MOODY'S INVESTORS SERVICE

CREDIT OPINION
13 June 2019

Update

Rate this Research

RATINGS

ENGIE SA

Domicile	Paris, France
Long Term Rating	A3
Type	LT Issuer Rating
Outlook	Stable

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

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ENGIE SA

Update following downgrade

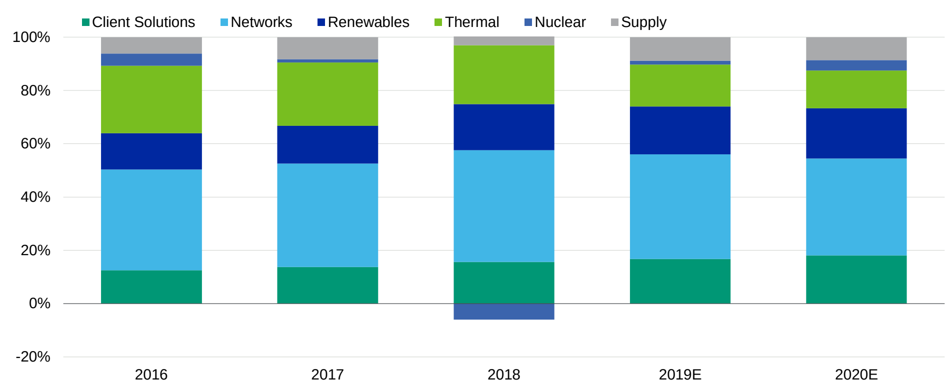
Summary

The credit profile of ENGIE SA (ENGIE) is underpinned by its scale and diversification, which are reflected in its leading business positions across the energy value chain in many different markets. These factors limit earnings volatility and, in combination with the progress made by the group under its cost-reduction programme, should continue to offset the negative effects of nuclear outages, underpinning EBITDA. The group's business risk profile continues to evolve positively as it shifts from commodity-exposed activities and towards contracted and regulated activities (see Exhibit 1).

Exhibit 1

Business risk profile will continue to evolve as ENGIE executes its transformation plan

EBITDA split by activity in percentage



The 2019-20 estimates represent Moody's forward view; not the view of the issuer.
Source: Moody's Investors Service

ENGIE's credit profile is supported by a relatively balanced financial policy, reflected in its leverage target of no more than 2.5x net debt/EBITDA. We expect this financial policy to translate into adjusted funds from operations (FFO)/net debt at or above 20%.

Following enactment of the Loi Pacte in France in May 2019, Moody's assesses ENGIE's creditworthiness based upon its stand-alone credit profile, and no longer incorporates uplift from its 23.64% ownership by the Government of France (Aa2 positive).

Credit strengths

» Scale and geographical diversification, which support cash flow stability

» Consistent strategic direction and delivery

» Growing share of infrastructure and contracted businesses, which underpins business risk profile

» Moderate financial leverage, with FFO/net debt expected to recover to above 20% in 2019

Credit challenges

» Merchant generation in Europe exposed to power price volatility

» Scheduled plant outages in 2019, which will constrain nuclear production, although output will recover from 2018 levels

» Residual execution risk associated with capital redeployment to replace the loss of earnings from asset disposals

» The proposed shift in the policy for management of nuclear waste in Belgium could lead to a rise in nuclear provisions

» High capital spending and dividend, which weigh on the group's free cash flow generation

Rating outlook

The outlook is stable, reflecting our expectation that ENGIE's credit metrics will strengthen over the short to medium term, in line with the guidance for the A3 rating, which includes FFO/net debt at or above 20% and RCF/net debt in the mid-teens in percentage terms.

Factors that could lead to an upgrade

Given limited capacity against our ratio guidance, upward rating pressure is unlikely in the medium term. Nevertheless, the ratings could be upgraded, provided that credit metrics strengthen towards FFO/net debt in the mid-twenties in percentage terms and RCF/net debt in the upper teens in percentage terms.

Factors that could lead to a downgrade

The ratings could be downgraded if credit metrics appeared likely to remain sustainably below our guidance for the A3 rating.

Key indicators

Exhibit 2
ENGIE SA

	12/31/2015	12/31/2016	12/31/2017	12/31/2018	2019 proj.	2020 proj.
(CFO Pre-W/C + Interest) / Interest	6.6x	6.2x	6.8x	5.9x	5.7x	6.4x
(CFO Pre-W/C) / Net Debt	20.7%	18.2%	20.1%	17.9%	20.2%	20% - 23%
RCF / Net Debt	14.1%	11.4%	13.6%	11.8%	14.4%	14% - 17%

All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Moody's projections (proj.) are Moody's opinion and do not represent the views of the issuer. They incorporate the effect of adoption of IFRS 16 from 1 January 2019.
Source: Moody's Financial Metrics™

