

MVM Zrt.

MVM Zrt.'s Long-Term Issuer Default Ratings (IDRs) of 'BBB' are at same level as the company's Standalone Credit Profile (SCP). Their Negative Outlook reflects the Outlook on Hungary's sovereign rating of 'BBB', which was revised to Negative from Stable in January 2023.

Hungary's rating serves as a cap on MVM's ratings, driven by strong linkage between MVM and the state as per Fitch Ratings' *Parent and Subsidiary Linkage Rating Criteria*. This is the reason for not revising the Outlook to Stable despite MVM's 2022 results and leverage being considerably better than we had anticipated when we changed its Outlook to Negative in November 2022.

Key Rating Drivers

2022 Results Beat Expectations: MVM's results in 2022 were better than our expectations, with funds from operations (FFO) net leverage at 2.5x versus our 7.5x forecast. This was because of stronger EBITDA and FFO largely due to higher margins in the wholesale and gas storage segment and full compensations received for losses on sale of electricity and gas to eligible customers.

In Fitch's updated projections, FFO net leverage will remain below our negative rating sensitivity of 3.5x in 2023-2024. Following the acceleration of capex, including two CCGT projects, FFO net leverage will peak at about 3.5x in 2025-2026 and then follow a declining trend when the projects start operating and contributing to EBITDA.

Large Net Debt Increase: MVM's net debt is subject to seasonal swings and is typically at a high point at end-December, when gas inventories are close to their peak ahead of strong winter demand. At end-2022, this was exacerbated by the high cost of gas purchased for storage in 2022. As a result, MVM's debt rose to HUF1.5 trillion at end-2022 from HUF644 billion at end-2021. We estimate that at end-2022 most of MVM's debt was related to gas inventories.

More Exposed to Working-Capital Swings: MVM is more exposed to seasonality in working-capital needs than most regional peers, given its large gas inventories due to domestic legislative requirements and its crucial role in the security of gas supply in Hungary.

Retail Compensation: Fitch expects compensations from the utility protection fund to support MVM's profitability in the retail segment in 2023-2024. The fund, created by the government and available to MVM since September 2022, has compensated for the sale of gas and electricity to eligible customers, mostly households, under a universal service provision, at regulated prices, which in 2022 were substantially below market prices. The scheme is in place indefinitely but the selection of MVM as a universal service provider at capped prices is valid until end-2024.

High Balancing Costs in 2022: MVM's infrastructure segment suffered from sharply higher balancing costs in 2022, which were covered at a considerably lower level by its tariff. Based on the existing regulatory framework the costs would be recovered through tariff increases with a two-year lag, but the regulator has reflected about a third of extra balancing costs in the tariff for 2022, instead of 2024, and factored in the high costs for 2022 in the 2023 tariff determination.

Ratings

Foreign Currency

Long-Term IDR BBB

Local Currency

Long-Term IDR BBB

Outlooks

Long-Term Foreign-Currency IDR Negative

Long-Term Local-Currency IDR Negative

Debt Ratings

Senior Unsecured Debt - Long-Term Rating BBB

2035 Climate Vulnerability Signal: 41

[Click here for the full list of ratings](#)

Applicable Criteria

[Corporates Recovery Ratings and Instrument Ratings Criteria \(April 2021\)](#)

[Government-Related Entities Rating Criteria \(September 2020\)](#)

[Sector Navigators: Addendum to the Corporate Rating Criteria \(May 2023\)](#)

[Corporate Rating Criteria \(October 2022\)](#)

[Parent and Subsidiary Linkage Rating Criteria \(June 2023\)](#)

Related Research

[Global Corporates Macro and Sector Forecasts \(March 2023\)](#)

[Central and Eastern European Integrated Utilities - Relative Credit Analysis \(March 2023\)](#)

Analysts

Renata Dobrzynska
+48 22 103 3035
renata.dobrzynska@fitchratings.com

Nataly Di Salvo
+34 93 492 9519
nataly.disalvo@fitchratings.com

Gas Supplies from Russia: MVM has significant exposure to Russian gas imports as the off-taker in its long-term import contract with Gazprom. Russian gas continues to flow to Hungary through interconnectors with Austria and Serbia. Lower supplies through Austria in 2022 were compensated via the Serbian route.

Financial Policy Consistent with Rating: The company’s management targets net debt/EBITDA of up to 2.5x in its current business plan until 2027, which is consistent with the ‘BBB’ rating. The plan was approved by the state as the sole shareholder. We assume the state will continue to provide extraordinary support to MVM given the latter’s strategic role in maintaining energy security.

Moderately Strong State Links: Fitch applies its *Government-Related Entities (GRE) Rating Criteria* in its analysis of MVM’s linkage with the Hungarian state. We assess status, ownership and control as well as support record as ‘Strong’. MVM has historically benefited from substantial tangible support from the state, most recently through large equity injections in the last three years, mainly related to acquisitions and investments.

Moderate Incentive to Support: We assess the socio-political implications of a default by MVM as ‘Moderate’ as we assume that most of its operations would likely continue following a default. We have changed the financial implications of a default to ‘Moderate’ from ‘Weak’ as we believe that non-payment of debt would have a moderate impact on funding access for the government and other GREs. This assessment results in a support score of 20 points, indicating moderately strong links with the state.

