

Rating object	Rating information	
Fluvius System Operator cvba Creditreform ID: 2000000589 Incorporation: 1 July 2018 Based in: Melle, Belgium (Main) Industry: Operating company of eleven utility intermunicipalities CEO: Frank Vanbrabant <u>Rating objects:</u> Long-term Corporate Issuer Rating: Fluvius System Operator cvba Long-term Local Currency (LC) Senior Unsecured Issues	Corporate Issuer Rating:	Type: Update solicited
	A+ / stable	
	LT Senior Unsecured Issues, LC:	Other: n.r.
	A+ / stable	
	Rating date: 26 July 2019	
	Monitoring until: withdrawal of the rating	
	Initial rating: www.creditreform-rating.de	
	Rating methodology: CRA "Corporate Ratings" CRA "Non-Financial Corporate Issue Ratings" CRA "Government-Related Companies" CRA "Rating Criteria and Definitions"	
	Rating history: www.creditreform-rating.de	

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Summary

Company

Fluvius System Operator cvba (the Company¹, FSO) is the Belgian operating entity of eleven Flemish intermunicipal infrastructure companies (legal name mission entrusted associations, MEAs)², which have operations in the regulated electricity and gas distribution, regulated sewerage, as well as in the cable TV infrastructure business sector. The Company was founded on 1 July 2018 through the merger of the former operating companies Eandis System Operator cvba and Infracvba. Fluvius System Operator cvba, its consolidated subsidiaries and the intermunicipalities together form the Economic Group Fluvius (EGF - the Group). The Group manages 230,000 kilometers of utility networks, and owns and operates 3.5 million access points for electricity, 2.2 million access points for gas, 0.6 million for sewerage, and 0.5 million for cable TV, over an area covering the entire Flemish region (300 municipalities).

As an operating entity of the intermunicipalities, FSO is responsible for the operation of the distribution networks for electricity and natural gas as well as other grid-related utilities (sewerage, public lighting, cable distribution and district heating), exercising all activities as data manager and heat manager, as well as providing other management services. As FSO operates on a cost-price basis on behalf of the intermunicipalities, which are the network owners, and given that they provide guarantees for debt obligations of FSO, we considered the Group as a whole in order to assess the creditworthiness of FSO.

FEG employed 5,320 people as of the end of 2018. The Group (IFRS) achieved a consolidated gross performance of EUR 3,250.30 million in 2018 (2017: EUR 2,922.6 million) and a net profit of EUR 190.91 million (2017: EUR 235.76 million). The Group's performance in the financial year 2018 was impacted by the incorporation of the ex-Infracvba companies (effective from 1 July 2018) and financing associations (effective from 1 April 2018), as well as by non-recurring effects (see Business development and outlook).

¹ Fluvius System Operator cvba and its consolidated subsidiaries: De Stroomlijn cvba, Atrias cvba, and Synductis cvba.

² Gaselwest, Imewo, Intergem, Iveka, Iverlek, Sibelgas, Infrac West, PBE, Riobra, Fluvius-Limburg, and Fluvius-Antwerpen.

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Rating result

The current rating (A+, stable outlook) attests a high level of creditworthiness to Fluvius System Operator cvba, representing a low default risk for the Company.

The Group disposes of a legally based regional monopoly in a sector that provides essential services to the population, and is therefore of strategic importance for the Flemish region. The Company benefits from the supportive regulatory framework in its major business segments, which allows generating strong predictable cash flows. In our view, the merger with Infrax has strengthened the market position of Fluvius by including further essential services (e.g. sewerage), and through covering the entire region as the only Flemish distributor of electricity and gas. After the merger and the integration of financing companies, the Group shows strengthened equity, while its annual result in 2018 was negatively impacted by the VREG decision of August 2018.

The ultimate shareholders of the MEAs are the municipalities of the Flemish Community, who own 100% of the MEAs' share capital. This has a positive impact on our rating assessment. The sub-methodology "government-related companies" has been applied. We thereby assume that the local authorities would give systemic support to the Group if needed. Any change in the sovereign rating of Belgium (CRA rating AA stable as of July 28, 2019) or to the Flemish Region could therefore have an impact on FSO's corporate rating.

Outlook

The one-year outlook of the rating is stable. This assessment takes into account the low business risk profile of the Company and its moderate financial risk profile given the supportive regulatory framework as well as the assumed support of its ultimate shareholders in the event of distress. Despite the modifications of the tariffs, following the decisions of VREG concerning the tariff balances for 2010-2014 and the merger efficiency gains, we anticipate an overall stable development of the Group's financials, also due to the full-year consolidation of ex-Infrax companies.

Relevant rating factors

Table 1: Financials of Economic Group Fluvius I Source: Economic Group Fluvius, Consolidated financial statements 2018, standardized by CRA

Excerpts from the financial key figures analysis 2018

- + Increase in Sales
- + Strengthened equity ratio

- Decrease in profit
- Worsened profitability ratios
- Increase of net total debt/EBITDA adj.

