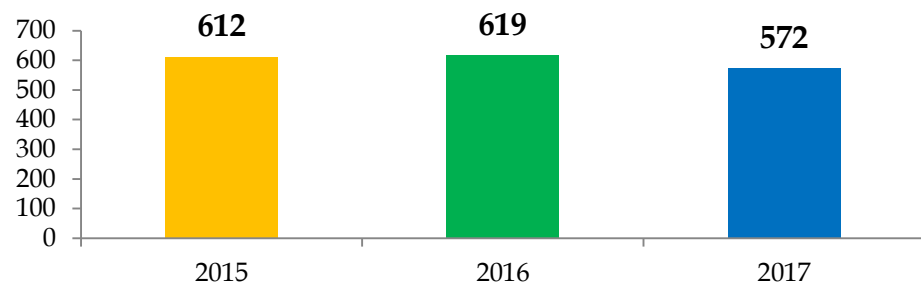
Financials (IFRS)

(in mio €)	2015	2016	2017
Statement of Profit/Loss			
revenues	2.316	2.454	2.652
operating revenues	2.678	2.789	3.019
operating expenses	-2.066	-2.170	-2.448
result from operations	612	619	572
net financial income/expenses	-185	-190	-175
profit before tax	427	429	423
profit for the period	284	283	236
other comprehensive income	48	10	141
total comprehensive income	333	293	377
Statement of Financial Position			
current assets	1.815	1.715	1.013
non-current assets	7.908	7.903	7.925
total assets	9.723	9.618	8.938
total equity (attributable to parent)	1.976	2.064	2.255
non-current liabilities	6.027	5.995	5.830
current liabilities	1.719	1.559	853
total liabilities	7.746	7.554	6.683
total equity & liabilities	9.723	9.618	8.938
Cash Flow Statement			
net CF from operating activities	1.283	709	1.174
net CF from investing activities	-431	-351	-393
net CF used in/from financing activities	-857	-359	-752
net increase/decrease of cash/cash equivalents	-5	-1	29
cash + cash equivalents at 31 Dec	4	3	31

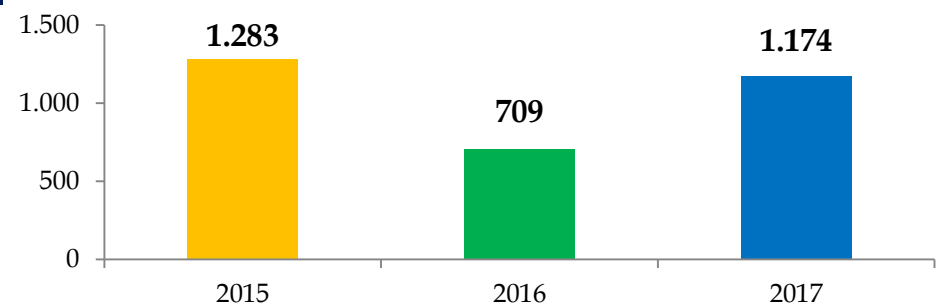
Revenue (in mio €)



Result from Operations (in mio €)



Net CF from Operating Activities (in mio €)

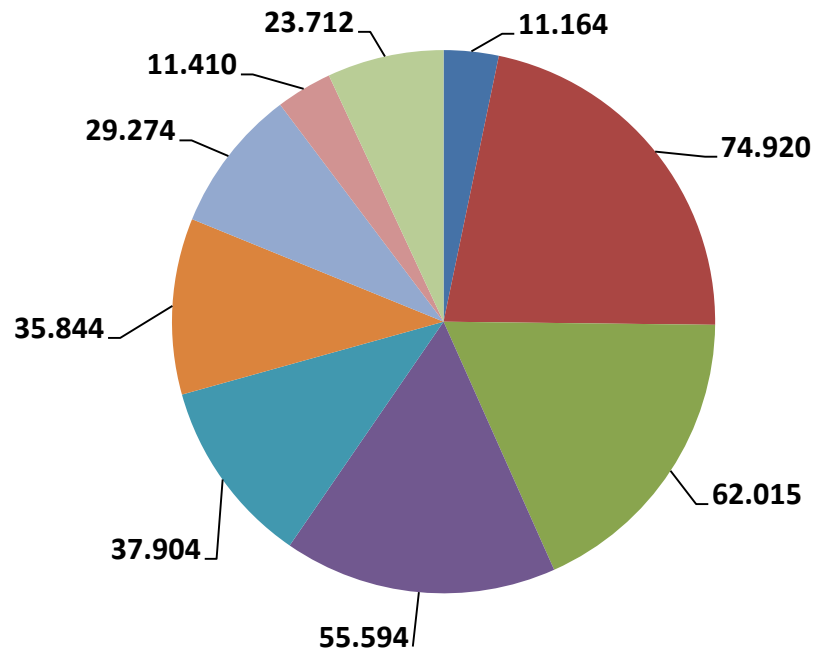


Financial Overview

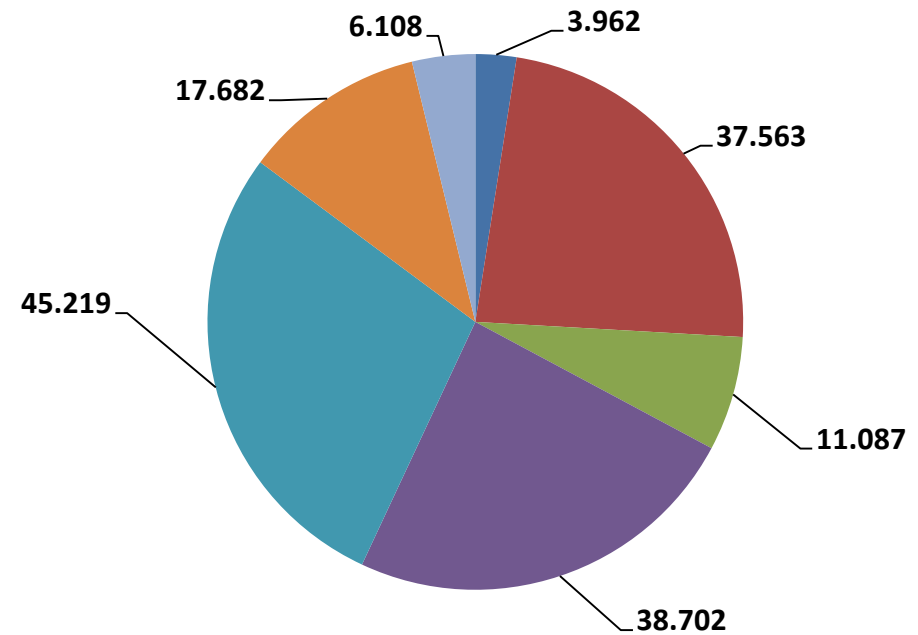
Capex Programme 2017 (actuals - gross investments)