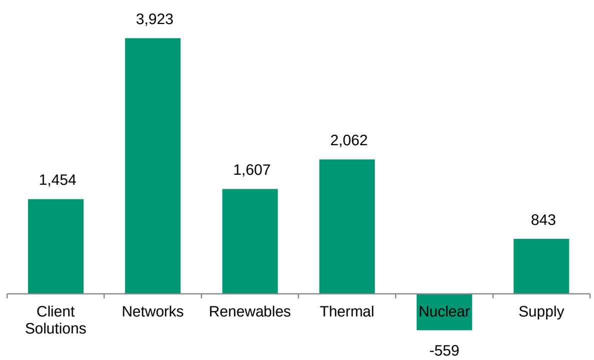
Profile

With consolidated revenue of €61 billion and EBITDA of €9.2 billion in 2018, ENGIE SA (ENGIE) is among the largest European integrated utilities. It is also one of the most diversified groups, with substantial assets along the energy value chain, both in Europe and further afield, as well as in energy services. The group is organised (1) by six, mainly geographic, reportable segments; and (2) by activity as follows: Renewables (12% of 2018 EBITDA); Networks, which is mostly comprised of infrastructure activities in France (50%); Client Solutions (16%); Thermal generation (18%); Supply (5%); and Nuclear (-5%, reflecting losses in 2018 because of the unplanned nuclear outages). The group is listed on Euronext Paris and Euronext Brussels, with a market capitalisation of around €32 billion. It is currently 23.64% owned and 34.79% controlled by the French government.

Exhibit 3

Business mix is tilted towards regulated and contracted activities...

Split of EBITDA by business in year ended 31.12.2018, € million

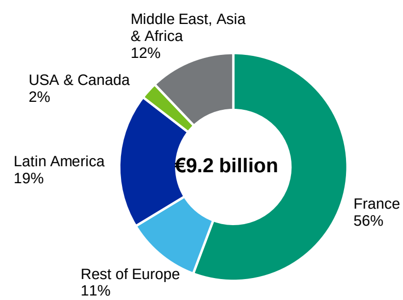


Source: Company reports, Moody's Investors Service

Exhibit 4

...with Europe accounting for over 60% of earnings

Split of EBITDA by geography in FY 2018



Source: Company reports, Moody's Investors Service

Detailed credit considerations

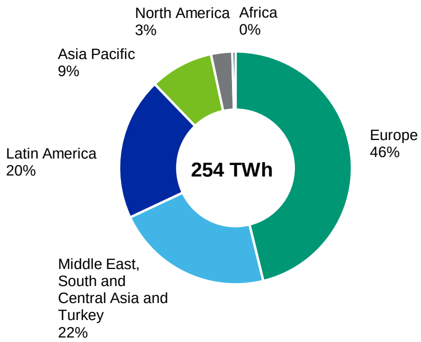
Scale and diversification support cash flow stability

ENGIE's credit profile is underpinned by its scale (total assets were €153.7 billion as of year-end 2018) and diversification by geography, business and asset type, which support the relative stability of its cash flow. In addition to geographical reach, ENGIE benefits from (1) the business diversification implied by the group's presence along the value chain, including positions in generation, networks, downstream liquefied natural gas (LNG; mostly re-gasification terminals), and supply and energy services; and (2) the size and granularity of the group's generation asset base, with 59.6 gigawatts (GW) of net installed capacity (net ownership), which helps absorb adverse operational developments, such as local changes to market frameworks or the impact of unusual weather conditions across the portfolio. The group's diversified fuel mix can also mitigate such risks.

Exhibit 5

ENGIE's generation business is diversified by geography...

Electricity output (percentage consolidation) by region in 2018

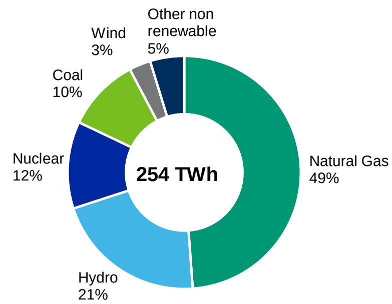


Sources: Company reports, Moody's Investors Service

Exhibit 6

...and by fuel type

Electricity output (percentage consolidation) by fuel in 2018



Source: Company reports, Moody's Investors Service

Low risk profile of infrastructure and contracted generation and renewables

The group's business risk profile is supported by the substantial and growing contribution from infrastructure and contracted generation, including renewables, which together accounted for about 75% of €9.2 billion EBITDA in 2018. Infrastructure (45% FYE 2018 EBITDA) includes gas transmission, distribution, storage and LNG terminals in France, with a combined regulated asset base of close to €28 billion as of 1 January 2018 (see Exhibit 7). The revenue generated by these activities is regulated under a framework that we view as well established and transparent, thus providing a good degree of stability and predictability of cash flow.