Economic Group Fluvius Selected key figures of the financial statement analysis Basis: Consolidated Financial Statements of 31.12. (IFRS, Group)	CRA standardized figures ³	
	2017	2018
Sales (million EUR)	2,652	2,943
EBITDA (million EUR)	898	773
EBIT (million EUR)	572	397
EAT (million EUR)	236	191
EAT after transfer (million EUR)	236	191
Total assets (million EUR)	8,874	13,775
Equity ratio (%)	29.35	43.73
Capital lock-up period (days)	30.59	37.07
Short-term capital lock-up (%)	22.40	31.82
Net total debt / EBITDA adj. (Factor)	6.56	9.13
Ratio of interest expenses to total debt (%)	2.83	2.45
Return on Investment (%)	4.33	2.12

Please note:

General rating factors summarize the key issues that – according to the analysts as per the date of the rating – have a significant or long-term impact on the rating, positive (+) as well as negative (-).

General rating factors

- + Government-related company, 100% public shareholders
- + Strategic importance of the Group for the Flemish region as largest Flemish multi-utility, with electricity and gas covering the whole region
- + Transparent and supportive regulatory framework
- + Low-risk business profile across all operations due to regulation and long-term agreements
- + Strong earnings capacity
- + Predictable revenues and cash flows
- + Enhanced efficiency due to multi-utility approach and merger with Infrac
- + Guarantee by MEAs for debts taken by FSO

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

Current rating factors (rating 2019)

- + Improved equity ratio due to the merger and the integration of financing associations
- + Good liquidity position

Current rating factors are the key factors that have, in addition to the underlying rating factors, an impact on the current rating.

³ For analytical purposes, CRA adjusted the original values in the financial statements in the context of its financial ratio analysis. For example, the analytical equity ratio, deferred tax assets, goodwill (entirely or partly), and internally generated intangible assets are subtracted from the original equity. Deferred tax liabilities are added to the equity. With the calculation of Net total debt all balance sheet liabilities are taken into account. As a result, the key financial figures shown often deviate from the original values of the company.

Prospective rating factors are factors and possible events that – according to the analysts as per the date of the rating – would most likely have a stabilizing or positive effect (+) and a weakening or negative effect (-) on future ratings, if they occurred. This is not a full list of possible future events with potential relevance for future ratings. Circumstances can arise that are not included in the list of prospective factors whose effects are impossible to assess at the time of the rating, either because these effects are uncertain or because the underlying events are deemed unlikely to occur.

- + Strengthening of regional relevance as a result of the merger
- Negative impact of the VREG decision from August 2018 on the 2018 financials
- High net total debt / EBITDA
- Relatively high pay-out ratio

Prospective rating factors

- + Further enhancement of regional importance through participation in publicly relevant projects
- + Increase of the RAB (e.g. through launch of digital metering project)
- + Realization of synergies and economies of scale through further optimization
- + Increase of sovereign rating of Belgium
- Lower cash flows due to the reduced tariffs for 2019-2020 (already settled in 2018 accounts)
- Possible fundamental changes in the regulatory system
- Lower sovereign rating of Belgium

Best-case scenario

In our best-case scenario for one year, we assume a rating of AA-. Taking into consideration the current tariff methodology and its modifications for 2019 and 2020, we do not expect significant improvements of Fluvius' financials. The rating could improve following an improvement of the sovereign rating of Belgium.

Worst-case scenario

In our worst-case scenario for one year, we assume a rating of A. It could be the case if the Group's financials deteriorate following an unexpected decline of its earnings or a substantial increase in debt due to exceptional events or following the downgrade of the sovereign rating of Belgium.

Business development and outlook

The merger of ex-Eandis and ex-Infrac companies into Fluvius System Operator cvba determined the development of the Group in 2018. According to IFRS, the merger by absorption of Infrac cvba by Eandis System Operator cvba was effective on 1 July 2018, the date of the legal merger. On this date, Fluvius System Operator cvba started its activities as an integrated multi-utility operator for Flanders. In 2018, the Group achieved total operating revenues of EUR 3,499 million (2017: EUR 3,019 million), including revenues from contracts with customers, other operating income, and capitalized own production.

Best-case scenario	AA-
Worst case scenario:	A

Please Note:

The scenarios are based on the information available at the time of the rating. Within the forecast horizon, some circumstances could occur that would lead to a rating change out of the indicated range.

Table 2: The development of business of the Economic Group Fluvius (revenues from contracts with customers). Source: Economic Group Fluvius' consolidated financial statements 2018

Economic Group Fluvius		
In million EUR	2017	2018
Distribution and transport grid revenue	2.517	2.785
Sale of energy	79	44
Construction works for third parties	55	74
Other sales	0	40
Total revenues	2.651	2.944

The Group has realized most of its revenues from the remuneration of the distribution of electricity and gas via its networks. The changes in the different segments are mostly due to the changes to the tariff methodology of the VREG for the period 2017 to 2020 and additional adjustments to these tariffs during the years 2017 and 2018, as well as due to the merger and the reclassification of revenues of the individual segments.

The development of the business segments and the allocation of the respective assets as reported to the Belgian authorities is shown in the following table.

