



**CFA Institute**

**CFA Institute Research Challenge**

Hosted in  
CFA Society Italy

**The Green Brothers**

## INVESTMENT SUMMARY

Coverage: February 5th, 2021

# BUY

Closing Price (€)	25.90
Target Price (€)	29.20
Upside	12.74%
Dividend Yield	2.9%
Total Return	15.64%

Min 52 week (€)	13.17
Max 52 week (€)	27.54
Market Cap (€mln)	3,942
Enterprise Value (€mln)	5,483
Shares Outstanding (mln)	150.3
Float	36.50%
Beta (5Y Monthly)	0.7811
Average Daily Volume (3 Months) (K)	249.8

Source: FactSet financial data and analytics

### Valuation

Augmented-DCF Target Price (weight 2/3) (€)	28.67
Multiples Analysis Target Price (weight 1/3) (€)	30.27

Source: team assessment



Exhibit: ERG vs FTSE MIB performance

Source: FactSet financial data and analytics

FACTSET

We are initiating coverage on **ERG (ERG.MI)** with a **BUY recommendation and 1-year target price of €29.20**, corresponding to a 12.74% return to the closing price on February 5th, 2021. Our target price calculation is based on a mix of two methodologies: 1) a Discounted Cash Flow (DCF) to Firm model with a target price of €28.67, and 2) a Multiples Analysis with a target price of €30.27, with weights 2/3 and 1/3 respectively. Our BUY recommendation is warranted by three key drivers, which could prompt the market to re-price the security:

- **ERG competitive advantage, which is the attitude to anticipate the market.** Predicting the trend of the market to switch into a sustainable economy, the Company achieved a leadership position in renewables energy, not only in Italy but also at European level.
- **Renewables (RES) industry is facing a positive shift**, led by renewed commitment of the EU and the Italian Government toward full de-carbonization.
- **Flexibility in business during the Covid-19 pandemic.** Despite higher sensitivity to market prices than its rivals, ERG shows a good level of resilience in its performances: **in FY20E Net Income should grow by mid-single digit to €66m** thanks to lower financial expenses and lower tax rate due to the re-introduction of ACE.

### A textbook case of a strategic shift

**ERG is a successful transformation story:** an independent power producer (IPP) of electricity almost entirely generated from renewable sources through the use of Wind, Solar and Hydro assets in Europe. At its creation in 1938, ERG was an oil and refining specialist. **In 2006, it made a U-turn and completed its transformation** from the largest independent operator in oil downstream in Italy into the largest player in Italian wind generation, thanks to its external growth and its presence in hydroelectric generation in Italy. **ERG is characterized by a robust business profile, in line with the revenues CAGR of 2.77% 2021E-2030E** and underpinned by both organic and external growth.

### One step ahead the others

With an operating profile based on more carefully managed development than its competitors, resilient performances and little leverage, **ERG is a renewable energy group that stands out from the crowd.** The increase in EBIT and EBITDA – +3.84% and +3.17% CAGRs in FY20E-30E, respectively – is driven by **revenues' growth coupled with a strategy of operational efficiency.** ERG is a different renewable energies group, thanks to a growth/profitability profile that enables the Company to conduct a genuine dividend policy, reaching highest yield in the segment (3.6%)

### Many drivers to sustain future growth...

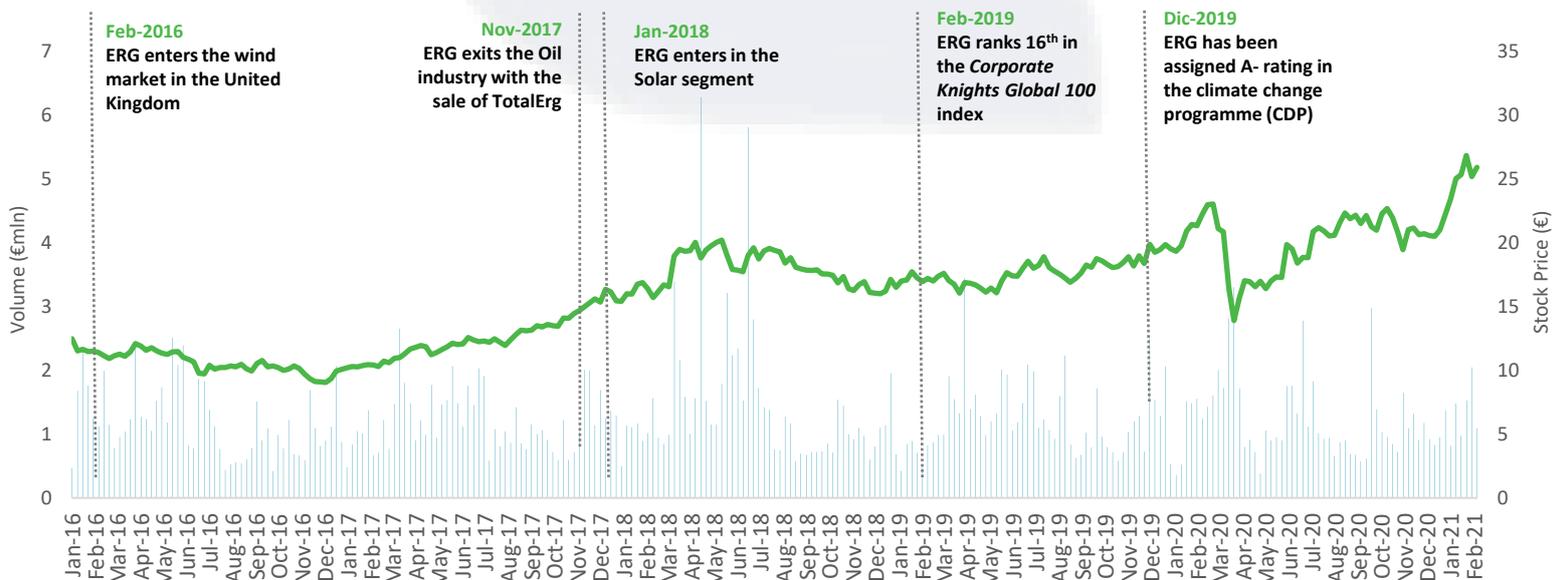
In 2020E, c. 60% of its EBITDA could come from wind power generation and c. 20% from hydroelectric generation. **Regional diversification has just begun and is likely to continue** given the company's firepower and its successful historical growth path. **Technological and business diversification is also ongoing.** The next catalyst for the stock could be the disposal of the thermoelectric asset to become a pure renewables player, and a business plan update in H1 2021.

### ...with a strong footprint on Environment...

ERG has a pure strength in the ecological dimension, in line with the core-business of the Company and its **constant initiatives to preserve the environment**, whereas significant improvements have been made in social and governance practice

### ...despite some risks to our rating:

- **Weather conditions may cause volatility** in numbers in the wind, hydroelectric and solar business lines, reducing or improving the availability of renewable resources.
- **ERG's thermoelectric business is subject to incentive risk** with a fraction of the total incentive ended on 31 December 2020 for the recognition of EECs, issued for ten years based on the primary energy savings.



# BUSINESS DESCRIPTION

## COMPANY PRESENTATION

With a market cap of €3.94bn and more than €1bn of revenues, ERG (formerly Edoardo Raffinerie Garrone) S.p.A. is an Italian producer of energy from renewable sources such as wind, solar, hydroelectric, and thermoelectric. ERG was founded on 2nd June 1938 and its production began at the refinery in Genova San Quirico, in 1947. Since October 1997, ERG completed its evolution from a family-owned business into a public company and it has been listed in the Italian Stock Market Exchange. Strengthening its presence in hydroelectric generation in Italy and its acquisition policy (including in 2020 acquisitions of 36 MW wind in Poland and 38 MW wind in France), in the last few years ERG has completed its transformation from an oil company into a renewable one (Exhibit 1).

## BUSINESS MODEL

ERG's business model is based on the choice of being a green operator in the electric power generation sector using non-programmable and programmable sources which are complementary, flexible and dynamic, with a common specific goal: generating clean energy. Incentives are also released for the production from renewable sources in the various countries in which the Group operates. Furthermore, ERG is developing its business through both Greenfield and external acquisitions.

### Business strategy

ERG's strategy continues focusing on its growth in the sector of renewable energies, through its industrial know-how, its territorial presence, the quality of its assets and operations. The Group pursues three main strategies: (i) Sustainable Economy, (ii) Power Generation and (iii) Operating Efficiency (Exhibit 2).

- Sustainable Economy:** Sustainable development and climate change represent the main challenges of ERG business. Its presence in the local communities goes beyond the electricity production, as it extends into the development of clear relationships with the regions and develops local growth initiatives devoted particularly to future generations. With regard to the climate change: accelerating energy transition, minimizing consumption and protecting the environment and biodiversity are the main challenges, which are implemented by ERG throughout the use of the most efficient technologies, achieving a continuous reduction in emissions and the use of fuels with low carbon content to reduce air pollution. These policies are also in line with the sustainable development goals of United Nations.
- Power Generation:** ERG's goal is to increase the installed capacity by 850 Megawatt (MW) through three main channels, as reported by the Business Plan 2018-2022 (Exhibit 3 & Appendix 3 for further details).
  - Greenfield and Co-Development (+350 MW):** ERG has created a development organization in order to continue to growth organically in France, Germany and the United Kingdom - i.e., countries characterized by high wind-power potentials combined with regulatory stability. The objective is to open the way for sustainable greenfield growth over time, ensuring the Group's long-term expansion (Exhibit 4).
  - Repowering and Re-blading in Italy (+260 MW):** interventions concerning wind-farms characterized by obsolete technologies but, at same time, good wind conditions and still high profitability. Supported by its industrial know-how, the Group is ready to renew its wind-power fleet in order to both significantly increase installed capacity and continuously expand the plants' life horizon (Appendix 2 for further details).
  - M&A (+250 MW):** according to the Group's significant track record, substantial investments will be carried out in order to support growth in the target countries, drawing on an acquired experience in the industry and the synergies deriving from consolidation of ERG's portfolio.
- Operating Efficiency:** improving operating efficiency through insourcing of O&M (Operations & Maintenance), which has been completed in Italy and is underway in France and Germany, and via the development of predictive maintenance, aimed at enhancing availability of the plants and extending their useful life.

## BUSINESS SEGMENT

ERG's business line can be divided into four main divisions: i) Wind, ii) Solar, iii) Natural Gas and iv) Hydroelectric (Exhibit 5 & Appendix 1 for more details).

**(i) Wind (€414mIn revenues in FY2019).** The Company operates in this sector through its wholly owned subsidiary ERG Power Generation. The total installed capacity in 2019 is 1,929 MW, defying the company as the leading wind operator in Italy, while all other players have capacities lower than 350MW each. The abroad capacity includes: (i) France (359 MW), (ii) Germany (272 MW), (iii) Poland (82 MW), (iv) Romania (70 MW) and (v) Bulgaria (54 MW). Thanks to its strategy, the growth in Europe will be significant, as it is expected to quadruple its installed capacity (110 to 400GW). By expanding the wind farms in Europe, ERG intends to create an optimal mix that can handle the uncertainties of the wind business.

**(ii) Solar (€71mIn revenues in FY2019).** ERG entered in the solar market in 2018 with the acquisition of 33 photovoltaic plants throughout Italy for a total installed capacity of 89 MW. In February 2019, the Company reached an installed capacity of 141 MW through another acquisition, allowing ERG to become one of the five leading photovoltaic operators in Italy, with over 140 MW of installed capacity. The solar segment benefit from incentives with an average expiration date of 2030.

**(iii) Thermoelectric (€418mIn revenues in FY2019).** ERG owns a high-output, high-efficiency cogeneration combined-cycle gas turbine (CCGT) power plant, which is located at the Priolo site in Sicily, with an overall capacity of 480 MW. The natural gas-fuelled plant produces electricity and heat, which are used to power the industrial facilities of the production site of Priolo. The remainder of the power generated is made available to the national grid for sale on the domestic market. The Energy efficiency certificates (i.e., the white certificates), which have been released basing on the energy savings related to the co-generation, ceased to be a source of income in 2020. These certificates have been issued since 2010, when operations actually began (further details in Appendix 1: Business Division).

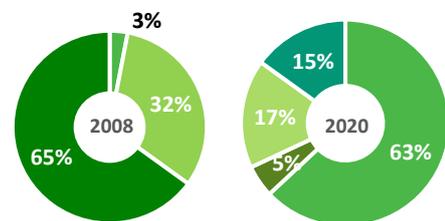


Exhibit 1: From Oil to Renewable: portfolio composition (%) (2008 vs 2020)  
(source: company data, team assessment)

STRATEGY	Geographic Reference			
	Germany	France	UK	Italy
Co-development & Greenfield	✓	✓	✓	✓
Repowering & Reblading	✓	✓	✓	✓
M&A	✓	✓	✓	✓
Operating efficiency	✓	✓	✓	✓

Exhibit 2: Business Strategy Summary  
(source: company data, team assessment)



Exhibit 3: Installed Capacity Evolution: Strategy Business Plan (18-2022E) (source: company data, team assessment)

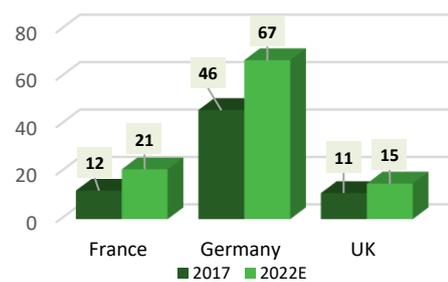


Exhibit 4: Greenfield & Co-Development effect on wind capacity growth (GW)  
(source: company data, team assessment)



Exhibit 5: Historical Revenues breakdown by business division (€mIn)  
(source: company data, team assessment)

**(iv) Hydroelectric (€132mln revenues in FY2019).** The Company started investing in this Segment in 2015 through the acquisition of *Terni hydroelectric integrated system*, which has a capacity of 527MW and a concession running until 2029. It has an integrated portfolio of assets consisting of 19 plants, 7 dams, 3 reservoirs and 1 pumping station. About 512MW of ERG's total installed hydro-generation capacity is a programmable source, and about 40% benefits from incentives that will expire in 2023-25. **Despite its low relevance in terms of revenues, the complex plays a crucial role in enabling ERG's asset diversification strategy** (further details in Appendix 1: Business Division).

**Geographical Segment.** ERG sells its products over 6 European countries: Italy, Germany, France, Poland, Bulgaria and Romania. In FY2019, these countries represented 60%, 11%, 17%, 5%, 3% and 4%, respectively, of total revenues of the wind sector, representing the primary source of revenues. **ERG is the leader in the wind power market in Italy and has a prominent position especially in France and Germany.** The Group reached an installed capacity of 1929 MW of wind farms, 1,093MW in Italy and 836 MW abroad (Exhibit 6 and Appendix 1). Regarding the Solar Segment, ERG is active in the generation of electricity from solar sources through 33 photovoltaic plants located in 9 regions between the North, Center and the South of Italy. Similarly, ERG operates in the thermoelectric sector with a plant site in Sicily at Priolo Gargallo and in the hydroelectric sector through different facilities located in central Italy. **New target locations: the company has 199MW under construction in UK to implement its business.**



Exhibit 6: Geographical Installed Capacity (MW) (source: team assessment)

## INDUSTRY OVERVIEW AND COMPETITIVE POSITIONING

In the last few years, **ERG has radically changed its business strategy, anticipating long-term energy scenarios, and achieving a leadership position in renewables**, not only in the Italian market but also at European level. **The high quality of ERG assets and its organisational structure** enable the Company to face new challenges and take advantage of the opportunities in the electricity sector. To better highlight ERG's industry characteristics and its competitive positioning, we first investigate the whole energy sector and then focus on the renewable sector.

### ENERGY SECTOR

**The global energy sector includes companies which primarily produce and supply energy**, such as fossil fuels or renewables. Energy businesses incur large capital expenditures, supporting substantial spending on research and development (R&D) to update technology in drilling and processing to improve efficiency and adapt to the changing environmental policies. In FY2019, the energy market had total revenues of \$9,387.2bn, with a CAGR of 4.7% (2015-2019).

#### Industry Trends

The Energy Industry is characterized by three recurring trends:

- **Decarbonization.** It indicates a transition towards a clean and carbon-free economy by integrating and increasing the share of renewable energy sources. In sharp contrast to all other fuels, **renewables used for generating electricity has grown by almost 7% in 2020.** Solar and wind account for 86% of global renewable capacity additions in 2020, but their annual expansion of installed capacity is forecast to decline by 17% and 12% respectively compared to 2019.
- **Decentralization.** It refers to geographically distributed electricity with a large number of multi-level producers and consumers, achieving universal access by 2030. In particular, until 2025 the shares of the **decentralised energy industry will increase up to 26-35%** of the total gross electricity production. (Exhibit 8 and Exhibit 9)
- **Digitization.** It implies the widespread use of digital machines and devices at all levels of the power system, from production and infrastructure to end-user devices. **Internet of Energy (IoE) technologies** are supposed to reach a global business value of roughly \$22bn by the end of 2020.

#### Market Drivers

The market drivers that currently have a significant impact on the Energy Industry are:

- **Electricity price.** The price of energy in the EU depends on the domestic energy mix, import diversification and environmental protection costs. The Italian electricity price is 0.226 EUR per kWh (2020), consistent with the Euro zone average price 0.2275 EUR per kWh (2019).
- **Oil and Natural Gas prices.** WTI Crude oil price averaged \$58.67 in February 2021, while Natural Gas price is \$2.78. It represents **one of the main factor costs** within the electricity generation process of the traditional thermo-power energy as well as the renewables ones.
- **EU Regulations.** The **European Green Deal** is a plan to make the EU's economy sustainable with a zero-net-emissions goal from greenhouse gases, by 2050. The EU will also provide financial support through the **Just Transition Mechanism**, mobilising at least €100bn over the period 2021-2027.

### RENEWABLE ENERGY MARKET (REM)

Worth \$928.0bn in 2017, the global renewable energy market is expected to reach \$1,512.3bn by 2025 (CAGR 6.1% in 2018-2025). Over the last decade, **projects delivering energy from renewable sources have become credible low-carbon alternatives to carbon-intensive fossil fuel-based projects.** Global commitment on climate change mitigation under the Paris Agreement in 2015 also helped reduce the short-term impact of low oil prices by acknowledging the longer-term benefits of renewables. The renewable energy market consists of **many players with similar features in terms of revenues (with an average value of \$17.7bn)** (Exhibit 10) and market capitalization (average value of \$17.4bn). In terms of installed capacity (MW) and market share, the most important players worldwide are: (1) SGRE, (2) Orsted, (3) Vestas Wind Systems, and (4) GE Energy. ERG cannot be compared with such global players. But instead, the Company is an important operator in Europe. The **most suitable comparables**, in terms of capacity size, revenues and business line are: (1) **Enel**, (2) **Iberdrola**, (3) **Falck Renew**, (4) **A2A**, (5) **Hera** and (6) **Acea**, with an average EBITDA margin of 35% (FY 2019) and with a volume of revenues of 96.105bn (FY 2019).

STRENGTH
Largest Italian wind power producer
Governance & Management team
High quality generation assets
Appealing Dividend Yield & Strong cash generation
WAKNESSES
Limited geographical diversification
Volatility in natural resources & energy prices
OPPORTUNITIES
Geographical Diversification
Green Deal
Reblading, Repowering & Revamping
THREATS
Weather Conditions & Climate Change
Changes in the regulatory mechanism
Growing competition in the international market

Exhibit 7: SWOT Analysis (Appendix 4) (source: team assessment)

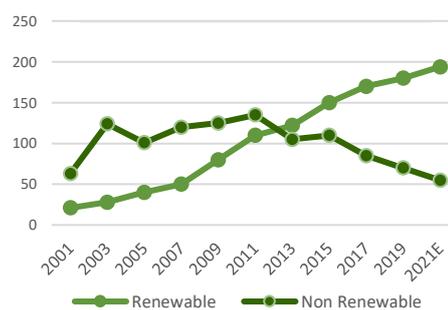


Exhibit 8: Renewable vs Energy Market: GW (Gigawatt) Expansion (source: company data, team assessment)

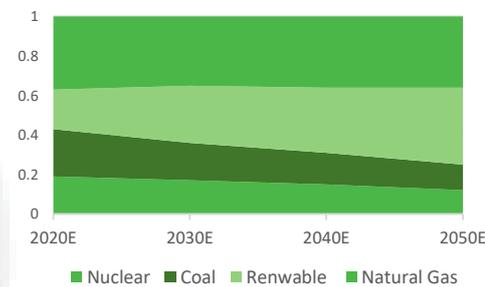


Exhibit 9: Expected Share Renewable Energy (source: team assessment)

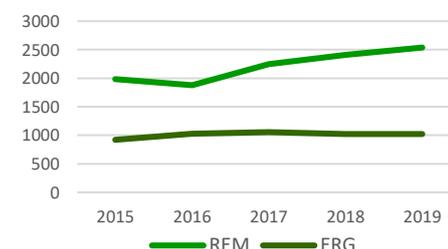


Exhibit 10: Revenues: ERG vs REM (source: company data, team assessment)

**Covid-19 Impact.** 2020 represents a dramatic year for the global energy sector which was strongly affected by the outbreak of the pandemic, leading **most energy companies to lose substantial revenues**. In particular, they are being hit twice: (i) by the lower demand for their products – including oil, gas, coal and electricity – and (ii) by lower prices for their products. The market forecasts indicate **renewable electricity capacity will have declined by 13% in 2020** compared with 2019, i.e., the **first downward trend since 2000**. This represents a 20% downward revision compared to the previous forecast, which foresaw 2020 as a record year for renewable power (*source: IEA forecasts*). Renewable power sources have so far demonstrated strong resilience to face Covid-19 crisis. The share of renewables in global electricity supply reached nearly 28% in the first quarter of 2020, up from 26% during the same period in 2019

### COMPETITIVE POSITIONING

**ERG is the leading wind operator in Italy and among the top 10 in Europe**, with the highest level of installed capacity and a share of 11.2% of total Italian production. The Company's market share in Europe for the Hydroelectric sector is 2.7%, in the Solar segment is 1%, and for the Thermoelectric is 2.45%. ERG constitutes the **only Italian utility with such a strong focus on renewable generation**. Although renewables are dependent on weather conditions, **ERG has a well-diversified assets portfolio**, from both a technological and a geographical standpoint, **with a good balance between programmable and non-programmable sources**. The Italian production of wind sector (14.844-20.245 TWh 2015-2019) has increased in the most recent years due to an expansion of energy demand. **ERG plays a crucial role in the whole renewable energy sector, representing one of the five leading solar operators in Italy** with an installed power (140 MW) in line with its comparables' average. The Company's business model is characterized by low **EBIT margin of 16.4% (FY19)**, whereas the industry margin exhibits a higher value of 23% (*Exhibit 11*); in addition, the Group exhibits an **EBITDA margin of 46.3% (Exhibit 12)**, significantly higher than renewable energy sector (FY19 35%). ERG has been showing a consistent growth since 2016, mainly due to M&A operations in order to adapt the business to the recent evolution of the regulatory and competitive context in which it operates. In addition, ERG is characterized by a conservative financial policy with a maximum net debt/EBITDA of 3.0x (*Exhibit 13 & Appendix 4 and 7 for further details*).