Strong PSL Linkage: Fitch views the parent-and-subsiidiary linkage between the state and MVM as strong under our PSL Criteria, with the subsidiary being stronger than the parent. MVM’s rating would therefore be constrained by the sovereign IDR if the latter is downgraded. This is reflected in the Negative Outlook for MVM, mirroring that on the sovereign rating. Our overall assessment of legal ring-fencing and access and control factors is ‘open’, due to full state-ownership leading to effective control and open ring-fencing.

Leading Market Position: MVM’s business profile benefits from its strong market position in Hungary, spanning electricity generation (57% market share), gas imports (off-taker in the main gas import contract), gas storage (70%), electricity transmission (100%), and electricity and gas distribution (23% and 34%, respectively). It is also the main supplier of wholesale and retail electricity and gas in Hungary.

Financial Summary

(HUFm)	2020	2021	2022	2023F	2024F	2025F
Gross revenue	1,424,782	2,850,817	7,647,782	5,091,899	5,346,494	5,832,750
EBITDA margin (%)	13.8	8.8	4.2	11.6	10.4	9.3
Funds flow from operations	162,150	189,251	374,404	499,921	452,283	396,826
FFO net leverage	1.7	-0.6	2.5	2.6	3.1	3.5
FFO interest coverage	28.1	20.6	8.8	6.0	5.8	4.9

F = Forecast

Source: Fitch Ratings, Fitch Solutions

Rating Derivation Relative to Peers

MVM’s central European peers are PGE Polska Grupa Energetyczna S.A. (PGE, BBB+/Stable), ENEA S.A. (BBB/Stable), TAURON Polska Energia S.A. (Tauron, BBB-/Stable) and Bulgarian Energy Holding EAD (BEH, BB+/Stable, SCP: bb).

MVM has better integration and business diversification than PGE, ENEA and Tauron, which are focused on a specific line of business, such as electricity generation or distribution, and also have higher exposure to coal.

BEH is more comparable to MVM in business diversification, as its activities include generation, transmission and supply of electricity, as well as transmission, transit and supply of gas, on top of lignite mining. However, BEH is a negative outlier in the peer group in cash flow predictability and corporate governance.

MVM’s balance sheet and working capital are highly exposed to changes in gas inventories due to seasonality and changes in gas prices. This results in a higher volatility of MVM’s leverage than peers’. MVM’s net debt and leverage at year-end is also higher than during the course of the year when gas inventories are lower.

The company’s peers are all state-controlled (either by the Polish or Bulgarian governments). The Polish peers are rated at a standalone level without any uplift for state links, while the ‘BB+’ rating of BEH includes a one-notch uplift for links with the Bulgarian state.

Navigator Peer Comparison

Issuer	Business profile							Financial profile			
	IDR/Outlook	Operating Environment	Management and Corporate Governance	Revenue Visibility	Regulatory Environment	Market Position	Asset Base and Operations	Profitability and Cash Flow	Financial Structure	Financial Flexibility	
MVM Zrt.	BBB/Negative	bbb+	bbb	bbb	bbb	bbb	bbb+	bbb-	a-	bbb+	
PGE Polska Grupa Energetyczna S.A.	BBB+/Stable	a-	a-	bbb	bbb	bbb+	bb	bbb	a	bbb+	
ENEA S.A.	BBB/Stable	a-	bbb+	bbb+	bbb	bbb	bb	bbb	a	bbb-	
TAURON Polska Energia S.A.	BBB-/Stable	a-	bbb+	bbb+	bbb	bbb	bb	bbb-	bbb	bbb	
Bulgarian Energy Holding EAD	BB+/Stable	bbb	bb-	bb	bb+	bb+	bbb-	bb	bbb	bb+	

Source: Fitch Ratings.

Relative Importance of Factor: Higher (Red), Moderate (Blue), Lower (Light Blue)

Name	IDR/Outlook	Business profile							Financial profile			
		Operating Environment	Management and Corporate Governance	Revenue Visibility	Regulatory Environment	Market Position	Asset Base and Operations	Profitability and Cash Flow	Financial Structure	Financial Flexibility		
MVM Zrt.	BBB/Negative	+1	0	0	0	0	+1	-1	+2	+1		
PGE Polska Grupa Energetyczna S.A.	BBB+/Stable	+1	+1	-1	-1	0	-4	-1	+2	0		
ENEA S.A.	BBB/Stable	+2	+1	+1	0	0	-3	0	+3	-1		
TAURON Polska Energia S.A.	BBB-/Stable	+3	+2	+2	+1	+1	-2	0	+1	+1		
Bulgarian Energy Holding EAD	BB+/Stable	+2	-2	-1	0	0	+1	-1	+2	0		

Source: Fitch Ratings.