Table 3: The development of individual segments in 2018 | Source: Consolidated annual accounts of Fluvius Economic Group (Belgian GAAP, before consolidation adjustments; the acquisition of ex-Infrax-companies is processed according to the Belgian GAAP retrospectively to 1 January 2018, and contains the results over the 12 months)

Economic Group Fluvius, individual corporate divisions								
In million EUR	Electricity		Gas		Other		Eandis / Fluvius System Operator	
	2017	2018	2017	2018	2017	2018	2017	2018
Turnover	1,870	2,264	445	600	20	230	1,049	1,637
Profit for the period	133	70	74	51	5	75	0	0
Total assets	6,069	7,301	3,145	3,828	67	2,209	4,061	4,749

Gross profit increased from EUR 1,543 million to EUR 1,591 million, whereby the gross profit margin deteriorated from 58% to 54% in 2018. The main reasons for this development were the higher costs for transportation, which include the transmission cost of electricity invoiced by the Transmission System Operator (TSO – Elia) and the costs of the federal contribution (obligations for denuclearization, the reduction of emissions of greenhouse gases, and the costs relating to the regulation and control of the energy market). In addition, the costs for green energy and cogeneration certificates increased in 2018, mainly due to the increased number of purchased certificates (5.581.415 in 2018, 4.695.892 in 2017), as did the costs for services (EUR 409 million in 2018, 2017: EUR 337 million). Wage costs (EUR 442 million, 2017: EUR 367 million), as well as amortisation/depreciation costs (EUR 406 million, 2017: EUR 321 million), have increased due to the merger with ex-Infrax companies.

The earnings performance of Fluvius was negatively impacted by the VREG's decision of 28 August 2018 (which was upheld by the Brussels Court of Appeal on 27 February 2019), according to which it was decided to fully return to the end customers the historical balances of manageable costs for the period 2010-2014 through the distribution grid tariffs for 2019 and 2020 (each

for 50%). The settlement of the VREG's decision caused additional one-off operational expenses of EUR 267 million in the accounts for the financial year 2018. Against this background, the Company achieved a relatively low annual result of EUR 191 million (2017: EUR 236 million) despite the positive effects of the merger.

On 1 April 2018, in the context of a wide-ranging restructuring of the organizations and entities in the Flemish energy sector, the split of the intermunicipal financing associations (Figga, Finea, Finiwo, Fingem and Finilek) was implemented. The activities were partly subdivided into the respective MEAs. The activities of the financing associations consisted of strategic participations in the transmission system operators (via the Publi-T and Publigas holdings) for electricity and gas Elia and Fluxys, as well as in the Telenet Group Holding. The acquired participations were finally included at fair value into the item "Other investments" (partly with changes recognized through other comprehensive income, partly through income or loss statement), because the MEAs cannot exert significant control on their activities.

The shareholder's structure has also changed in the course of reorganization of the energy sector: four Walloon municipalities have switched from PBE to the Walloon operator Ores, and the municipality Sint-Pieters-Leeuw has opted for Riobra (sewerage activity).

In July 2018, the VREG took the decision to modify the tariff methodology for electricity and natural gas distribution during the regulatory period 2017-2020 with regard to efficiency gains resulting from the merger of the operating companies. The distribution network tariffs for electricity and natural gas will be reduced by a so-called efficiency-factor (x'-factor).

Regarding the green power (REC) and cogeneration (CHPC) certificates, which weighted on the balance sheet of Fluvius, the Flemish system has been changed and currently allows DSOs to reduce their stock of unsold certificates. A "services of general economic interest" (DAEB) arrangement has been made that includes the buy-in of certificates by the Flemish Energy Agency (VEA), which are then to be destroyed. The arrangement is valid until 2026. The RECs and CHPCs amounted to EUR 115 million at the end of December 2018 compared to EUR 25 million (EUR 33 million with ex-Infrax companies) at the end of December 2017. The DAEB buy-in foreseen for December 2018 was cancelled in favour of funding rational energy use (RUE) premiums. Due to the DAEB arrangement, it is expected that in the future the number of certificates bought by the DSOs will roughly correspond to the number of certificates they can sell to the market.

As a part of its strategy for the coming years, the Group has envisaged a range of projects focused on the realization of Flemish climate objectives: the reduction of CO₂ emissions; the development of sustainable mobility through the promotion of electrical and CNG mobility; the extension of charging infrastructure; the implementation of the investment programme for switching to LED technology in public lighting, comprehensive digital metering, and other projects. In our view, participation in these projects should enhance the Group's relevance for the entire Flemish region and should have a positive effect on its regulated asset base (RAB).

Despite the exceptional negative effects in 2018 as a result of VREG's decision of August 2018, we consider the Group's earnings capacity to be strong and sufficient, benefiting from the merger and from the generally supportive regulatory environment in Flanders. We expect additional improvement of the Group's earnings in the next years due to the full-year-effect of the merger.