### PORTER'S FIVE FORCES ANALYSIS

#### Porter's 5 Forces Analysis: attractive substitute products, fierce industrial rivalry

The Renewable landscape competition is mostly shaped by (i) substitute products and (ii) industrial rivalry. **Substitute products are represented by alternative sources of energy**, which are mainly based on nuclear energy and fossil fuels. Renewable sources have proven to be uneconomic substitutes: they are less efficient and more expensive than fossil fuels. Although previously solar and wind power accounted only for 8-10% of global energy, nowadays in 2020, **more than 40% of electricity in the EU-27 has been generated from renewable sources**, surpassing for the first-time fossil fuels, which stopped at 34%. **Industrial rivalry is driven by (i) the high industry growth (6.1% 2018-2025E CAGR) and (ii) the low product differentiation** which does not give competitors the possibility to create brand identification. Therefore, companies' strategies are not able to be differentiated, leading buyers to be more price sensitive. **Potential new entrants put little pressure over the renewable market** given the high capital-requirements, economy of scale and entry barriers which explain the historical prevalence of acquisition-based entries (*Exhibit 14 & Appendix 5*). **The Government policy represents an important barrier to entry** since the price at which the utilities are distributed is subject to regulations, thus the companies cannot set their desired profit margin. The Italian and European regulations establish regulatory frameworks aimed at controlling the development of renewable energy, based on premiums, green certificates or regulated tariffs (*further details in Appendix 6*).

### FINANCIAL ANALYSIS

ERGs financial performances fully reflect the Company's attitude to anticipate the market. The diversified portfolio and the diversification among countries strategies lead the company to obtain between FY16-FY19: (1) **Stable revenues**; (2) **Sound financial structure** and (3) **Strong Cash Flows generation**.

### HISTORICAL FINANCIAL ANALYSIS

#### Divisional Revenues: (Exhibit 15)

- Wind (ca. 40.5% of revenues in FY19).** In FY15-FY19, revenues of the Wind division exhibited a 3.97% cumulative CAGR. Revenues' growth strongly benefited from ERG's abroad expansion. In particular, **the installed capacity almost doubled in FY15-FY19 (+417 MW) boosting Abroad revenues (+22.32% CAGR in FY15-FY19) which increased the relevance in ERG's generation portfolio over the period (from 6.6% to 16.5% of the top line FY15-FY19)**. Revenues are partially offset by the exit from the incentive scheme of part of its wind production in Italy (72MW and 12MW, respectively in FY18 and FY19).
- Thermoelectric (ca. 40.9% of revenues in FY19)** is characterized by **-3.35% CAGR in FY16-FY19**, mainly due to a reduction of the price of white certificates introduced by the regulator in 2018.
- Hydroelectric (ca. 11.6% of revenues in FY19) exhibited stable revenues** over the last years, except in FY18, which experienced water levels significantly above the historical average (+42.09% in FY18).
- Solar (ca. 6.9% of revenues in FY19).** This segment has **experienced the highest growth (+84.9% in FY2019)** mainly due to recent acquisitions of photovoltaic plants and good solar conditions.

**Additional incentivized capacity drives margins:** ERG exhibited an **EBITDA margin outstanding growth in FY16** (43.4% compared to a 34.7% in the previous year) mainly related to the Company's entrance into the Hydro segment. Since then, the Company aimed at increasing this margin in the next years, **reaching a peak of 46.3% in FY19** as a consequence of ForVei and Andromeda acquisitions. Moreover, this positive trend is backed by a successful vertical integration model: O&M (Operation and maintenance) insourcing drives to further cost reduction (-8.74% SG&A CAGR in FY16-FY19 compared to stable revenues), setting ERG apart from most other Wind energy operators. On the contrary, **ERG discloses stable EBIT margin in**

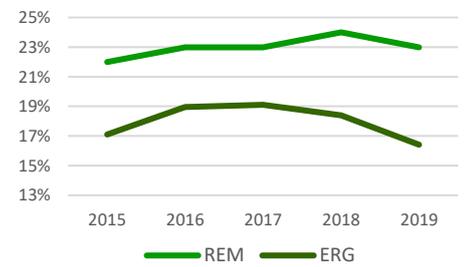


Exhibit 11: EBIT margin: ERG vs REM  
(source: company data, team assessment)

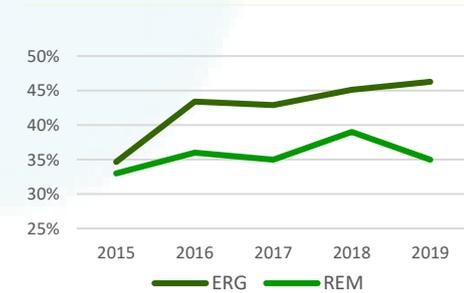


Exhibit 12: EBITDA margin REM vs ERG  
(source: company data, team assessment)

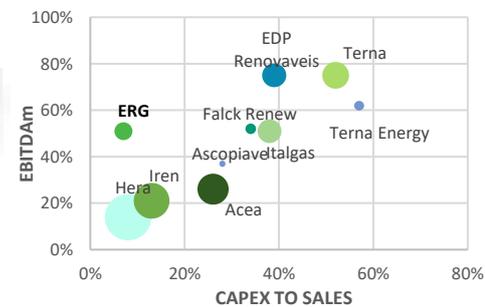


Exhibit 13: EBITDA margin vs CAPEX to sales  
REM and ERG (Ball size reflects Revenues)  
(source: FactSet, team assessment)

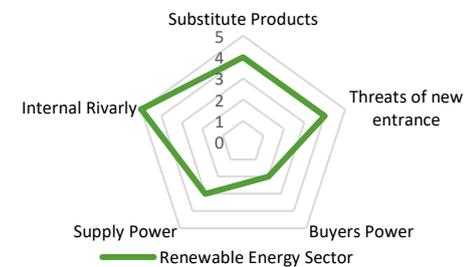


Exhibit 14: Porter's 5 Forces analysis  
(source: team assessment)

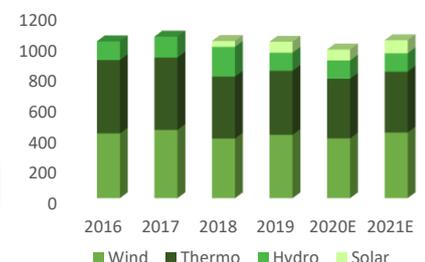


Exhibit 15: Revenues Breakdown by division  
(source: team assessment)

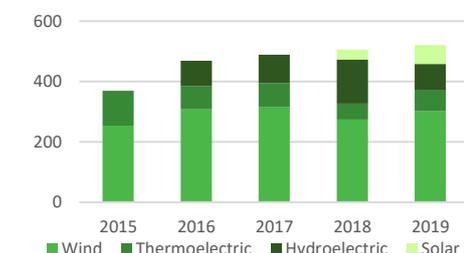


Exhibit 16: EBITDA margin by segment  
(source: company data, team assessment)

**FY16-FY18** (ca. 18.8%) and a decrease in FY19 reaching the lowest value of 16.4%. Accordingly, ERG exhibited an **increase in D&A expenses (from 17.56% to 29.88% in FY15-FY19)** due to **Wind and Solar expansion**. Finally, Wind segment is the largest contributor of EBITDA, in contrast to Thermo which contributes to the 14% only, despite its high volumes. (*Exhibit 16*)

**Profitability:** In FY16-19 ERG experienced a **decrease in ROIC and ROE** passing from 3.4% to 0.8% and from 7.3% to 1.8%, respectively. According to the **DuPont analysis** (*Exhibit 17*), ROIC decrease is mainly determined by a combination of (i) **a decrease in Pretax Profit** due to higher Non-operating expenses and (ii) **a growth in the tax rate** (from 24.7% to 37.0% in FY16-19), while **Asset Turnover remained fairly stable (0.2x)** during the same period. Net income declined to €132m in FY18 mainly due to the **exit of TotalErg** (classified as discontinued operations at the end of 2017), which has **contributed ca. €100m** to FY17 bottom line.

**Cash flow:** Since its transformation into a renewable Company, **ERG has mastered a strong FCF generation**, fueled by sound Operating FCF. In 2019, ERG reported **€405m in Operating Cash Flows (+36.5% vs 2018)** backed by **increasing D&A due to solid investments**. Also, changes in working capital have generally produced positive cash flows in FY16-19, mainly through the sale of energy efficiency certificates, except for FY18, in which ERG showed a significant outflow due to the settlement of payables relating to purchases of the former OIL business. The generous free cash flows sustained acquisitions and investors' remuneration via dividend distribution (€0.75 FY16-19 DPS is the current dividend policy, with an extraordinary component amounting to 0.40€ in FY2018 related to TotalErg disposal).

**Prudent Financial policy coupled with sizeable liquidity.** ERG's capital structure reflects its **conservative financial policy: Net Debt on EBITDA was 3.0x on average** in FY16-19 (in line with ERG management target upper bound). Moreover, the strong financial profile is driven by a relevant bulk of liquidity (above €700m on average in the last three years). ERG managed to increase its **Quick Ratio between years 2016-19 (+7% 4Y-CAGR)**, showing that the firm is trying to improve its capability to manage short term assets. This liquidity position is confirmed by the Cash Conversion Cycle, which is equal to 135 days in FY19 instead of 149 in FY18.

**ACE.** fiscal benefit restoration (**Aiuto alla Crescita Economica**) was re-introduced by the Italian Government with the balance law in 2020. ERG is particularly exposed because has high D&A that are exposed to the fiscal benefit. Thanks to ACE, ERG is subjected to a reduction of the tax rate.

**Green bonds: a key funding instrument with sustainable footprint.** In 2019, ERG updated its commitments towards sustainability moving from **project financing (ca. 60% of gross debt in FY18)** to corporate financing with green DCM issue as key funding instrument. In particular, **ERG issued three Green Bonds in 2019 and 2020 for a total amount of €1.1bn**. The proceeds are entirely used for Renewable energy (Wind and Solar projects in Europe).

## FORECAST

We perform detailed revenues' forecast estimates by disentangling ERG's business in its four main divisions: i) Wind, ii) Hydroelectric, iii) Thermoelectric and iv) Solar (*Exhibit 18*). We estimate that, in 2020E-2030E, ERG will generate a 2.77% total revenues CAGR, which reflects its robust business profile, underpinned both by organic and external growth and partially offset by the phase-out from incentive's scheme of a portion of existing assets.

**Additional capacity and incentivized assets to sustain growth.** For each business division, we start by identifying the key drivers of the company's growth (*Appendix 8 for further details*).

**Wind.** We forecast Wind's revenues by considering the different scenarios in Italy and Abroad. Based on our estimates, **Repowering and Reblading will compensate the loss of incentives** from the existing asset base: due to an increase in production (+6.01% CAGR in FY20E-30E), ERG's reliance on incentives will impact positively in the long-run growth in Italy (+0.96% CAGR in FY21E-30E). In addition, Greenfield and co-development will further push Abroad Revenues (+6.63% CAGR in FY20E-30E), being able to count on predominantly incentivized revenues and a well-diversified regulated portfolio.

**Thermoelectric.** Despite CCGT plant lost benefits from white certificates starting from the second half of 2020, **we expect a possible revamp of the facility** in order to enhance efficiency and obtain new incentives for the subsequent 10-years, making its contribution more stable (0.77% in FY20E-30E).

**Hydroelectric.** As a programmable source, Hydro generation will continue to be part of ERG's diversification strategy. However, since **incentives will expire** in 2023-2025 (ca. 40% of production is incentivized), **we forecast a lower contribution** over the years (-3.20% CAGR 2020E-2021E).

**Solar.** We expect that Solar will play a **crucial role for the company**. We expect that ERG will manage to increase Solar installed capacity in the next years (+325% MW in 2020E-2030E) (*Exhibit 19*) mainly through **M&A activities and co-development projects in Italy and Europe**. We forecast a solid revenues growth in period 2021-25 (+11.02% CAGR) and in period 2025-30 (+6.29% CAGR).

**ERG drives a stable margins growth.** We estimate 2021E ERG's EBIT and EBITDA margins to be 17.5% and 45.5%, respectively, with +3.89% and +3.22% CAGRs in FY20E-30E. The increase in EBIT and EBITDA is **mainly driven by slight revenues' growth coupled with a strategy of operational efficiency** (*Exhibit 20*). More precisely, in our analysis, SG&A's growth forecasts are determined by considering ERG's insourcing process related to Wind farms in Italy, France and Germany. According to our estimates, **SG&A's growth is expected to be lower than revenues growth** (respectively, +1.0% vs 3.19% CAGRs in FY25E). As a result, **ERG's margins are forecasted to be slightly higher** in the next years, thus reflecting the company's efficiency in extending a consolidated know-how throughout Europe notwithstanding a very competitive market.

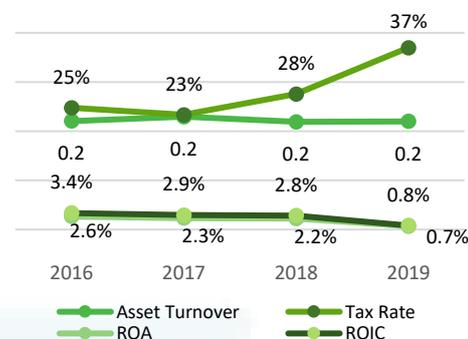


Exhibit 17: DuPont analysis (source: team assessment)

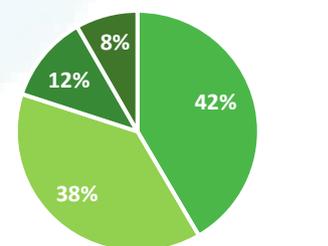


Exhibit 18: Revenues Breakdown in 2021E (source: team assessment)

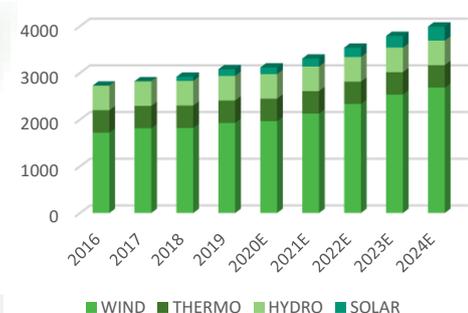


Exhibit 19: Installed capacity by division (MW) (source: company data, team assessment)

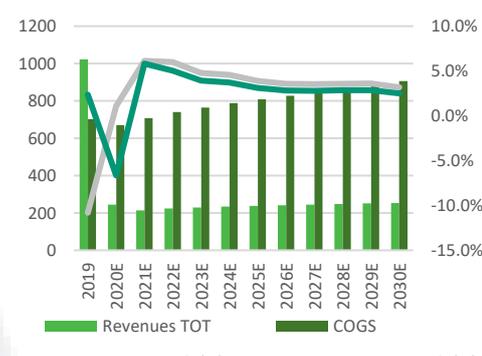


Exhibit 20: Margins Evolution (source: team assessment)

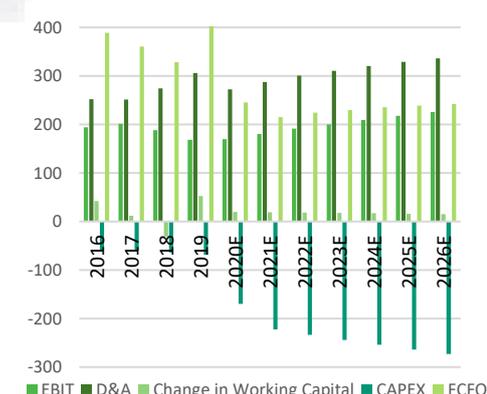


Exhibit 21: Breakdown of Cash Flow Generation; (source: company data, team assessment)

**Robust business profile provides flexible cash flows.** Despite solid cash flows from operations (€437.7m in 2021E), **we expect broadly neutral cumulative free cash flows** (+1.7% CAGR in 2021E-2030E) due to sizeable growth in Capex (*Exhibit 21*). As a matter of fact, **high levels of Capital Expenditures will sustain repowering of wind farms** (ca. €400 mln cumulative capex as of 2018-2022 Business Plan) with other repowering projects in the pipeline and Greenfield projects. Management's flexibility in the implementation of growth investments is a key strength of ERG's financial profile, although lower growth investments could imply a reduction of the incentivized revenue profile of the Company.

Values in Million euros	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E
<b>Sales</b>	<b>1,025</b>	<b>1,054</b>	<b>1,024</b>	<b>1,022</b>	<b>971</b>	<b>1,025</b>	<b>1,070</b>	<b>1,106</b>	<b>1,141</b>	<b>1,171</b>	<b>1,198</b>
Wind	423	445	389	414	391	422	454	475	494	512	529
Thermo	479	473	405	418	389	397	401	405	409	413	415
Hydro	122	137	194	119	120	121	116	111	107	103	98
Solar			38	71	71	85	100	115	132	144	155
<b>Gross Income</b>	<b>382</b>	<b>378</b>	<b>319</b>	<b>318</b>	<b>301</b>	<b>318</b>	<b>332</b>	<b>343</b>	<b>354</b>	<b>363</b>	<b>371</b>
Margin (%)	37%	36%	31%	31%	31%	31%	31%	31%	31%	31%	31%
<b>EBITDA</b>	<b>445</b>	<b>452</b>	<b>462</b>	<b>473</b>	<b>441</b>	<b>467</b>	<b>490</b>	<b>509</b>	<b>528</b>	<b>545</b>	<b>560</b>
margin (%)	0.43	0.43	0.45	0.46	0.45	0.46	0.46	0.46	0.46	0.47	0.47
<b>Pretax Income</b>	<b>116</b>	<b>141</b>	<b>144</b>	<b>53</b>	<b>93</b>	<b>99</b>	<b>106</b>	<b>112</b>	<b>118</b>	<b>124</b>	<b>130</b>
<b>Tax Rate</b>	<b>25</b>	<b>23</b>	<b>28</b>	<b>37</b>	<b>0</b>						
<b>Net Income available to Common</b>	<b>122</b>	<b>207</b>	<b>133</b>	<b>32</b>	<b>66</b>	<b>71</b>	<b>76</b>	<b>81</b>	<b>85</b>	<b>89</b>	<b>93</b>
Net Income Growth YoY%		0.69	-0.36	-0.76	1.10	0.07	0.07	0.06	0.06	0.05	0.05
<b>FCFO</b>	<b>357</b>	<b>408</b>	<b>336</b>	<b>244</b>	<b>245</b>	<b>250</b>	<b>261</b>	<b>267</b>	<b>272</b>	<b>274</b>	<b>277</b>
<b>Net Debt</b>	<b>1,581</b>	<b>1,261</b>	<b>1,425</b>	<b>1,557</b>	<b>1,464</b>	<b>1,475</b>	<b>1,485</b>	<b>1,496</b>	<b>1,506</b>	<b>1,517</b>	<b>1,528</b>
<b>Net Debt/EBITDA(x)</b>	<b>3.55</b>	<b>2.79</b>	<b>3.08</b>	<b>3.29</b>	<b>3.32</b>	<b>3.16</b>	<b>3.03</b>	<b>2.94</b>	<b>2.85</b>	<b>2.79</b>	<b>2.73</b>
<b>Return on Assets</b>	0.03	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
<b>Return on Equity</b>	0.07	0.06	0.06	0.02	0.04	0.04	0.04	0.04	0.04	0.05	0.05

## VALUATION

We issue a **BUY recommendation** on ERG (ERG.MI) with a 1-year target price of €29.20, corresponding to a 12.74% return to the closing price on February 5th, 2021. Our target price calculation is based on a mix of two methodologies: 1) a Discounted Cash Flow (DCF) to Firm model with a target price of €28.67, and 2) a Multiples Analysis with a target price of €30.27, with weights 2/3 and 1/3 respectively. While the multiples analysis shows the market's perspective on the price of similar assets, the DCF considers forward looking features regarding the future evolution of the growth and risks of ERG's business. It also uses free cash flows from operations (FCFO), which reduces the influence of subjective accounting adjustments. We decide to underweight the relative valuation approach because of the scarcity of suitable comparables to ERG.

### DISCOUNTED CASH FLOW MODEL

Our assessment considers all Company's business lines disentangled for geographic area, focusing on the prices and production estimates. We adopt a **2-stage DCF approach** to discount future expected cash flows from operations. The **first stage** covers the period from **FY21 until FY30** during which the **revenues growth will be characterized by a higher rate** at the beginning (e.g., 5.6% in FY21E considering the recovery from Covid-19 impact) and will **slowly decline until FY30E** to the long-term growth rate of 1% (*Exhibit 23*). The **second stage** starts from FY31 and computes the firm's terminal value by assuming that FCFO will also growth at the constant **1% long-term growth rate in perpetuity**.

**DCF Valuation.** Our DCF model consists in estimating: A) a sum-of-the-parts (SOTP) DCF to evaluate ERG's organic growth DCF – leading to a fair value of €27.33, and B) an incremental-DCF model to evaluate ERG's inorganic growth given by M&A project – leading to an incremental value of €1.34 per share. Summing these two values, we obtain the (DCF) target price of €28.67.

#### A) Organic Growth

This **2-stage model captures ERG's organic growth** and relies on the FCFO estimates highlighted in the financial analysis' forecasts. In *Appendix 8*, in fact, we explain the main drivers of revenues' growth over the next decade with a year-to-year forecast as well as the forecasts of other key financial indicators. The first stage covers the period **from FY20 until FY30, during which revenues growth will be slowly increasing** (+1.9 CAGR FY2020E-FY30E). The second stage starts from FY31 and computes the firm's terminal value by assuming that FCFO will also growth at the constant 1.0% long-term growth rate in perpetuity.

#### B) Inorganic Growth

**We assume ERG can further increase its value by exploiting M&A projects.** More precisely, we assume that **ERG will continue its expansion and diversification in different geographic areas** in the period FY20 until FY30, during which revenues growth will be slowly increasing (+0.17% FY21E-FY30E). In the second stage (from FY31), inorganic will grow at the long-run growth in perpetuity (1%). The Company has a **strong preference to acquire private firms**, independently on the country in which they are located. **Our analysis of Inorganic Growth is based on the average cost for MW, weighted by climatic conditions of each geographic area.** Our assessment led us to a ratio "Mean Transaction Value/Mean MW" (Mean T.V./Mean MW) that explains the convenience to purchase MW in the different countries, taking also into account their climatic conditions. **We forecasted an expansion in Germany** due to the lowest ratio "Mean T.V./Mean MW" (0.75m for MW). We also observed ERG **strong convenience in continuing its M&A projects in France and U.K.** (*Exhibit 25 & Appendix 9*). As regard to the Solar sector, the Company prefers to invest its sources in Co-Developments rather than M&A because the latter is more expensive in terms of unit price of MW.