Exhibit 7

Regulated infrastructure in France accounted for 36% of group EBITDA in 2018 and provides significant cash flow visibility

Column1	Gas transmission	Gas distribution	LNG terminals	Gas storage
Company	GRTgaz	GRDF	Elengy	Storengy [1]
EBITDA FY18	€ 1.1	€ 1.8	€ 0.2	€ 0.4
RAB at 1 January 2018	€ 8.2	€ 14.4	€ 1.1	€ 3.6 [2]
Regulatory determination	ATRT6	ATRD5	ATTM5	ATS1
Regulatory period	4 years (2017-21)	4 years (2016-20)	4 years (2017-21)	2 years (2018-19)
WACC	5.25% (real, pre-tax)	5.00% (real, pre-tax)	7.25% (real, pre-tax)	5.75% (real, pre-tax)

[1] Storengy also includes gas storage operations in Germany. [2] Including 50% of geomethane.
Source: CRE, ENGIE, Moody's Investors Service

Contracted thermal generation and renewables (29% of 2018 EBITDA) include a substantial share of earnings outside Europe, which are underpinned by power purchase agreements. Although each is different, these are generally characterised by lengthy tenors, minimum contractually agreed revenue streams, fuel costs hedged by cost pass-through mechanisms and protection against inflation, which in turn provide a degree of earnings stability and insulation from wholesale power price volatility. Most of the group's European renewables business is in France, where revenue stability is supported by 15-year feed-in tariffs.

In addition, Client Solutions' portfolio of service and maintenance contracts has underpinned steady and growing EBITDA — about a quarter of 2018 group EBITDA when including energy supply. These activities nevertheless offer less visibility and have a lower credit quality than capital-intensive infrastructure and long-term contracted generation activities.

Merchant generation exposed to power price volatility and nuclear outages

The group has cut its commodity-linked activities, which have a higher business risk profile than infrastructure and contracted generation, through the disposal of its upstream and midstream LNG businesses (liquefaction, shipping and supply contracts). Commodity-linked earnings, mainly from merchant power generation, represented just 1% of 2018 EBITDA, reflecting the negative impact from unplanned nuclear outages. Merchant generation comprises mainly nuclear plants in Belgium and hydro capacity in France (with a combined normalised annual output of around 60 terawatt hour (TWh)), and is exposed to wholesale power price volatility, although the group's hedging policy moderates this.

In common with other European markets, forward baseload power prices in Belgium and France rose sharply in 2018, driven by the CO_2 price, which increased to around €24/tonne. Although power prices have come down slightly in the first quarter of 2019, they remain well above 2016 levels and will boost ENGIE's profit from its fixed-cost, low emission, nuclear and hydro generation. The overall boost to the group's earnings will depend on the extent to which its supply margins are squeezed by higher wholesale price input costs and its hedging strategy. For example, as of year-end 2018, it had sold forward 77% of its planned 2019 nuclear and hydro output, 62% of 2020 output and 31% of 2021 output at achieved prices of €38/MWh, €42/MWh and €46/MWh, respectively.

Operation of the group's 6.4 GW nuclear capacity across seven reactors was hurt by planned maintenance and unplanned outages in 2018. These had an especially negative impact on achieved output in 2018, when nuclear availability was just 52% and output at 30.7 TWh, with a €700 million adverse effect on EBITDA in 2018 versus 2017. The group's remedial work has been progressing as planned, with Doel 4 brought back online in December 2018 and Doel 2 in February 2019. The group has estimated that availability will recover to 78% in 2019 and output to 33 TWh. However, there is likely to be some variance from this following the announced planned outages for Doel 1, Doel 2 and Tihange 1 next winter.

Transformation plan extended, but replacing earnings associated with disposals remains a challenge

ENGIE's 2019-21 strategy follows and extends the 2016-18 plan whose transformation towards a more predictable earnings profile and growth objectives were substantially achieved. The updated plan targets current operating income (COI) growth (compound annual growth rate) of 6.5%-8.5% based on investment of around €20 billion (including maintenance) over the three-year period, with growth capital spending focused on Client Solutions, Networks and Renewables, consistent with the group's ongoing strategy shift away from commodity-linked activities.

The group's development will continue to be focused on three growing segments: Client Solutions, Networks and Renewables as ENGIE seeks the best way to align its competitive strengths with the ongoing transition to a lower carbon economy. The fourth business segment, Thermal Generation and Supply, is set to continue to decline in relative importance as thermal capacity progressively reduces. The plan provides for growth capital spending of €11 billion-€12 billion over the three-year period (net of Design Build partial Sell Operate (DBpSO)), and asset disposals of €6 billion (including €2.5 billion carried over from the earlier period). Client Solutions accounts for the largest share, with around 40% of investment to support the development of its asset-based business, with the balance allocated to Networks (around 28%), Renewables (22%), which targets an increase of 9 GW to 33 GW of installed capacity, and Thermal Generation and Supply (10%).

The 2019-21 plan also aims to reduce complexity, further promote decentralisation and extend ENGIE's Lean performance programme. It will focus the group on fewer geographies, distilling the group's presence to 20 countries and 30 emerging market urban areas, and targeting up to five hundred companies and local authorities. Its Lean 2021 performance plan builds upon the €1.3 billion improvement in COI achieved in the three years to 2018, and targets a further €800 million improvement in net COI through a combination of cost reduction and revenue enhancement.