Structural risk

Fluvius System Operator cvba was created in July 2018 through the merger of Eandis System Operator cvba and its peer Infrax cvba as a new multi-utility network operator. Currently, Fluvius operates in all 300 Flemish municipalities. From a legal point of view, it was opted to have Infrax absorbed into Eandis, with Eandis System Operator cvba subsequently changing its name to Fluvius System Operator cvba. The Fluvius Economic Group is composed of the eleven inter-municipal companies⁴, Fluvius System Operator cvba and its subsidiaries: De Stroomlijn cvba, Atrias cvba, and Synductis cvba.

All the 11 intermunicipal companies of the Economic Group Fluvius are 100% publicly owned by the Flemish municipalities and have the status of mission entrusted association (MEA), as stipulated in the provisions of the Flemish Decree on Local Government. According to this, MEA is an intermunicipal legal entity, which the participating municipalities have entrusted with the management of certain public utilities. Ten of Fluvius' MEAs are recognized by the Flemish energy regulatory authority VREG as system operators for electricity and/or gas (DSO), and they need to be appointed for a renewable term of 12 years. The license for electricity was renewed in 2014, and for gas in 2015. The statutory aim of Fluvius' MEAs is furthermore the operation of cable distribution greeds and installations, the treatment and purification of sewerage as well as carrying out peripheral activities such as public lighting and district heating.

The activities of Fluvius are assigned to the MEAs as follows:

- regulated electricity and gas distribution: 10 intermunicipal DSOs, entire Flemish region
- regulated sewerage system: 4 MEAs, 27% of Flanders territory (84 municipalities)
- cable network infrastructure business: 4 MEAs, 30% of Flanders territory

The MEAs are managed centrally by their operating company Fluvius System Operator cvba, a limited liability partnership under Belgian law. The role of Fluvius System Operator cvba consists in the operation of the distribution networks for electricity and natural gas; the development, exploitation, use, and maintenance of other grid-related utilities (sewerage, public lighting, cable distribution and district heating); activities as data manager and heat manager; managing strategic participations and the access register; metering data reading; providing energy services, management services, and other services. The Company carries out its operational activities at cost price without charging any commercial margin to the MEAs. Hence, the result of the Company is without profit or loss.

The grid assets themselves remain in the ownership of the MEAs, which are also the holders of the electricity and gas distribution system operator licenses granted by VREG.

The main managing bodies of FSO are the Board of Directors, composed of 20 members, and the Management Committee, composed of 10 members and headed by the CEO. Further institutions are the Strategic Committee, which is composed of the representatives of the MEAs, the Audit Committee, and the HR Committee. The MEAs have their own boards of directors, which are responsible for their corporate matters and for relations with the local authorities.

⁴ Initially after the merger, there were 14 MEAs: 11 distribution system operators (DSOs) for gas and electricity and three other intermunicipal utilities. During 2019, in the Antwerp region the Fluvius MEAs IMEA and IVEG merged with Integan, active in cable infrastructure (which was not initially integrated), and formed Fluvius Antwerp. In Limburg Province, Inter-energa, Inter-aqua and Inter-media merged to Fluvius Limburg.

Given the systemic relevance of the Group as the owner of the Flemish networks, and bearing in mind the tight organizational and ownership links between the Group and the Flemish municipalities, no core risks can, in our opinion, be associated with the structure of the Group. The operational and organizational structures are in accordance with the current relevant laws, which brings particular transparency and stability to the Group's structure.

Business risk

The EGF is the largest utility group in Flanders and is system-relevant for the cities and municipalities in which it operates. The energy activities of the EGF are organized as a regional natural monopoly, with each intermunicipal DSO holding exclusive operating rights for the area covered by its network through licenses. End customers and SMEs cannot choose their DSO.

Almost all of Fluvius' business is subject to regulation. For the distribution of electricity and gas the Group operates according to the guidelines established in the Energy Decree. The supervisory authority is VREG. Its sewerage business is regulated by the Flemish Environmental Agency (Vlaamse Milieumaatschappij - VMM), which acts as a regulator on both the tariffs of the contribution collection and transport, based on the Flemish Drinking Water Decree. The Company's cable infrastructure business is supervised by the BIPT (Belgian Institute for Postal Services and Telecommunications) and the VRM (Flemish Regulator for the Media). Fluvius charges fees for the transport of electricity from the TSO (Elia), or for sewerage at tariffs set by the regulating authorities. DSOs' annual investment plans have to be ratified by VREG. The main business risks of Fluvius are therefore regulatory risks and / or any changes in government policy.

The MEAs are required to make efficient long-term investments that ensure a secure, sustainable and reliable supply to the population. Business risks are linked to ageing assets and increasing requirements for transparency and efficiency in capex and opex. The energy transition is costly, as the balance between power generation and demand will be more challenging than with the old energy generation systems. In order to satisfy customers, DSOs must account for an enormous variety of production and load scenarios.

Safety and reliability are an issue for the MEAs. Nevertheless, blackout events are rare, occurring approx. one every three years according to management information, and may affect only a small territory.