Electricity: 341,8 mio € (2016: 321,2 mio €)

Gas: 160,3 mio € (2016: 148,2 mio €)



- transformer stations
- distribution cabins
- low voltage connections
- buildings, vehicles etc.
- mid-voltage lines
- low-voltage lines
- metering
- smart metering



- stations
- mid-pressure pipes
- distribution cabins
- low-pressure pipes
- connections
- metering
- smart metering

CAPEX/Total Net Fixed Assets: 6,4% (2016: 6,1%)

2017 investments in district heating: 7,6 m€ (2016: 4,1 m€)

Short term financing capacity and debt

Liquidity Facilities (as per 1 January 2018)

Straight Loan & Debet Line with Cash Pooling

- Bank account draft facility: 200 m€
 - no negative balance
- Overnight cash facility: 200 m€
- 0 € drawn
- Both committed and non-cumulative in use

Revolving Credit Line & Straight Loan

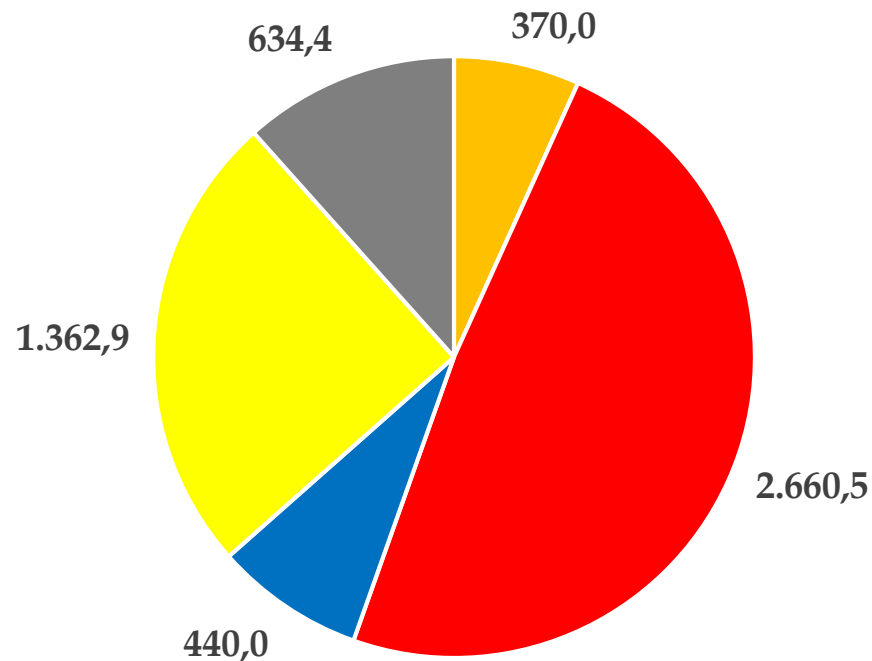
- Total size of facilities: 300 m€
- Outstanding : 0 €
- Committed

Commercial Paper Programme (*"Thesauriebewijzen"*)

- Total size of facilities: 522 m€
- Outstanding: 0 €
- Non-committed

Debt Profile (Economic Group)

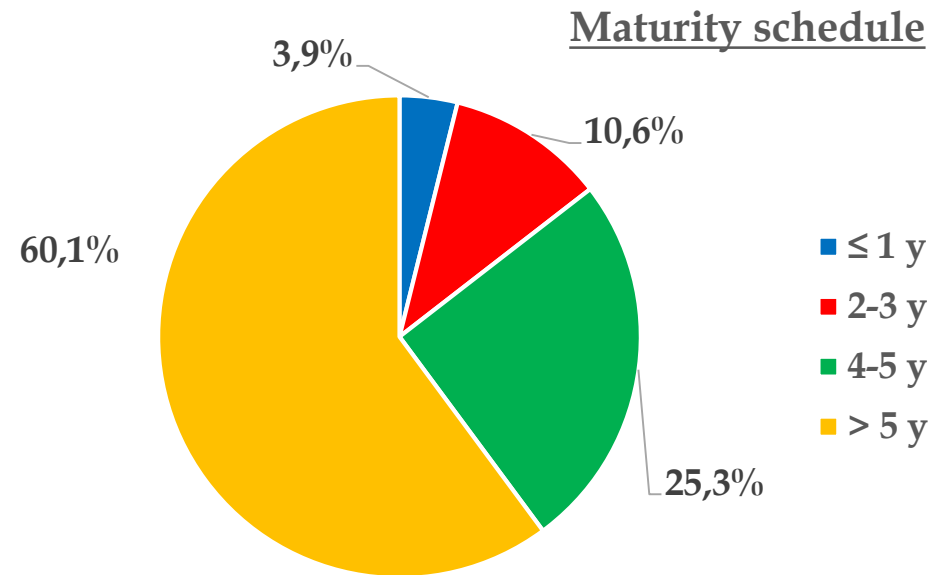
LT Debt Profile by Instrument (5.467,8 m€ outstanding as per 31 December 2017)



- retail bonds
- EMTN (benchmarks & private placements)
- private placements (stand-alone)
- bank loans (fixed)
- bank loans (variable swapped to fixed)