Exhibit 22: ERG Financial Highlights;  
Source: company data, team assessment

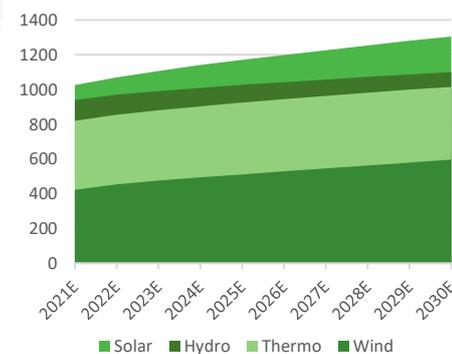


Exhibit 23: Revenues forecasts breakdown  
(source: company data, team assessment)

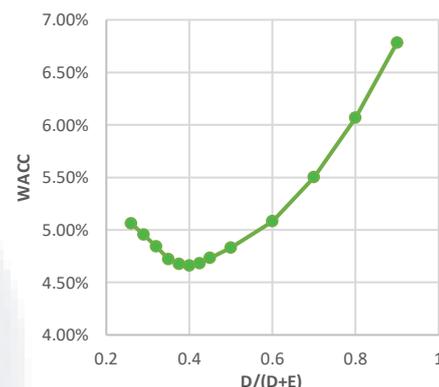


Exhibit 24: WACC vs D/(D+E)  
(source: company data, team assessment)

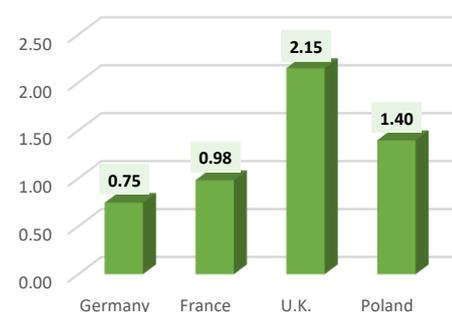


Exhibit 25: T.V.m/MWm values  
(source: company data, team assessment)

Organic Growth	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Wind	422.2	448.4	467.4	482.3	497.1	511.9	525.1	538.9	552.5	565.8
Thermo	396.8	400.8	404.8	408.8	412.9	415.0	417.1	419.1	421.2	423.3
Hydro	120.8	116.0	111.3	106.9	102.6	98.5	94.6	90.8	87.1	83.7
Solar	64.8	75.8	87.2	100.3	109.3	118.0	127.5	137.7	148.7	157.6
<b>TOTAL</b>	<b>1004.6</b>	<b>1041.0</b>	<b>1070.7</b>	<b>1098.2</b>	<b>1121.9</b>	<b>1143.4</b>	<b>1164.2</b>	<b>1186.5</b>	<b>1209.6</b>	<b>1230.4</b>
Growth %	3.4%	3.6%	2.9%	2.6%	2.2%	1.9%	1.8%	1.9%	1.9%	1.7%
Cost of Goods Sold (GOGS) & D&A	693.2	718.3	738.8	757.8	773.0	786.6	799.8	813.9	828.6	840.9
SG&A	120.5	122.8	124.2	125.2	125.7	125.8	125.7	125.8	125.8	125.5
<b>EBIT</b>	<b>175.9</b>	<b>184.9</b>	<b>192.7</b>	<b>200.3</b>	<b>208.3</b>	<b>216.0</b>	<b>223.7</b>	<b>231.8</b>	<b>240.2</b>	<b>248.9</b>
Tax Rate %	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
<b>NOPAT</b>	<b>128.4</b>	<b>135.0</b>	<b>140.7</b>	<b>146.2</b>	<b>152.0</b>	<b>157.6</b>	<b>163.3</b>	<b>169.2</b>	<b>175.4</b>	<b>181.7</b>
D&A	281.3	291.5	299.8	307.5	314.1	320.1	326.0	332.2	338.7	344.5
Change in Working Capital	16.5	15.7	14.9	14.2	13.5	12.8	12.1	11.5	11.0	10.4
CAPEX	-209.2	-219.7	-229.6	-238.8	-247.8	-255.9	-264.3	-273.2	-282.7	-291.8
<b>FCFO</b>	<b>216.9</b>	<b>222.4</b>	<b>225.8</b>	<b>229.1</b>	<b>231.8</b>	<b>234.6</b>	<b>237.1</b>	<b>239.7</b>	<b>242.3</b>	<b>244.8</b>
Growth %	-18.2%	2.5%	1.5%	1.4%	1.2%	1.2%	1.0%	1.1%	1.1%	1.1%
WACC	4.67%	4.67%	4.67%	4.67%	4.67%	4.80%	4.80%	4.80%	4.80%	4.80%
Inorganic Growth	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
<b>REVENUES</b>	<b>21.9</b>	<b>31.0</b>	<b>37.4</b>	<b>45.2</b>	<b>51.1</b>	<b>56.9</b>	<b>63.7</b>	<b>70.3</b>	<b>77.1</b>	<b>82.4</b>
<b>EBIT</b>	<b>4.2</b>	<b>6.0</b>	<b>7.2</b>	<b>8.9</b>	<b>9.0</b>	<b>9.1</b>	<b>9.4</b>	<b>9.6</b>	<b>9.8</b>	<b>9.1</b>
D&A	6.1	8.7	10.5	12.7	14.3	15.9	17.8	19.7	21.6	23.1
Change in Working Capital	2.3	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.8	1.7
CAPEX	-13.4	-14.0	-14.7	-15.2	-16.4	-17.5	-18.7	-19.9	-21.3	-22.0
<b>FCFO</b>	<b>-1.9</b>	<b>1.6</b>	<b>3.6</b>	<b>6.2</b>	<b>6.7</b>	<b>7.2</b>	<b>8.0</b>	<b>8.7</b>	<b>9.3</b>	<b>9.5</b>
WACC	4.67%	4.67%	4.67%	4.67%	4.67%	4.80%	4.80%	4.80%	4.80%	4.80%

Exhibit 26: 2-STAGE DCF model; Source: company data, team assessment

**The Weighted Average Cost of Capital (WACC):** We consider 3 different values for the WACC according to the time horizon necessary to discount future cash flows. We discount 2021-2025E FCFOs using the short-run WACC (4.67%), 2026-2030E FCFOs using the medium-run WACC (4.80%), and FCFOs starting from 2031E using the long-run WACC (5.07%). To obtain these values, we consider a dynamic cost of debt  $R_d$  with values 0.45%, 0.95% and 1.93% for the 3 periods, respectively, to take into account a possible normalization of the European monetary policy deriving from the current long-run growth and inflation expectations in the Eurozone. The remaining variables are constant, in particular we use a 35.77% leverage ratio, i.e.,  $D/(D+E)$  and a levered cost of equity  $R_e$  equal to 7.08%. Despite ERG would benefit from an increase in its leverage ratio for tax purposes, **we assume that the target  $D/(D+E)$  will remain at 35.77%**, in line with the company's low leverage strategy. **The cost of debt is computed using an augmented Merton-Black & Scholes model to estimate ERG's spread premium.** Instead, the cost of equity is derived from the CAPM formula with a 0.44% risk free rate given by a country-weighted average of the 10Y government bond yields, an 8.5% equity risk premium given by a country-weighted average of market risk premia, and ERG's levered beta of 0.7811 (Appendix 16).

Constant Values			Cost of Debt ( $R_d$ )		WACC	
Risk Free Rate	0.44%	Country weighted-average of 10-years government bond	Short-Run	0.45%	Short-Run	4.67%
Equity Risk Premium (ERP)	8.5%	Country-weighted average of market risk premia	Medium-Run	0.95%	Medium-Run	4.80%
Beta	0.7811	Linear Regression of ERG returns against STOXX Europe600	Long-Run	1.93%	Long-Run	5.07%
Cost of Equity ( $K_e$ )	7.08%	Capital Asset Pricing Model: $R_f + \beta * \text{Equity Risk Premium}$				
Leverage Ratio: $D/(D+E)$	35.77%	Current and target leverage				
Tax Rate	24%	Italian Tax rate (FactSet)				

Exhibit 27: WACC Computation; Source: team assessment

**Multiple Analysis.** We also perform a relative analysis to support our ERG valuation using a Equally-weighted average multiple approach. More precisely, in line with the Comparables Selection's analysis (Appendix 15), we first create a basket of comparables taking into account several ERG's characteristics. Next, rather than relying on a single multiple (which could give rise to a larger estimation error stemming from possible model misspecification and outliers), we decide to diversify the estimation error and use more multiples in our analysis. Hence, we focus on 1-y forward EV/EBITDA and 1-y forward P/E since these are the most reliable multiples. Moreover, we have excluded (i) 2020 multiples in order to avoid any possible estimation error due to COVID-19 Impact and (ii) EV/EBIT multiple because it could be influenced by amortization and depreciation policies. Then, for each multiple, we first compute the mean value of all peers with 1-y multiple and derive the corresponding price. Next, we assign an equal weight to these two prices and get a final target price of €30.27 (Exhibit 28).

Company	1-y EV/EBITDA	1-y P/E
Iberdrola	10.42	18.8
EDP Renovaveis	15.2	45.5
Falck Renewables	12.3	42.7
Terna Energy	10.6	23.8
<b>Comparables Average</b>	<b>12.1</b>	<b>32.7</b>
<b>ERG S.p.A.</b>	<b>10.3</b>	<b>29.5</b>
	Target Price EV/EBITDA	Target Price P/E
	<b>32.41</b>	<b>28.12</b>
	<b>Average Target Price = 30.27</b>	

Exhibit 28: Multiple Analysis; Source: company data, team assessment

The **Sensitivity analysis** (Exhibit 31) highlights the impact of the two important variables of our DCF model, WACC and long-run growth rate  $g$ . We performed a two sensitivity analysis to show the impact of short and long-run WACC on the target price. Indeed, since the terminal value accounts for ca. 73% of the total enterprise value, ERG's price is more sensitive to the long-run WACC impact. Moreover, the **Tornado Chart** (Exhibit 29) shows the effect of a 5% persistent shock (i.e., every year) to the revenues, COGS, capex

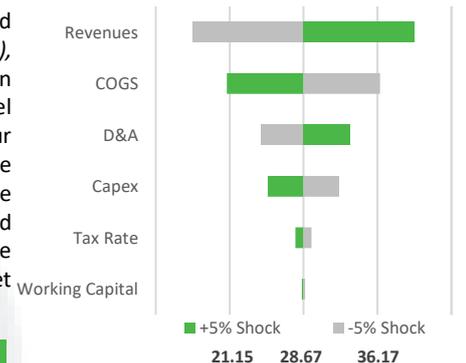


Exhibit 29: Tornado Chart – DCF (€) (source: team assessment)

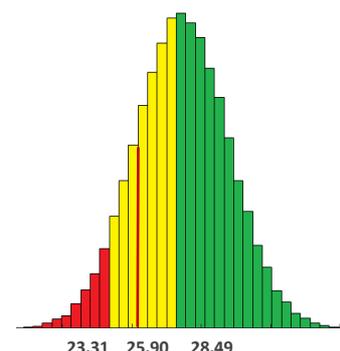


Exhibit 30: Montecarlo Analysis – DCF (€) (source: team assessment)

working capital and tax rate on the DCF's target price. Our results highlight that the target price is particularly sensitive to shocks to revenues and exhibit little variation from shocks to D&A and working capital. Finally, a **MONTENARLO simulation** (Exhibit 30) analysis (100,000 scenarios simulations) on the most important parameters of our DCF model (such as revenues, COGS, capex and working capital) shows that our BUY recommendation seems to be well-supported in the vast majority of cases (60%).

### Short-Term Sensitivity Analysis – DCF (€)

Growth Rate	WACC						
	4.07%	4.27%	4.47%	4.67%	4.87%	5.07%	5.27%
0.6%	26.76	26.53	26.31	26.09	25.88	25.66	25.45
0.7%	27.37	27.14	26.92	26.69	26.47	26.25	26.04
0.85%	28.34	28.11	27.88	27.64	27.42	27.19	26.97
1.0%	29.39	29.15	28.90	28.67	28.43	28.20	27.96
1.15%	30.51	30.26	30.01	29.77	29.52	29.28	29.04
1.3%	31.73	31.47	31.21	30.95	30.70	30.45	30.20
1.45%	33.04	32.77	32.50	32.24	31.97	31.71	31.45

### Long-Term Sensitivity Analysis – DCF (€)

Growth Rate	WACC						
	4.47%	4.67%	4.87%	5.07%	5.27%	5.47%	5.67%
0.6%	29.98	28.56	27.27	26.09	25.02	24.04	23.13
0.7%	30.78	29.28	27.92	26.69	25.57	24.54	23.60
0.85%	32.05	30.43	28.97	27.64	26.44	25.34	24.33
1.0%	33.44	31.68	30.09	28.67	27.37	26.19	25.12
1.15%	34.95	33.03	31.31	29.77	28.37	27.11	25.95
1.3%	36.61	34.50	32.63	30.95	29.45	28.08	26.85
1.45%	38.43	36.11	34.06	32.24	30.60	29.13	27.80

Exhibit 31: Short and Long Run Sensitivity Analysis– DCF (€); Source: team assessment

### ...Is it profitable to dismiss Thermo & Hydro?

To improve our analysis, we also investigate the economic convenience of an alternative business model in which ERG sells Hydro and Thermo business' lines to allow a faster growth in Wind and Solar sectors (Exhibit 32). According to such Asset Rotation strategy, we forecasted the future FCFO for each business line. We obtained an estimated value of €801mIn for the Hydro segment and €213mIn for the Thermo segment (Appendix 17). We forecasted that the Company would use these returns to improve its positioning in Wind and Solar segment using M&A projects and greenfield operations. To conclude our analysis for this scenario, we forecasted a 1-year target price of 32.30 with an increase of 10.62% with respect to our current target price. This would allow the Company to reach higher margins and greater market share for Wind and Solar segments.

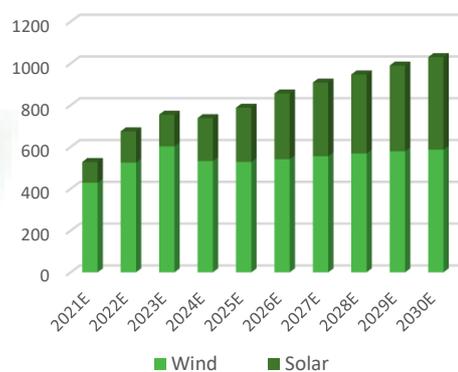


Exhibit 32: Solar & Wind Revenues Breakdown; Source: team assessment

## RISKS

### STRATEGY RISKS

**A. Information & Communication Technology.** ERG's activities are managed through ICT systems that support both operational and administrative corporate process. The Company mitigates ICT risks carrying out security assessments to identify critical issues in the systems and support infrastructure with constant protection of the confidentiality, integrity, and availability of the information. In addition, in order to be protected from possible cyber crime risk, ERG is also supported by a full insurance.

**B. Weather & Atmospheric conditions.** Weather changes can produce significant effects in ERG production. In particular, weather forecasting instruments and risk analysis models may not be accurate or sufficient to predict the effects of any unfavourable weather or climactic conditions. In addition, climate change may have a strong impact on business activities, reducing or improving the availability of renewable resources. (Appendix 19 for further details)

### FINANCIAL RISKS

**C. Liquidity.** ERG is weakly exposed to the liquidity risk since it is ensured by incentives until their expire. ERG in FY19 had cash and cash equivalents of EUR 654mIn, and a flexible financial structure that allows the Company to be endowed by a solid liquidity, also accordingly to its quick ratio of 2.9x in FY19. The company would have the possibility to reduce its Net Debt/EBITDA ratio from the estimated current level of 3.3x.

**D. Credit Defaults.** ERG is slightly exposed to risk of an unexpected change in the creditworthiness of counterparties of its commercial, commodity and financial transactions. In FY19 the maximum exposure to credit risk on trade receivables was EUR 193.4mIn, including an amount of EUR 84mIn related to the two main customers of the Group, operators of the market and of electrical services in Italy. The expected credit risk exposure has a weighted average LGD (loss-given default) percentage of 0.35%. (Exhibit 34 & Appendix 19: Exhibit 32)

**E. Interest rate.** ERG is subject to interest rate risk arising from the various financial instruments which cover the needs of its industrial activities. Moreover, the level of Company's Net Debt is quite high, we estimate 3.3x Net Debt/EBITDA for FY19 despite the business growth rate. Our forecasts lead to a net leverage adjusted per funds from operations (FFO) of 3.5x over 2020-2024. The Company hedges the interest rate risk using derivative instruments which limits the potential impacts deriving from the interest rate fluctuations.

**F. Commodity risk.** The commodity price risk consists of the unexpected change in commodity prices, in the procurement of services, finished goods and services marketed for sale. The Group implements all risk management strategies necessary to avoid the economic damages deriving from the volatility of the price

Risk	Category
A Information & Com. Technology	Strategy
B Weather Conditions	Strategy
C Liquidity	Financial
D Credit Defaults	Financial
E Interest Rate	Financial
F Commodity	Financial
G Electricity Price	Macro
H Covid-19	Macro
I Brexit	Macro
L Incentives	Regulatory
M Concessions	Regulatory



Exhibit 33: Risk Inventory and Heat Map (source: team assessment)

for the sale and purchase of Electricity and from fluctuations in the Clean Spark Spread. They are exposed to **commodities CFD** (Contract For Difference) instruments for **EUR 625mIn**, used to manage the risk of volatility of the price of electricity.

## MACRO RISKS

**G. Electricity price.** ERG is vulnerable to any decrease in electricity prices, which could have a material adverse effect on its results of operations and financial conditions. The incentives policy allows ERG to mitigate and monitor this risk. **The electricity demand is strongly affected by the level of economic activity** in each country. In Italy, for example, the demand for electricity was 319.6 TWh in 2019, decreasing by 0.6% Vs. the previous year (321.4 TWh) (Exhibit 35).

**H. Covid-19 impact.** At the very beginning of the pandemic emergency, ERG promptly put in place all the necessary measures to ensure both the health of its employees and the operational continuity of its assets in safe conditions, including no staff reductions during this period. The global restrictive measures have led to **serious interruptions in business, economic and day-to-day activities** (Exhibit 36 & Appendix 19) in the countries where ERG operates and many other countries around the world, affecting, among other things, manufacturing, electricity consumption and trades. A decrease in industrial production and the relevant consumption can adversely affect the demand for electricity, with a consequential **negative impact on the price of electricity**. In the first quarter of 2020, the Company made EUR 2 million donations to support COVID-19 emergency.

**I. Brexit.** ERG Group manages risk through a strategy which entails the activation, development and maintenance of relations with local and European institutions in order to better understand the continuing evolutions as well as the potential impacts of the renegotiation of the international treaties between Europe and UK. In the meantime, **significant elements of uncertainty persist which can have potential repercussions on financial markets**, such as a progressive devaluation of the exchange rate of the British Pound relative to the Euro as well as spikes in the volatility of financial markets which **could adversely impact the Group's results**. (Exhibit 37 & Appendix 19)

## CORPORATE AND REGULATORY RISKS

**L. Incentives.** ERG's thermoelectric business is subject to incentive risk since a fraction of the total **incentive ended on 31 December 2020 for the recognition of EECs**, issued for ten years on the basis of the primary energy savings. Moreover, in the wind sector, Plants that entered into operation from 2017 onwards, FIP incentives, are going to be allocated through Dutch auctions.

**M. Concessions.** ERG's hydroelectric business activities depend on concessions from local authorities for the management of the Company's hydroelectric power plants, which are due to expire at the end of 2029. **There is no assurance that any such concessions will be renewed.** The expiry of existing hydroelectric concessions for any reason and the failure of ERG to renew existing concessions **may have a negative impact on the business prospects and financial condition of the Group** and, in turn, on its market value. (Appendix 19)

## ENVIROMENTAL, SOCIAL & GOVERNANCE

Legally headquartered in Genova, **ERG's Corporate Governance policy relies on the provisions of Corporate Governance Code** for Italian listed companies promoted by Borsa Italiana. Thanks to the nature of its business and its sustainable approach, **ERG is considered a low-carbon company** and, therefore, able to generate interest among investors who base their investment decisions on ESG criteria in which decarbonisation is a key factor. As a result, **the Group has been included in some of the most important Sustainability indices** such as ECPI (Global Clean Energy Equity) Index, FTSE Environment Renewable and Alternative Energy Index, acknowledging the Company's strong ESG commitment and the value of its social responsibility policy. (Appendix 20)

## ENVIROMENTAL

With more of 5.4 TWh of electricity produced from renewable sources and about 3 mln tonnes of CO<sub>2</sub> in a year avoided (Exhibit 38), **ERG fully operates in harmony with the environment. Accelerating energy transition, minimising the consumption, and tackling climate change represent ERG's main challenges in order to reduce its business impact on the territory and biodiversity.** Since entering the renewable energies sector, the Company has enabled the gradual reduction of the carbon intensity of the output over the years, leading to a **successful reduction in the carbon index** (Exhibit 39). ERG Hydro has implemented plant solutions to prevent oil leaks in the environment. These actions include the **increased safety of system operating pressures**, which has contributed to the reduction of lubricating oil's volumes in plants and the **use of next-generation synthetic biodegradable oils**. In 2019, the Company implemented the **Plastic Free project**, identifying initiatives to eliminate or reduce the plastic consumption that is involved in their business activities, reaching more than 2,500 kg of plastic saved and around 15t of CO<sub>2</sub> avoided. Above all, this reflects **ERG's fight against climate change** - at the core of its business strategy - and the **leading role played in the energy transition process**. Moreover, thanks to the Reblading project, ERG is improving the efficiency of their wind farms plants, replacing the old turbines with a lower number of latest-generation, high-output models. With an improvement in the aerodynamic performance of the blades, this process will guarantee a reduction in sound emissions preserving the biodiversity. ERG also ranked 35th in the **Corporate Knights Global 100 Most Sustainable Corporations in the World Index** and was assigned an AA rating from MSCI (Exhibit 40 & Appendix 20: Exhibit 34). The double-A rating reflects all the Group's significant growth in the renewable energy sector, which has taken the company to become **one of the top ten private European RES-E operators**.