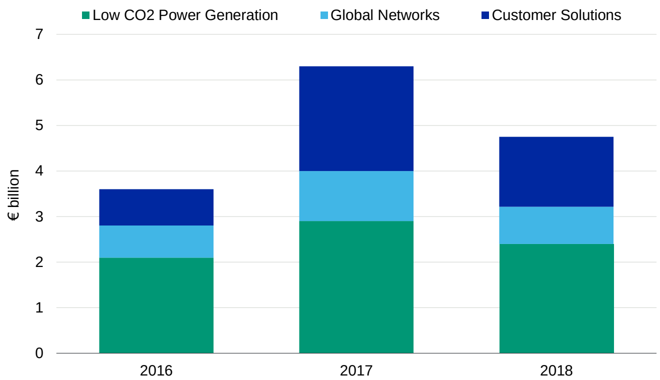
Overall, we expect the group's business risk profile to develop favourably over the plan period and to continue the shift away from commodity-linked businesses. However, its capital investment programme implies some execution risk because of (1) the overall scale of the spending plan; (2) the share of investments dedicated to emerging markets; and (3) the margin compression seen in the renewables sector. Some of these risks are nevertheless moderated by the regulated nature of investment into networks, as well as by the scale and competitive advantage that ENGIE derives from its renewables platform.

In addition, we note that replacing the loss of earnings associated with asset disposals will be a challenge. In March 2019, the group completed the disposal of its 69.1% stake in Glow for €2.5 billion, which contributed €165 million to group net income in 2018.

In April, an ENGIE-led consortium comprising ENGIE, its 68.7%-owned subsidiary ENGIE Brasil Energia (EBE) and Caisse de depot et placement du Quebec offered $8.6 billion (around €7.7 billion) for the acquisition of a 90% stake in Transportadora Associada de Gas SA (TAG), the largest natural gas transportation company in Brazil. The deal is consistent with the group's strategy to invest in infrastructure and to position itself in the transition to a lower carbon economy. TAG's capacity is fully operational and is mostly contracted under lengthy gas transportation agreements, which underwrite future revenue and mitigate business risk. The transaction will have a moderately negative impact on ENGIE's leverage profile, reflecting the €1.6 billion debt-funded cost of the equity for a 49.3% economic exposure to the consortium acquisition vehicle. As TAG will be jointly owned, it will not be consolidated in ENGIE's account but will be accounted for by using the equity method. The deal, which remains subject to certain approvals, is expected to close by the end of June 2019. TAG's contribution to ENGIE's results is expected to be below €50 million for the second half of 2019.

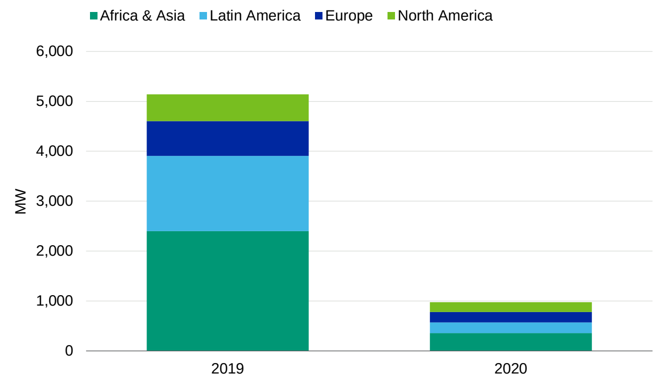
Later in April, ENGIE signed an agreement for the sale of its shares in coal-fired power plants in the Netherlands and in Germany which represent a total installed capacity of 2,345 MW. The transaction will reduce ENGIE's net consolidated debt by approximately €200 million. The closing of the transaction is expected during the second semester 2019. After this sale, coal will only represent about 4% of ENGIE generating capacity, down from 15% at the end of 2015. This transaction is in line with ENGIE's strategy to become a leader in the zero-carbon transition.

Exhibit 8
Investment is focused on contracted and regulated activities
Split of growth in capital spending (excluding maintenance) by business



Capital spending excludes E&P- and LNG-related investments.
Sources: Company reports, Moody's Investors Service

Exhibit 9
New generation to be mostly added in emerging markets
Expected commissioning of capacity (100%) as of 31 December 2018



Source: Company reports

Credit metrics expected to strengthen from 2019 following a dip in 2018

ENGIE's credit profile benefits from a relatively balanced financial policy, as illustrated by a leverage target (expressed as net debt/EBITDA) of no more than 2.5x. Net debt/EBITDA was 2.3x as of year-end 2018, equivalent to 3.7x net economic debt/EBITDA.