weighted average interest: 2,93%

weighted average maturity: 9 years 11 months



- ≤ 1 y
- 2-3 y
- 4-5 y
- > 5 y

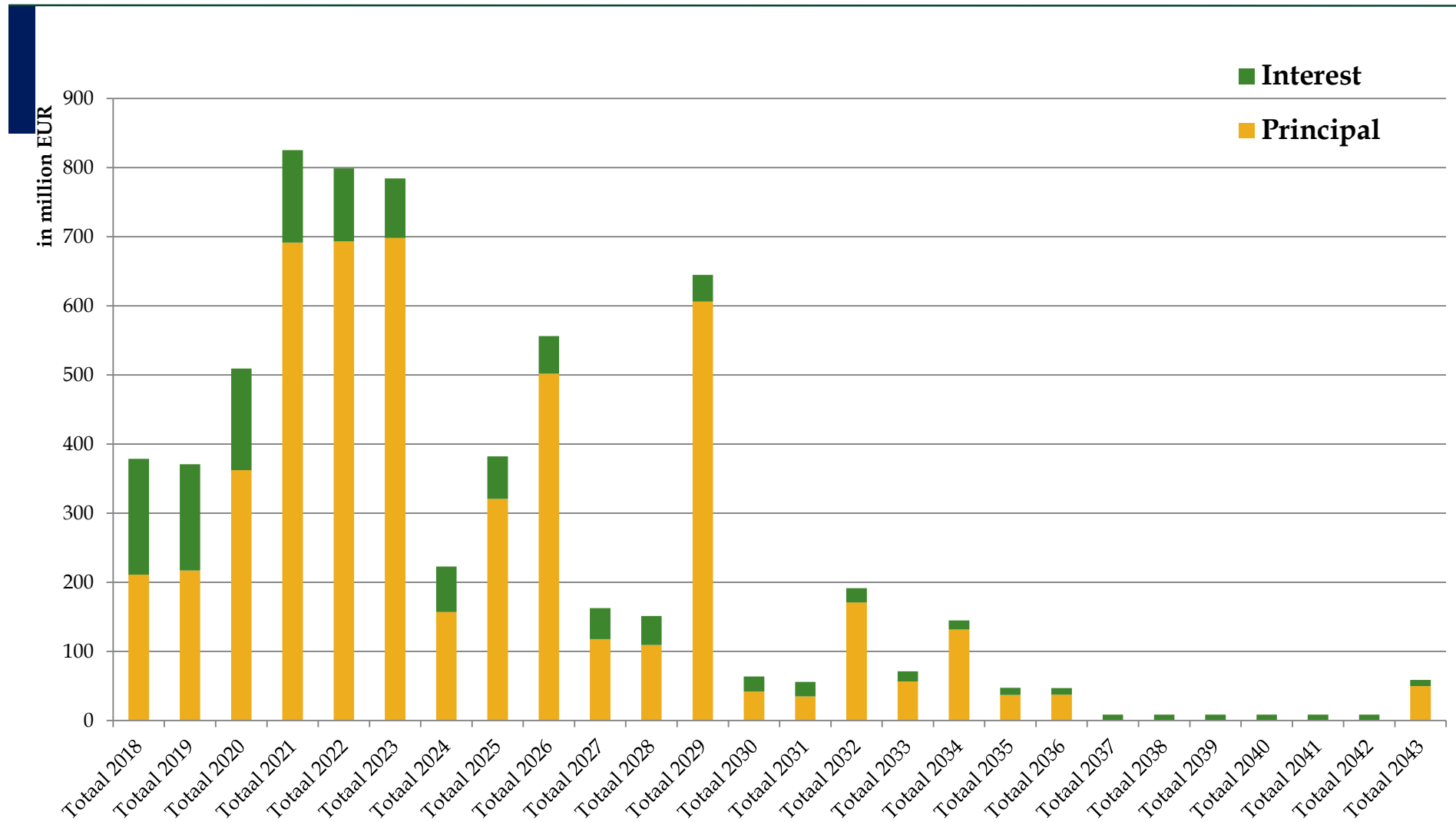
Financial Overview

Eandis's outstanding bonds (as per 31 Dec 2017): 3.470,5 m€

[in order of maturity date]

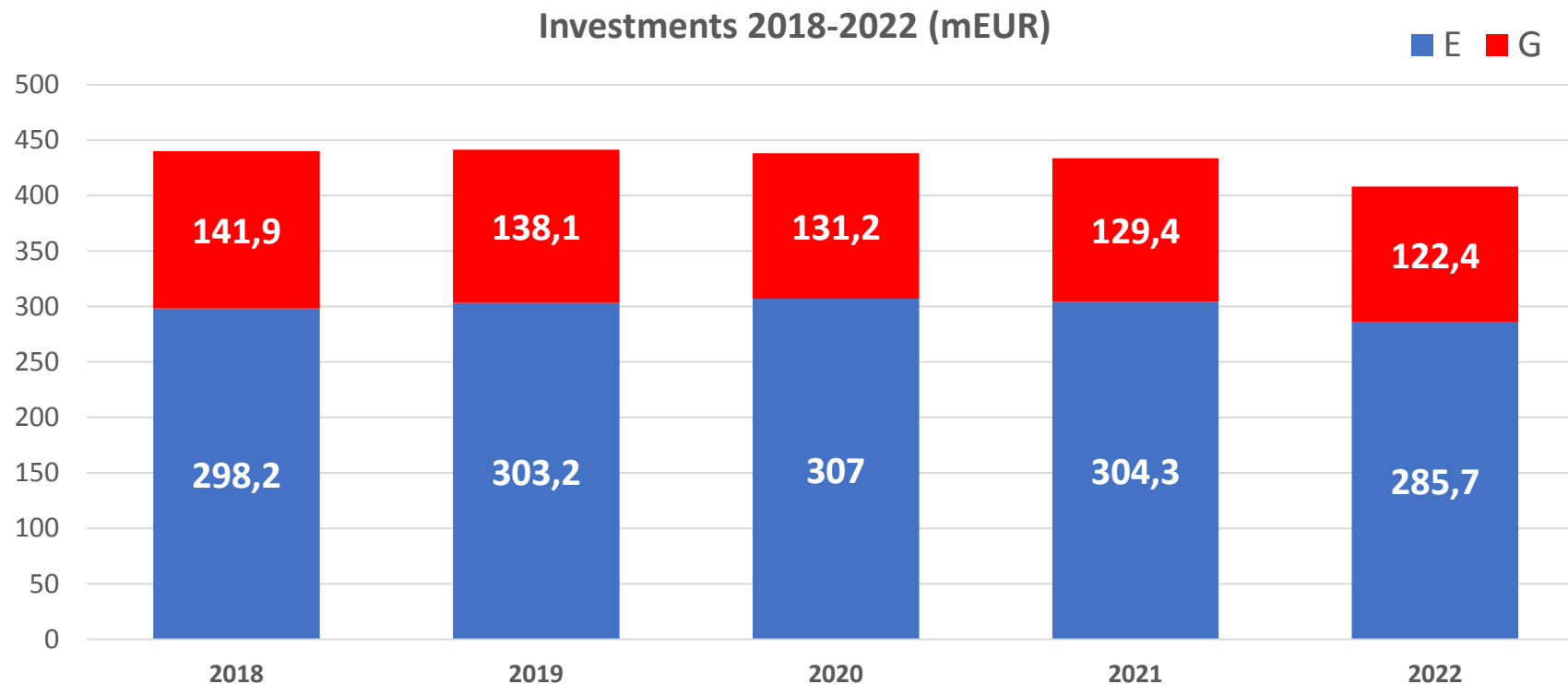
Type	Amount (m€)	Issue Date	Maturity date	Maturity	Coupon
Retail	170	30/12/2010	30/12/2020	10	4,250%
EMTN benchmark	500	8/11/2011	8/11/2021	10	4,500%
EMTN benchmark	500	30/11/2012	30/11/2022	10	2,750%
EMTN benchmark	500	9/10/2013	9/10/2023	10	2,875%
Retail	200	23/06/2017	23/06/2025	8	2,000%
EMTN sub-benchmark	400	4/12/2014	4/12/2026	12	1,750%
Schuldschein	50	21/09/2012	21/09/2027	15	3,500%
EMTN Private Placement	54,5	28/03/2013	28/03/2028	15	3,500%
EMTN benchmark	550	7/05/2014	7/05/2029	15	2,875%
EMTN Private Placement	135,5	10/07/2012	10/07/2032	20	3,950%
EMTN Private Placement	20,5	28/03/2013	28/03/2033	20	3,750%
Private Placement	95	27/10/2014	27/10/2034	20	2,600%
Private Placement	23	5/03/2014	5/03/2036	22	3,550%
Namenschuldverschreibung	50	24/06/2013	24/06/2043	30	3,500%
Private Placement	52	5/03/2014	5/03/2044	30	3,550%
Private Placement	170	27/10/2014	27/10/2044	30	3,000%