Factor Score Relative to IDR: Worse positioned than IDR (Red), Within one notch of IDR (Blue), Better positioned than IDR (Light Blue)

Rating Sensitivities

Factors That Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

- An upgrade of MVM is unlikely due to the Negative Outlook on the sovereign rating, which serves as a cap on the company's ratings
- We would revise the Outlook to Stable if Hungary's Outlook is also revised to Stable, provided leverage and interest coverage remain within our negative sensitivities

Factors That Could, Individually or Collectively, Lead to Downgrade

- FFO net leverage above 3.5x and FFO interest cover below 6x on a sustained basis
- Substantial adverse change in the business profile, such as a material reduction in the share of regulated or quasi-regulated business in total EBITDA
- Negative rating action on Hungary would lead to similar rating action on MVM due to the sovereign cap

Liquidity and Debt Structure

Solid Liquidity: MVM has a solid liquidity position. At end-2022, it had unrestricted cash of HUF407.5billion and undrawn committed facilities of HUF298 billion, of which HUF195 billion will expire within 12 months. In the year to date MVM has committed new loans totalling HUF644 billion. This liquidity is sufficient to cover debt maturities of HUF145 billion in 2023, and Fitch-projected negative free cash flow (FCF) in 2023, driven by large negative changes in working capital and capex.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

Climate Vulnerability Considerations

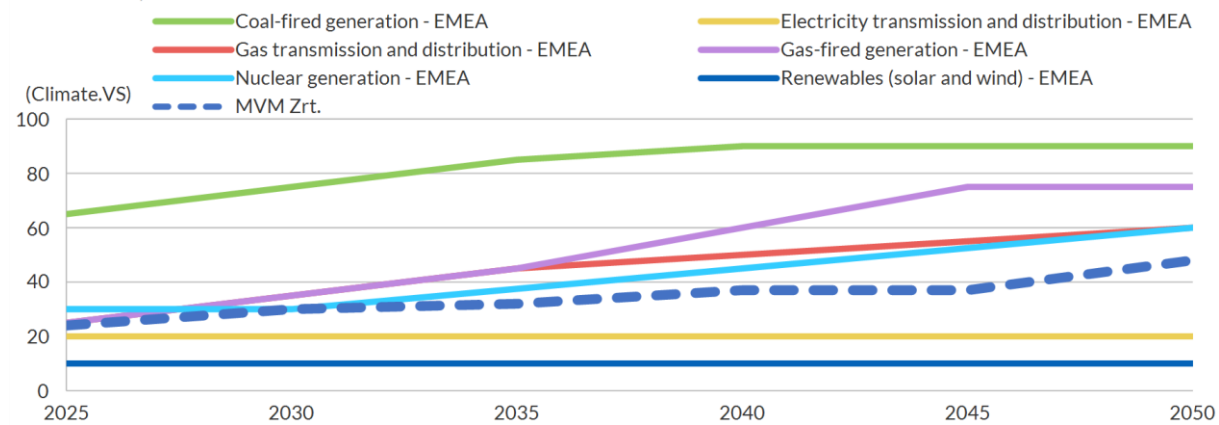
Fitch Ratings has published a Criteria Exposure Draft describing its approach to assessing Climate Vulnerability for Corporates. In this report, we describe our proposal to use Climate Vulnerability Signals (Climate.VS) as a screening tool to identify sectors and Fitch-rated issuers that are potentially most exposed to credit-relevant climate transition risks and, therefore, require additional consideration of these risks in rating reviews. [Click here for the Criteria Exposure Draft.](#)

Fitch invites feedback to criteria.feedback@fitchratings.com by 10 July 2023. Fitch will publish on its website any written responses it receives in full, including the name of the respondent, unless the response is clearly marked as confidential.

The FY22 EBITDA-weighted Climate.VS for MVM for 2035 is 41 out of 100, suggesting moderate exposure to climate-related risks in that year. For further information on how Fitch perceives climate -related risks in utilities sector see [Utilities – Long -Term Climate Vulnerability Scores Update.](#)

Climate.VS Evolution

As of Dec. 31, 2022



Source: Fitch Ratings

Liquidity and Debt Maturities

Liquidity Analysis

(HUFm)	2023F	2024F	2025F	2026F
Available liquidity				
Beginning cash balance	407,530	-46,427	-485,615	-845,343
Rating case FCF after acquisitions and divestitures	-578,645	-270,876	-240,239	-171,434
Debt issued since last balance sheet	258,653			
Total available liquidity (A)	87,538	-317,303	-725,854	-1,016,777
Liquidity uses				
Debt maturities	-133,964	-168,312	-119,489	-444,652
Total liquidity uses (B)	-133,964	-168,312	-119,489	-444,652
Liquidity calculation				
Ending cash balance (A+B)	-46,427	-485,615	-845,343	-1,461,428
Revolver availability	485,850	0	0	0
Ending liquidity	439,423.2	-485,614.6	-845,342.5	-1,461,428.4
Liquidity score (x)	2.3	-1.9	-6.1	-2.3

F - Forecast.
Source: Fitch Ratings, Fitch Solutions, MVM Zrt.

Scheduled debt maturities	2022
2023	133,964
2024	168,312
2025	119,489
2026	444,652
2027	222,273
Thereafter	362,023
Total	1,450,713

Source: Fitch Ratings, Fitch Solutions, MVM Zrt.