EBITDA of €9.2 billion in 2018 reflected organic growth of 4.7% and illustrated how the group's scale and diversification support the stability of its cash flow. Underlying organic growth of 5% in Client Solutions and Infrastructure, and 15% in Renewables helped offset the negative €700 million EBITDA impact of low availability in ENGIE's Belgian nuclear operations. Combined with asset disposal proceeds of €4.4 billion, operating cash flow more than offset gross capital spending of €7.6 billion and dividend outflows of €2.3 billion, as reflected in the €1.4 billion decline in financial net debt to €21.1 billion and a net debt-to-EBITDA ratio of 2.3x, within its 2.5x leverage target.

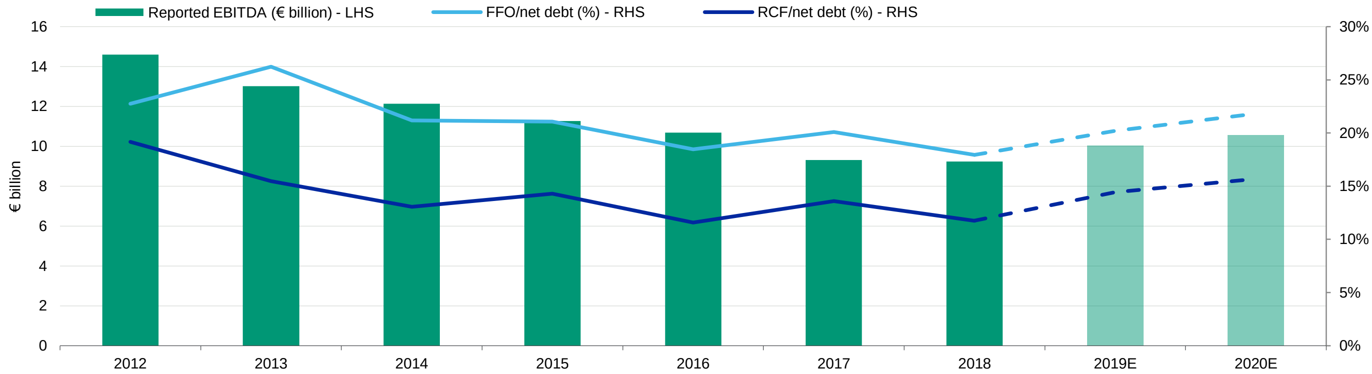
2018 FFO/net debt of around 18% and RCF/net debt of around 12% were below our rating guidance of, respectively, 20% or more, and mid-teens in percentage terms. This reflected primarily the negative impact of weak nuclear output and the delay in closing the Glow disposal, as well as a relatively high dividend payout. We estimate FFO/net debt would have been around 19.5% in 2018, pro forma for the Glow sale. The outlook is for higher power prices in Europe and normalised levels of nuclear output, combined with the returns from large capital investments, to support EBITDA growth in 2019.

Although EBITDA of €3.1 billion in the first quarter of 2019 was 3.9% lower than Q1 2018 on an organic basis, it remained broadly in line with management's phasing expectations, and allowed the group to reiterate EBITDA guidance for 2019 overall of an indicative €9.9 billion-€10.3 billion [1] range. On that basis, we expect the group's FFO/net debt to recover to above 20% in 2019, consistent with our rating guidance.

Approximately one fifth of ENGIE's adjusted debt of €41.8 billion at end-2018 was represented by nuclear provisions net of dedicated assets. Current proposals by the Belgian National Agency for Radioactive Waste and enriched Fissile Material (Organisme national des déchets radioactifs et des matières fissiles enrichies, (ONDRAF)) provide for a shift from the current mixed scenario for estimating necessary provisioning levels. If approved by the Belgian government, this could lead to an increase in provisions in future, although ENGIE believes, based on information available to date, that the impact of the new technical scenario on the provisions for the back-end cycle should not significantly alter the net present value of its commitments as estimated today.

Exhibit 10

We expect ENGIE's credit metrics to strengthen from 2019



The 2019-20 estimates represent Moody's forward view; not the view of the issuer. They incorporate the effect of adoption of IFRS 16 from 1 January 2019.
Source: Moody's Investors Service

Loi PACTE prompts reassessment of French government support for ENGIE

Given the 23.64% shareholding and 34.79% voting rights held by the French government, we consider ENGIE a government-related issuer under our rating methodology, which generally requires 20% as the minimum government ownership level. However, following the adoption in French law of the Loi PACTE ('Plan d'Action pour la Croissance et la Transformation des Entreprises') on 23 May 2019 we changed our assessment of government support to 'moderate' from 'strong' under the methodology, and removed the notch of uplift which had hitherto been factored into the rating. ENGIE's A3 rating is now based on the group's underlying credit strength, as reflected in its baseline credit assessment (BCA) of a3.

Our reassessment reflected that the Loi PACTE is designed, inter alia, to redefine the state's role in France's economy. In that context it identified the state's shareholding in ENGIE, as non-core to the state's fundamental mission, and suitable for disposal. Amongst other measures the new law removed the requirement of a 33.33% minimum threshold for government ownership of ENGIE, and for the change from full to majority ownership by ENGIE and French public entities at GRTgaz, the ENGIE-owned French gas transmission grid. The government is now free to sell its stake in ENGIE in line with its stated intent, and to use the proceeds to boost its Fund for investment in innovation and industry. However the government will continue to hold a golden share in ENGIE and rights to oppose any sale of ENGIE gas infrastructure assets.