Maturity Profile LT Financing (Ec. Group - mEUR - 31 Dec 2017)



Financial overview

Investment programme 2018-2022 (net investments – in mEUR)



Most likely investment programme includes (1) roll-out of digital meters starting in 2019), (2) conversion programme low to high calorific gas and (3) the end of the Smart Users programme (2020).
All capex programmes validated by VREG.

Financial Overview

Financial Policies and Strategy

Operational Basis

- Eandis System Operator operates on a cost price basis
- DSOs operate in a fully regulated framework
- Separate tariff proposals and regulatory accounts per DSO, E and G separately
- All energy suppliers are required in order to receive network access to either (1) provide a letter of credit, (2) obtain a rating, or (3) provide a deposit equal to 3 months upfront network fees

DSO Capital Structure

- The regulator uses a defined regulated capital structure with preponderance for debt to equity
- Current balance sheet structure close to this regulatorily promoted equity vs debt ratio of 40/60%

DSO Financial Policies

- Commitment of stable dividend in EUR (until 2019)
- Financial transactions need prior approval by the Board of Directors
- Funds (bank loans, bonds) borrowed by Eandis System Operator solely on behalf of the DSOs (pass-through principle)
- DSOs are guarantors of the debt issued by Eandis System Operator, each in proportion to its capital share in ESO

Currency

- External funding in EUR only (no exchange rate risks)

3. Company & Business Overview

- Ownership structure
 - Intermunicipalities and DSOs
 - Eandis's Network
- 
- A dark green horizontal bar is located at the bottom left of the slide.

Company Overview

Ownership Structure

- **Eandis System Operator** is 100% owned by the DSOs Gaselwest, IMEA, Intergem, Iverlek, Imewo, Iveka and Sibelgas
- DSOs themselves are **100% publicly owned**:
 - i.e. municipalities (province West-Flanders participates in Gaselwest and Imewo until end 2018)
 - Sibelgas: important stake held by IBE/IBG
- The current **expiry date** of all DSOs is 9 November 2019*, as stipulated by Decree
- At the end of the mandate expiry of a DSO, the municipalities can decide to **extend its statutory lifetime for another 18 years**. If a municipality should decide not to take part in such a prolongation, it is obliged to take over from DSO/ESO its relevant assets & liabilities (incl. financial debt), personnel, public service obligations etc.

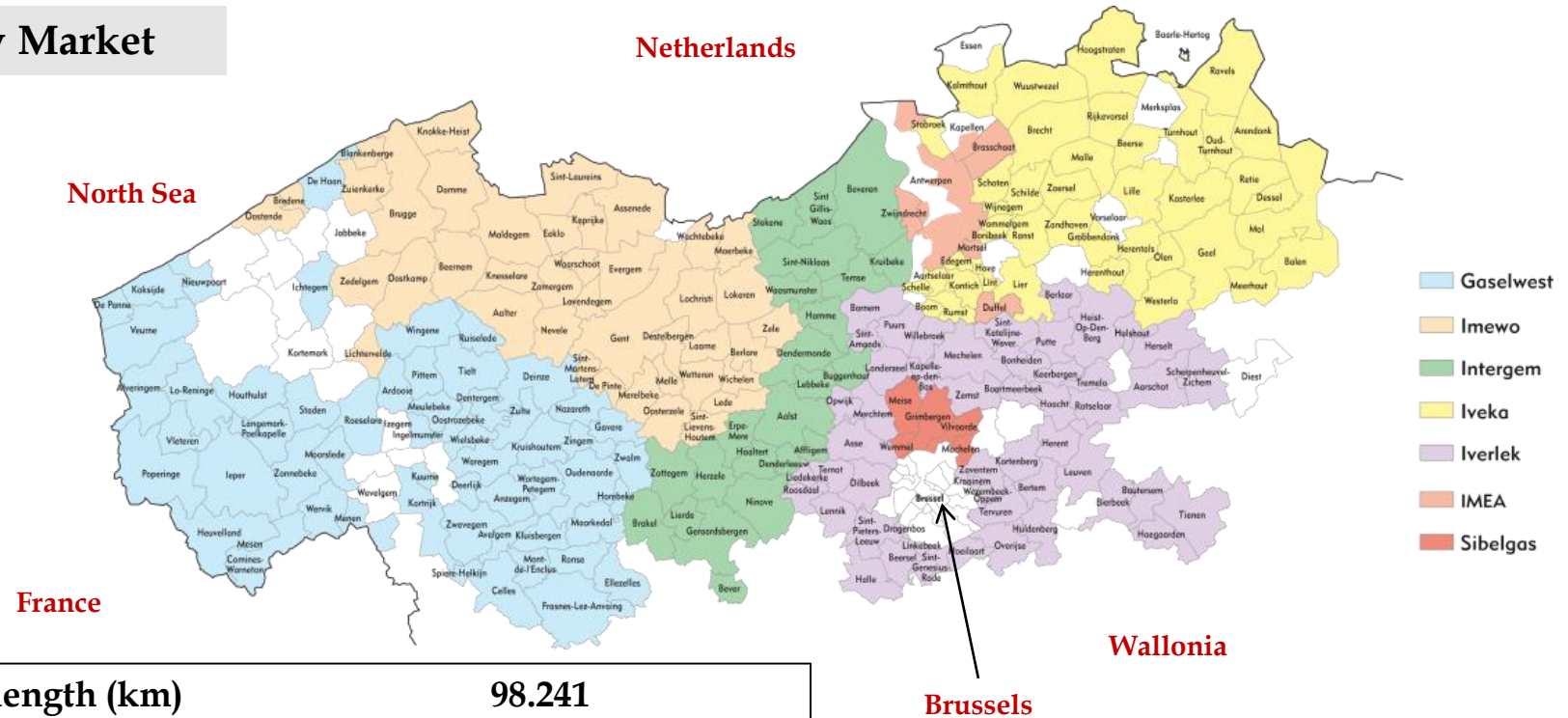
** also valid for the DSOs of the Infrax group*