Key Assumptions

Key Assumptions Within Our Rating Case for the Issuer:

- Generation EBITDA growth driven by stable contribution from nuclear power plants and renewables. High EBITDA from coal-fired assets in 2023 following CO2 prices being hedged at low levels in 2023 and high market prices
- Strong EBITDA in infrastructure in the medium term due to high balancing costs accrued in 2022 being recognised in tariffs in 2023 and 2024 (a third of extra costs already reflected in 2022 tariff)
- High EBITDA in wholesale gas and electricity in 2023 due to higher electricity margins and better performance of gas storage, followed by more normalised EBITDA from 2024
- Total capex averaging about HUF800 billion a year in 2023-2027 with development capex focusing on decarbonisation (replacing coal-fired assets with gas-fired assets), as well as digitalisation and infrastructure development
- Capex partly funded by domestic and EU grants, averaging HUF115 billion a year in 2023-2027
- Dividend payments of HUF108 billion in 2023 followed by lower amounts in 2024-2027
- No equity injections by the state over 2023-2027

Financial Data

MVM Zrt.

(HUFm)	Historical			Forecast		
	2020	2021	2022	2023	2024	2025
Summary income statement						
Gross revenue	1,424,782	2,850,817	7,647,782	5,091,899	5,346,494	5,832,750
Revenue growth (%)	7.5	100.1	168.3	-33.4	5.0	9.1
EBITDA (before income from associates)	196,756	251,529	320,941	591,302	554,222	543,510
EBITDA margin (%)	13.8	8.8	4.2	11.6	10.4	9.3
EBITDAR	196,756	251,529	320,941	591,302	554,222	543,510
EBITDAR margin (%)	13.8	8.8	4.2	11.6	10.4	9.3
EBIT	12,299	27,204	88,994	317,810	249,005	219,263
EBIT margin (%)	0.9	1.0	1.2	6.2	4.7	3.8
Gross interest expense	-6,339	-14,479	-51,589	-99,040	-94,335	-102,175
Pretax income (including associate income/loss)	3,673	17,514	109,265	222,506	150,975	129,000
Summary balance sheet						
Readily available cash and equivalents	244,097	766,038	407,530	144,006	152,417	226,426
Debt	521,329	644,346	1,450,713	1,686,588	1,869,310	1,959,800
Lease-adjusted debt	521,329	644,346	1,450,713	1,686,588	1,869,310	1,959,800
Net debt	277,232	-121,692	1,043,183	1,542,582	1,716,893	1,733,374
Summary cash flow statement						
EBITDA	196,756	251,529	320,941	591,302	554,222	543,510
Cash interest paid	-5,973	-9,636	-46,858	-99,040	-94,335	-102,175
Cash tax	-53,445	-67,495	-43,928	-112,059	-127,281	-124,069
Dividends received less dividends paid to minorities (inflow/(out)flow)	585	197	2,545	0	0	0
Other items before FFO	24,087	13,814	133,189	119,718	119,677	79,560
Funds flow from operations	162,150	189,251	374,404	499,921	452,283	396,826
FFO margin (%)	11.4	6.6	4.9	9.8	8.5	6.8
Change in working capital	124,689	448,353	-1,271,242	-439,506	218,007	334,725
Cash flow from operations (Fitch defined)	286,839	637,604	-896,838	60,415	670,290	731,551
Total non-operating/nonrecurring cash flow	-	-	-	-	-	-
Capex	-165,176	-236,420	-444,610	-	-	-
Capital intensity (capex/revenue) (%)	12	8	6	-	-	-
Common dividends	-7,500	-	-7,515	-	-	-
Free cash flow	114,163	401,184	-1,348,963	-	-	-
Net acquisitions and divestitures	-281,195	-242,886	128,489	-	-	-
Other investing and financing cash flow items	-44,184	31,197	30,070	-	-	-
Net debt proceeds	198,134	120,446	790,896	235,875	182,722	90,490
Net equity proceeds	229,020	212,000	41,000	0	0	0
Total change in cash	215,938	521,941	-358,508	-263,524	8,411	74,009
Leverage ratios (x)						
EBITDA leverage	2.6	2.6	4.5	2.9	3.4	3.6
EBITDA net leverage	1.4	-0.5	3.2	2.6	3.1	3.2
EBITDAR leverage	2.6	2.6	4.5	2.9	3.4	3.6
EBITDAR net leverage	1.4	-0.5	3.2	2.6	3.1	3.2
EBITDAR net fixed-charge coverage	33.8	28.6	8.4	6.0	5.9	5.3
FFO adjusted leverage	3.1	3.3	3.5	2.8	3.4	3.9
FFO adjusted net leverage	1.7	-0.6	2.5	2.6	3.1	3.5
FFO leverage	3.1	3.3	3.5	2.8	3.4	3.9
FFO net leverage	1.7	-0.6	2.5	2.6	3.1	3.5
Calculations for forecast publication						
Capex, dividends, acquisitions and other items before FCF	-453,871	-479,306	-323,636	-639,060	-941,167	-971,791
FCF after acquisitions and divestitures	-167,032	158,298	-1,220,474	-578,645	-270,876	-240,239
FCF margin (after net acquisitions) (%)	-12	6	-16	-11	-5	-4

(HUFm)	Historical			Forecast		
	2020	2021	2022	2023	2024	2025
Coverage ratios (x)						
FFO interest coverage	28.1	20.6	8.8	6.0	5.8	4.9
FFO fixed-charge coverage	28.1	20.6	8.8	6.0	5.8	4.9
EBITDAR fixed-charge coverage	33.0	26.1	6.9	6.0	5.9	5.3
EBITDA interest coverage	33.0	26.1	6.9	6.0	5.9	5.3
Additional metrics						
CFO-capex/debt	23.3	62.3	-92.5	-26.3	-12.8	-11.1
CFO-capex/net debt	43.9	-329.7	-128.6	-28.8	-13.9	-12.5
CFO/capex	173.7	269.7	-201.7	12.0	73.7	77.1

Source: Fitch Ratings, Fitch Solutions, MVM Zrt.