Through the merger and the multi-utility-approach (several utility services comprised within one entity) the Group created a basis for increased operational and cost efficiency due to the expected savings in operating costs and capital expenditure based on better coordination in terms of planning construction and maintenance measures as well as on scale effects. The Group expects recurring annual savings of least €110 million per year by 2022 through the merger. These efficiency gains and cost savings will be finally passed on via the distribution network charges to end customers.

The Group is obligated to buy certificates for green energy offered by producers of renewable energy at a fixed price. These are resold to the market, however, at a lower price and with a time lag, which results in additional costs for the Group. Costs for green energy and cogeneration certificates amounted to EUR 521.2 million in 2018 (EUR 417.5 million in 2017).

Overall, we assess the company as having a low business risk profile, as the company is systemically important and benefits from a supportive regulatory framework from the VREG and other authorities as well as from the long-term agreements. The risks are connected to general changes in the regulatory system and tariff methodology, following possible fundamental

changes of the relevant legislation in Belgium. Modifications to the tariff system could have a temporary negative impact on the Group's financials, such as VREG's decisions of July and August 2018.

Financial risks

For analytical purposes, the CRA adjusted the original values in the financial statements in the context of financial ratio analysis. In order to assess the financial position of Fluvius System Operator cvba, we assessed the Company both on its own as well as within the Economic Group Fluvius. Given that Fluvius System Operator cvba and its three subsidiaries operate at cost price and therefore do not make any profit or loss, CRA based its analysis on the consolidated annual accounts of the Economic Group Fluvius. The following descriptions and indicators refer to EGF.

The consolidated balance sheet structure was significantly impacted by the merger of Eandis and Infrac and by the partial incorporation of the financing associations. In the course of the merger, ex-Infrac companies were absorbed by Eandis. Shares were issued to the former shareholders of ex-Infrac. Hence, equity increased, but no goodwill was created. The total adjusted assets amount increased by EUR 4,901 million to EUR 13,775 million, primarily due to the increase in fixed and financial assets as result of the changes in the Group's structure. Other investments grew to EUR 1,372.86 million (2017: EUR 0.83 million) due to the incorporation of participations in Publi-T (48.03%) and Publigas (30.36%) as well, as of several other participations.

Adjusted equity increased to EUR 6,023 million (2017: EUR 2,604 million) as of 31 December 2018, whereby the main factors for this development were the incorporation of the ex-Infrac MEAs (EUR 2,598 million) and of the financing associations (EUR 1,072 million). In 2018, EUR 267 million in dividends was paid. The adjusted equity ratio improved significantly, amounting to 43.73% (2017: 29.35%). Total debt increased by EUR 1,482 million to EUR 7,752 million and was most significantly impacted by the inclusion of financing activities, which have been acquired as a result of the merger with Infrac.

One of the significant financing instruments of Fluvius is bond issues. Eandis issued bonds in the framework of its EUR 5,000 million Euro Medium Term Note (EMTN) Programme launched in 2011. Currently, an amount of EUR 2,662.1 million has been issued. Infrac issued bonds in the framework of its EUR 500 million EMTN programme launched in 2013. A first part was issued for EUR 250 million in 2013 and a second part of EUR 250 million was launched in 2014. Since year-end 2014 no more bonds have been issued under these programmes and no stand-alone placements have been carried out. Existing Eandis bonds continue to be guaranteed by the same MEAs that were guarantor for these financial instruments before the merger. Each of the MEAs is a guarantor on a non-joint and non-inclusive basis, limited to its proportional share in the capital of Fluvius System Operator cvba. The MEAs of ex-Infrac are guarantor with respect to the acquired EMTN bond loans registered in the name of ex-Infrac cvba.

The maturity profile of the long-term debt portfolio (EUR 6,085 million) is well-balanced, with a weighted average maturity of 8 years and 11 months. The next retail bond repayment of EUR 170 million is foreseen for December 2020; and the next EMNT-bond repayments are foreseen for 2021 (EUR 500 million), 2022 (EUR 500 million) and 2023 (EUR 750 million).

Cash and cash equivalents amounted to EUR 21.7 million at the end of 2018. The Group has a number of short-term financing sources. These comprise cash facilities / straight loans of up to EUR 225 million with two banks, a revolving credit facility of up to EUR 200 million with one bank,

and a commercial paper programme (up to EUR 500 million) with four banks. The first two of these facilities are committed to the company by the banks concerned; the commercial paper programme is uncommitted. All short-term loans are subscribed by Fluvius System Operator cvba in the name and on behalf of the MEAs. Off-balance commitments are guarantees given amounting to EUR 13.2 million and leasing amounting to EUR 23.2 million as of December 31, 2018.

The ratio of net total debt / EBITDA is relatively high at 9.13, the EBIT interest coverage is also worthy of improvement at 2.09. These ratios were negatively affected by the balance transfers (EUR 267 million) according to the VREG's decision of 28 August 2018 on the establishment and allocation of the historical balances for 2010-2014. As agreed with the Flemish authorities, the regulatory transfers will be eliminated by the year-end 2020. These ratios are expected to improve from 2019 onwards because of the accounting settlement of the regulatory transfers in 2018 and due to the full-year consolidation of ex-Infrac companies beginning with 2019.