Business Overview

Eandis System Operator's network

Eandis serves 77,8% of Flemish connections

Electricity Market



Total network length (km)	98.241
low voltage	63.294
mid voltage	34.947
Access points	2.691.131
Budget meters in operation	33.502
Public lighting points	855.433
Volume transported (TWh)	25,5

(*) All figures as per 31 December 2017 - Source : Eandis Annual Report 2017

Business Overview

Eandis System Operator's network

Eandis serves 83,2% of Flemish connections

Gas Market



Total network length (km)	43.323
low pressure	35.241
mid pressure	8.082
Access points	1.806.653
Budget meters in operation	24.200
Volume transported (TWh)	53,2

(*) All figures as per 31 December 2017 - Source : Eandis Annual Report 2017

4. Belgian Energy Market & Regulatory Framework

- Regulatory Framework: Purpose & Organisation
- Distribution Grid Tarification

Regulatory Framework

Purpose and Organisation of the Regulatory Framework in Belgium

Purpose

- **Organise the energy market** in order to
 - Increase generation capacity through import and new generation units
 - Improve competition on the generation side
 - Provide the framework for neutral, technically well integrated and cost efficient networks for gas and electricity transmission and distribution
 - Benchmark cost of energy
 - Reduce costs
 - Permanently monitor the market and if necessary adjust regulations to improve its organisation
 - Have a well functioning retail market
- Take action with a view to **satisfy the climate objectives**
 - Harmonise energy policies with environmental policies
 - Promote efficient use of energy
 - Promote use of renewable energy and use of CHP (Combined Heat & Power) units

Areas of Competence

- In order to organise the Belgian energy market, one federal (CREG) and 3 regional regulators (Flanders: VREG) were set up
- **CREG's areas of competence**
 - Electricity generation (except from renewable sources and combined heat & power systems)
 - Electricity transmission on > 70 kV grids
 - Gas storage and gas transport
 - Transmission tariffs
- **The 3 regional regulators' areas of competence**
 - Local distribution of electricity (voltage ≤ 70kV)
 - Local distribution of natural gas
 - Energy production from renewable sources and combined heat & power systems
 - Rational use of energy (RUE)
 - (Social) public service obligations
 - Organisation of supply market and supply licenses
 - Distribution tariffs

Regulatory Framework

Principles for the Flemish Distribution Grid Tarification

The coalition agreement for the Flemish government (2014-2019) stipulates the following elements with regard to distribution grid tariffs in the Flemish region:

- distribution tariffs to be reformed into **purely grid-related tariffs per customer segment**, reflecting capacity required by the end user
- tariffs should **reflect costs** for both off-take and injection
- **balances from previous tariff periods** to be settled in tariff methodology
- tariffs should take into account the **costs for constructing and using the grid**
- **objectifiable differences** will be integrated into the tariffs, e.g. grid density (rural vs urban areas)
- a **possible uniform contribution** for social/ecological public service obligations will be investigated

→ still to be confirmed in formally approved tariff guidelines

Regulatory Framework

Distribution Grid Tarification 2017-2020

- 12 December 2017: VREG approved and published the 2018 DSO tariffs, based on the 2017-2020 tariff methodology
- Basic tarification principles:
 - **Exogenous costs:** budget-based allowed income with balances budget/reality to be compensated for in subsequent tariff periods
 - **Non-exogenous costs:** revenue regulated ('revenue cap' or 'allowed income'):

$$AI_n = AI_{n-1} * [1 + CPI - x + q] \text{ in which}$$

- | | |
|--|---|
| ▪ AI = allowed income | CPI = consumer price index |
| ▪ x = efficiency factor (<i>not yet implemented</i>) | q = quality factor (<i>not yet implemented</i>) |

- includes a **RAB x WACC**-based margin for shareholders with gearing [= debt/(debt+equity)] set at 60%
 - **cost of equity (post-tax) at 5,24%**, with risk-free rate = 1-year average yield on 10y Belgian OLO for 75% & German Bund for 25%, market risk premium at 5,01% (E & G) and equity β at 0,76
 - **cost of debt at 3,04%**
 - **RAB-based WACC at 3,9% (post-tax); WACC at 5,0% (pre-tax)**
- VREG allows for the **recovery of regulatory assets/liabilities** 2010-2014 over a 5-year period (2016-2020)



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<http://www.eandis.be/eandis/investor-relations-en.htm>

Annexes

Company Overview

Organizational Structure: Management Committee (as from 1 Jan 2015)