How to Interpret the Forecast Presented

The forecast presented above is based on Fitch Ratings' internally produced, conservative rating case forecast. It does not represent the forecast of the rated issuer. The forecast set out above is only one component used by Fitch Ratings to assign a rating or determine a rating outlook, and the information in the forecast reflects material but not exhaustive elements of Fitch Ratings' rating assumptions for the issuer's financial performance. As such, it cannot be used to establish a rating, and it should not be relied on for that purpose. Fitch Ratings' forecasts are constructed using a proprietary internal forecasting tool, which employs Fitch Ratings' own assumptions on operating and financial performance that may not reflect the assumptions that you would make. Fitch Ratings' own definitions of financial terms such as EBITDA, debt or free cash flow may differ from your own such definitions. Fitch Ratings may be granted access, from time to time, to confidential information on certain elements of the issuer's forward planning. Certain elements of such information may be omitted from this forecast, even where they are included in Fitch Ratings' own internal deliberations, where Fitch Ratings, at its sole discretion, considers the data may be potentially sensitive in a commercial, legal or regulatory context. The forecast (as with the entirety of this report) is produced strictly subject to the disclaimers set out at the end of this report. Fitch Ratings may update the forecast in future reports but assumes no responsibility to do so. Original financial statement data for historical periods is processed by Fitch Solutions on behalf of Fitch Ratings. Key financial adjustments and all financial forecasts credited to Fitch Ratings are generated by rating agency staff.

Ratings Navigator

FitchRatings

MVM Zrt.

ESG Relevance:



Corporates Ratings Navigator
EMEA Utilities

Factor Levels	Sector Risk Profile	Operating Environment	Management and Corporate Governance	Business Profile			Asset Base and Operations	Profitability and Cash Flow	Financial Profile		Issuer Default Rating
				Revenue Visibility	Regulatory Environment	Market Position			Financial Structure	Financial Flexibility	
aaa											AAA
aa+											AA+
aa											AA
aa-											AA-
a+											A+
a											A
a-											A-
bbb+											BBB+
bbb											BBB
bbb-											BBB-
bb+											BB+
bb											BB
bb-											BB-
b+											B+
b											B
b-											B-
ccc+											CCC+
ccc											CCC
ccc-											CCC-
cc											CC
c											C
d or rd											D or RD

Bar Chart Legend:

Vertical Bars = Range of Rating Factor	Bar Arrows = Rating Factor Outlook
Bar Colors = Relative Importance	<ul style="list-style-type: none"> ↑ Positive ↓ Negative ↕ Evolving □ Stable
<ul style="list-style-type: none"> Higher Importance Average Importance Lower Importance 	

Operating Environment

a-	Economic Environment	a	Strong combination of countries where economic value is created and where assets are located.
bbb+	Financial Access	bbb	Average combination of issuer-specific funding characteristics and the strength of the relevant local financial market.
b-	Systemic Governance	bbb	Systemic governance (eg rule of law, corruption, government effectiveness) of the issuer's country of incorporation consistent with 'bbb'.
ccc+			

Revenue Visibility

a-	Size and Integration	a	Top-tier position in more than one market. Vertically integrated (typically including generation, transmission, distribution and supply).
bbb+	Earnings from Regulated Network Assets	bbb	Less than 40% of EBITDA comes from high-quality regulated network assets.
bbb	Quasi-Regulated Earnings	bbb	10%-20% of EBITDA comes from quasi-regulated assets or from long-term contracted sales with creditworthy counterparties.
bbb-			
bb+			

Market Position

a-	Fundamental Market Trends	bbb	Markets with emerging structural challenges.
bbb+	Generation and Supply Positioning	a	Strong position in the merit order; effective hedging; flexible fuel procurement. Generation balanced with strong position in supply and services.
bbb	Customer Base and Counterparty Risk	bbb	Economy of area served provides structurally stable background; medium counterparty risk; fair collection rates for supply operations.
bbb-			
bb+			

Profitability and Cash Flow

bbb+	Free Cashflow	bb	Structurally negative FCF across the investment cycle.
bbb	Volatility of Profitability	bbb	Stability and predictability of profits in line with utility peers.
bbb-			
bb+			
bb			

Financial Flexibility

a	Financial Discipline	a	Clear commitment to maintain a conservative policy with only modest deviations allowed.
a-	Liquidity	bbb	One-year liquidity ratio above 1.25x. Well-spread debt maturity schedule but funding may be less diversified.
bbb+	FFO Interest Coverage	a	5.5x
bbb	FX Exposure	bbb	Some FX exposure on profitability and/or debt/cash flow match. Effective hedging.
bbb-			

How to Read This Page: The left column shows the three-notch band assessment for the overall Factor, illustrated by a bar. The right column breaks down the Factor into Sub-Factors, with a description appropriate for each Sub-Factor and its corresponding category.