In 2018, Fluvius carried out gross investments of €832.5 million. This total was divided between €474.9 million for electricity, €172.0 million for gas, €97.2 million for sewerage, €59.9 million for cable TV infrastructure and €28.5 million for other investments including public heating, vehicles, public lighting, and IT. According to management information, investments within the coming years should remain at approximately the same level. With a view to the Group's strong earnings capacity and its average expected EBITDA of over EUR 900 million per year, its unused financing sources, and generally good access to the financial markets, we hold the investment plans to be feasible and realistic.

We assess the financial risks of EGF as moderate and lower than in other industries. The Group disposes of a favourable business model with regulated tariffs, stability of earnings and low probability of negative results. We furthermore assume that the Group will be able to count on the support of its public shareholders in the event of liquidity problems. The EGF has the necessary financial instruments and capital market access to finance its investment plan, but its credit risk position may deteriorate following the possible reduction of the tariffs, or increased investment necessity. A significant increase of the net total debt / EBITDA ratio could have a negative impact on the rating outlook and / or on the rating in a long-term perspective.

Issue rating

Issue rating details

The rating objects of this issue rating are exclusively the long-term senior unsecured issues, denominated in euros, issued by Fluvius System Operator cvba (ex-Eandis and ex-Infrac) and, which are included in the list of ECB-eligible marketable assets. The ECB list of eligible marketable assets can be found on the website of the ECB.

The bonds issued by ex-Eandis, which have been issued within the framework of a Euro Medium Term Note Programme ("EMTN Programme") - of which the latest base prospectus is dated 25 November 2014 - benefit from a guarantee on a several but not joint basis by the following DSOs: Gaselwest, Fluvius Antwerpen, Imewo, Intergem, Iveka, Iverlek and Sibelgas. The current EMTN Programme of ex-Eandis amounts to a maximum EUR 5 bn. The issue proceeds are used to finance general corporate purposes of the issuer, and, in most cases, consists in the financing of the guarantors' investment programmes (capex) as approved by the regulator. The Notes issued under the EMTN Programme benefit from a negative pledge provision and cross-default

mechanism. A redemption at the option of the noteholders may be possible if a put option is specified in the final terms of the Note.

The bonds issued by ex-Eandis, which have been the object of separate bond issuance documentation, also benefit from the several but not joint guarantee from the ex-Eandis DSOs. The issue proceeds serve to finance the investment programme of the Group, the working capital of the regular operations of the Group or to refinance other bonds

The bonds issued by ex-Infrac have been issued within the framework of a Euro Medium Term Note Programme ("EMTN Programme"), of which the latest base prospectus is dated 16 October 2014. A first tranche of EUR 250 million was issued in 2013 (duration 10 years) and a second tranche of EUR 250 million was issued in 2014 (duration 15 years). All Notes issued under the EMTN Programme are guaranteed on a several, proportionate and joint basis by Fluvius Limburg and on a several and proportionate but not joint basis by Infrac West, Fluvius Antwerpen, PBE and Riobra. The issue proceeds are used to finance working capital requirements and the investment expenditure of the issuer and the guarantors. The Notes issued under the EMTN Programme benefit from a negative pledge provision as well as cross-acceleration and cross-default mechanisms. A change of control put right has been specified in the final term of each outstanding note (BE0002448232 and BE0002478536). As Infrac was dissolved within the framework of the merger and its assets and liabilities transferred to the merged entity Fluvius, the conditions 9(f) and 9(h) of the "event of default" of the base prospectus of the EMTN-Programme of Infrac (dated 16 October 2014) were applicable. This means that the merger constituted an event of default and the bondholders could request an early redemption of the bonds. This early redemption was waived by the bondholders during a meeting of bondholders on 2 May 2018. Furthermore, the bondholders consented during the meeting to various amendments to the conditions under the EMTN-Programme in light of the merger of Infrac with Eandis.

Result Corporate Issue Rating

We assign a rating of A+ (stable) to the long-term local currency senior unsecured debt securities issued by Fluvius System Operator cvba. The decision is derived from the corporate issuer rating and its outlook. We did not derive any unfavourable change in the current bonds' documentation due to the transfer of the outstanding bonds into Fluvius, because the current outstanding ex-Eandis bonds remain guaranteed by ex-Eandis guarantors and the current outstanding ex-Infrac bonds remain guaranteed by ex-Infrac guarantors. After the merger of Imea, Iveg and Integan into Fluvius-Antwerpen, the latter took over the guarantee of Imea in the ex-Eandis bonds and the guarantee of Iveg in the ex-Infrac bonds proportionally. Similarly, Fluvius-Limburg as a legal successor assumed the guarantee for the ex-Infrac bonds, formerly provided by Inter-energa, Inter-aqua and Inter-media, after their merger.

Any change in the guarantee structure could generally have an impact on the rating of the LT LC senior unsecured issues of Fluvius.

The following tables give overviews of the ratings attributed by CRA as well as of the current EMTN Programmes of ex-Eandis and ex-Infrac.