**Walter
VAN DEN BOSSCHE, CEO**
*Chairman Management
Committee*



Guy COSYNS
*Customer
Operations*



Wim DEN ROOVER
Network Operations



**Jean Pierre
HOLLEVOET**
*Network
Management*



**David TERMONT,
CFO**
Finance & ICT



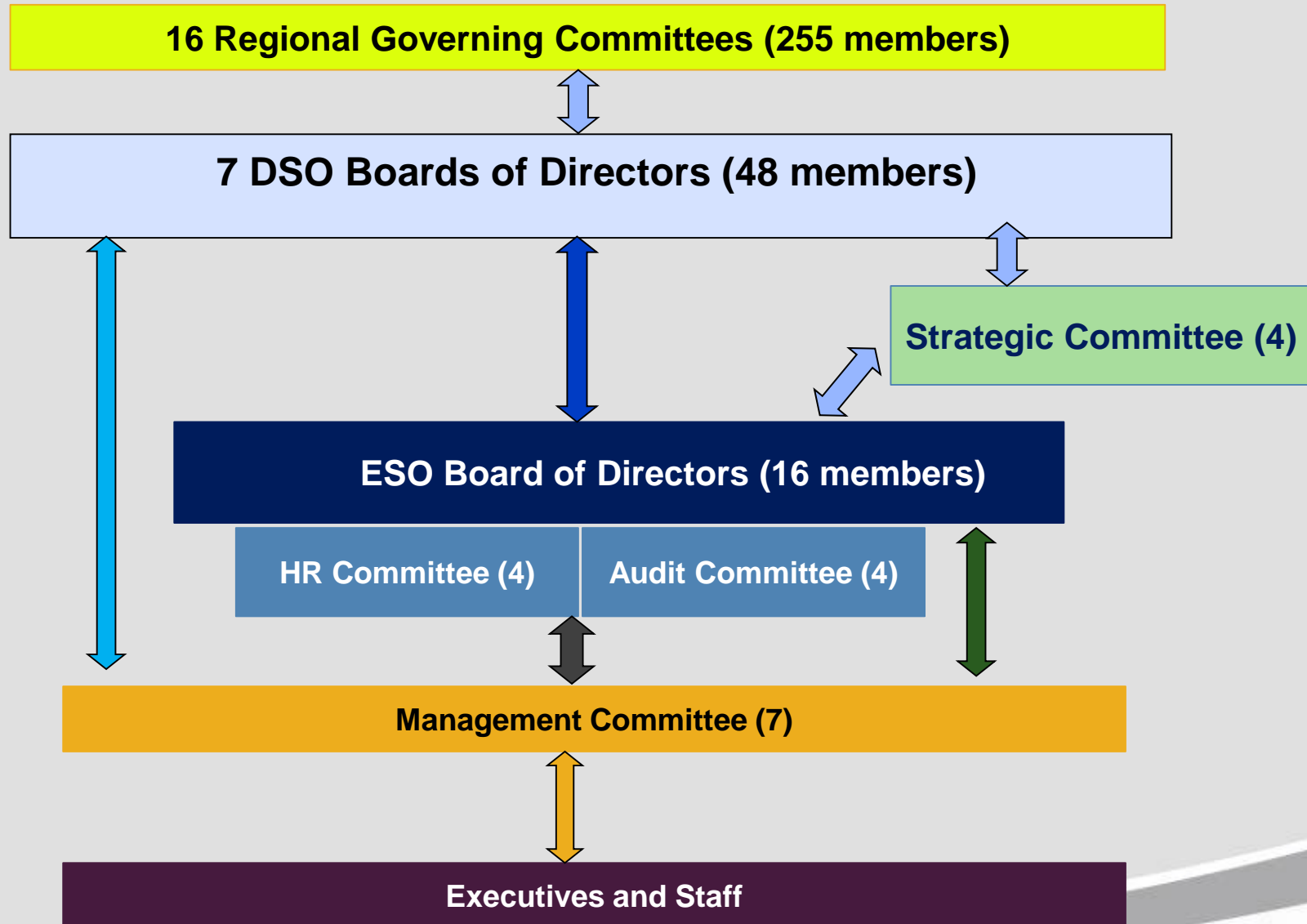
**Donald
VANBEVEREN**
*Regulation &
Strategy*



**Werner
VERLINDEN**
*HR &
Organisational
Management*

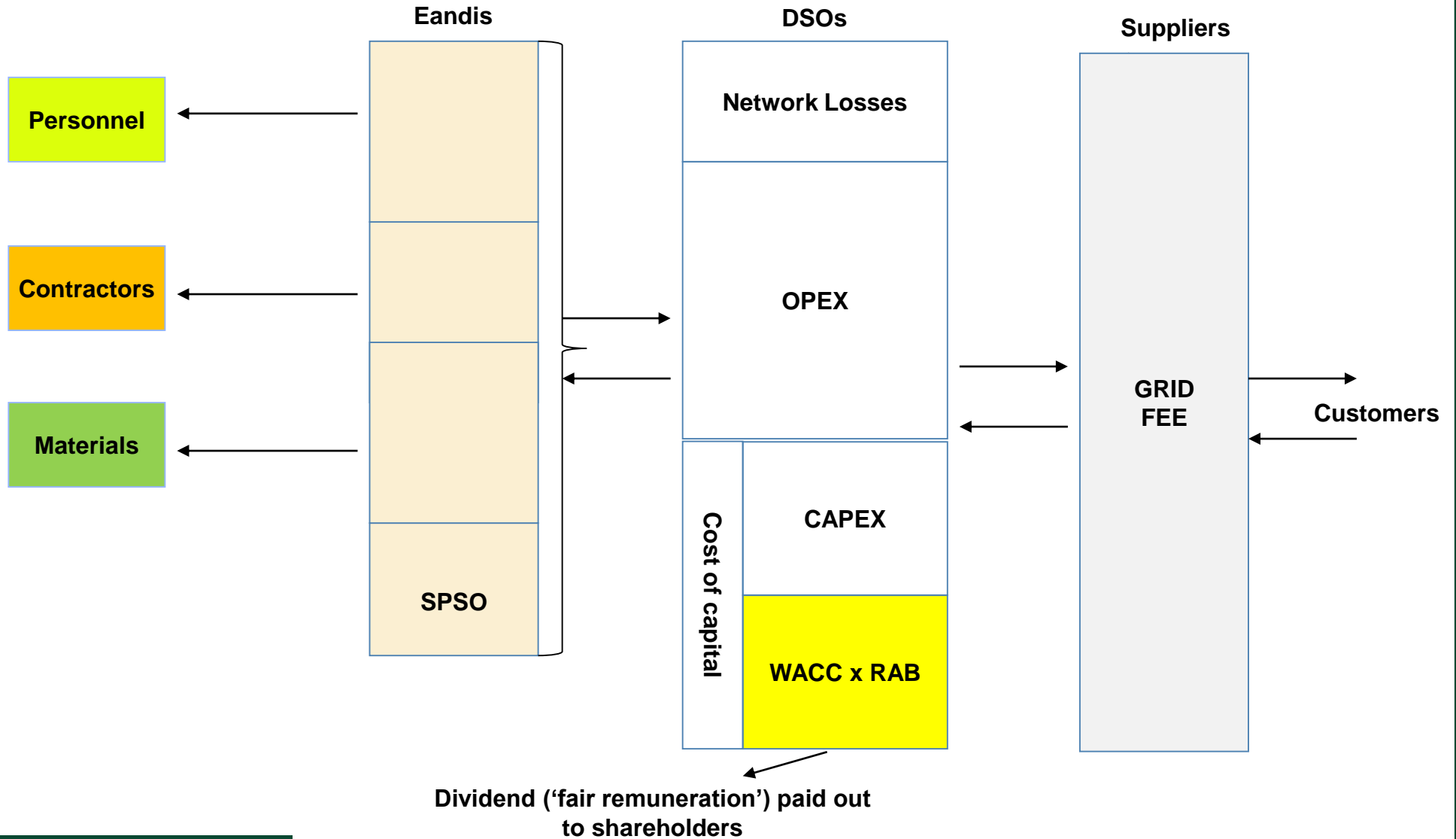
Company Overview

Corporate Structure: DSOs vs Eandis System Operator



Regulatory Framework

Cash Cycle



Company Overview

Intermunicipalities and DSOs

Intermunicipalities - Overview

- **In Belgium, municipalities are in charge** of the provision of several public services covering, among others, waste management, water management, environment, **energy distribution**.
- The municipalities may **organise** these tasks in two ways
 - Through a “municipal company” (also called “regie”) in which each municipality organises the service with its own personnel and financial resources
 - Through an association of several municipalities, (also called “**intermunicipality**”) in which several municipalities are associated to provide a common service
- Legal status of **companies of public law**
- In Flanders, intermunicipalities are governed by the **Flemish Decree of 6 July 2001**. All items not explicitly covered by this decree are covered by the corporate rules for a “cooperative company” (“cvba”)

