



CFA Institute

CFA Institute Research Challenge

Hosted in

CFA Society Italy

Team VGLP

BUY

Price: €26.1 (closing price 4th February 2021)

Target Price: €29.6**Upside: +13.6%**

Dividend Yield: 2.84%

Market Data**Main Shareholder**

San Quirico SpA (55.6%)

Polcevera Srl (6.9%)

Treasury Shares (0.9%)

Other Shareholders (36.5%)

Listed on: MTA

Index components: ECPI Global Clean Energy Equity Index; FTSE Environment Renewable and Alternative Energy Index; FTSE Environment Renewable and Alternative Energy 50 Index; Ethibel Excellence and Pioneer Investment Register 2019; 2019 Q1 Carbon Clean 200; Corporate Knights 2019 Global 100 Most Sustainable Corporations in the World Index

ISIN: IT0001157020

	2021E	2022E	2023E	2024E
EPS	0,75	0,78	0,87	1,00
P/E	34,59x	33,41x	29,88x	26,19x
Price to book	11,78x	12,04x	12,34x	12,68x
EV/SALES	5,39x	6,47x	6,24x	5,88x
EV/EBITDA	11,22x	12,44x	11,77x	10,89x
EV/EBIT	39,38x	38,04x	34,02x	29,82x
ROE	0,06	0,07	0,07	0,08
ROIC	0,03	0,03	0,03	0,04

52-week range: 13.17 - 27.54

1Y stock return: +16,89%

30 days average volume: €241,619mln

**5Y ERG performance vs. FTSE Mid Cap**

ERG SpA



€mln	2020A	2021E	2022E	2023E	2024E	2025E
Revenues	1041,41	1088,56	908,04	941,66	998,73	1065,56
EBITDA	504,37	523,64	472,18	499,08	539,31	596,71
Margin	0,48	0,48	0,52	0,53	0,54	0,56
EBIT	190,47	191,49	195,11	211,75	234,57	271,57
Margin	0,18	0,18	0,21	0,22	0,23	0,25
Net Income	145,93	149,23	154,49	172,71	197,05	235,05
Margin	0,14	0,14	0,17	0,18	0,20	0,22
EPS	0,74	0,75	0,78	0,87	1,00	1,19
P/E	35,38x	34,59x	33,41x	29,89x	26,2x	21,96
EV/EBITDA	11,65x	11,22x	12,45x	11,77x	10,90x	9,85x
Net Debt	2048,53	2165,39	1435,83	1462,22	1612,35	1838,24

“We are #GreenEnERGymakers”

We initiate our coverage on **ERG SpA** with a **BUY recommendation**, assessing a **€29,6 Target Price** that imply a **13,6% potential upside** from its current stock price (€26,1 per share, closing price 4th February 2021). In our opinion, the key variables that bring ERG in a leadership position in the wind energy sector in Italy and that make the Company one of the most important players in Europe, are the growth profile of the Company, and the managerial culture, that have been paired over time by a brand strategy that focused on green innovation.

The future growth is based on three principles: **decarbonization**, **innovation**, and **internationalization**. It keeps growing in renewables using strategies such as greenfield and co-Development, Repowering and Reblading, M&A; the Company adopted an “Open Innovation” approach that will improve operational efficiency and will allow to seize disruptive ideas to anticipate new global trends and gain market position. Moreover, for resource use, emissions, and environmental innovations, ERG received an **ESG score** of 74.8 (Grade: **B+**) in fiscal year 2019, with an **A** rating in **Environmental pillar score** (weight: 42.5%), thanks to the full compliance with the mission and the goals of the Company.

ERG: from grey to green

ERG SpA is an **Italian industrial group** founded in Genoa in 1938 by Edoardo Garrone and it is mainly controlled by the Garrone-Mondini family through San Quirico S.p.A. (55.6%) and Polcevera S.r.l. (6.9%). The company went public in 1997 with the listing on the Italian Stock Exchange; in 2005 it moved from the STAR segment to the Blue-Chips one (now FTSE Mid Cap). In the past (until 2016) it was an individual entity operating on the trading of products derived from the processing of oil and tar; today it is a European leader in the **renewable-energy industry**.