Although there is currently no indication of the timing of any future share sales, in our view enactment of the Law crystallised a change in the ownership intentions of the state, and a high likelihood that the government will bring down its stake. Even if a disposal may be delayed, and potentially phased, enactment of the legislation implies a reduced likelihood of the French government's support for ENGIE, which we reflected in the shift of our support assessment to 'moderate' from 'strong'.

Moderate risk from decarbonisation of the power sector

The European Union (EU) has committed to reduce greenhouse gas emissions by 40% from 1990 levels and to increase the contribution of renewables to energy demand to 27% by 2030. These targets, agreed in 2014, formed the basis of the EU's commitments under the Paris Agreement and are designed to significantly decarbonise the region's economies. We believe that unregulated utilities, which account for around 40% of carbon emissions across the EU, will need to deliver a significant share of the reductions, and that this will create a variety of risks and opportunities for utilities.

We believe that ENGIE is moderately well positioned compared with its peers, given its remaining exposure to gas-fired generation, which accounts for around half of its generation capacity and is mostly located in Middle East and not in the EU. This is mitigated by the group's strategy to focus on regulated networks and low-carbon power generation, as well as energy services, which we expect would provide resilience to both policy direction and the development of potential disruptive technologies.

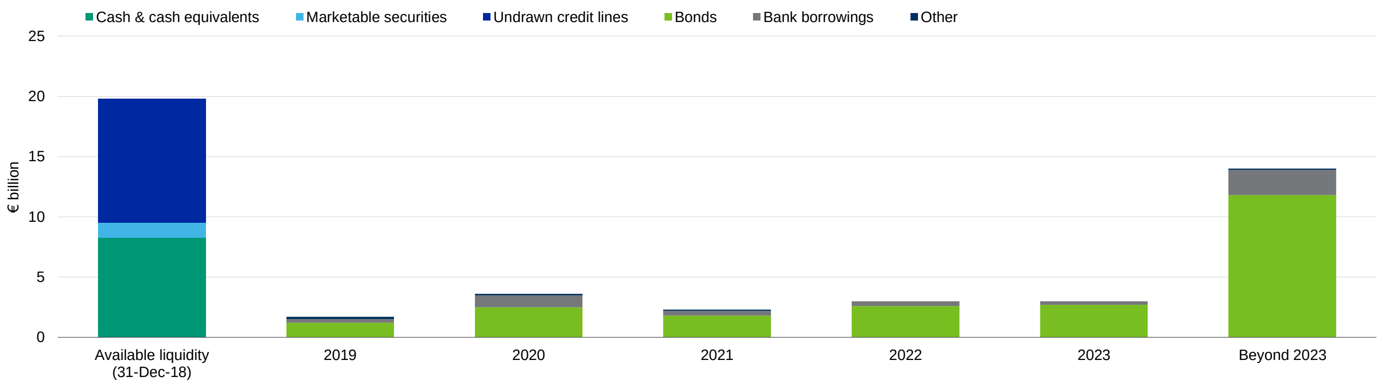
Liquidity analysis

ENGIE's strong liquidity position was supported by €9.5 billion of available cash and financial assets and a total of €13.2 billion of undrawn confirmed covenant-free credit facilities as of 31 December 2018. These include €5.0 billion and €5.5 billion syndicated loan facilities maturing in December 2023 and November 2022, respectively. We believe that, together with strong cash generation, these sources are sufficient to cover the group's debt maturities (including €2.9 billion of commercial paper outstanding as of 31 December 2018 and €4.0 billion of other debt maturities), capital spending and expected dividend payments over the next 12 months.

Exhibit 11

ENGIE has a well-spread debt maturity profile

Debt maturity profile and available liquidity as of 31 December 2018



Undrawn credit lines are net of outstanding commercial paper.

Sources: ENGIE, Moody's Investors Service

Structural considerations

Our credit assessment takes account of both external borrowing at subsidiary level and nuclear provisions at ENGIE's subsidiary Electrabel SA (Baa1 Stable) (around €9.5 billion net of allocated assets), which benefit from a priority ranking in respect of the movable assets of Electrabel. We consider that while these liabilities imply some structural subordination for ENGIE's parent company creditors, they can be accommodated in the context of total group debt of €32 billion and assets of €154 billion.

Rating methodologies and scorecard factors

ENGIE is rated in accordance with the rating methodologies for (1) Unregulated Utilities and Unregulated Power Companies, published in May 2017, and (2) Government-Related Issuers, published in June 2018, reflecting that we consider ENGIE a government-related issuer, given the French government's ownership of 23.64% of the share capital and 34.79% voting rights.