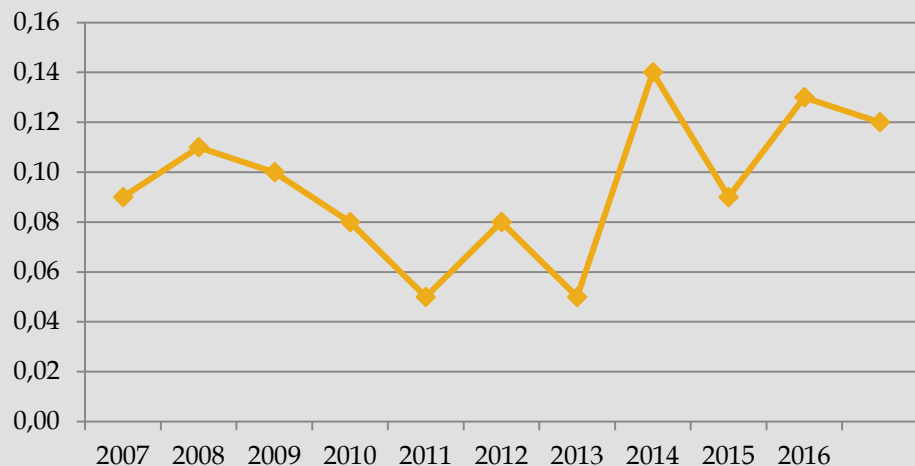
DSOs - Overview

- Most municipalities opted for **intermunicipal associations** for their mission of electricity and gas distribution system operator (“DSO”)
- Intermunicipal DSOs - being public law companies - do not have a commercial character, thus the **Belgian Act of 8 August 1997 on bankruptcy does not apply**
- In view of their mission entrusted by public shareholders, the **intermunicipal DSOs perform a public service** in an environment driven by principles of equality, continuity, regularity of service in relation to its suppliers and customers, rather than by principles of pure economic profit
- Each intermunicipal DSO holds a **legal monopolistic position** for the area covered by its network
- Each intermunicipal DSO owns **its proper grid infrastructure**
- Each intermunicipal DSO is appointed by the regional regulator VREG for a **renewable term of 12 years**: ownership of network (or rights of use) is prerequisite for obtaining such a licence – licence for E was renewed in 2014, for G renewed in 2015

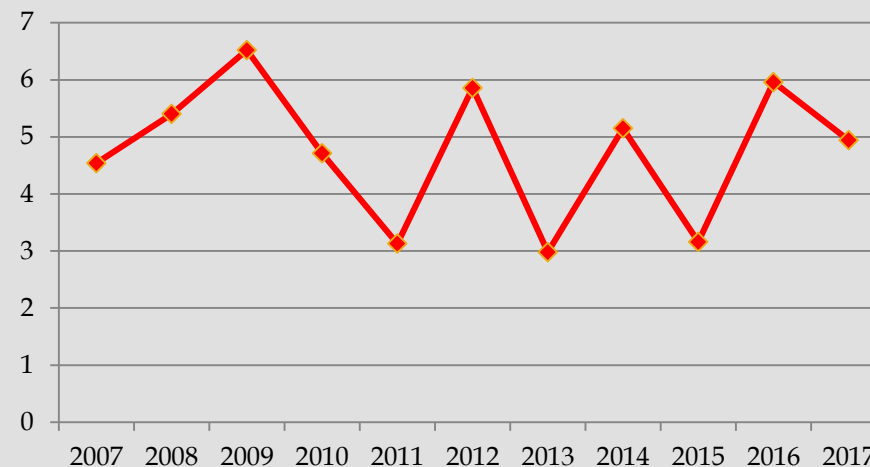
Eandis System Operator: safety & reliability

Industrial accidents (2007-2017) / electricity outages (2010-2017)

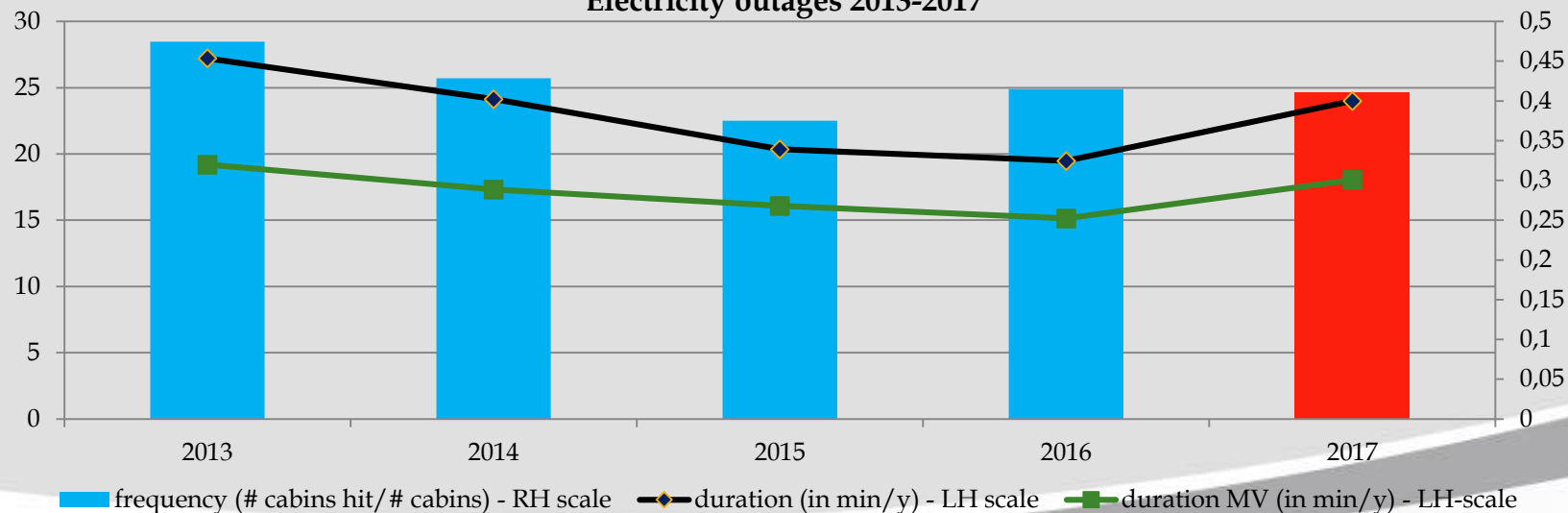
Gravity Index (Eg)