Overview

Table 4: Overview of CRA Ratings | Source: CRA

Rating Category	Details	
	Date	Rating
Fluvius System Operator cvba	26.07.2019	A+ / stable
LT LC senior unsecured issues of Fluvius System Operator cvba	26.07.2019	A+ / stable
Other	--	n.r.

Table 5: Overview of 2014 EMTN Programme of ex-Eandis | Source: Eandis System Operator cvba, prospectus dated 25 November 2014

Overview 2014 EMTN Programme			
Volume	EUR 5,000,000,000	Maturity	Depending on the respective Notes
Issuer	Eandis System Operator cvba	Coupon	Depending on the respective Notes
Arranger	Belfius Bank and HSBC	Currency	Depending on the respective Notes
Credit enhancement	Guarantee on a several but not joint basis by Gaselwest, Fluvius Antwerpen, Imewo, Intergem, Iveka, Iverlek and Sibelgas	ISIN	Depending on the respective Notes

Table 6: Overview of 2014 EMTN Programme of ex-Infrac | Source: Infrac cvba, prospectus dated 16 October 2014

Overview 2014 EMTN Programme			
Volume	EUR 500,000,000	Maturity	Depending on the respective Notes
Issuer	Infrac cvba	Coupon	Depending on the respective Notes
Arranger	BNP Paribas	Currency	Depending on the respective Notes
Credit enhancement	Guarantee on a several, proportionate and joint basis by Infrac Limburg and on a several and proportionate but not joint basis by Infrac West, Fluvius Antwerpen, PBE and Riobra	ISIN	Depending on the respective Notes

Under the current issuance conditions, all future LT LC senior unsecured bonds, denominated in euro and included in the list of ECB-eligible marketable assets, which will be issued by Fluvius System Operator cvba, will, until further notice, receive the same ratings as the current outstanding LT LC senior unsecured bonds. Other types of debt instruments of the issuer (i.e. *Namensschuldverschreibungen* or *Schuldschein*) have not been rated by CRA so far. The current ratings and information can be seen on the website of Creditreform Rating AG.

Financial ratio analysis

Table 7: Financial key ratios | Source: Economic Group Fluvius consolidated annual report 2018, structured by CRA

Asset Structure	2015	2016	2017	2018
Fixed asset intensity (%)	81.12	81.98	88.58	89.40
Asset turnover	0.27	0.28	0.32	0.29
Asset coverage ratio (%)	86.01	81.35	75.81	77.76
Liquid funds to total assets (%)	0.04	0.03	0.35	0.27
Capital Structure				
Equity ratio (%)	24.42	25.82	29.35	43.73
Short-term-debt ratio (%)	17.87	16.37	9.61	8.97
Long-term-debt ratio (%)	45.35	40.87	37.80	25.79
Capital lock-up period (in days)	42.26	31.81	30.59	37.07
Trade-accounts-payable ratio (%)	2.79	2.25	2.50	2.17
Short-term capital lock-up (%)	62.64	53.37	22.40	31.82
Gearing	3.09	2.87	2.39	1.28
Leverage	3.67	3.98	3.63	2.63
Financial Stability				
Cash flow margin (%)	21.91	19.30	17.34	33.68
Cash flow ROI (%)	5.97	5.52	5.71	7.95
Total debt / EBITDA adj.	7.35	7.21	6.59	9.17
Net total debt / EBITDA adj.	7.34	7.21	6.56	9.13
ROCE (%)	7.67	7.69	7.80	3.88
Total debt repayment period	5.87	10.40	5.56	4.52
Profitability				
Gross profit margin (%)	47.70	55.36	58.18	54.03
EBIT interest coverage	2.89	3.01	3.22	2.09
EBITDA interest coverage	4.48	4.60	5.05	4.08
Ratio of personnel costs to total costs (%)	14.07	13.26	12.56	13.59
Ratio of material costs to total costs (%)	57.82	50.10	47.22	51.06
Cost income ratio (%)	88.04	86.13	89.09	97.18
Ratio of interest expenses to total debt (%)	2.91	2.92	2.83	2.45
Return on investment (%)	4.88	4.97	4.33	2.12
Return on equity (%)	10.62	11.77	9.31	4.43
Net profit margin (%)	10.86	10.39	8.07	5.87
Operating margin (%)	23.37	22.72	19.55	12.20
Liquidity				
Cash ratio (%)	0.21	0.17	3.68	1.76
Quick ratio (%)	102.96	107.75	114.84	73.09
Current ratio (%)	105.66	110.08	118.88	118.13

Appendix

Rating history

The rating history is available under <https://www.creditreform-rating.de/de/ratings/published-ratings/>

Table 8: Corporate issuer Rating of Fluvius System Operator cvba | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial rating	04.11.2016	www.creditreform-rating.de	18.01.2017	A+ / stable
Update	18.01.2017	www.creditreform-rating.de	24.04.2017	A+ / stable
Update	24.04.2017	www.creditreform-rating.de	17.01.2018	A+ / stable
Update	17.01.2018	www.creditreform-rating.de	26.07.2019	A+ / stable
Update	26.07.2019	www.creditreform-rating.de	16.01.2020	A+ / stable