Following enactment of the Loi Pacte in France in May 2019, ENGIE's creditworthiness is based upon its stand-alone credit profile, as reflected in its BCA of a3, which is aligned with the scorecard indicated outcome.

Exhibit 12

Rating factors

ENGIE SA

Unregulated Utilities and Unregulated Power Companies Industry Grid [1][2]	Current LTM 12/31/2018		Moody's 12-18 Month Forward View As of June 2019 [3]	
Factor 1 : Scale (10%)	**Measure**	**Score**	**Measure**	**Score**
a) Scale (USD Billion)	Aaa	Aaa	Aaa	Aaa
Factor 2 : Business Profile (40%)				
a) Market Diversification	Aaa	Aaa	Aaa	Aaa
b) Hedging and Integration Impact on Cash Flow Predictability	A	A	A	A
c) Market Framework & Positioning	A	A	A	A
d) Capital Requirements and Operational Performance	Baa	Baa	Baa	Baa
e) Business Mix Impact on Cash Flow Predictability	Aa	Aa	Aa	Aa
Factor 3 : Financial Policy (10%)				
a) Financial Policy	Baa	Baa	Baa	Baa
Factor 4 : Leverage and Coverage (40%)				
a) (CFO Pre-W/C + Interest) / Interest (3 Year Avg)	6.3x	Baa	5.5x - 6.5x	Baa
b) (CFO Pre-W/C) / Net Debt (3 Year Avg)	18.7%	Ba	19% - 22%	Baa
c) RCF / Net Debt (3 Year Avg)	12.2%	Ba	12% - 16%	Ba
Rating:				
a) Scorecard-Indicated Outcome		A3		A3
b) Actual Baseline Credit Assessment				a3
Government-Related Issuer				**Factor**
a) Baseline Credit Assessment				a3
b) Government Local Currency Rating				Aa2
c) Default Dependence				Moderate
d) Support				Moderate
e) Final Rating Outcome				A3

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 12/31/2018; Source: Moody's Financial Metrics™. [3] This represents Moody's forward view; not the view of the issuer.

Source: Moody's Investors Service

Ratings

Exhibit 13

Category	Moody's Rating
ENGIE SA	
Outlook	Stable
Issuer Rating	A3
Senior Unsecured	A3
Subordinate MTN -Dom Curr	(P)Baa1
Commercial Paper	P-2
Other Short Term -Dom Curr	(P)P-2
ENGIE CC	
Outlook	Stable
Issuer Rating	Baa1
ENGIE INVEST INTERNATIONAL S.A.	
Outlook	Stable
Issuer Rating -Dom Curr	A3
ELECTRABEL SA	
Outlook	Stable
Issuer Rating -Dom Curr	Baa1
Other Short Term -Dom Curr	(P)P-2
ENGIE ALLIANCE	
Outlook	Stable
Issuer Rating	A3
Senior Unsecured -Dom Curr	A3
ST Issuer Rating	P-2

Source: Moody's Investors Service

Appendix

Exhibit 14
Peer comparison
ENGIE SA

	ENGIE SA A2 Stable			Electricite de France A3 Stable			Iberdrola S.A. Baa1 Stable			E.ON SE Baa2 Stable			ENEL S.p.A. Baa2 Stable		
(in EUR millions)	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-15	FYE Dec-16	FYE Dec-17
Total Assets	163,965	154,554	158,295	282,418	275,542	286,158	107,582	111,727	80,513	63,081	55,488	55,090	164,641	158,842	158,791
EBITDA	10,937	9,259	9,040	15,606	13,677	11,852	8,098,336	6,869,924	1,112	2,575	8,003	3,389	13,755	14,777	15,033
CFO Pre-W/C	8,296	8,462	7,507	12,693	10,943	13,091	5,912,141	5,334,175	- 181	3,742	5,798	2,736	10,173	9,750	10,484
Retained Casl	5,214	5,663	4,920	11,948	10,368	12,105	5,118,409	4,379,605	- 1,198	2,653	5,248	1,853	7,731	7,098	7,466
Net Debt	45,547	42,238	41,847	68,672	61,722	61,499	32,590,358	37,175,072	4,662	28,497	20,872	17,150	48,801	45,533	46,348
CFO pre-W/C	18.2%	20.0%	17.9%	18.5%	17.7%	21.3%	18.1%	14.3%	-3.9%	13.1%	27.8%	16.0%	20.8%	21.4%	22.6%
RCF / Net Del	11.4%	13.4%	11.8%	17.4%	16.8%	19.7%	15.7%	11.8%	-25.7%	9.3%	25.1%	10.8%	15.8%	15.6%	16.1%
(CFO pre-W/(	6.2x	6.8x	5.9x	5.3x	4.8x	5.4x	5.7x	5.3x	0.8x	3.3x	4.0x	2.6x	4.5x	4.6x	5.2x
Debt / Book (	53.4%	54.3%	54.1%	72.1%	65.2%	63.9%	39.1%	44.5%	42.5%	91.2%	76.4%	70.2%	48.8%	46.4%	47.6%