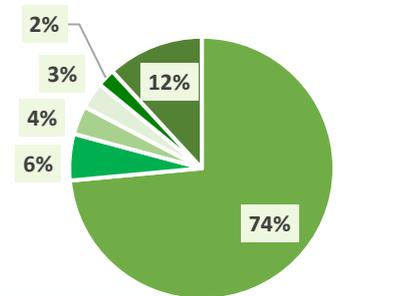


Exhibit 34: Credit Default Positions (%) (source: team assessment)

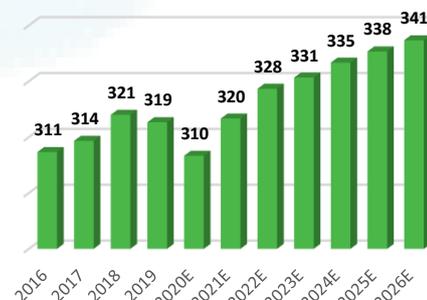


Exhibit 35: Italian Electricity Demand (TWh) (source: team assessment)

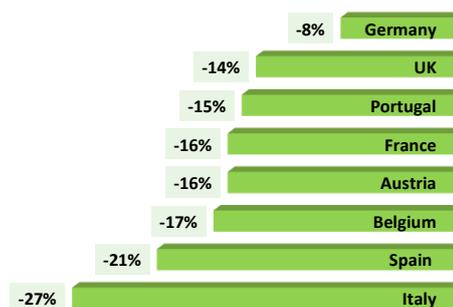


Exhibit 36: Covid-19 Impact on Electricity Demand (source: team assessment)



Exhibit 37: GBP/EURO Currency Chart (source: team assessment)

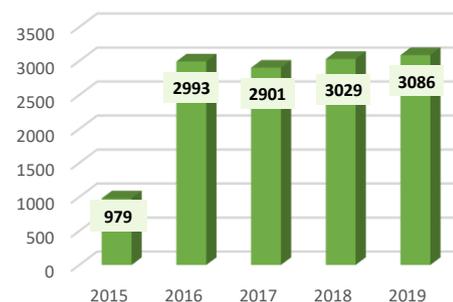


Exhibit 38: CO2 Avoided (kt) (source: team assessment)

## SOCIAL

The Group's relations are in line with the principles established by **ERG Code of Ethics such as lawfulness, honesty, integrity, and equality**. The Company pursues constant dialogue with the labour market, in accordance with the laws and regulations on the circulation of inside information, aiming at preventing disparities by ensuring that all investors or potential ones are entitled to receive the same information simultaneously. ERG believes that **employees are the essential factor** behind the existence, development, and success of its Company. The Group's relations are mainly focused on the protection of the rights and the development of the skills of its employees, in order to **enable them to realise their full potential and professionalism, guaranteeing the respect of workers' rights without any discrimination**. The Company formalised these responsibilities and principles in the **Human Capital Coverage (HCC)**, the index that allows to compare the level of skills expected for each role to the actual skills coverage of the people in those roles. The HCC is continually evolving, confirming the level of growth (87% in 2017, 90% in 2018, 93% in 2019), which began in 2017 with the new reorganisation and continued in 2018-2019, reaching 93% coverage at Group level. **Competence, expertise, know-how and the ability to learn are fundamental characteristics for individuals but also represent the resources on which the company's future is built.**

## GOVERNANCE

ERG's business is managed by a Board of Directors. The current one, **composed by twelve members**, was appointed on the 23rd of April 2018. It is formed by **the Founder, the Chairman and Executive Director Edoardo Garrone**, two Deputy chairmen Alessandro Garrone and Giovanni Mondini, the **Chief Executive Officer (CEO) Luca Bettonte** and other eight additional non-executive directors, of which six are independent (*Appendix 20.A: Exhibit 35*). The composition of the BoD respects a series of eligibility criteria, such as gender balance, age and professional carrier **in order to better pursue the valorisation of diversity**. **The corporate governance system is strongly oriented towards business ethics**, following a model of values which inspires different business activities, in order to ensure business management in full compliance with legality, transparency and fairness. **We perform an assessment of ERG's Corporate Governance** based on the principles established by the Organization for Economic Cooperation and Development (OECD). **Our final score is 89.25 out of 100, indicating the excellent quality of ERG Corporate Governance.** (*Exhibit 41 & Appendix 20.B: Exhibit 36*)

### Remuneration Policy

**The board's member remuneration policy is composed by i) a fixed component**, in order to enhance the responsibilities, the skills and the contribution demanded by the position; this remuneration is, therefore, not linked to the business performance of the Company, **ii) a short term variable remuneration (MBO)** which takes into account both the external remuneration benchmarks and the strategic importance of the position held, **iii) a long term incentives system (LTI)**, aimed at aligning the beneficiaries' interests with the pursuit of the priority objectives in order to create sustainable value for the shareholders over the medium/long term and **iv) additional monetary benefits.** (*Exhibit 42*)

## SUSTAINABLE DEVELOPMENT: Business Plan 2018-22

ERG adopted a business model aimed at **achieving the Sustainable Development goals (SDG) and decarbonisation for 2018-2022 business plan**. In particular, according to SDG7 on climate change, ERG's main objectives are to **avoid CO2 emissions for 15 mln tons and to reduce Carbon Index down 14% to 2022**. The Company shows continuous effort on extracting value from its technology with 89% of indirect consumption supplied by green energy and 91.8% of capital invested in renewable energy plants (SDG 12-13). Regarding people enhancing, ERG operates in line with SDG4-5 improving Human Capital Coverage and skills development with 84% of training on technical and managerial topics. **Thanks to ERG's effort, the Group has been assigned an A- (previously B) rating in the climate change programme promoted by Carbon Disclosure Project (CDP)**. ERG thus moves up the CDP scale positioning itself in the "Leadership" range, which includes all the companies that adopt best practices in the fight against Climate Change, in line with the Objectives defined by the Paris Agreement (COP21).

## ESG PERFORMANCE

In line with the main ESG assessment methodologies (ISS "Governance Quality Score methodology", JP Morgan "ESG index", MSCI "ESG rating methodology"), we developed a **framework to evaluate ERG's ESG performances**. Specifically, we construct an index which takes into consideration 8 environmental, 10 social and 31 governance parameters. In *Appendix 20.C*, we deeply detailed the factors considered for each driver, such as impact on climate, waste generation, employee's relations, defence of shareholders' rights and others (*also summarized in Exhibit 43*). The maximum attainable score is 300, with a maximum of 100 points for each dimension (E, S and G). **ERG final score is 222/300, showing a 74% of adherence to the ESG criteria**. According to our evaluations, **ERG has a major strength in the environmental dimension**, in line with the core-business of the Company and their constant initiatives to preserve the environment, whereas **significant improvements have been made in social and governance practices**. Our evaluation is consistent with the results obtained with the "Standard Ethics rating" released by the independent agency "Standard Ethics": **the latter, in fact, assigned a rating of E+ with a positive outlook in June 2020**, implying that they expect a "good" level of future ESG practices.



Exhibit 39: Carbon Index (gCO2/kWh)  
(source: team assessment)

Rating Company	Rating
VigeoEiris	Advanced
Corporate Knights	35th place
CDP	A-
ISS ESG	B
ECPI	EE+
MSCI ESG	AA
Sustainalytics	69 Avg Performance

Exhibit 40: ERG Ratings  
(source: company data, team assessment)

Governance Quality	Score
Disclosure and Transparency	29%
Shareholders right	19%
Equitable treatment of Shareholders	20%
Responsibility of the board	21.25%
<b>TOTAL SCORE</b>	<b>89.25%</b>

Exhibit 41: Governance Quality Score  
(source: team assessment)

Name	Fixed amount	Non-monetary benefits
Edoardo Garrone	846K	13K
Alessandro Garrone	1,186K	16K
Giovanni Mondini	348K	15K
Luca Bettonte	1,488K	33K
Massimo Belcredi	65K	5K
Mara Anna R. Caverni	70K	-
Barbara Cominelli	70K	-
Marco Costaguta	70K	-
P. Francesco Lanzoni	65K	5K
Silvia Merlo	70K	-
Elisabetta Olivieri	70K	-
Mario Paterlini	70K	-

Exhibit 42: Remuneration Policy (€)  
(source: company data, team assessment)

E	S	G
Impact on climate change	Employees	Board structure
Waste	Institutions	Remuneration policy
Natural resources consumption	Communities	Audit & Risk
		Shareholder interests

Exhibit 43: ESG Criteria  
(source: team assessment)

## APPENDIX 1: BUSINESS DESCRIPTION

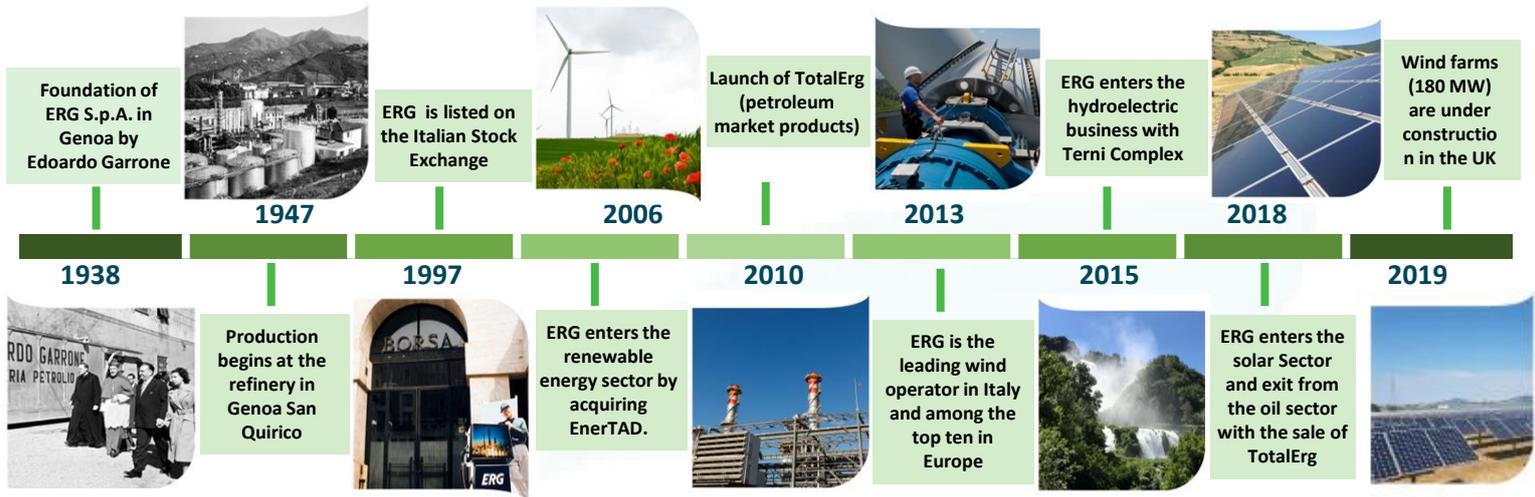


Exhibit 1: ERG through time; Source: ERG, team

## 1.A: GEOGRAPHICAL DIVISION



Exhibit 2.B: Wind Pipeline as Today  
Source: ERG, team assessment

## 1.B: BUSINESS SEGMENT

In this section, our team describes more specifically ERG services and products from renewable sources, operating through the following segments: **Wind, Solar, Hydroelectric and Thermo**electric:

**Wind** segment activities are related to the wind farms in Italy and 6 other foreign countries, generating electric energy through wind turbines movement, inducted by the wind presence. It is an inexhaustible source of clean energy that comes from nature and becomes nature. Thanks to the wind, the Company produces energy without carbon dioxide emissions, and they do it with a business approach based on real skills in the area. Since 2006 ERG has increased our installed capacity more than tenfold (from 134 to more than 1,800 MW) achieving a wind-based production of 4,000 GWh of energy in 2019 alone, representing their concrete contribution to the effort to reduce greenhouse gas emissions in Italy and around the world, as the Group fights climate change and transition to a greater amount of energy from renewable sources.

According to Bloomberg data, worldwide installed wind power capacity is expected to increase by seven times by 2040, reaching 2,033 GW from the 282 GW data recorded in 2012. In particular, ERG is one of the few wind energy operators with expertise that spans the entire supply chain: from the identification of sites to the maintenance of turbine blades and forecasting the weather. By choosing to do so, the Company has become a highly specialised and efficient operator. They directly operate and maintain the wind farms with a technical team that is highly specialised in operational management. After a period of strong growth achieved through acquisitions, ERG will now focus on consolidating our existing assets and on growing organically abroad, to further improve our geographic diversification. The main goal is to grow abroad, adding 200 MW of installed capacity. By expanding the wind farms in Europe, they intend to create an optimal mix that is capable of handling the uncertainties of the wind business.

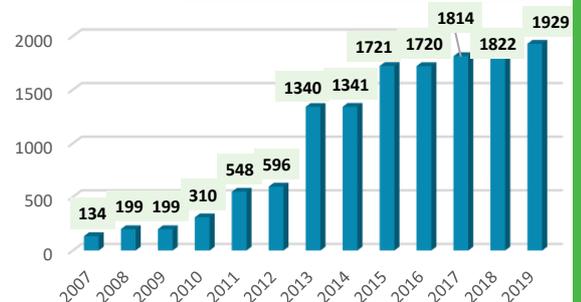


Exhibit 3: Wind (Mw/h) Evolution; Source: ERG, team assessment



**Solar** segment focuses on photovoltaic plants located in 9 regions of north and south of Italy, in which the panel plants absorb the protons of sunlight, transforming them into electricity but more detailed: a photovoltaic plant transforms rays of sunlight into electricity. For a further and detailed look at how this takes place: the plant consists of photovoltaic modules made up of panels in semiconductor material that directly turn solar energy into direct current. Afterwards, an inverter converts the direct current produced by the panels into alternating current that is put into the network in medium or high voltage through a transformer. A control system monitors the entire plant to ensure optimum management. Thanks to an important acquisition, ERG portfolio has grown, allowing the Company, in 2018, to entry into the solar business with 30 photovoltaic plants in eight different regions from the north to the south of Italy with a total installed capacity of 89 MW and with about 136 GWh of annual production while preventing about 77 kt of CO<sub>2</sub> emissions. At the beginning of 2019, ERG acquired 78.5% of a company that manages two photovoltaic power facilities with an overall installed capacity of 51.4 MW in Montalto di Castro (Lazio region), that in 2017 recorded a total output of 95.9 Gwh, corresponding to around 50 kt of avoided CO<sub>2</sub> emissions. This acquisition allows ERG to become one of the five leading photovoltaic operators in Italy, with over 140 MW of installed power and, at the same time, to achieve the plan objectives ahead of schedule with high quality assets. The operation will enhance balancing of installed capacity, with an almost doubled contribution to EBITDA from the photovoltaic sector, in keeping with their technological diversification strategy, optimisation of ERG Energy Management portfolio and capitalisation of the industrial skills. ERG operates in nine different regions from the north to the south of Italy with a total installed capacity of over 140 MW (*Exhibit 5 on the left*). Their high-quality plants are in Piedmont, Emilia Romagna, the Marches, Abruzzo, Lazio, Campania, Puglia, Calabria and Sicily. One other piece of the technological diversification strategy that lets the Group to expand and optimise their energy management portfolio.

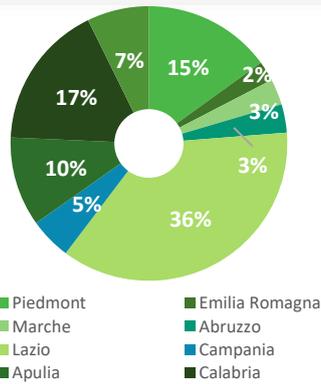


Exhibit 4: Solar (Mw) Regions' Installed Capacity; Source: ERG, team assessment

**Hydroelectric** segment generates electricity from hydroelectric sources such as water; in particular, the water is held in a conventional dam and when the liquids are realised, they spin a turbine connected to a generator that produces electricity, then the water returns to the river on the downstream side of the dam. By using an integrated system of plants, ERG can modulate the production of electricity according to their sustainable requirements, ensuring continuity and stability. Accordingly, in 2015 the Company entered this sector by acquiring the entire Italian hydroelectric business of E.ON, the Terni Complex. It is a very significant operation for their business, that immediately placed ERG among the top ten hydropower producers in Italy, with a 4% market share. This allowed them to quickly have a portfolio of renewable energy plants that is diversified and technologically complete, consistent with the vocation as a green energy operator. Due to their closeconnection with the area, the management of hydroelectric plants cannot be limited to the technical-organizational aspect, but it should involve safety and the safeguard of the environment. 81 years of ERG history are a concrete demonstration of the commitment and attention that the Group has always paid in promoting sustainability as a development model, through a responsible process of innovation and change, a sort of "engine" for continuous improvement of business and creation of shared value for stakeholders. Over the last 10 years, ERG has confirmed its concrete commitment in the fight against climate change and in the process of decarbonisation of the economy, embarking on the journey of energy transition. From leading private Italian oil company, today ERG is a leading independent operator in the market of electricity generation from renewable sources. Growth and enhancement of human capital, attention to the environment and respect of safety are priority and distinctive elements of the ERG culture in its business model. The concept of listening to nature and respecting it fully permeate ERG Hydro, company of the ERG Group operating in the hydroelectric sector, through its power plants with an efficient capacity of 527 MW and an annual clean energy production of approximately 1.4 TWh. Presentation of the ERG Hydro Environmental Declaration is an act of transparency and open communication on the environmental performance of our hydroelectric assets and on our objectives of ongoing improvement, on those achieved in 2017-2019 three-year period and on those we strive to achieve during the 2020-2022 three-year period, with our constant commitment to caring for the Environment.

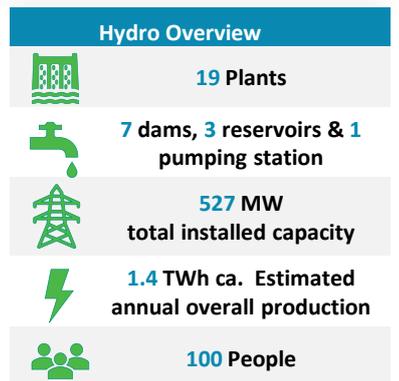


Exhibit 5: Hydro Main Characteristics; Source: ERG, team assessment



**Thermoelectric** segment provides combined cycle technology fuelled with natural gas for the production of steam and other utilities: more specifically, the thermoelectric centrals use natural gas, coal, or other combustibles, in the boiler a burner burns the fossil fuel that produces heat by heating a coil filled with a liquid. This liquid, when heated, turns into high pressure steam. Finally, the chimney, a 250m high construction, channels the smoke upwards the high-pressure steam drives a turbine which starts an alternator which produces electric energy. ERG's natural gas fuelled plant, which produces electricity, is located in the South-East of Sicily, at Priolo Gargallo, in the province of Syracuse. It is a Combined Cycle Gas Turbine (CCGT) that runs on natural gas and consists of two units, with two gas turbines and one steam turbine each. Its production capacity is 480 MW. Part of the electricity it



Exhibit 6: Thermoelectric Emissions; Source: ERG, team assessment

generates is fed into the national grid and the rest is used to power the industrial plants of the Priolo site. In 2016, it generated 2,693 GWh of electricity, in line with the previous year (2,632 GWh). About a quarter of the power, it generated was used to cover the needs of the Priolo industrial site. The cogeneration plant is characterised by high performance and low emissions and is helping the Group to achieve its energy efficiency objective. In accordance with the data in Exhibit 6 on the left, it is possible to highlight one of the main goals achieved in recent years, that is the significant reduction in atmospheric emissions thanks to the completion of two important projects: the revamping of the old CTE plants, the opening of the new CCGT plant and the project to carry out environmental improvements to the SA1N/1 group. In fact, the previous liquid fuels were completely replaced exclusively with gaseous fuels (natural gas and fuel gas from the adjacent ISAB S.r.l. ISAB Imp. Nord refinery). ERG Power is continuing to affirm its special commitment to both the environment protection and the health and safety of its workers through its voluntary adoption of the international and EU standards ISO 14001 and EMAS.

Business Segment	Natural Resource	Since	Production (GWh)	CO2 Avoided (Kt)	% Green energy consumption	EBITDA (mln)	Country	M&A	Co-Development & Greenfield	REB & REP
Wind	✓	2006	4.000	2.350	97.7	301		✓	✓	✓
Hydro	✓	2015	1.229	622	100	87				
Solar	✓	2018	226	114.36	65.3	63		✓		
Thermo		2010	2.504	1.155*	19.6	69				

Exhibit 7: Business Summary (FY2019); Source: ERG, team assessment  
\*co2 Emitted

## APPENDIX 2: REPOWERING & REBLADING

The main drivers of ERG 2018-2022 Business Plan, presented to the Financial Community in March 2018, include - in addition to international growth - the technological renewal of the wind fleet in Italy through the Repowering and Reblading projects.

**Repowering** involves the replacement of old wind turbine generators with latest-generation models with better output, reducing the total number of WTG by around half while at the same time increasing the overall power of the wind farm (twofold, on average) and its producibility (threefold, on average), without increasing land use. This also facilitates the optimum use of the original site, makes use of existing infrastructure, which is adapted where necessary, (e.g. roads, cable ducts and substations, lighting systems and ancillary services) and, most importantly, avoids making any significant changes to the site's environmental biodiversity.

**Reblading** project, an innovative and ambitious initiative aimed at wind farms, was brought to fruition in the first half of 2019 with ERG's successful installation of new blades on 20 turbines in the Avigliano wind farm in Basilicata. ERG is the first wind farm owner to install also new wind turbines. The project provides for the replacement of the original blades, produced by the manufacturer over 20 years ago, with a new blade, which is innovative both in terms of its materials and its aerodynamic design. The new blade offers improvements in performance and producibility, enabling the existing turbine to be modernised. For this reason, during the maintenance activities, replacements were carried out of



### REBLADING in NUMBERS

- 20 turbines certified with new blades and controllers
- 60 blades replaced
- 60 blade bearings replaced;
- full revision of all mechanical components connected to the blades;
- 5,800 hours/man for blade and controller assembly
- 400 hours/man for pre-assembly at the blade production factory
- 0 accidents/injuries

of the components and systems that regulate the position of the nacelle and the blades (lever mechanisms) and are necessary for correct operation. The most interesting element of the project is the newly installed blade: produced using different methods and materials to the existing blades, it is also around a metre longer and has an optimised aerodynamic profile. In addition to the traditional fibreglass used for the composite of the original blade, the new blade uses carbon fibre, which enables the construction of a more streamlined and high-performing shape. Thanks to the efficient and meticulous management of the preliminary phases of the project, the monitoring activities did not highlight any particular issues. The only difficulty regarded the need to approach each individual phase of the works with the knowledge that the standard equipment and movements would no longer be appropriate, given that the measurements and weights of the new blades were substantially different. The replacement of the blades, which altered the technical balance calibrations of the turbine, resulted in the need to modify the control system, introducing a new system able to interface directly with the centralised management and control systems. Thanks to the new blades, new linkages and the new control system, the resulting turbine is structurally new and requires its own patent and trademark, in line with current EC standards. Once the new technical data sheet had been drawn up for the new machine, the turbine ownership was transferred: ERG officially became the producer and manufacturer of the new turbine with 49 metre rotors. Analyses and calibrations are currently underway to confirm the anticipated increase in performance.