Frequency Index (Fg)



Electricity outages 2013-2017



Source: Eandis
 Eg= # days lost due to industrial accidents x 1000/# hours worked / Fg= # industrial accidents resulting in days lost x 1000000/# hours worked

Eandis System Operator's subsidiary: De Stroomlijn cvba

- Activity: call centre for distribution network related issues
- Shareholders: Eandis System Operator (64,03%), multi-service company Farys (32,98%), and Synductis (2,99%)
- Board: 7 members (of which 4 for Eandis, incl. Chairman David Termont)
- Staff: 273⁽¹⁾ on 3 sites (Mechelen, Ghent and Ypres)
- Works at **cost price** (no margin/profit) for its shareholders
- Consolidated according to the integral method
- Financials 2017 (BE-GAAP)
 - **Balance sheet total:** € 4.066.471
 - **Share capital:** € 257.700
 - **Debt:** € 3.808.771 (of which € 3.632.651 < 1 year / no LT debt)
 - **Turnover:** € 14.144.062

⁽¹⁾ As per end 2017



Eandis System Operator's subsidiary: Atrias cvba

- Shareholders: all Belgian distribution grid operators
Eandis System Operator: 25% of share capital
- Board: 12 members (of which 3 for Eandis, incl. Chairman Walter Van den Bossche)
- Staff: 23 (31 December 2017) – CEO: Frank De Saer (ex-Eandis)
- Established: 9 May 2011
- Operates on a federal scale (the whole of Belgium) for reasons of economies of scale
- Atrias has developed MIG-6 (Message Implementation Guide, smart-ready) and is charged with the development of a clearing house application
- Works at **cost price** (no margin/profit) for its shareholders
- Consolidated in Eandis according to the equity method
- Financials 2017 (BE-GAAP)
 - Balance sheet total: € 42.041.380
 - Share capital: € 18.600
 - Debt: € 42.022.780 (of which € 41.984.972 < 1 year / no LT debt)
 - Turnover: € 22.562.470

Eandis System Operator's subsidiary: Synductis cvba

- Date of establishment: 21 December 2012
- Shareholders: Eandis System Operator (33,33%), Farys (44,95%), Proximus (16,67%), IWVA (2,26%) and IWVB (2,79%) and Infrac (XX%) – Pidpa and De Watergroep are participating for coordination activities (B shares) – still open for other utilities
- Board: 5 members (of which 2 for Eandis, incl. Chairman Geert Versnick)
- Staff: none, all operations by staff delegated by shareholders
- Synductis detects synergies between utilities carrying out infrastructure works in the public domain (energy, water, telecom, sewerage a.o.), thus reducing hindrance for the general public and realising cost efficiencies for the utilities
- Works at **cost price** (no margin/profit) for its shareholders
- Consolidated according to the equity method
- Financials 2017 (BE-GAAP)
 - Balance sheet total: € 913.277
 - Share capital: € 19.500
 - Debt: € 893.777 (all debt < 1 year / no LT debt)
 - Turnover: € 1.714.372

Eandis System Operator's subsidiary: Warmte@Vlaanderen cvba



- Date of establishment: 18 May 2016
- Shareholders: Eandis System Operator (50%), Infrax (50%), Walter Van den Bossche (CEO ESO - 1 share) and Frank Vanbrabant (CEO Infrax - 1 share)
- Board: 10 members (of which 5 for Eandis, incl. Chairman Koen Kennis)
- Warmte@Vlaanderen was established to (i) detect, design, develop, build and maintain infrastructure for district heating and geothermal energy, (ii) generate heat and (iii) transport, distribute, supply, measure and invoice heat
- First fiscal year runs until 31 December 2017 (not consolidated)
- Share capital: € 18.600

Warmte@Vlaanderen was liquidated in April 2018

Eandis System Operator's subsidiary: Fluvius cvba



- Date of establishment: 27 December 2016
- Shareholders: Eandis System Operator (50%), Infrax (50%), Piet Buyse (Chairman ESO Board – 1 share) and Wim Dries (Chairman Infrax Board – 1 share)
- Board: 10 members
- Fluvius was established to (i) in general, organise activities and developments in support of its shareholders (both operating companies) in the field of energy distribution management and, additionally, cable TV, sewerage and district heating, and (ii) more particularly, be responsible for the end-to-end smart meter chain, on behalf of both Eandis System Operator and Infrax
- First fiscal year runs until 31 December 2017 (not consolidated)
- Share capital: € 18.600

Fluvius to be liquidated in Q2 2018

Regulatory Framework

Public Services Obligations: socio-economic, technical, ecological

- **RUE** (Rational Use of Energy, 'REG' in Dutch)
 - DSOs are required to **reduce primary energy use**
 - DSOs draw up compulsory annual **RUE Action Plans**, to be ratified by the VREG
- **certificate mechanism**
 - DSOs are compelled to buy **green power certificates and CHP certificates** at a predetermined price from the generators - DSOs can sell these certificates at (lower) market prices in an auction procedure
- **SPSO** (Social Public Service Obligations, 'SODV' in Dutch)
 - Goal : to ensure **minimum and continuous supply of electricity and gas** to any household in Flanders
 - social supplier for customers dropped by commercial suppliers
 - cut-offs from grid connection only allowed in well-defined circumstances (fraud, disused premises etc.)
 - special conditions for protected customers e.g. free installation of a budget meter
- **Ecological**
 - installation, maintenance and operations of charging infrastructure for electric vehicles (2016-2020), as part of the Clean Power for Transport policy
- **global service obligations**
 - **right of connection** to the gas and electricity network (Flemish Government Decision, 19 November 2010)
 - DSOs' annual **investment plans** to be ratified by VREG
 - **supplier of last resort** in case a supplier defaults (no legal document as yet, intermediary system currently in place)

*DSOs are crucial in implementing the Flemish Government's public service / social welfare policies.
In addition, supplier of last resort indicates the confidence of the Flemish Government in the DSOs' networks.*