Management and Corporate Governance

a-	Management Strategy	a	Coherent strategy and good track record in implementation.
bbb+	Governance Structure	bbb	Good governance track record but board effectiveness/independence less obvious. No evidence of abuse of power even with ownership concentration.
bbb	Group Structure	a	Group structure has some complexity but mitigated by transparent reporting.
bbb-	Financial Transparency	bbb	Good-quality reporting without significant failings. Consistent with the average of listed companies in major exchanges.
bb+			

Regulatory Environment

a-	Regulatory Framework and Policy Risk	bbb	Less transparent frameworks, with emerging track record and multi-year tariffs; exposed to political risk. Medium-term predictability.
bbb+	Cost Recovery and Risk Exposure	bbb	Tariff setting that may limit efficiently incurred cost and investment recovery, with moderate regulatory lag, price and volume risk.
bbb			
bbb-			
bb+			

Asset Base and Operations

a	Asset Quality	bbb	Mid-range asset quality not likely to affect opex and capex requirements compared with peers.
a-	Asset Diversity	bbb	Partial diversification by geography, generation source, supplied product.
bbb+	Carbon Exposure	a	Energy production mostly from clean sources and low carbon exposure (< 300gCO2/kWh).
bbb			
bbb-			

Financial Structure

a+	FFO Leverage	a	3.5x
a	FFO Net Leverage	a	3.0x
a-			
bbb+			
bbb			

Credit-Relevant ESG Derivation

				Overall ESG
MVM Zrt. has 12 ESG potential rating drivers				
key driver	0	issues	5	
driver	0	issues	4	
potential driver	12	issues	3	
not a rating driver	2	issues	2	
	0	issues	1	

Showing top 6 issues
For further details on Credit-Relevant ESG scoring, see page 3.

Credit-Relevant ESG Derivation

MVM Zrt. has 12 ESG potential rating drivers

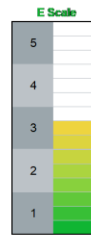
- ➔ MVM Zrt. has exposure to emissions regulatory risk but this has very low impact on the rating.
- ➔ MVM Zrt. has exposure to energy productivity risk but this has very low impact on the rating.
- ➔ MVM Zrt. has exposure to waste & impact management risk but this has very low impact on the rating.
- ➔ MVM Zrt. has exposure to extreme weather events but this has very low impact on the rating.
- ➔ MVM Zrt. has exposure to access/affordability risk but this has very low impact on the rating.
- ➔ MVM Zrt. has exposure to customer accountability risk but this has very low impact on the rating.

Showing top 6 issues

			Overall ESG Scale	
key driver	0	issues	5	
driver	0	issues	4	
potential driver	12	issues	3	
not a rating driver	2	issues	2	
	0	issues	1	

Environmental (E)

General Issues	E Score	Sector-Specific Issues	Reference
GHG Emissions & Air Quality	3	Emissions from operations	Asset Base and Operations; Profitability and Cash Flow
Energy Management	3	Fuel use to generate energy	Asset Base and Operations; Market Trends and Risks; Profitability and Cash Flow
Water & Wastewater Management	2	Water used by hydro plants or by other generation plants; effluent management	Asset Base and Operations; Market Trends and Risks; Profitability and Cash Flow
Waste & Hazardous Materials Management; Ecological Impacts	3	Impact of waste from operations	Asset Base and Operations; Profitability and Cash Flow
Exposure to Environmental Impacts	3	Plants' and networks' exposure to extreme weather	Asset Base and Operations; Profitability and Cash Flow



How to Read This Page

ESG scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant and green (1) is least relevant.

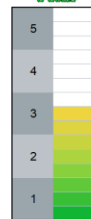
The Environmental (E), Social (S) and Governance (G) tables break out the individual components of the scale. The right-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a particular industry group. Scores are assigned to each sector-specific issue. These scores signify the credit-relevance of the sector-specific issues to the issuing entity's overall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis.

The Credit-Relevant ESG Derivation table shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG score summarize the issuing entity's sub-component ESG scores. The box on the far left identifies the some of the main ESG issues that are drivers or potential drivers of the issuing entity's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the score.

Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI) and the Sustainability Accounting Standards Board (SASB).