Exhibit 8: Rebladig in Numbers; Source: ERG, team assessment

## APPENDIX 3: BUSINESS PLAN 2018-2022

During recent years ERG has radically changed its business model, anticipating long-term energy scenarios, and achieving a position of leadership in renewables, not only as regards the Italian market but also at European level. Today the Group has its own industrial know-how and a portfolio of assets that is well diversified, from both a technological and a geographical standpoint, with a good balance between programmable and non-programmable sources. In March 2018, ERG presented the new business plan for the period up to 2022: a five-year Plan focused on overseas expansion and the technological renewal of our Wind power fleet in Italy. It aims to substantially step-up expansion through greenfield and co-development projects, M&A and repowering, adding about 850MW to its 2.78GW of capacity as of YE17. The plan entails EUR 1.68bn in capex and EBITDA is expected to reach EUR 560mn by 2022 (FY18: EUR 491mn). In April 2019, ERG released an update to the plan which acknowledges a different standpoint as of FY18 due to the anticipation of acquisitions and some expansion capex. Although the company has provided an updated FY19 guidance, figures to 2022 have not been restated but only a visual trajectory has been provided. ERG aims to grow in the wind-power markets in France, Germany and the UK. EUR 444mn of capex has been allocated to expansion in this area. 350MW of additional

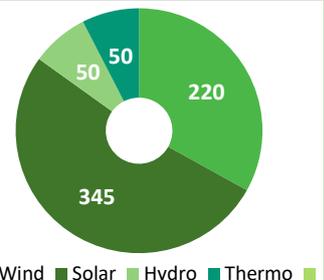


Exhibit 9: Installed Capacity Investments in 2018 (MW); Source: ERG, team assessment



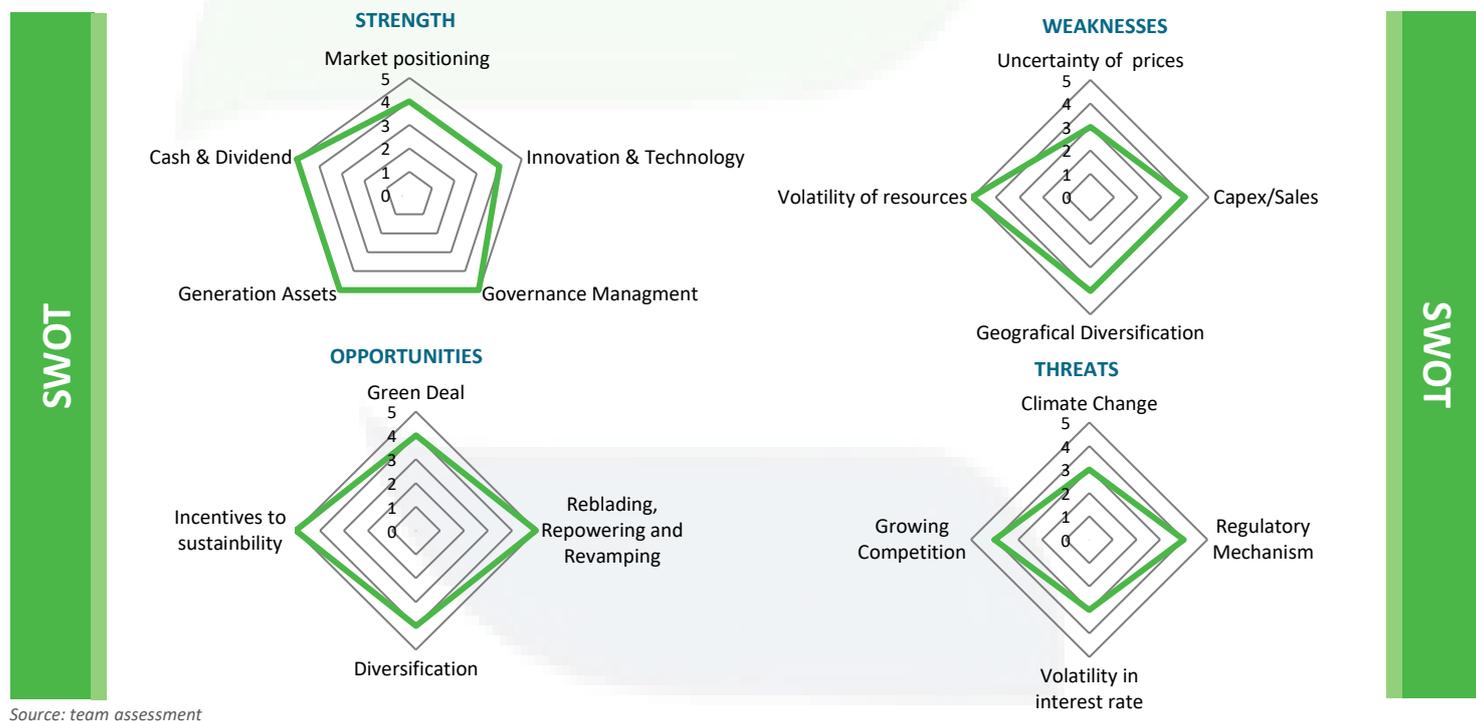
capacity is included in the plan. About 250MW of capacity has been secured (55MW of this is already on stream). **In 2019** ERG made progress towards its growth objectives outlined in the Business Plan, having added 137 MW both originating from M&A in solar power (with particular reference to the acquisition of Andromeda for 51 MW) and in wind power (acquisition of Polaris, 52 MW in France to the more recent acquisition of Barkow, 34 MW in Germany), and having advanced greenfield development (opening construction sites in the UK and obtaining authorisations in France for 37 MW) and the repowering project with the submission of the authorisation requests for a number of MW that may even exceed those included in the Plan.

## APPENDIX 4: SWOT ANALYSIS

We decide to carry out a SWOT analysis by assigning a score between 1 (very low) and 5 (very high) to each driver according to the characteristics of ERG. The grades in each category are displayed in the following graphs and tables:

STRENGTH	SCORE
Market positioning in the wind sector	4
Innovation & Technology as key drivers	4
Governance Management team	5
Quality generation assets	5
Cash generation and dividend yield	5
<b>Total</b>	<b>23</b>
WEAKNESSES	SCORE
Uncertainty of power prices	3
Volatility in natural resources	5
Limited geographical diversification	4
Capex to Sales 7% (competitors average 17% FY2019)	4
<b>Total</b>	<b>16</b>
OPPORTUNITIES	SCORE
Impact of Green Deal	4
Reblading, Repowering and Revamping	5
Diversification among geografies	4
Incentives to sustainability	5
<b>Total</b>	<b>18</b>
THREATS	SCORE
Weather conditions & Climate change	3
Changes in the regulatory mechanism	4
Volatility of interest rate	3
Growing competition in the international market	4
<b>Total</b>	<b>14</b>

Exhibit 10: SWOT Analysis  
Source: team assessment



**Further overview.** ERG is characterized by a solid business mix with about 80% of EBITDA currently generated by incentivized or contracted activities. The business is supported by a strong management team, which has shown a clear corporate vision in shifting the company away from oil into clean energy. M&A, Green-field development and Repowering activities are essential to successfully implement the 2018-22 business plan, defining international diversification, which allows the Company to grow and reduce exposure to its domestic market while benefiting from differences across other markets. ERG will be also able to increase the diversification of generation technology with an expansion into solar segment (keeping the Company away from becoming too dependent on one source of energy). On the other side, the Group' operations are deeply dependent on weather conditions (wind speeds, sun, water levels), generating very high volatility of energy prices, which can harm profitability, especially those associated with fully merchant generation. Regarding the CCGT, input-cost volatility can reduce clean spark spread and translate into further earnings volatility. CCGT plant will lose benefit from white certificates from the second half of 2020; this could be offset by a possible revamp of the facility, in order to enhance efficiency and obtain new certificates for the subsequent ten-years period.

## APPENDIX 5: PORTER'S FIVE FORCES ANALYSIS

Porter's Five Forces analysis is a framework for analyzing the level of competition within a specific industry. **Threats of new entry:** The main requirements to enter are high capital, adherence to state regulation and expert human resources. Overall, the threat of new entrant analysis is quite moderate, not representing a particular danger for the companies that operate in this sector. **Supply power:** Supplier's power is weak to moderate, not representing a particular danger for the entrenched companies in the renewable energy production. **Buyer's power:** buyers bargaining power in the renewable power is to be assessed as a weak. **Substitute product:** Threat of substitutes in general represent one of the most significant factors for renewable energy companies. **Industry Rivalry:** The energy distribution is a profitable business, and it can be very rewarding, as the sector promises decent revenues it attracts competition.

INTENSITY AMONG INCUMBENTS	<b>Concentration and size of competitors</b>	Concentration is moderate (Herfindahl Index= 8,84 %, team estimates). There is a discrete number of key competitors with similar market shares.
	<b>Industry growth</b>	The number of renewable energy produced has been increasing at a fast pace in the last 15 years (4.7% CAGR 2015-2019 ) and this trend is expected to continue in the next years (6.1% 2018-2025E CAGR)
	<b>Presence of fixed costs</b>	In the renewable energy industry, fixed costs are high. Companies undergo cycles of increased CapEx on regular occurrences, during which EBITDA margins twitch.
	<b>Incentives</b>	The presence of incentives and subsidies focused towards renewable energy has given it a boom for new companies to enter into the market.
	<b>Diversity of competitors</b>	Players are not well diversified, since companies' strategies are not able to be differentiated.
	<b>High entry barriers</b>	New energy technologies face larger barriers. They compete with major market players like coal and gas, and with proven, low-cost solar and wind technologies. Most investors want large quantities of energy, ideally at times when wind and solar aren't available. That's difficult to accomplish, and a major reason why new technologies suffer high rates of failure.
THREAT OF NEW ENTRY	<b>Economies of scale</b>	Scale economies are critical in the industry and represent a significant barrier for new entrants, since the production volumes are very high.
	<b>Product differentiation</b>	the low product differentiation does not give to market members the possibility to create brand identification.
	<b>Capital requirements</b>	The industry is capital intensive, as high levels of Capex are required to acquire and maintain PPE but also to pursue R&D. Consequently, it is a significant deterrent for new entrants.
	<b>Entry barriers</b>	The are very high entry barriers, which explain the historical prevalence of acquisition-based entries.
	<b>Distribution channel</b>	Access to distribution channels represents an entry barrier since energy market usually sell their products through
	<b>Government policy</b>	The Government policy represents an important barrier to entry since the price at which the utilities are distributed is subject to regulations.
SUBSTITUTE PRODUCTS	<b>Number of substitutes</b>	They are represented by alternative sources of energy, which are mainly based on nuclear energy and fossil fuels
	<b>Relative price</b>	The relative price of substitutes varies a lot depending on the specific product. Price is a relevant driver for substitution since Renewable forms of energy have proven to be uneconomic substitutes: they are less efficient and more expensive than fossil fuels.
	<b>EU regulations</b>	According to European green deal the target is to not have net emissions of greenhouse gases by 2050. This imply a disincentive to the use of fossil fuel and nuclear.
BARGAINING POWER OF SUPPLIERS	<b>Concentration of supplier industry</b>	The more concentrated is the whole supplier's industry the higher is their bargaining power. The two most relevant industries of suppliers of ERG are: 1) SEC Newgate S.p.A; 2)Vestas Wind Systems A/S engages in the development, manufacture, sale, and maintenance of wind power plants.
	<b>Substitutes of suppliers product</b>	Substitute products are represented by alternative sources of energy, which are mainly based on nuclear energy and fossil fuels.
	<b>Technological impact</b>	The advancement in technology has helped in reducing the cost of manufacturing and increased the competition.
	<b>Profit margin</b>	The suppliers can reduce the profit margin of the utility companies by driving the cost up.
	<b>Dependence on industry</b>	Given the high volumes of renewables energy produced, the weight on suppliers' revenues is high.
	<b>Forward Integration</b>	The large company have vertically integrated supply chain, that protects them from suppliers risk. If the company does not have vertical integration, then suppliers hold high bargaining power.
BARGAINING POWER OF BUYERS	<b>Buyers concentration</b>	The buyers of the energy utility company are commercial entities and domestic users.
	<b>Product differentiation</b>	Buyers exercise higher bargaining power if there are available options; such as: solar, wind, hydroelectric and hydrogen
	<b>Price sensitivity</b>	Companies' strategies are not able to be differentiated, leading buyers to be more price sensitive.
	<b>Switching costs</b>	Switching to new renewable system ownership requires an effort, some degree of inconvenience and includes the upfront cost of installation. Incentives can help mitigate switching costs.

## APPENDIX 6: REGULATIONS & INCENTIVE FRAMEWORK

The political and regulatory environment in which ERG operates its business affects many aspects of its activities, including the incentive systems which the Group benefits from. Renewable energy generation assets currently benefit from various national, provincial, and local governmental incentives. In particular, electricity generation from renewable sources depends upon price subsidies and other incentives that are highly contingent on the prevailing political and regulatory environment. The Italian Regulations, the EU and each other country in which the Group operates establish regulatory frameworks aimed at controlling the development of renewable energy, based on formulas which may include premiums, green certificates, tax deductions or regulated tariffs.

- **Feed-in-premium** is a type of price-based policy instrument whereby eligible renewable energy generators are paid a premium price, which is a payment in addition to the wholesale price. This premium can be fixed or floating; a floating premium would be calculated as the difference between an average wholesale price and a previously defined guaranteed price.
- **Feed-in-tariff** is a type of price-based policy instrument whereby eligible renewable energy generators are paid a fixed price at a guaranteed level (irrespective of the wholesale price) for the electricity produced from renewable energy sources and fed into the grid.
- **Green certificates** or more generally Guarantees of Origin, are purchased on a voluntary basis to get guaranteed green electricity. This allows businesses to reduce their CO2 footprint.
- A **white certificate** is a tradable asset which ensures that a certain percentage of energy savings has been achieved relative to a baseline. They are issued for achieving a minimum of energy savings and if energy producers do not meet the mandated target for energy consumption they are required to pay a penalty

The Netherlands was the first European country to introduce a large-scale auction scheme with SDE+ in 2011. Later on time, it was also adopted by other governments in order to incentivise the renewable sources usage. A **Dutch auction mechanism** is a competitive process in which energy project developers bid against each other to supply renewable energy through long-term contracts at the lowest possible price.

WIND	Plants	Incentive	Duration
<b>Italy</b>	Before 2013	Feed-in premium	15 years
	From 2013	Dutch Auctions	20 years
<b>Germany</b>	Before 2014	Feed-in tariff and FIP plus a management premium	15 years
	From 2017	Dutch auctions	20 years
<b>France</b>	Before 2015	Feed In Tariff	15 years
	From 2016	Feed in Premium	15 years
<b>Poland</b>	Before 2016	Certificates of Origin	20 years
<b>Bulgaria</b>	From 2015	Feed in Tariff	12-15 years
<b>Romania</b>	From 2013	Green Certificates	15 years
<b>SOLAR</b>			
<b>Italy</b>	From 2018	Feed-in premium	20 years
<b>HYDRO</b>			
<b>Italy</b>	Before 2013	Feed-in premium	15 years
<b>THERMO</b>			
<b>Italy</b>	From 2010	Energy Efficiency Certificates - EECs (White Certificates)	10 years

Exhibit 12: Incentive Framework; Source: team assessment

## APPENDIX 7: COMPETITIVE ANALYSIS

To better understand ERG positioning and performances, we perform a competitive analysis on 2019 key financial indicators. ERG's business model is characterized by a higher EBITDA margin 46.3% while has a lower EBIT margin 16.4% and capital profitability (ROIC is 1.4%) respect to the Renewable industry average ( 5% ROIC, 23% EBITm and 39% EBITDAm), and with those of the general Energy industry (7 % ROIC, 23.4% EBITm and 41% EBITDAm). Similarly, ERG's financial leverage (Net Debt/EBITDA is 3) is closer to the average value of the Renewable industry (3.23) rather than the one shown by general Energy (4.42). On the contrary, the Company has a 7% Capex/sales, denoting a low level of investments to support its organic growth, compared both to the average Renewable (25%) and Energy sector (30.4%).

2019	Revenues(€bln)	Capex/Sales	EBIT margin	EBITDA margin	ROIC	Net debt/EBITDA
<b>ERG S.p.A.</b>	<b>1,022</b>	<b>7%</b>	<b>16.4%</b>	<b>46.3%</b>	<b>1.4%</b>	<b>3</b>
<b>ENERGY INDUSTRY</b>						
Hera	6,913	8%	8%	14%	7.10%	3.5
Acea	3,106	26%	13%	26%	5.7%	4.2
Ascopiave	125	28%	18%	37%	56%	4.5
Terna	2,288	52%	50%	75%	6%	5
Italgas	1,820	38%	28%	51%	7.60%	4.9
<b>Average Energy Industry</b>	<b>2,850</b>	<b>30.4%</b>	<b>23.4%</b>	<b>41%</b>	<b>7%</b>	<b>4.42</b>
<b>RENEWABLE ENERGY INDUSTRY</b>						
Enel	77,366	12%	15%	22%	4%	3.2
ENI	69,881	12%	13%	24%	0.20%	1.4
Falck Renew	374	34%	32%	52%	6.2%	3.6
A2A	7,324	9%	9%	17%	6.40%	2.6
Iren	4,081	13%	11%	21%	5%	3.6
EDP Renovaveis	1,824	39%	42%	75%	5.20%	2.7
Terna Energy	299	57%	40%	62%	5.90%	5.5
<b>Average Renewable EI</b>	<b>23021</b>	<b>25%</b>	<b>23%</b>	<b>39%</b>	<b>5%</b>	<b>3.23</b>

Exhibit 13: Competitive Positioning; Source: team assessment

## APPENDIX 8: FINANCIAL FORECASTS

### REVENUES FORECASTS

We perform detailed revenues' forecast estimates by disentangling ERG's business in its four main divisions: i) Wind, ii) Thermolectric, iii) Hydroelectric and iv) Solar.

#### i) Wind

##### Revenues breakdown by geographic area.

Since the portfolio capacity and incentives has direct impact on future projections, we forecasted Wind revenues by estimating the production (in GWh basis) and the prices (€/MWh) separately. We perform a bottom-up approach by separating the markets in which ERG operates in Italy and Abroad (Germany, France, Others).

The wind farms' total production is result driven by (i) the **MW of installed capacity** and (ii) the **load factor**.

**MW of installed capacity.** The installed capacity is the maximum capacity that a plant is designed to run at. We considered that ERG portfolio capacity includes all consolidated MW already installed and in operation, the under-construction MW and the MW already signed but not in construction phase in the period 2020E-2023E. Moreover, we expect an additional installed capacity of 150 MW per year on average in the period 2024E-2030E since (i) **Repowering** on remaining plants will be necessary to offset the exit from the incentives scheme and since (ii) Europe's decarb strategy should also be supportive for ERG's growth in Europe.

INSTALLED CAPACITY (MW)	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
<b>Italy</b>	1093	1093	1093	1193	1303	1373	1458	1548	1618	1703	1793	1903
<b>Germany</b>	272	272	272	272	272	302	322	342	362	387	407	417
<b>France</b>	359	397	397	441	441	466	486	506	536	556	576	586
<b>Other</b>	206	206	368	428	520	545	570	590	620	640	660	680
<b>Total</b>	<b>1930</b>	<b>1968</b>	<b>2130</b>	<b>2334</b>	<b>2536</b>	<b>2686</b>	<b>2836</b>	<b>2986</b>	<b>3136</b>	<b>3286</b>	<b>3436</b>	<b>3586</b>

Exhibit 14: Installed Capacity (MW) Forecasts; Source: team assessment

**Load factor.** The load factor represents the measurement used to assess a plant's level of use; it is derived from the ratio between actual production in a given period of time and the plant's maximum theoretical production in the same period. To obtain the reference load factor for each market, we considered the average of the period 2016-2019, being constant over the valuation period. Moreover, we have estimated an increase in Italy load factor (23% in E2021-E2030) due to Reblading operations.

LOAD FACTOR WIND (%)	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
<b>Italy</b>	23%	22%	23%	23%	23%	23%	23%	23%	23%	23%	23%	23%
<b>Germany</b>	20%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%
<b>France</b>	25%	23%	23%	23%	23%	23%	23%	23%	23%	23%	23%	23%
<b>Other</b>	32%	31%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%

Exhibit 15: Load Factor (%) Forecasts; Source: ERG, team assessment

According to our model, ERG will reach a production of 5325GWh in FY2023, as a result of Repowering and Reblading operations in Italy and geographical expansion expected by 2018-2022 Business Plan. In FY2030, we expect a production of ca. 7491 GWh (+6.01% CAGR FY20E-FY30E).

PRODUCTION (GWh)	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
<b>Italy</b>	2161	2130	2226	2430	2654	2796	2970	3153	3295	3469	3652	3876
<b>Abroad</b>	1839	1812	2192	2455	2672	2837	2974	3099	3268	3401	3526	3615
<b>Total</b>	<b>4,000</b>	<b>3942</b>	<b>4418</b>	<b>4885</b>	<b>5325</b>	<b>5634</b>	<b>5944</b>	<b>6252</b>	<b>6564</b>	<b>6870</b>	<b>7178</b>	<b>7491</b>
<b>Growth %</b>	<b>16.5%</b>	<b>-1.4%</b>	<b>12.1%</b>	<b>10.6%</b>	<b>9.0%</b>	<b>5.8%</b>	<b>5.5%</b>	<b>5.2%</b>	<b>5.0%</b>	<b>4.7%</b>	<b>4.5%</b>	<b>4.4%</b>

Exhibit 16: Production Forecasts (GWh); Source: ERG, team assessment

We forecast the price effect by distinguishing Italy and Abroad prices and basing our assumptions on the historical prices (€/MWh) comprehensive of incentivized and not incentivized production. In particular:

- (i) **Italy.** We have a negative price effect given by the progressive expiration of incentives. In particular, we forecast a negative price growth over the valuation period given by the progressive decrease of the incentivized wind farms, in line with historical trend (-4.87% CAGR in FY16-19).
- (ii) **Abroad.** We forecast a further stable pool price due to relatively young portfolio of wind farms and geographical diversification. Regarding tariffs, ERG is subjected to various remuneration schemes in each of the markets it operates, limiting the exposure on prices.

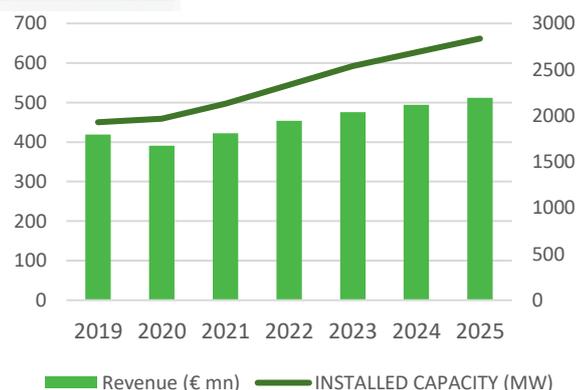


Exhibit 17: Future Revenues (€mn) and Installed Capacity (MW); Source: ERG, team assessment

Finally, revenues forecasts are obtained by multiplying the forecasted production times the estimated prices.