All figures and ratios are calculated using Moody's estimates and standard adjustments. FYE = Financial Year-End. LTM = Last 12 months.
Source: Moody's Financial Metrics™

Exhibit 15
Adjusted net debt calculation
ENGIE SA

ENGIE SA

(in € Millions)	FYE Dec-13	FYE Dec-14	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18
As Reported Debt	**38,892**	**38,321**	**39,155**	**36,950**	**33,467**	**32,179**
Pensions	1,408	2,278	1,862	2,135	1,864	2,078
Operating Leases	6,768	5,538	5,424	5,274	3,954	4,194
Hybrid Securities	829	1,816	1,816	1,816	1,816	1,875
Securitizations	380	766	856	762	928	872
Non-Standard Adjustments	4,985	6,564	6,552	9,251	10,262	10,344
Moody's-Adjusted Debt	**53,262**	**55,282**	**55,664**	**56,188**	**52,291**	**51,542**
Cash and Cash Equivalents	-8,706	-8,546	-9,183	-9,825	-8,929	-8,700
Non-Standard Adjustments	-732	-808	-797	-816	-1,124	-995
Moody's-Adjusted Net Debt	**43,824**	**45,928**	**45,684**	**45,547**	**42,238**	**41,847**

Source: Moody's Financial Metrics™

Exhibit 16
Adjusted EBITDA calculation
ENGIE SA

ENGIE SA

(in € Millions)	FYE Dec-13	FYE Dec-14	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18
As Reported EBITDA	**14,477**	**12,082**	**9,958**	**10,132**	**7,952**	**8,096**
Pensions	23	-11	-21	90	77	105
Operating Leases	1,128	923	904	879	659	699
Interest Expense – Discounting	-421	-518	-555	-553	-493	-538
Unusual	-565	-660	955	901	1,201	668
Non-Standard Adjustments	-351	-236	-262	-512	-137	10
Moody's-Adjusted EBITDA	**14,291**	**11,580**	**10,979**	**10,937**	**9,351**	**9,040**

Source: Moody's Financial Metrics™

Exhibit 17

Select historical adjusted financial data

ENGIE SA

€ Millions	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18
INCOME STATEMENT						
Revenue	87,898	74,686	69,883	64,840	59,576	60,596
EBITDA	14,291	11,580	10,979	10,937	9,259	9,040
EBIT	7,685	6,118	5,516	6,420	4,246	4,630
Interest Expense	2,177	1,709	1,683	1,589	1,465	1,539
Income Available to Common Sh.	-9,198	2,437	-4,617	-415	1,320	1,033
BALANCE SHEET						
Total Debt	53,262	55,282	55,664	56,188	52,291	51,542
Cash & Cash Equivalents	9,438	9,354	9,980	10,641	10,053	9,695
Net Debt	43,824	45,928	45,684	45,547	42,238	41,847
Total Liabilities	114,921	124,256	125,780	127,562	121,646	125,348
Net PP&E	69,725	69,416	62,234	62,911	54,912	52,977
Total Assets	162,701	171,051	166,427	163,965	154,554	158,295
CASH FLOW						
Funds from Operations (FFO)	11,397	9,609	9,461	8,296	8,462	7,507
Cash Flow from Operations (CFO)	11,124	8,192	10,215	10,303	9,541	7,683
Cash Dividends - Common	-4,694	-3,653	-2,962	-3,009	-2,727	-2,536
Cash Dividends - Preferred	19	-9	-72	-74	-72	-51
Retained Cash Flow (RCF)	6,722	5,947	6,428	5,214	5,663	4,920
Capital Expenditures	-7,237	-6,377	-7,004	-6,830	-6,802	-6,646
Free Cash Flow (FCF)	-788	-1,847	178	391	-60	-1,550
FFO / Net Debt	26%	21%	21%	18%	20%	18%
RCF / Net Debt	15%	13%	14%	11%	13%	12%
FCF / Net Debt	-2%	-4%	0%	1%	0%	-3%
PROFITABILITY						
EBIT Margin %	9%	8%	8%	10%	7%	8%
EBITDA Margin %	16%	16%	16%	17%	16%	15%
INTEREST COVERAGE						
FFO Interest Coverage	6.2x	6.6x	6.6x	6.2x	6.8x	5.9x
LEVERAGE						
Debt / EBITDA	3.7x	4.8x	5.1x	5.1x	5.6x	5.7x
Net Debt / EBITDA	3.1x	4.0x	4.2x	4.2x	4.6x	4.6x
Debt / Book Capitalization	46%	47%	51%	53%	54%	54%

All metrics are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

Source: Moody's Financial Metrics™

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» ENGIE SA: Updated strategy and 2018 results are credit supportive; Loi PACTE signals changing relationship with French government, 7 March 2019

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Endnotes

1 Includes IFRS16 effect, versus 2018 EBITDA of €9.7 billion restated for €0.5 billion IFRS16 treatment.

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