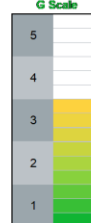
Social (S)

General Issues	S Score	Sector-Specific Issues	Reference
Human Rights, Community Relations, Access & Affordability	3	Product affordability and access	Profitability and Cash Flow; Regulation
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Quality and safety of products and services; data security	Profitability and Cash Flow
Labor Relations & Practices	3	Impact of labor negotiations and employee (dis)satisfaction	Profitability and Cash Flow; Financial Structure; Financial Flexibility
Employee Wellbeing	2	Worker safety and accident prevention	Profitability and Cash Flow; Financial Structure; Financial Flexibility
Exposure to Social Impacts	3	Social resistance to major projects that leads to delays and cost increases	Asset Base and Operations; Profitability and Cash Flow



Governance (G)

General Issues	G Score	Sector-Specific Issues	Reference
Management Strategy	3	Strategy development and implementation	Management and Corporate Governance
Governance Structure	3	Board independence and effectiveness; ownership concentration	Management and Corporate Governance
Group Structure	3	Complexity, transparency and related-party transactions	Management and Corporate Governance
Financial Transparency	3	Quality and timing of financial disclosure	Management and Corporate Governance

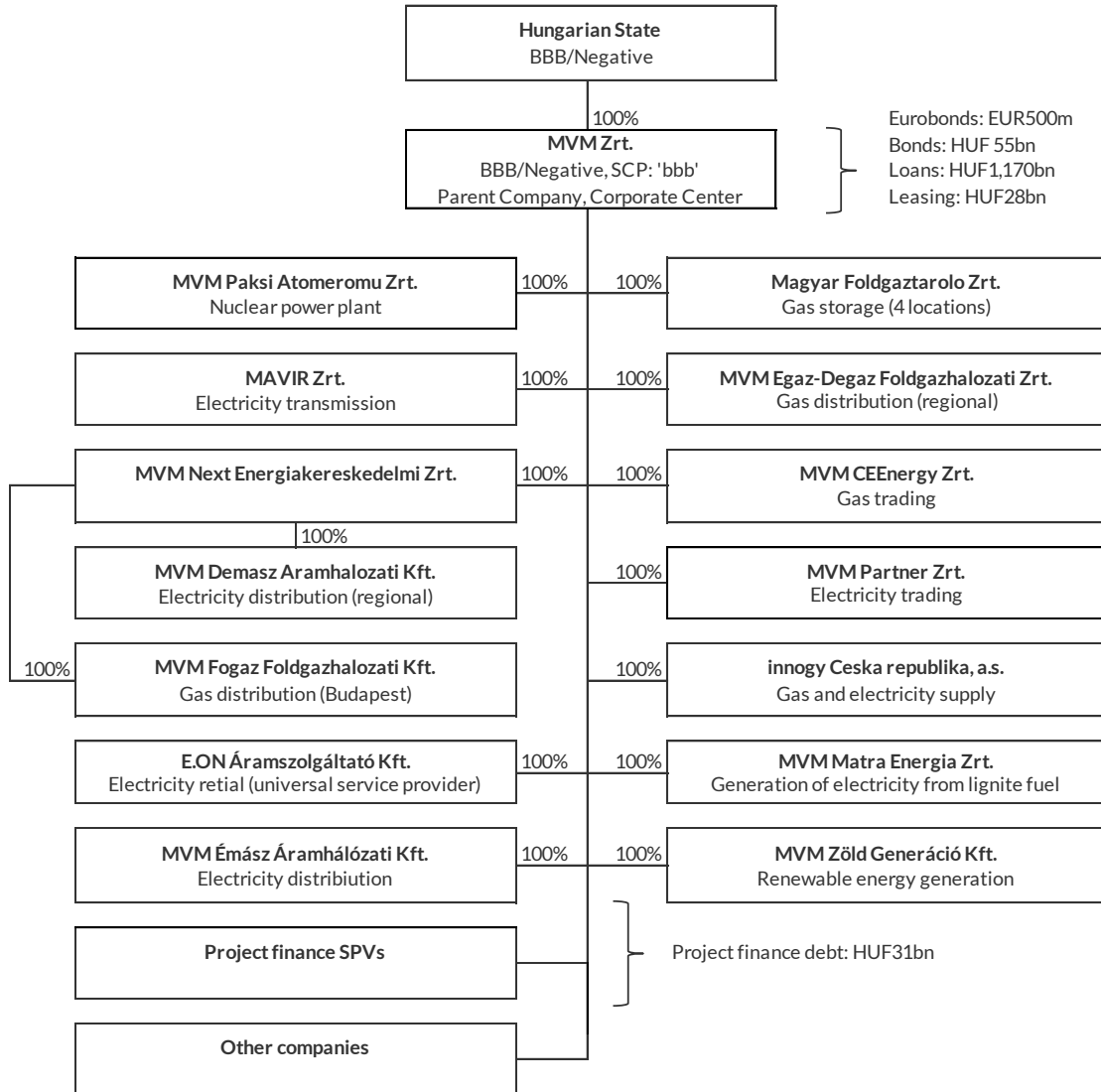


CREDIT-RELEVANT ESG SCALE

How relevant are E, S and G issues to the overall credit rating?

5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.
4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.
3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.
2	Inrelevant to the entity rating but relevant to the sector.
1	Inrelevant to the entity rating and irrelevant to the sector.