REVENUES (€mln)	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Italy	249.0	230.7	244.0	253.3	263.2	263.8	266.5	269.2	267.6	268.0	268.4	270.9
Abroad	169.8	160.1	178.2	200.6	212.3	230.0	245.0	260.0	278.5	295.2	311.5	324.5
<b>Total Revenue</b>	<b>418.8</b>	<b>390.8</b>	<b>422.2</b>	<b>453.9</b>	<b>475.5</b>	<b>493.8</b>	<b>511.5</b>	<b>529.1</b>	<b>546.1</b>	<b>563.1</b>	<b>579.9</b>	<b>595.4</b>
Growth YoY%		-6.7%	8.02%	7.51%	4.75%	3.86%	3.59%	3.44%	3.21%	3.12%	2.97%	2.68%

Exhibit 18: Revenues Forecasts (€mln); Source: ERG, team assessment

As we can see from Table 18, the solid growth of the total revenues is due to the strong investments in geographic diversification of the company. Thanks to this diversification, the abroad revenues (+6.18% CAGR in FY21E-30E) compensate and overlap the slight decrease of Italy revenues (-0.79% CAGR in FY21E-30E).

#### ii) Thermoelectric

Despite the high contribution of this segment on the total revenues (49.1%), We expect ERG will not increase the total installed capacity (480 MW) over the valuation period since this segment is not a pure renewable one. Moreover, we expect ERG's CCGT plant will benefit from revamping.

THERMOELECTRIC	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenues (€mln)	418.3	389.0	396.8	400.8	404.8	408.8	412.9	415.0	417.1	419.1	421.2	423.3
Growth YoY%		-7.0%	2.0%	1.0%	1.0%	1.0%	1.0%	0.5%	0.5%	0.5%	0.5%	0.5%
Installed Capacity (MW)	480	480	480	480	480	480	480	480	480	480	480	480

#### iii) Hydroelectric

We believe that ERG has already reached an efficient level of installed capacity. Therefore, for the period FY20-30, we assume that the installed capacity remains constant and equal to the efficient level. Further, we do not think ERG would invest more on the Hydro segment since in 2029 can lose this concession.

HYDROELECTRIC	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenues (€mln)	118.7	119.9	121.1	116.2	111.6	107.1	102.8	98.7	94.8	91.0	87.4	83.9
Growth YoY%		1.0%	1.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%
Installed Capacity (MW)	527	527	527	527	527	527	527	527	527	527	527	527

#### iv) Solar

For this business line we expect a high growth for 3 reasons: (i) it is an early-stage segment for ERG, (ii) the Company has already achieved new additions of the 2018-2022 Business Plan for this sector and (iii) this business line can have a strong impact in world trend for the decarbonization up to 2050.

SOLAR	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenues (€mln)	71.0	72.0	86.4	101.1	116.3	133.7	145.7	157.4	170.0	183.6	198.3	210.1
Growth YoY%		1.4%	20.0%	17.0%	15.0%	15.0%	9.0%	8.0%	8.0%	8.0%	8.0%	6.0%
Installed Capacity (MW)	141.0	141.0	170.0	200.0	250.0	300.0	350.0	400.0	450.0	500.0	550.0	600.0

Exhibit 19: Thermo-Hydro-Solar Revenues Forecasts (€mln); Source: ERG, team assessment

## APPENDIX 9: INORGANIC GROWTH

Given the revenues from this possible scenario, ERG has to improve its positioning both in Wind and in Solar segment. We forecasted an expansion in Germany, France, U.K. We also supported a possible small ERG's expansion in Poland due to some lack of efficiency in the various opportunities. In line with our assessment, our team analyzed with high confidence that between 2022E-2026 ERG would increase its M&A activities. This would be possible using the revenues from the sale of the assets from Hydro and Thermo, with an acquisition of at least 500MW in Germany: this will have, on average, a cost of  $500 \times 0.75$  mln/MW, with a final value of ca. 375mln. An additional and possible installed capacity expansion is forecasted in France with an acquisition of at least 350 MW, with an average cost of  $350 \text{ MW} \times 0.98 \text{ mln/MW} = \text{ca. } 343 \text{ mln}$ . Our team also considered a possible expansion in U.K. of at least of 100 MW. ERG is interested in continuing in U.K. its expansion even with a lower intensity with respect to the other countries just mentioned because it exhibits a higher load factor. We forecast that the Company will achieve a total expenditure of 70% on the revenues from sales in 2025. We are confident about the possibility that ERG will continue its M&A operations in other countries such as Denmark which constitutes one of the windiest countries in Europe.

Deal Date	Target Company	Acquirer	Mkt Cap	Sector	Geographic Area
23 Oct '20	EW piotrków kujawski SP. z.o.o.	ERG Poland Holding Sp zoo	private	Wind	Poland
05 Mar '20	Laszki Wind Sp zoo	ERG Power Generation SpA	private	Wind	Poland
24 Feb '20	Long Wind France SA	ERG Éolienne France SAS	private	Wind	France
13 Sep '19	Aquila Capital Concepts GmbH	ERG Windpark Beteiligungs GmbH	private	Wind	Germany
03 May '19	Renewable Energy Systems Ltd.	ERG UK Holding Ltd.	private	Wind	UK
06 May '19	Les Moulins De Fruges SAS	ERG Éolienne France SAS	private	Wind	France
06 Aug '18	Parc Eolienne de la Voie Sacrée SAS	ERG Éolienne France SAS	private	Wind	France
01 Aug '18	Creag Riabhach Wind Farm Ltd.	ERG Power Generation SpA	private	Wind	UK
12 Jan '18	Windpark Linda GmbH & Co. KG	ERG Windpark Beteiligungs GmbH	private	Wind	Germany
02 May '17	Aberdeen Asset Management Plc	ERG Nuove Centrali SpA	private	Wind	Germany
29 Feb '16	Brockaghboy Windfarm Ltd.	ERG Renew SpA	private	Wind	UK
02 Feb '16	CSO Energy GmbH	ERG Renew SpA	private	Wind	Germany
23 Jul '14	EW Orneta 2 Sp zoo	ERG Renew SpA	private	Wind	Poland
21 Nov '19	Origis Energy USA, Inc.	ForVei Srl	private	Solar	Italy
13 Feb '19	Perseo SRL	ERG Power Generation SpA	private	Solar	Italy
12 Jan '18	ForVei Srl	ERG Nuove Centrali SpA	private	Solar	Italy

Exhibit 20: Historical Inorganic Growth (€mln); Source: FactSet, team assessment

## APPENDIX 10: BALANCE SHEET

Values in Million euros	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E
<b>Assets</b>											
Cash & Cash Equivalents	507	813	774	654	686	693	700	707	714	721	728
Accounts Receivables, Net	293	256	251	193	252	255	257	260	262	265	268
Other Receivables	133	127	142	105	128	130	131	132	133	135	136
Inventories	20	21	22	22	22	22	22	22	22	23	23
Other Current Assets	0	0	0	0	0	0	0	0	0	0	0
<b>Total Current Assets</b>	<b>954</b>	<b>1,216</b>	<b>1,189</b>	<b>974</b>	<b>1,088</b>	<b>1,099</b>	<b>1,110</b>	<b>1,121</b>	<b>1,132</b>	<b>1,144</b>	<b>1,155</b>
LT Investment	209	21	14	14	64	65	66	66	67	68	68
Long-Term Note Receivable	0	40	77	42	53	54	55	55	56	56	57
Intangible Assets	803	761	931	1,111	944	953	963	973	982	992	1,002
Deferred Tax Assets	160	133	128	42	117	118	119	121	122	123	124
Other Assets	46	308	71	84	77	78	79	79	80	81	82
<b>Non-Current Assets</b>	<b>3,578</b>	<b>3,445</b>	<b>3,509</b>	<b>3,628</b>	<b>3,561</b>	<b>3,596</b>	<b>3,632</b>	<b>3,669</b>	<b>3,705</b>	<b>3,742</b>	<b>3,780</b>
<b>Total Assets</b>	<b>4,532</b>	<b>4,661</b>	<b>4,698</b>	<b>4,603</b>	<b>4,649</b>	<b>4,695</b>	<b>4,742</b>	<b>4,790</b>	<b>4,838</b>	<b>4,886</b>	<b>4,935</b>
<b>Total Liabilities &amp; Shareholders' Equity</b>											
ST Debt	154	285	331	127	218	220	222	224	226	227	229
Accounts Payable	153	127	92	88	119	120	121	122	123	124	125
Income Tax Payable	36	32	26	7	25	25	25	25	25	26	26
Other Current Liabilities	81	108	80	104	99	100	100	101	102	103	104
<b>Total Current Liabilities</b>	<b>424</b>	<b>552</b>	<b>528</b>	<b>326</b>	<b>461</b>	<b>465</b>	<b>468</b>	<b>472</b>	<b>476</b>	<b>480</b>	<b>484</b>
Long-Term Debt	1,934	1,789	1,868	2,084	1,932	1,948	1,963	1,979	1,995	2,011	2,027
Provision for Risks & Charges	132	134	150	145	141	142	144	145	146	147	148
Deferred Tax Liabilities	274	265	289	209	262	265	267	269	271	273	275
Other Liabilities	38	43	34	53	42	43	43	43	44	44	44
<b>Long-Term Liabilities</b>	<b>2,378</b>	<b>2,231</b>	<b>2,341</b>	<b>2,491</b>	<b>2,378</b>	<b>2,397</b>	<b>2,416</b>	<b>2,436</b>	<b>2,455</b>	<b>2,475</b>	<b>2,495</b>
<b>Total Liabilities</b>	<b>2,803</b>	<b>2,784</b>	<b>2,869</b>	<b>2,817</b>	<b>2,839</b>	<b>2,862</b>	<b>2,885</b>	<b>2,908</b>	<b>2,931</b>	<b>2,955</b>	<b>2,978</b>
Minority Interest	0	0	0	12	0	0	0	0	0	0	0
<b>Total Equity</b>	<b>1,729</b>	<b>1,877</b>	<b>1,829</b>	<b>1,786</b>	<b>1,810</b>	<b>1,833</b>	<b>1,857</b>	<b>1,882</b>	<b>1,906</b>	<b>1,931</b>	<b>1,957</b>
Growth (%)	3	9	-3	-2							
Total Equity/Total Assets	38	40	39	39							
<b>Total Liabilities &amp; Shareholders' Equity</b>	<b>4,532</b>	<b>4,661</b>	<b>4,698</b>	<b>4,603</b>	<b>4,649</b>	<b>4,695</b>	<b>4,742</b>	<b>4,790</b>	<b>4,838</b>	<b>4,886</b>	<b>4,935</b>

## APPENDIX 11: INCOME STATEMENT

Values in Million euros	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E
<b>Sales</b>	<b>1,026</b>	<b>1,054</b>	<b>1,024</b>	<b>1,022</b>	<b>972</b>	<b>1,026</b>	<b>1,072</b>	<b>1,108</b>	<b>1,143</b>	<b>1,173</b>	<b>1,200</b>
Growth (%)		2.7%	-2.8%	-0.2%	-4.9%	5.6%	4.4%	3.4%	3.2%	2.6%	2.3%
Cost of Goods Sold (COGS) incl. D&A	644	675	705	704	671	708	740	765	789	809	828
of which D&A	251	251	274	305	272	287	300	310	320	328	336
<b>Gross Income</b>	<b>382</b>	<b>378</b>	<b>319</b>	<b>318</b>	<b>301</b>	<b>318</b>	<b>332</b>	<b>344</b>	<b>354</b>	<b>364</b>	<b>372</b>
SG&A Expense	176	156	116	122	117	123	126	129	130	131	132
Other Operating Expense	12	21	15	28	15	15	15	15	15	15	15
<b>EBIT (Operating Income)</b>	<b>194</b>	<b>201</b>	<b>188</b>	<b>168</b>	<b>170</b>	<b>180</b>	<b>191</b>	<b>200</b>	<b>209</b>	<b>217</b>	<b>225</b>
Growth (%)		4%	-6%	-11%	1%	6%	6%	5%	5%	4%	4%
Margin (%)	19%	19%	18%	16%	17%	18%	18%	18%	18%	19%	19%
Nonoperating Income - Net	27	28	22	17	15	16	17	17	18	18	19
<b>Pretax Income</b>	<b>116</b>	<b>141</b>	<b>144</b>	<b>53</b>	<b>93</b>	<b>99</b>	<b>106</b>	<b>112</b>	<b>119</b>	<b>124</b>	<b>130</b>
Growth (%)		22%	2%	-63%	75%	7%	7%	6%	6%	5%	5%
Margin (%)	11%	13%	14%	5%	10%	10%	10%	10%	10%	11%	11%
Income Taxes	29	33	40	20	25	27	29	30	32	34	35
Tax Rate	25%	23%	28%	37%	27%	27%	27%	27%	27%	27%	27%
<b>Net Income</b>	<b>122</b>	<b>107</b>	<b>104</b>	<b>32</b>	<b>66</b>	<b>71</b>	<b>76</b>	<b>81</b>	<b>85</b>	<b>90</b>	<b>94</b>
Growth (%)		-12%	-3%	-70%	111%	7%	7%	6%	6%	5%	5%
Margin (%)	12%	10%	10%	3%	7%	7%	7%	7%	7%	8%	8%
Net Income Growth		69%	-36%	-76%	68%	9%	7%	6%	6%	5%	5%
<b>EBITDA</b>	<b>445</b>	<b>452</b>	<b>462</b>	<b>473</b>	<b>442</b>	<b>467</b>	<b>491</b>	<b>510</b>	<b>529</b>	<b>546</b>	<b>561</b>
margin (%)	43%	43%	45%	46%	45%	46%	46%	46%	46%	47%	47%

Exhibits 21&22: Balance Sheet and Income Statement (€mln); Source: ERG, team assessment

## APPENDIX 12: CASH FLOWS

Values in Million euros	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	194	201	188	168	170	180	191	200	209	217	225	233	241	250	258
%Tax Rate	22%	24%	28%	37%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%
NOPAT	150	154	136	105	124	131	139	146	153	159	164	170	176	183	188
D&A	251	251	274	305	272	287	300	310	320	328	336	344	352	360	368
Change in Working Capital	42	11	-31	52	19	19	18	17	17	16	15	14	13	13	12
CAPEX	-60	-60	-64	-69	-170	-223	-234	-244	-254	-264	-273	-283	-293	-304	-314
<b>FCFO</b>	<b>389</b>	<b>360</b>	<b>328</b>	<b>408</b>	<b>245</b>	<b>215</b>	<b>224</b>	<b>229</b>	<b>235</b>	<b>239</b>	<b>242</b>	<b>245</b>	<b>248</b>	<b>252</b>	<b>254</b>
Interests	105	89	56	100	82	87	91	94	97	99	102	104	106	109	111
Taxes on Interests	81	68	40	62	60	63	66	68	71	72	74	76	78	79	81
Issuance/Reduction of Debt	-577	-48	-152	-257	-106	-83	-9	14	-60	-121	-52	74	-187	-66	-158
<b>FCFE</b>	<b>-270</b>	<b>244</b>	<b>136</b>	<b>89</b>	<b>192</b>	<b>181</b>	<b>261</b>	<b>287</b>	<b>217</b>	<b>157</b>	<b>227</b>	<b>355</b>	<b>96</b>	<b>218</b>	<b>127</b>
Dividends	-143	-74	-171	-112	-112	-112	-112	-112	-112	-112	-112	-112	-112	-112	-112

Exhibit 23: Cash Flows (€mln); Source: ERG, team assessment

## APPENDIX 13: KEY FINANCIAL RATIO

	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E
ROIC	3.4%	2.9%	2.8%	0.8%	1.15%	1.22%	1.30%	1.36%	1.42%	1.47%	1.52%
ROE	7.3%	6.0%	5.6%	1.8%	3.7%	3.9%	4.1%	4.3%	4.5%	4.7%	4.8%
ROA	2.6%	2.3%	2.2%	0.7%	1.4%	1.5%	1.6%	1.7%	1.8%	1.8%	1.9%
Operating Working Capital	529	664	661	649	627	634	641	649	656	664	671
Asset turnover	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Capex/D&A(x)	-24%	-24%	-23%	-22%	-62%	-77%	-78%	-79%	-79%	-80%	-81%
Net Debt/Equity	91%	67%	0.78	88%	81%	80%	80%	79%	79%	79%	78%
Net Debt/EBITDA(x)	3.6	2.8	3.1	3.3	3.3	3.2	3.0	2.9	2.8	2.8	2.7
Interest Coverage Ratio(x)	1.8	2.3	3.4	1.7	2.1	2.1	2.1	2.1	2.2	2.2	2.2

Exhibit 24: Key Financial Ratio (%); Source: ERG, team assessment

## APPENDIX 14: M-SCORE

INPUT VARIABLES (€MLN)	2015	2016	2017	2018	2019
Current Assets	1,337	954	1,216	1,189	974
Total Assets	4,777	4,532	4,661	4,698	4,603
Current Liabilities	612	424	552	528	326
Long-Term Debt	2,489	2,378	2,231	2,341	2,491
PPE	2,055	2,360	2,182	2,288	2,336
Cash	771	507	813	774	654
Revenues	921	1,025	1,054	1,024	1,022
Depreciation/Amortization	162	251	251	274	305
General & Administrative Expenses	119	176	156	116	122
Gross Margin	0.31	0.37	0.36	0.31	0.31
Cost of Good sold	633	644	675	705	704

We use the Beneish's M-SCORE analysis, created in 1999 by Dr Messod Beneish, to better understand whether ERG earnings have not been manipulated. The scoring process starts with the computation of different ratios made by salvaging data from the financial statement of the firm. An M-score lower than -2.22 means that the firm is not likely to be a manipulator of earnings. We can use two different formulas in order to get the scoring.

The formula for the 8 variable model is:

$$-4.84 + (0.92*DSRI) + (0.528*GMI) + (0.404*AQI) + (0.892*SGI) + (0.115*DEPI) - (0.172*SGAI) - (0.327*LVGI) + (4.679*TATA).$$

The formula for the 5 variable model is:

$$-6.065 + (0.823*DSRI) + (0.906*GMI) + (0.593*AQI) + (0.717*SGI) + (0.107*DEPI).$$

INPUT USED TO CALCULATE M-SCORE	2016	2017	2018	2019
DAY'S SALES RECEIVABLES INDEX--> DSRI	0.77	0.85	1.01	0.77
GROSS MARGIN INDEX-->GMI	0.84	1.04	1.15	1.00
ASSET QUALITY INDEX-->AQI	0.93	1.01	0.96	1.08
SALES GROWTH INDEX-->SGI	1.11	1.03	0.97	1.00
DEPRECIATION INDEX-->DEPI	0.76	0.93	0.96	0.93
SGA EXPENSES INDEX-->SGAI	1.33	0.86	0.76	1.06
LEVERAGE INDEX-->LVGI	0.95	0.97	1.02	1.00
TOTAL ACCRUALS/TOTAL ASSETS-->TATA	-0.06	-0.08	-0.04	-0.08
<b>M-SCORE (5-VARIABLE MODEL)</b>	<b>-2.24</b>	<b>-2.08</b>	<b>-1.94</b>	<b>-2.17</b>
<b>M-SCORE (8-VARIABLE MODEL)</b>	<b>-3.04</b>	<b>-2.91</b>	<b>-2.59</b>	<b>-3.06</b>

Exhibit 25: M-SCORE (€mln); Source: team assessment

## APPENDIX 15: COMPARABLES SELECTION

In order to value ERG with the multiple approach it is very important to correctly identify the set of listed comparables. ERG is a family-owned company that is managed prudently compared to its competitors, which use to stress their financial leverage and it offers stability with a presence solely in Europe. In other words, **ERG is a different renewable energies company**. For these reasons, identifying peers for ERG is hard.

In more details, we followed a 3 step-selection method to select ERG's comparables:

### STEP 1

In the first stage we collected companies which belongs to the sector Utilities and the sub-industry Independent Power and Renewable Electricity Producers according to GICS Standards, ranking them by market cap size:

Company	Market Cap	Company	Market Cap
Iberdrola	89.10B	Capital Power	3.09B
EDP Renovaveis	26.42B	Voltaia	2.82B
Snam	10.02B	TransAlta	2.46B
Northland Power	7.94B	Falck Renewables	2.37B
Neoen	7.04B	First Gen	2.31B
Clearway Energy	6.84B	Terna Energy	1.97B
Scatec	6.95B	Greenergy Renovables	935.87M
Encavis	4.08B	Alerion Clean Power	880.49M
ERG	3.80B	Polenergia	693.72M
Electricity Generating	3.29B	Edison	141.31M

### STEP 2

In the second stage, we excluded those companies (i) with a Market Cap less than 1B in order to ensure a major comparability in terms of business size and (ii) with a geographical focus predominantly in Non-European Countries

Company	Market Cap	Selection	Company	Market Cap	Selection
Iberdrola	89.10B		Voltaia	2.82B	
EDP Renovaveis	26.42B		TransAlta	2.46B	NO
Snam	10.02B		Falck Renewables	2.37B	
Northland Power	7.94B	NO	First Gen	2.31B	NO
Neoen	7.04B		Terna Energy	1.97B	
Clearway Energy	6.84B	NO	Greenergy Renovables	935.87M	
Scatec	6.95B		Alerion Clean Power	880.49M	NO
Encavis	4.08B		Polenergia	693.72M	NO
Electricity Generating	3.29B	NO	Edison	141.31M	NO
Capital Power	3.09B	NO			

### STEP 3

In the third stage, we focused on companies with a similar business model to ERG. In particular, we excluded companies with a financial leverage higher than the market average (Net debt/EBITDA > 5x). Finally, our 3-step selection model shows that **Iberdrola, EDP Renovaveis, Falck Renewables and Terna Energy are the closest comparables for ERG**.

Company	Market Cap	Net Debt/Ebitda (x)	Selection
<b>Iberdrola</b>	<b>89.10B</b>	<b>4.20</b>	
<b>EDP Renovaveis</b>	<b>26.42B</b>	<b>2.33</b>	
Snam	10.02B	5.44	NO
Neoen	7.04B	8.62	NO
Scatec	6.95B	7.95	NO
Encavis	4.08B	7.02	NO
Voltaia	2.82B	5.28	NO
<b>Falck Renewables</b>	<b>2.37B</b>	<b>3.92</b>	
<b>Terna Energy</b>	<b>1.97B</b>	<b>4.12</b>	
Albioma	1.72B	4.56	NO

## APPENDIX 16: WACC COMPUTATION

We discount our FCFO estimates at 3 different values for WACC. We discount 2021-2025E FCFOs using the short-run WACC (4.67%), 2026-2030E FCFOs using the medium-run WACC (4.80%), and FCFOs starting from 2031E using the long-run WACC (5.07%). ERG WACC is determined as a weighted average of its cost of debt  $R_d$  (computed using an augmented Merton-Black Scholes model) and its levered cost of equity  $R_e$  (computed using the CAPM formula and levered beta). We estimate the ERG's dynamic cost of debt by adding the future Company's credit spread to the forward guidance on the risk-free rate (German T-Bills) over the next ten years. In our analysis we use the "5-year, 5-year EUR inflation swap rate" which is a common measure, mostly used by central banks and dealers, to look at the market's future inflation expectations.