Table 9: LT LC Senior Unsecured issues issued by Fluvius System Operator cvba | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial rating	05.10.2018	www.creditreform-rating.de	26.07.2019	A+ / stable
Update	26.07.2019	www.creditreform-rating.de	16.01.2020	A+ / stable

Regulatory requirements

After having prepared an unsolicited corporate issuer rating of Eandis System Operator cvba (since 1 July 2018 Fluvius System Operator cvba) on 4 November 2016, the management of the Company commissioned Creditreform Rating AG with the preparation of a corporate issuer rating (solicited rating) on 7 December 2016 (standing order). The rating on the corporate issuer was set to A+ / stable on 18 January 2017 and reaffirmed on 24 April 2017, on 17 January 2018, and on 26 July 2019. The issue rating of Fluvius has been ordered by Fluvius on 28 September 2018. It was set to A+ / stable on 5 October 2018 and reaffirmed on 26 July 2019.

This rating was carried out by analysts Elena Alexeenco (e.alexenco@creditreform-rating.de) and Rudger van Mook (r.vanmook@creditreform-rating.de), both located in Neuss, Germany. The last conference call with the Company took place on 18 July 2019.

In addition to the documents available from previous years, the Company provided the following additional information as part of the rating process:

List of documents

Accounting and controlling

- Consolidated financial statements IFRS Economic Group Fluvius as of 31 December 2018
- Consolidated financial statements IFRS Fluvius System Operator Group as of 31 December 2018
- Annual report Fluvius 2018
- Forecast financial statements
- Information on green certificates, Investment plans

Finances

- Eandis EMTN-programme prospectus dated 25 November 2014
- Infrac EMTN-programme prospectus dated 16 October 2014 Group Debenture
- Eandis System Operator cvba prospectus dated 2 June 2017
- Final terms of the outstanding notes
- Minutes of the meetings of bondholders and other information

Other documents

- Investor presentation dated April 2019
- Press releases
- Correspondence

The documents submitted and information gathered were sufficient to meet the requirements of Creditreform Rating AG's rating methodology. The rating was conducted on the basis of Creditreform Rating's "Corporate Ratings" methodology, the "Government related companies" methodology and the "Non-Financial Corporate Issue Rating" methodology. A complete description of Creditreform Rating's rating methodologies is published on the following internet page:

www.creditreform-rating.de/en/regulatory-requirements/

The rating was presented to the rating committee on 26 July 2019. The Company has received the rating result, along with the key reasons that led to the rating prior to publication and was given at least one full working day to appeal the rating committee's decision and to provide additional information. The rating decision was not amended following this examination.

The rating will be monitored until CRA removes the rating and sets it to non-rated (n.r.).

In 2011 Creditreform Rating AG was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on the registration Creditreform Rating AG (CRA) is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation.

Please note:

This report exists in an English version only. This is the only binding version.

Conflict of interests

No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services

are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or in approving credit ratings and rating outlooks.

In the event of providing ancillary services to the rated entity, CRA will disclose all ancillary services in the credit rating report.

Rules on the presentation of credit ratings and rating outlooks

The approval of credit ratings and rating outlooks follows our internal policies and procedures. In line with our 'Rating Committee' policy, all credit ratings and rating outlooks are approved by a rating committee based on the principle of unanimity.

To prepare this credit rating, CRA has used following substantially material sources:

Corporate Issuer rating:

1. Annual report
2. Website
3. Internet research

Corporate Issue rating:

1. Issuer corporate rating incl. information used for the Issuer corporate rating
2. Documents on issues / instruments

There are no other attributes and limitations of the credit rating or rating outlook other than those displayed on the CRA website. Furthermore, CRA considers as satisfactory the quality and extent of information available on the rated entity. With respect to the rated entity, Creditreform Rating AG regarded available historical data as sufficient.

Between the time of disclosure of the credit rating to the rated entity and the public disclosure, no amendments were made to the credit rating.

The 'Basic Data' information card indicates the principal methodology or version of methodology that was used in determining the rating, with a reference to its comprehensive description.

In cases where the credit rating is based on more than one methodology or where reference only to the principal methodology might cause investors to overlook other important aspects of the credit rating, including any significant adjustments and deviations, Creditreform Rating AG explains this fact in the credit rating report and indicates how the different methodologies or other aspects are taken into account in the credit rating. This information is integrated in the credit rating report.

The meaning of each rating category, the definition of default or recovery and any appropriate risk warning, including a sensitivity analysis of the relevant key rating assumptions such as mathematical or correlation assumptions, accompanied by worst-case scenario credit ratings and best-case scenario credit ratings are explained.

The date at which the credit rating was initially released for distribution and the date when it was last updated, including any rating outlooks, is indicated clearly and prominently in the 'Basic Data' card as a "rating action"; initial release is indicated as "initial rating", other updates are indicated as an "update", "upgrade" or "downgrade", "not rated", "confirmed", "selective default" or "default".

In the case of a rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available within 'Basic Data' information card.

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