Simplified Group Structure Diagram



Source: Fitch Ratings, Fitch Solutions, MVM, data as at end-2022

Peer Financial Summary

Company	Issuer Default Rating	Financial statement date	Gross revenue (EURm)	EBITDA margin (%)	Funds from operations (EURm)	FFO net leverage	FFO interest coverage (x)
MVM Zrt.	BBB						
	BBB	2022	19,086	4.2	934	2.5	8.8
	BBB	2021	7,739	8.8	514	-0.6	20.6
		2020	3,938	13.8	448	1.7	28.1
PGE Polska Grupa Energetyczna S.A.	BBB+						
	BBB+	2021	11,385	15.2	1,621	0.4	24.5
	BBB+	2020	10,189	13.2	1,149	1.2	16.5
	BBB+	2019	8,808	17.4	1,338	1.7	19.0
TAURON Polska Energia S.A.	BBB-						
	BBB-	2021	5,529	15.4	719	3.0	10.4
	BBB-	2020	4,657	18.0	821	3.1	10.7
	BBB	2019	4,801	16.4	587	4.3	7.3
ENEA S.A.	BBB						
	BBB	2022	6,415	7.4	365	2.0	11.3
	BBB	2021	4,580	17.0	613	1.0	19.8
	BBB	2020	4,051	18.0	574	2.3	10.8
Energa S.A.	BBB+						
	BBB-	2021	2,956	17.1	360	2.3	11.2
	BBB-	2020	2,774	15.6	354	2.8	6.6
	BBB	2019	2,849	16.0	347	3.0	6.0
Bulgarian Energy Holding EAD	BB+						
	BB	2021	4,763	29.6	1,496	0.9	23.5
	BB	2020	2,301	20.8	499	4.4	10.8
	BB	2019	2,719	18.6	511	4.6	11.1

Source: Fitch Ratings, Fitch Solutions, MVM Zrt.

Fitch Adjusted Financials

(HUFm)	Notes and formula	Reported values	Sum of adjustments	Lease treatment	Other adjustments	Adjusted values
31 Dec 22						
Income statement summary						
Revenue		7,647,782				7,647,782
EBITDAR		453,347	-132,406	-9,451	-122,955	320,941
EBITDAR after associates and minorities	(a)	455,892	-132,406	-9,451	-122,955	323,486
Lease expense	(b)	0				0
EBITDA	(c)	453,347	-132,406	-9,451	-122,955	320,941
EBITDA after associates and minorities	(d) = (a-b)	455,892	-132,406	-9,451	-122,955	323,486
EBIT	(e)	212,830	-123,836	-881	-122,955	88,994
Debt and cash summary						
Other off-balance-sheet debt	(f)	0				0
Debt	(g)	1,483,733	-33,020	-27,748	-5,272	1,450,713
Lease-equivalent debt	(h)	0				0
Lease-adjusted debt	(i) = (g+h)	1,483,733	-33,020	-27,748	-5,272	1,450,713
Readily available cash and equivalents	(j)	407,530				407,530
Not readily available cash and equivalents		110,165				110,165
Cash flow summary						
EBITDA after associates and minorities	(d) = (a-b)	455,892	-132,406	-9,451	-122,955	323,486
Preferred dividends paid	(k)	0				0
Interest received	(l)	8,515				8,515
Interest paid	(m)	-47,739	881	881		-46,858
Cash tax paid		-43,928				-43,928
Other items before FFO		-525,679	658,868		658,868	133,189
FFO	(n)	-152,939	527,343	-8,570	535,913	374,404
Change in working capital (Fitch-defined)		-735,329	-535,913		-535,913	-1,271,242
CFO	(o)	-888,268	-8,570	-8,570		-896,838
Non-operating/non-recurring cash flow		0				0
Capex	(p)	-444,610				-444,610
Common dividends paid		-7,515				-7,515
FCF		-1,340,393	-8,570	-8,570		-1,348,963
Gross leverage (x)						
EBITDAR leverage ^a	(i/a)	3.3				4.5
FFO adjusted leverage	(i-j)/(n-m-l-k+b)	-13.0				3.5
FFO leverage	(i-h)/(n-m-l-k)	-13.0				3.5
EBITDA leverage ^a	(i-h)/d	3.3				4.5
(CFO-capex)/debt (%)	(o+p)/(i-h)	-89.8%				-92.5%
Net leverage (x)						
EBITDAR net leverage ^a	(i-j)/a	2.4				3.2
FFO adjusted net leverage	(i-j)/(n-m-l-k+b)	-9.5				2.5
FFO net leverage	(i-h-j)/(n-m-l-k)	-9.5				2.5
EBITDA net leverage ^a	(i-h-j)/d	2.4				3.2
(CFO-capex)/net debt (%)	(o+p)/(i-h-j)	-123.9%				-128.6%
Coverage (x)						
EBITDAR fixed-charge coverage ^a	a/(-m+b)	9.6				6.9
EBITDA interest coverage ^a	d/(-m)	9.6				6.9
FFO fixed-charge coverage	(n-l-m-k+b)/(-m-k+b)	-2.4				8.8
FFO interest coverage	(n-l-m-k)/(-m-k)	-2.4				8.8

^a EBITDA/R after dividends to associates and minorities.

CFO - Cash flow from operations.

Note: Debt includes other off-balance-sheet debt.

Source: Fitch Ratings, Fitch Solutions, MVM Zrt.

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: <https://www.fitchratings.com/understandingcreditratings>. In addition, the following <https://www.fitchratings.com/rating-definitions-document> details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at <https://www.fitchratings.com/site/regulatory>. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see <https://www.fitchratings.com/site/regulatory>), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2023 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.