**Risk-free rate estimate.** In the CAPM formula, we estimate the Risk-Free Rate with a bottom-up approach based on the country-weighted average of the 10Y government bond yields, using as weights the fraction of sales revenues that ERG generates in that geographical area. We use this approach in order to underline and correctly weight each countries' risk.

**Equity Risk Premium estimate.** We also estimate the Equity Risk Premium using a bottom-up approach based on the country-weighted average of market risk premia (equity risk premium + country risk premium), using as weights the fraction of sales revenues that ERG generates in that geographical area.

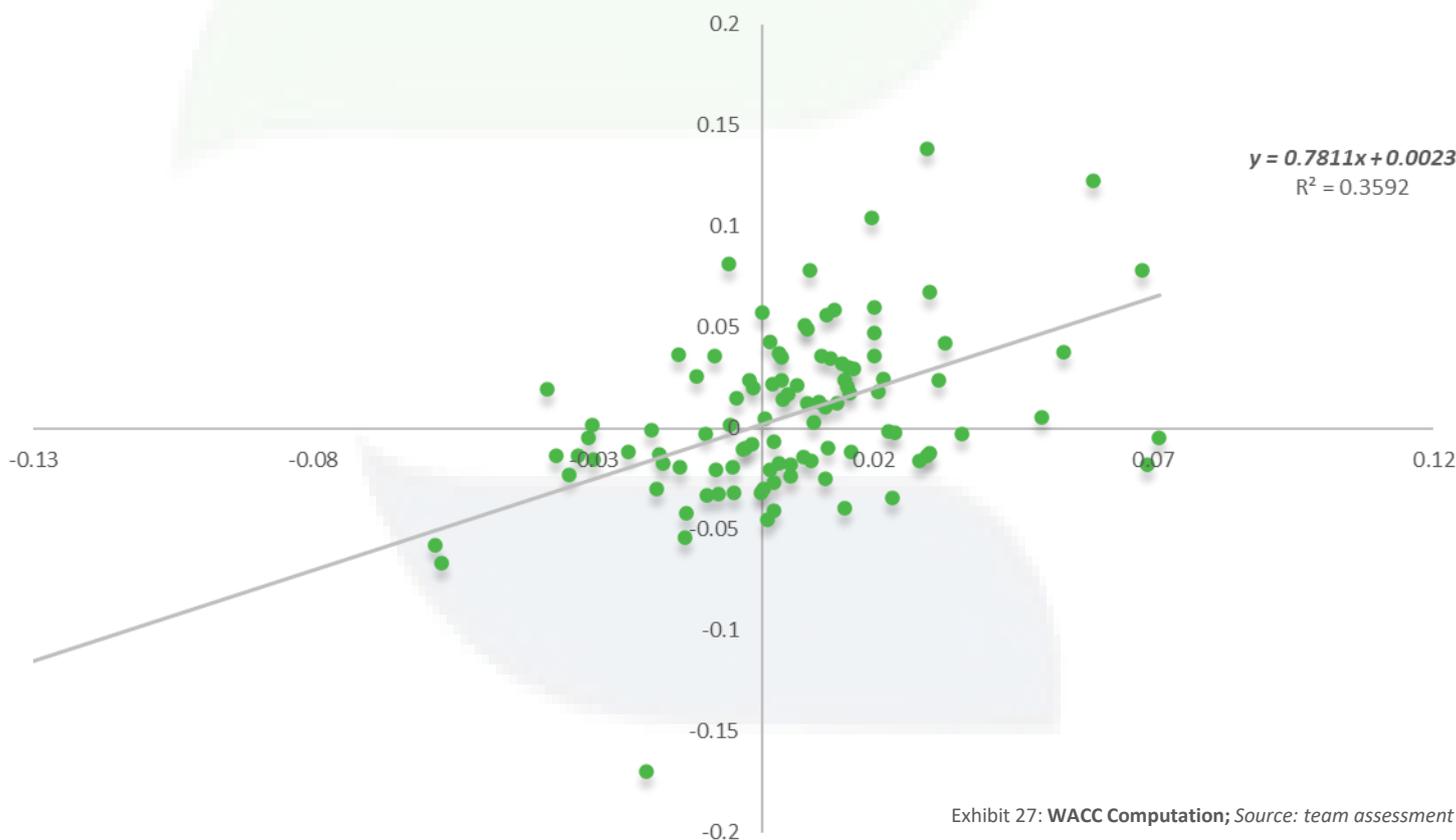
**Beta.** We compute the company's levered Beta by regressing the log returns of ERG's stock on the STOXX Europe 600 Index log returns. We use the STOXX Europe 600 Index as proxy for the market portfolio because of ERG EURO-Zone business exposure. Our time series span the last two years period, at a weekly frequency to avoid any noise arising from daily observations. Our results show that ERG has a Beta Levered close to 0.8.

	Weighted 10y gov. bond yield	Weight
Italy	0.50%	83.50%
Germany	-0.52%	4.50%
France	-0.32%	6.90%
Poland	1.24%	1.80%
Romania	2.94%	1.50%
Bulgaria	0.28%	1.80%
<b>Risk Free Rate</b>	<b>0.44%</b>	

	Weighted Market Risk Premium	Weight
Italy	8.98%	83.50%
Germany	4.72%	4.50%
France	5.68%	6.90%
Poland	6.36%	1.80%
Romania	8.98%	1.50%
Bulgaria	7.81%	1.80%
<b>Equity Risk Premium</b>	<b>8.50%</b>	

Index	Beta	Correlation	R <sup>2</sup>
STOXX Europe 600	0.7811	0.6275	0.3592

### Weekly Beta Regression (STOXX Europe 600; 2years).



**Cost of Debt ( $R_d$ ) estimate.** We estimate ERG's cost of debt ( $R_d$ ) as the sum of two terms: 1) a risk-free component plus 2) a credit spread premium. Since ERG's leverage is denominated in euro, we use the yield on the 10Y-German Bund as a proxy of the risk-free term (-0.44%). For what concerns the spread premium, we estimate the cost of a hypothetical 10yr bond ERG would issue this year, using the Merton-Black & Scholes framework. The model consists of multi-variate regressions applied to the most liquid alternative-energy issues (single bonds). It explains the fair value 10-year spread of each issuer by using a set of fundamental variables [ (CFO pre-w/c + interest)/ interest; (CFO pre-w/c)/ DEBT; RCF/ DEBT] and market regressors (single stock volatility, risk-free rate, duration). According to our methodology, ERG's spread would be 89 bps, implying a cost of debt of 0.45%. Moreover, according to Moody's rating agency, such spread would be consistent with a Baa3 rating. Therefore, to further validate our augmented Merton-Black & Scholes model, we fully replicate Moody's rating methodology for unregulated power companies (see table below) obtaining precisely a Baa3 rating.

Moody's rating Methodology for Unregulated Power Industry

Factor	Factor Weighting	Sub-factor	ERG Sub-factor	ERG Sub-factor score	ERG Sub-factor numerical score	Sub-factor Weighting	Weighted numerical score	
<b>Scale</b>	<b>10%</b>	Total Assets	4.6388	<b>Ba</b>	<b>12</b>	0.10	1.20	
<b>Business Profile</b>	<b>35%</b>	Market Diversification	Expected to maintain material operations in more than one geographic or market regions with no one market accounting for >75% of EBITDA	<b>Baa</b>	<b>9</b>	0.05	0.45	
		Hedging and integration impact on cash flow predictability	Forward hedges or other contractual/market arrangements provide good visibility on 50% or more of expected cash flow for the next 3 years	<b>Baa</b>	<b>9</b>	0.1	0.90	
		Market Framework & positioning	Presence of fuel concentration risk (e.g. more than 50% of generation from single fuel type)	<b>Ba</b>	<b>12</b>	0.15	1.80	
		Capital Requirement and Operational Performance	Minimal levels of capex needed for maintenance, environmental related expenditures or expansion of asset base, reflecting a modern, well developed asset base	<b>Aa</b>	<b>3</b>	0.05	0.15	
<b>Leverage and Coverage</b>	<b>40%</b>	(CFO pre-w/c+interest)/interest	5.74x	<b>Baa</b>	<b>9</b>	0.10	0.90	
		(CFO pre-w/c)/DEBT	18%	<b>Ba</b>	<b>12</b>	0.20	2.40	
		RCF/DEBT	8.2%	<b>Ba</b>	<b>12</b>	0.10	1.20	
<b>Financial Policy</b>	<b>15%</b>	Financial Policy	Track record and expected maintenance of a conservative financial policy; an average level of debt for the industry and a balance between shareholders and creditors	<b>Baa</b>	<b>9</b>	0.15	1.35	
<b>Total</b>	<b>100%</b>					<b>1.00</b>	<b>10.35</b>	
							<b>FINAL RATING</b>	<b>Baa3</b>

Exhibit 28: ERG Rating; Source: Moody's research, team assessment

**ERG's short-run optimal financial structure.** We also determine the short-run optimal financial structure of ERG to better understand whether the company can exploit some value creation for its shareholders due to the tax benefits associated to its leverage. More precisely, for different values of the leverage ratio  $D/(D+E)$  we compute the corresponding cost of equity capital  $R_e$  and the cost of debt, in order to determine ERG's WACC. To compute  $R_e$  as a function of  $D/(D+E)$ , we first un-lever the Regression Beta shown above (0.7811) using the 2021 D/E ratio and then re-lever it as a function of  $D/(D+E)$ . Finally, plugging such re-levered beta in the CAPM formula gives us  $R_e$ . On the other side, we estimate the cost of debt spread using the augmented Merton-Black & Scholes model discussed above. Our analysis shows that ERG would benefit from an increase in its leverage ratio.

D/(D+E)	Ro	Market Premium	Risk Free Rate	Re	10Y Gov Bund Yield	Spread (bps)	Rd	Tax Rate	Net Rd	WACC
0.26	5.66%	8.5%	0.44%	6.69%	-0.44%	89	0.45%	0.24	0.0034	5.04%
0.29	5.66%	8.5%	0.44%	6.81%	-0.44%	89	0.45%	0.24	0.0034	4.93%
0.32	5.66%	8.5%	0.44%	6.93%	-0.44%	89	0.45%	0.24	0.0034	4.82%
<b>0.3577</b>	<b>5.66%</b>	<b>8.5%</b>	<b>0.44%</b>	<b>7.08%</b>	<b>-0.44%</b>	<b>89</b>	<b>0.45%</b>	<b>0.24</b>	<b>0.0034</b>	<b>4.67%</b>
0.375	5.66%	8.5%	0.44%	7.15%	-0.44%	110	0.66%	0.24	0.0050	4.66%
<b>0.4</b>	<b>5.66%</b>	<b>8.5%</b>	<b>0.44%</b>	<b>7.25%</b>	<b>-0.44%</b>	<b>140</b>	<b>0.96%</b>	<b>0.24</b>	<b>0.0073</b>	<b>4.64%</b>
0.425	5.66%	8.5%	0.44%	7.35%	-0.44%	180	1.36%	0.24	0.0103	4.66%
0.45	5.66%	8.5%	0.44%	7.45%	-0.44%	225	1.81%	0.24	0.0138	4.71%
0.5	5.66%	8.5%	0.44%	7.64%	-0.44%	305	2.61%	0.24	0.0198	4.81%
0.6	5.66%	8.5%	0.44%	8.04%	-0.44%	450	4.06%	0.24	0.0309	5.07%
0.7	5.66%	8.5%	0.44%	8.44%	-0.44%	600	5.56%	0.24	0.0423	5.49%
0.8	5.66%	8.5%	0.44%	8.83%	-0.44%	750	7.06%	0.24	0.0537	6.06%
0.9	5.66%	8.5%	0.44%	9.23%	-0.44%	900	8.56%	0.24	0.0651	6.78%

Exhibit 29: Short-Run Optimal Financial Structure; Source: team assessment

## APPENDIX 17: Is it profitable to dismiss Thermo & Hydro?

	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
<i>values in €mln</i>										
Wind	428.9	525.3	602.9	533.0	528.5	541.6	555.4	568.7	579.2	587.1
Solar	99.4	149.5	151.8	205.2	259.7	314.5	353.2	378.6	410.6	443.0
<b>TOTAL</b>	<b>528.3</b>	<b>674.7</b>	<b>754.6</b>	<b>738.1</b>	<b>788.2</b>	<b>856.1</b>	<b>908.7</b>	<b>947.3</b>	<b>989.8</b>	<b>1030.1</b>
<b>sales of asset</b>	<b>1058.7</b>									
Growth %	-45.6%	27.7%	11.8%	-2.2%	6.8%	8.6%	6.1%	4.2%	4.5%	4.1%
SG&A	158.5	202.4	226.4	221.4	236.4	256.8	272.6	284.2	296.9	309.0
<b>EBIT</b>	<b>90.7</b>	<b>119.9</b>	<b>135.9</b>	<b>132.6</b>	<b>142.6</b>	<b>156.2</b>	<b>166.7</b>	<b>174.5</b>	<b>183.0</b>	<b>191.0</b>
Growth %	-39.9%	32.3%	13.3%	-2.4%	7.5%	9.5%	6.7%	4.6%	4.9%	4.4%
Tax Rate %	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
<b>NOPAT</b>	<b>66.2</b>	<b>87.6</b>	<b>99.2</b>	<b>96.8</b>	<b>104.1</b>	<b>114.0</b>	<b>121.7</b>	<b>127.4</b>	<b>133.6</b>	<b>139.4</b>
<b>D&amp;A</b>	<b>147.9</b>	<b>188.9</b>	<b>211.3</b>	<b>206.7</b>	<b>220.7</b>	<b>239.7</b>	<b>254.4</b>	<b>265.2</b>	<b>277.1</b>	<b>288.4</b>
<b>EBITDA</b>	<b>238.6</b>	<b>308.9</b>	<b>347.2</b>	<b>339.3</b>	<b>363.3</b>	<b>395.9</b>	<b>421.2</b>	<b>439.7</b>	<b>460.1</b>	<b>479.4</b>
Change in Working Capital	18.8	18.3	17.4	16.5	15.7	14.9	14.1	13.4	12.8	12.1
CAPEX	-210.0	-280.0	-260.0	-273.0	-286.7	-299.5	-313.0	-327.1	-341.8	-357.2
<b>FCFO</b>	<b>148.9</b>	<b>168.8</b>	<b>210.9</b>	<b>197.1</b>	<b>211.5</b>	<b>233.8</b>	<b>249.4</b>	<b>258.8</b>	<b>269.6</b>	<b>279.2</b>
Growth %		13.3%	25.0%	-6.5%	7.3%	10.6%	6.7%	3.8%	4.2%	3.6%

<b>THERMO</b>	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
<i>values in €mln</i>										
<b>Revenues</b>	<b>396.8</b>	<b>400.8</b>	<b>404.8</b>	<b>408.8</b>	<b>412.9</b>	<b>415.0</b>	<b>417.1</b>	<b>419.1</b>	<b>421.2</b>	<b>423.3</b>
<b>EBIT</b>	<b>19.6</b>	<b>20.0</b>	<b>20.5</b>	<b>20.9</b>	<b>21.4</b>	<b>21.6</b>	<b>21.8</b>	<b>22.1</b>	<b>22.3</b>	<b>22.5</b>
Tax Rate %	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
<b>NOPAT</b>	<b>14.3</b>	<b>14.6</b>	<b>15.0</b>	<b>15.3</b>	<b>15.6</b>	<b>15.8</b>	<b>16.0</b>	<b>16.1</b>	<b>16.3</b>	<b>16.4</b>
<b>D&amp;A</b>	<b>28.0</b>	<b>28.1</b>	<b>28.1</b>	<b>28.1</b>	<b>28.1</b>	<b>28.2</b>	<b>28.2</b>	<b>28.2</b>	<b>28.3</b>	<b>28.3</b>
<b>EBITDA</b>	<b>47.6</b>	<b>48.1</b>	<b>48.6</b>	<b>49.1</b>	<b>49.5</b>	<b>49.8</b>	<b>50.0</b>	<b>50.3</b>	<b>50.5</b>	<b>50.8</b>
CAPEX	24.2	25.4	26.6	28.0	29.4	30.8	32.4	34.0	35.7	37.5
<b>FCFO</b>	<b>18.2</b>	<b>17.3</b>	<b>16.4</b>	<b>15.4</b>	<b>14.4</b>	<b>13.1</b>	<b>11.8</b>	<b>10.4</b>	<b>8.8</b>	<b>7.3</b>
<b>WACC</b>	<b>4.67%</b>	<b>4.67%</b>	<b>4.67%</b>	<b>4.67%</b>	<b>4.67%</b>	<b>4.80%</b>	<b>4.80%</b>	<b>4.80%</b>	<b>4.80%</b>	<b>4.80%</b>

<b>HYDRO</b>	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
<i>values in €mln</i>										
<b>Revenues</b>	<b>120.8</b>	<b>116.0</b>	<b>111.3</b>	<b>106.9</b>	<b>102.6</b>	<b>98.5</b>	<b>94.6</b>	<b>90.8</b>	<b>87.1</b>	<b>83.7</b>
<b>EBIT</b>	<b>30.0</b>	<b>24.1</b>	<b>18.5</b>	<b>13.0</b>	<b>7.7</b>	<b>2.6</b>	<b>-2.4</b>	<b>-7.3</b>	<b>-12.0</b>	<b>-16.6</b>
Tax Rate %	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
<b>NOPAT</b>	<b>21.9</b>	<b>17.6</b>	<b>13.5</b>	<b>9.5</b>	<b>5.6</b>	<b>1.9</b>	<b>-1.8</b>	<b>-5.3</b>	<b>-8.8</b>	<b>-12.1</b>
<b>EBITDA</b>	<b>87.5</b>	<b>81.6</b>	<b>76.0</b>	<b>70.5</b>	<b>65.2</b>	<b>60.1</b>	<b>55.1</b>	<b>50.2</b>	<b>45.5</b>	<b>40.9</b>
CAPEX	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
<b>FCFO</b>	<b>103.4</b>	<b>93.3</b>	<b>83.5</b>	<b>74.0</b>	<b>64.8</b>	<b>55.9</b>	<b>47.3</b>	<b>38.9</b>	<b>30.8</b>	<b>22.8</b>
<b>WACC</b>	<b>4.67%</b>	<b>4.67%</b>	<b>4.67%</b>	<b>4.67%</b>	<b>4.67%</b>	<b>4.80%</b>	<b>4.80%</b>	<b>4.80%</b>	<b>4.80%</b>	<b>4.80%</b>

Exhibits 30: Thermo & Hydro valuation; Source: ERG, team assessment

## APPENDIX 18: Z-SCORE

<b>INPUT VARIABLES (€MN)</b>	2016	2017	2018	2019
Total Assets	4,532	4,661	4,698	4,603
Total Liabilities	2,803	2,784	2,869	2,817
EBIT	194	201	188	168
Revenues	1,025	1,054	1,024	1,022
Retained Earnings	175	0	1,149	946
Working Capital	529	664	661	649
MKT Capitalization	1,535	2,292	2,455	2,861

The **Altman Z-Score Analysis** indicates the financial health of a company and, therefore, the probability of default for bankruptcy. If the Z-score is below 1.81, a firm has a high probability of bankruptcy, while a score of 2.99 indicates a financially sound firm that is far from filing for bankruptcy.

The formula used for our assessment:  
 $(1.2*Z1) + (1.4*Z2) + (3.3*Z3) + (0.6*Z4) + (1.0*Z5)$

**RESULT:** ERG faces a consistent probability of bankruptcy

<b>DERIVED VARIABLES</b>	2016	2017	2018	2019
Z1: Working Capital/Total Assets	0.12	0.14	0.14	0.14
Z2: Retained Earnings/Total Assets	0.04	0.00	0.24	0.21
Z3: EBIT/Total Assets	0.04	0.04	0.04	0.04
Z4: MKT Capitalization/Total Liabilities	0.34	0.49	0.52	0.62
Z5: Revenue/Total Assets	0.23	0.23	0.22	0.22
<b>Z-SCORE</b>	<b>0.77</b>	<b>0.83</b>	<b>1.17</b>	<b>1.17</b>

Exhibit 31: Z-SCORE (€mln); Source: team assessment

## APPENDIX 19: RISKS

**Information & Communication Technology.** The Risk refers to the inadequacy of technical and organisational measures directed at protecting the integrity, availability, confidentiality of automated information and of the resources used to acquire, store, process and communicate this information. In particular, the main ICT risks include the risk of access to uncontrolled networks, information system vulnerability, technological disaster.

**Weather & Atmospheric conditions.** Revenues of the ERG Group's electricity generation business are linked to the amount of energy generated by its wind, hydroelectric and solar plants which, in turn, depend upon atmospheric conditions including conditions impacting the availability of renewable energy. Sources of renewable energy are affected by the natural variations and may also change permanently due to climate change or other factors beyond the ERG's control. This risk is mitigated through the technological diversification of renewable facilities and the geographic diversification of the generation facilities that allow to reduce both impact and the probability of occurrence.

**Liquidity.** Liquidity risk is the risk that the ERG Group, while solvent, may not be able to meet its short-term and/or medium/long-term payment commitments, or may be able to do so only on unfavourable conditions. This may happen because of difficulty in obtaining funds or in liquidating assets on the market, or due to inadequate management of the entity's own liquidity. Despite ERG's high value of cash and cash equivalents of EUR 654mln in FY19, the Company implements a risk mitigation strategy directed at preventing the emergence of liquidity crisis situations that involves pursuing a balanced financial structure in terms of duration and composition, continuous monitoring of financial balances and systematic generation of cash on the part of its business activities.

**Credit.** Exposure to credit risk relates to the probability that a determined counterparty will not be able to meet its contractual obligations. This phenomenon is managed through appropriate analyses and assessments also supported by primary providers on the analysis of the credit risk, attributing to each counterparty an internal rating (Internal Rating Based, summary indicator of creditworthiness assessment). The choice of the counterparties depends on the decisions of the Credit Committee whose final decisions are based on the credit rating analyses. In FY19 2019, the Italian maximum exposure to credit risk on trade receivables amounts to €196.466 mln, with a total of €51.266 mln for abroad regions. ERG assigns to each exposure a credit rating that provides a forecast of the risk of loss and considers proven experience in rating credit quality. Credit ratings are defined using qualitative and quantitative factors indicating the risk of breach. The following table shows credit risk exposure and expected losses on trade receivables not past due at 31 December 2019. (*Exhibit 32: Credit Risk exposure & Rating*)

€(Thousands)	12/31/2019	12/31/2018
Italy	142,200	208,282
France	11,055	7,352
Germany	6,808	4,235
Bulgaria	6,307	5,574
Poland	4,282	3,484
Romania	22,814	22,073
<b>Total</b>	<b>193,466</b>	<b>251,000</b>

Rating	Amount	W.A.L.%
AAA	7,572	0.01%
AA+/AA-	11,055	0.02%
A+/A-	4,401	0.05%
BBB+/BBB-	38,898	0.93%
BB+/BB-	91,630	0.11%
B+/B-	15,870	0.69%
CCC	75	1.42%
CC	91	3.59%
<b>Total (€K)</b>	<b>169,501</b>	<b>0.35%</b>

**Interest rate.** Changes in market interest rates can have such negative impacts on the level of financial expenses and in the cost of financing so as to compromise the ERG's financial stability and its capital adequacy. An increase or decrease in interest rates will increase or decrease interest expense of the ERG Group associated with such borrowing. There can be no guarantee that the exchange rate risk strategy adopted by the ERG Group, including the use of derivative hedge instruments, will actually have the effect of reducing losses connected to fluctuations in exchange rates. The derivatives entered into by ERG and designed to hedge the exposure to interest rate risk, are the interest rate swaps and interest rate caps of EUR 625 mln in FY19.

**Commodity.** ERG is exposed to various risks relating to fluctuations of commodity prices. Product categories that may have an impact are:

- Electricity Price: The Group is engaged in the generation and sale of electricity. Accordingly, fluctuations in the price of electricity for provision and supply agreements could have a significant effect on the ERG's operating results.
- Natural gas, CO<sub>2</sub>, and Energy Efficiency Certificate ("EEC") prices: Through the ERG Group's operation of a high-efficiency cogeneration thermoelectric power plant, which uses combined cycle technology fuelled with natural gas, it is exposed to fluctuations in the prices of natural gas, CO<sub>2</sub>, or EECs (as such certificates are exchanged in a regulated market or through bilateral negotiations between operators).

**Covid-19.** The negative economic impact of the COVID-19 pandemic on the ERG Group cannot be adequately determined or reliably quantified. The social and economic implications of containing the infection are having an effect on energy price trends, and on the smooth running of the activities of the public administrations and of the industrial and financial operators with which ERG regularly interacts. The ongoing COVID-19 pandemic has also led to a significant overall downturn in electricity demand in all the reference markets, due above all to the restrictions imposed to some parts of the production activities, in ways that differ from country to country. To have a more specific overview about the Covid-19 impact on the main values, we have that total EBITDA for 2020 is forecast by ERG within a range of EUR 500 million and EUR 520 million (EUR 504 million in 2019) thanks to greater forecast volumes in the Hydro sector, to the higher price of the incentive both in Wind and in Hydro, to the contribution of the new wind farms abroad and to operating efficiency and energy management actions. These positive effects are partly offset mainly in the Wind sector by a decreasing incentivised perimeter in Italy, and by less favourable price scenarios and wind forecasts, as well as by lower expected profitability in the Thermoelectric sector. With reference to the price scenarios, of note is the potential depressive effect on commodity values engendered by the worldwide Covid-19 emergency. In the first quarter of 2020, to support COVID-19 emergency the Company made EUR 2 million donation. The main measure used by the organisation has been remote working, which has now been extended to all working days and all the Group's offices across Italy and abroad. In particular, remote working involves over 70% of the corporate workforce, no staff reductions have been planned or carried out during this period.

**Brexit.** UK EU membership ended at the end of January 2020, after 46 years. From an economic point, the UK was doing relatively well during its EU membership "outgrowing" Germany and France over that period. Now the Bank of England seems to be more skeptical about the long-term outlook after Brexit, as it believes that "Brexit will continue to weigh on productivity growth over the forecast period". The results of the agreements on Brexit and its consequences on EU economies and on the relations between Europe and United Kingdom are still uncertain. Thus, significant elements of uncertainty persist which can have potential repercussions on financial markets, although given the limited presence of the ERG in the United Kingdom with respect to its own international production portfolio, this would limit the possible damages that can arise from this risk. Moreover, for new investments, risk mitigations entail the assessment of the same investments requiring an adequate return on the expected risk profile, considering the main indicators of the country that are periodically revised to take into consideration any changes that may have an impact on the correct representation of the country risk.

Exhibit 32 : Credit Risk exposure & Rating  
(source: team assessment)

**Incentives.** In order to carry out its activities and implement any expansion of its business, the ERG Group needs to obtain, maintain, and comply with a variety of incentives, licences, authorisations, permits and approvals from regulatory framework. The processes for obtaining these incentives, permits and approvals are often lengthy, complex, unpredictable, and costly. During the operational phase, ERG or the relevant ERG subsidiary concerned is required to operate and maintain the managed facility in compliance with certain qualitative and quantitative requirements set forth in the concession agreement or by regulation. If ERG is unable to obtain the relevant incentives, or if it delays or fails to renew, its ability to achieve its strategic objectives could be impaired, incurring costs and losses. In particular, the risk is related to plants that entered into operation from 2017 onwards: FIP incentives will be allocated through Dutch auctions. Also, ERG’s thermoelectric business is subject to incentive risk since a fraction of the total incentive ended on 31 December 2020 for the recognition of Energy Efficiency Certificates (EECs - White Certificates), issued for ten years on the basis of the primary energy savings that cogeneration makes it possible to achieve when compared to the separate production of the same amount of electricity and heat.

**Concessions.** The ERG’s hydroelectric business activities are dependent on concessions from local authorities for the management of its hydroelectric power plants, which are due to expire at the end of 2029. There is no assurance that any such concessions will be renewed. If it occurs, it may be on economic terms that are more costly for the Company. Concessions are governed by agreements with the relevant grantor requiring the relevant concession holder to comply with certain obligations, in which each holder is subject to penalties or sanctions for the non-performance or default rules that regulate the duration and conditions of large-scale hydroelectric concessions.

	Risks	Likelihood	Impact	Mitigation	Strategy
Strategic	Information & Communication Technology	1/5	2/5	YES	Use of automatic instruments for the detection and management of incidents and anomalies
	Weather Conditions	4/5	5/5	YES	Technological & Geographic diversification
Financial	Liquidity	2/5	2/5	NO	
	Credit Defaults	1/5	2/5	YES	Use of Internal Rate based approach
	Interest rate	1/5	1/5	YES	Interest rate swaps and Interest rate caps for hedging purposes
	Commodity	1/5	2/5	YES	Derivatives on commodities CfD (Contract for Difference) instruments
Macro	Covid-19	5/5	3/5	NO	
	Brexit	5/5	3/5	NO	
	Electricity Price	3/5	4/5	YES	CfD (Contract for Difference) instruments for hedging purposes
Regulatory	Incentives	4/5	5/5	NO	
	Concessions	4/5	4/5	NO	

IMPACT	5				Weather Conditions; Incentives	Covid-19; Brexit
	4			Electricity Prices	Concessions	
	3					
	2	ITC; Credit Defaults; Commodity	Liquidity			
	1	Interest Rate				
		1	2	3	4	5

Source: Team Assessment

LIKELIHOOD

Exhibit 33: Risk Inventory and Heat Map; Source: team assessment

## APPENDIX 20 : ENVIROMENTAL, SOCIAL & GOVERNANCE

According to Refinitiv data, over the last 5 years, the company has an average ESG score of 74.82, and a median of 75.10. The ESG score is calculated as a sum of weighted individual pillar scores. For ERG.MI, Environmental, Social, and Governance pillars are weighted 42.50%, 32.50%, and 25.00% respectively in ESG score weighting, consistent with companies within the Electric Utilities & IPPs industry groups. In particular, the social pillar measures a company's capacity to generate trust and loyalty with its workforce, customers, and society, through its use of best management practices. It is a reflection of the company's reputation and the health of its license to operate, which are key factors in determining its ability to generate long term shareholder value. The environmental pillar measures a company's impact on living and non-living natural systems, including the air, land and water, as well as complete ecosystems. It reflects how well a company uses best management practices to avoid environmental risks and capitalize on environmental opportunities in order to generate long term shareholder value, while the the corporate governance pillar measures a company's systems and processes, which ensure that its board members and executives act in the best interests of its long-term shareholders. It reflects a company's capacity, through its use of best management practices, to direct and control its rights and responsibilities through the creation of incentives, as well as checks and balances in order to generate long term shareholder value.

As shown in *Exhibit 34 (above)*, ERG Environmental pillar score is 86.32%, almost the double of the average value of the market (46.38%), determining again the strong effort of the Company for the environmental care. The Social pillar score (ERG) is 79.59%, still higher comparing to the average market value (49.18%), in line with constant and growing relationship with the stakeholders, while the Governance pillar score is 49.07%, slightly above the 46.85% value shown by the market.

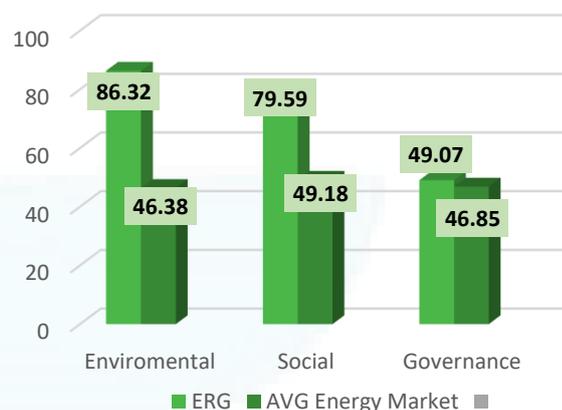


Exhibit 34: ERG ESG Pillars (%)  
(source: Refinitiv, team assessment)

### 20.A : BOARD OF DIRECTORS

Pursuant to the Articles of Association, the Company is managed by a Board of Directors which, in compliance with the gender balance criterion prescribed by current law and regulatory provisions, consists of no fewer than 5 and no more than 15 members, consisting by gender composition of 33% female and 67% of male workers. Directors are appointed on the basis of lists presented by shareholders, accompanied by information on the personal and professional characteristics of the candidates and a declaration as to whether they meet the independence requirements prescribed by the CFA.

BOARD MEMBER	OFFICE	EXECUTIVE	OTHER CHARGES	NO. OF OTHER CHARGES*	IN OFFICE SINCE	YEAR OF BIRTH	EDUCATIONAL BACKGROUND & OTHER ACTIVITIES
<b>Edoardo Garrone</b>	Chairperson	yes	yes	3	16/10/1997	1961	Graduation in Political Science at the Alfieri Institute in Florence. He is a member of Confindustria Presidency for the Internalization of the Association System. From 2015 to 2020: the Chairman became member of the Board of Directors of Istituto Giannina Gaslini. He is currently the chairman of the Board of Directors of San Quirico S.p.A.
<b>Alessandro Garrone</b>	Deputy Chairperson	yes	yes	1	16/10/1997	1963	Graduated in Economics in 1991. He was member of the Energy and Petroleum Trade Union Committee from 2008 to February 2019 and Vice Chairman of AIDAF Board of Directors (The Italian Association of Family Business). Then, Director of Banca Passadore & C. S.p.A. Since April 2015, he is Director responsible for overseeing the internal control and risk management system.
<b>Giovanni Mondini</b>	Deputy Chairperson	no	yes	1	16/10/1997	1966	From 2008 to 2010 he was the Chairman and C.E.O. of ERG Raffinerie Mediterranee. Chairman of the Managing Board of San Quirico S.p.A. Then, he became Vice-Chairman, member of the Strategic Committee of ERG S.p.A. and chairman of Confindustria Genova. He is also a member of the Technical Group of the Association Services of Confindustria.
<b>Bettonte</b>	Chief Executive Officer (CEO)				15/12/2009		Graduated in economics and business at the University of Bologna. He is a chartered Accountant and Auditor. From July 2020 he became the Deputy Chairman of Elettricità Futura. In 2008, he also experienced the academic career: he was Professor at the Faculty of Economics and Commerce of the "Università Cattolica Sacro Cuore" in Milan and of the University of Bologna.
<b>Massimo Belcredi</b>	Director	no	yes	1	29/04/2003	1962	Degree in Economics and Commerce, Università Cattolica of Milan, April 1987 and "G. Toniolo Institute of Superior Studies" Fellowship. He is currently full Professor of Corporate Finance, Università Cattolica of Milan. Member of the Risks and Control Committee and Director in charge of coordinating the requests and contributions of the non-executive directors for ERG S.p.A.
<b>Mara Anna Rita Caverni</b>	Director	no	yes	2	24/04/2015	1962	Graduated in Economics and Finance from "Università L. Bocconi" (Milan), she started engaging a chartered accountant and auditor activity. In 2016, she became a member board of Eight International after representing the Chairman of the Board of Directors at Italcalditi S.p.A. in 2012. She also dedicates her time to publications.

BOARD MEMBER	OFFICE	EXECUTIVE	OTHER CHARGES	NO. OF OTHER CHARGES*	IN OFFICE SINCE	YEAR OF BIRTH	EDUCATIONAL BACKGROUND & OTHER ACTIVITIES
<b>Barbara Cominelli</b>	Director	no	yes	1	24/04/2015	1970	With 25 years of management experience in the ICT, Telco and Energy sectors in Italy, she is currently Marketing and Operations Director in Microsoft Italy. In 2017 she has also been included in the Top 15 women in Digital in Italy by Digitalic and among the top 10 managers in technology by CorrieredellaSera. She is also actively involved in several nonprofit initiatives.
<b>Marco Costaguta</b>	Director	no	yes	5	20/04/2012	1959	Graduated in MSC Mechanical Engineering, Politecnico of Milan in 1984, followed by master's in business administration INSEAD Paris in 1987. He's now a board Member of S.Quirico S.p.A., but he is endowed with a very high level and detailed professional background. In particular, from 1985 to 1988 he was an Engagement Manager at McKinsey & Co.
<b>P. Francesco Lanzoni</b>	Director	no	yes	2	29/04/2003	1953	(1974) New York Institute of Finance and London Graduate School of Business Studies (1978) are the key representant institute of his educational background. First work experience, in 1973, Smith Barney Harris Upham New York, Investment Bank. Board Member of DB Fondi (asset management) and of DB Vita (life insurance).
<b>Silvia Merlo</b>	Director	no	yes	4	24/04/2015	1968	Bachelor's Degree in business economics and "BNP Paribas Women Entrepreneur Program" Stanford Graduate School of Business California (USA). Chief Executive Officer at Merlo S.p.A and Tecnoindustrie Merlo S.p.A. but also Member of the Boards of smaller companies of the Merlo Group.
<b>Elisabetta Olivieri</b>	Director	no	yes	3	23/04/2018	1963	She graduated with honors in Electronic Engineering at the University of Genoa in 1987. She then developed her career in Marconi S.p.A., then becoming Senior Vice President Strategies of Marconi Mobile S.p.A. From April 2019 she was CEO of Gruppo Fabbri Vignola SpA but 2010 she has served as non-executive Director of important Italian and foreign companies.
<b>Mario Paterlini</b>	Director	no	yes	1	23/04/2018	1963	Graduated at Université de Technologie de Compiègne 1987 - Ingénieur/Masters, he is an experienced Chief Executive with a proven track record in International Business. Experienced across various disciplines including legal, HR, finance, procurement and M&A but also Strong International experience across EMEA and the US.

\*This column indicates the number of Director or Statutory Auditor positions held by the relative subject in other companies listed on regulated markets, including foreign markets, in financial, banking, insurance companies or companies of significant size, different to those held in ERG Group companies

Exhibit 35: **Board of Directors**; Source: *team assessment*

## 20.B : CORPORATE GOVERNANCE

We use a ScoreCard Model to provide an extensive and comprehensive picture of the quality of ERG's governance under the OECD best practices. We assigned a score from 0 (lowest) to 10 (highest) to each sub-section and then performed a weighted average. In our analysis ERG S.p.A. exhibits an overall score of 89.25%, showing a very high adherence to the OECD best practices.

DISCLOSURE TRANSPARENCY	TOTAL SCORE	WHEIGHT
<b>Are the annual reports drawn-up following internationally accounting standards and disclosed in timely manner? Does it give a full and clear picture of the competitive position, business risks, financial performance and other matters?</b>	<b>9.67/10</b>	<b>30%</b>
In the annual reports, is all relevant information about board' members disclosed? (Director's shareholdings, remuneration polices, internal dealing operations)		<b>10</b>
Does the Company have a policy and process to ensure continuous and hoc disclosure of important matters providing a variety of communication methods (such as Company Website)?		<b>8</b>
Does the company have an annual external audit undertaken by an authorized and independent auditor? Does external auditors' opinion publicly disclosed?		<b>9</b>
<b>SHAREHOLDERS RIGHT</b>	<b>TOTAL SCORE</b>	<b>WHEIGHT</b>
<b>Are basic shareholders right ensured (to nominate and remove the board of directors and the board of supervisory, to approve major corporate transactions and to share corporate profit) ?</b>	<b>9.5/10</b>	<b>20%</b>
Are there adequate company systems for the shareholder attendance and participation at the AGM (effective and timely notice, possibility to ask questions, provided report on directors performace) ?		<b>9</b>
Are dividend and dividend policies transparent and publicly disclosed?		<b>10</b>
Do the Chairman/CEO of the board and the Chairman of external audit attend to the last AGM?		<b>9</b>

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EQUITABLE TREATMENT OF SHAREHOLDERS	TOTAL SCORE	WHEIGHT
	8/10	25%
Can minority shareholders affect the composition of the board and are directors required to be re-nominated and re-elected at regular intervals?		9
Is there evidence of structures/mechanisms that have the potential to violate minority shareholder rights?		6
Are there mechanisms that provide effective redress for complaints of shareholders? Can a small shareholders place an item on the AGM agenda?		8
Are the Company policies in place that effectively prohibit the misuse of information by directorss, managment and staff?		9
RESPONSABILITY OF THE BOARD	TOTAL SCORE	WHEIGHT
	8.5/10	25%
Are there evidence which ensure that board applies high ethical standards (exercises duties of loyalty and care and acts in the interest of the Company and its shareholders)?		10
Is there evidence that the board of directors is responsible for the strategy and business plans of the Company and have responsibility for and oversee the risk management system of the Company?		10
Was there any avidence of non-compliance of the Company over the last year?		5
Does the supervisory board report include discussion on the supervision of operation and financial conditions of the Company and performance of the board of directors, management board and executive officers?		9

Exhibit 36: **Governance ScoreCard**; *Source: team assessment*

#### Shareholders Base.

ERG is traded at the Milan Stock Exchange and has a market capitalization of EUR 3.942bn, represented by 150,320,000 registered ordinary shares with a par value of 0.10€ each. The shares are indivisible, and each share gives the right to one vote. The founder's family controls about 63% of shares through the two holding companies of San Quirico S.p.A. (56% of shares) and Polcevera S.r.l (7% of shares) and 36.50% of shares are free floated. The Garrone family holds key positions in ERG (Chairman and Executive Deputy Chairman) and defines long-term strategy along with the top management through the Strategic Committee, whilst the Board of Directors is composed mainly (7 out of 12) of independent directors.

#### 20.C : ESG PERFORMACE

We developed a framework to assess ESG performances by taking inspiration from some already existing ESG assessment methods (ISS "Governance Quality Score methodology", JP Morgan "ESG index", MSCI "ESG rating methodology"). The maximum attainable score is 300: a maximum of 100 point for each dimension (E, S and G). In order to evaluate (i) Environmental, (ii) Social and (iii) Governance practices of ERG, we considered several factors for each dimension. Specifically, for (i) Environmental practices, we considered impact on climate, waste generation and recycling, and natural resources consumption. For (ii) Social performances we checked the Company impact on employees, institutions, and communities. Finally, to assess (iii) Governance we looked at its board structure, internal audit, remuneration policy and defence of shareholders' rights. For each of these factors we evaluated many parameters. Each parameter was assigned a score between 0 and 1. By averaging the points assigned to parameters, we obtained a score for each area, comprised between 0 and 1. Then, after having applied a weighted average to each factor, we got to a final score for each dimension (E, S and G), and we multiplied it by 100. As last step, we summed the score obtained for E, S and G dimensions, thus obtaining our final value, with a maximum score of 300.

		ERG
<b>Environmental</b>		
<b>Impact on climate change</b>	CO2 emissions (gCO2/kWh)	145
	Energy consumption (GWh)	5.455
	Energy from clean sources [%]	89%
	Compliance with emissions cap	✓
<b>Waste</b>	Waste generated [ton]	380
	Waste recycled [%]	34.1%
<b>Natural resources consumption</b>	Water consumption [m3]	1252
	Intensive use of animal leather and fur	X
<b>Social</b>		
<b>Employees</b>	Gender mix [%]	79.2% Men - 20.8% Women
	Gender pay-gap [%]	0%
	Employee training hours [h/year]	7.8h
	Safety [no. of injuries x 1,000,000]/no. hours worked]	3.17
	Employee turnover [%]	13.7%

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Social		
Institutions	Tax transparency	✓
	Law infringements	X
Communities	Code of conduct	✓
	Workers with disability [%]	n.d.
	Charity initiatives	✓
Governance		
Board structure	How many directors serve on the board?	12
	What percentage of the board is independent?	50%
	Is there separation between chairman & CEO ?	✓
	Is the chairman independent?	X
	Has the company identified a senior independent director or an independent Lead Director?	X
	Are there audit, compensation, governance and sustainability committees?	✓
	Is the chair of the nominating committee independent?	X
	Are there executives on the nominating committee?	✓
	Is the chair of the compensation committee independent?	✓
	Are there executives on the compensation committee?	X
	Is the chair of the audit committee independent?	✓
	Are there executives on the audit committee?	X
	What percentage of the audit committee is independent?	100%
	What percentage of the directors attended less than 75% of board and/or key committee meetings?	0%
	What is the proportion of women on the board?	33%
What is the average of directors' age?	56	
Remuneration policy	Do directors participate in equity-based plans?	✓
	Do non-executive directors participate in performance related remuneration?	X
	Does the company disclose details of individual executives' or inside directors' remuneration?	✓
	What are the minimum vesting periods mandated in the plan documents for executives' restricted stock?	3y
	What proportion of the salary is subject to stock ownership requirements or guidelines for the CEO?	63%
	Did the company disclose a clawback or malus provision?	✓
Audit & Risk	What percentage of the total fees are represented by non-audit fees?	0
	Did the auditor issue an adverse opinion in the past year?	X
	Has a regulator initiated enforcement action against the company in the past two years?	X
	How many financial experts serve on the audit committee?	3
Shareholders interest	Does the company have a slate ballot at its current shareholders' meeting?	X
	Does the company have classes of stock with different voting rights?	✓
	Does the company maintain pre-emptive rights in the event of a takeover bid?	✓
	Are there ownership factors that affect takeover defences?	✓
	Are there priority rights that affect takeover defences?	✓

Exhibit 37: ESG PERFORMANCE  
Source: team assessment

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