Now ERG S.p.A. operates in four **Electric Power generation sectors**: wind, hydro, solar, and thermoelectric.

Its business model is focused on sustainable development and energy transition and its mission is to become a leader in the new global energy scenario, supported by the discovery and exploitation of new opportunities, benefitting from its sound know-how and flexibility of the organizational structure.

Business and Financial development

According to our analysis, the probable **sale** of hydroelectric and thermoelectric assets will lead the Company to an **improved efficiency** and **higher margins** (estimated **EBITDA margin** equal to **56%** in 2025E vs. an average of 45.6% in the period 2016-2020) thanks to a reduction in operating costs and an increased productivity due to Repowering and Reblading. Furthermore, a focus on **wind and solar segments** will allow to catch the strong demand for renewable sources that is expected to come from the development of global **hydrogen production**. In particular, the disposal of thermoelectric assets will improve the Company’s “**carbon footprint**” and is expected to lead to a **better ESG positioning** in financial indexes. In conclusion, thanks to the amount of cash inflow following the sale, we assume that ERG will be able to reduce its debt and to reach an **optimal capital structure**, potentially obtaining a higher credit rating and, therefore, more favourable financial terms.

Valuation

Our **Target Price €29.6** is the result of ERG’s competitive position and strengths, thanks to its **efficiency** and **diversified production base**, **strategic position** of its assets, a future strategy focused on **innovation** and the ability to meet new energy demand. For the distinctive characteristics of the Company, in our opinion the most appropriate method of valuation is the Discounted Cash Flow: as such, we implemented a **four-stage DCF** to take into account an initial period of transformation of the Company (with the disposal of two segments: hydro and thermoelectric), a second period of strong growth and a mature one. We support our **BUY recommendation** by comparing the result of our DCF with a **Multiple Analysis**, in which we consider two samples represented by European and Italian companies operating in the same industry. Through this method we find a TP consistent with the result of the DCF model, confirming our **BUY recommendation**. We stress some of the most important variables with a **sensitivity analysis**: in particular, Terminal Value Growth Rate, WACC and Beta. We assess a **scenario analysis** considering a Bull case and a Bear case, reinforcing our Buy recommendation. Furthermore, we use a **DDM model**, to take into consideration the effect of potential extraordinary dividends, with which we find a TP consistent with the previous analysis.

Investment Summary

ERG: An Independent Power Producers that operates in the renewable-energy industry

We initiate our coverage on ERG SpA with a **BUY recommendation**, assessing a **€29,6 Target Price**, implying a 13,6% potential upside from its current stock price (€26,1 per share, closing price 4th February 2021). Our investment recommendation is based on: i) a **brand strategy** that focused on green innovations; ii) the **leadership position** of ERG in the wind sector, this segment is mainly concentrated in Italy (1,093MW), but with a growing presence abroad (397MW in France, 272MW in Germany, 82MW in Poland, 70MW in Romania and 54MW in Bulgaria); iii) a **flexible organization** that allows the company to anticipate new global trends; iii) an **efficiency hedge against risks**; iv) a **business model** based on new environmental requirements; v) the **great growth expectation** of the industry in which ERG operates.

Drivers for growth

The three principles of **decarbonisation, innovation** and **internationalization** will be the basis of the future growth. ERG's intention is to keep growing in renewables through: i) **Greenfield and Co-Development**, setting up a sustainable greenfield growth implementing a local organizational structure; ii) **Repowering and Reblading**, increasing the installed capacity, the productivity and extending the useful lives of wind farms; iii) **M&A operations**, expanding its geographical and market presence in wind and solar segments. In addition, the **decarbonisation** of the economies and the development of **hydrogen** production are key macro elements that will drive growth of renewables.

Relevant risks

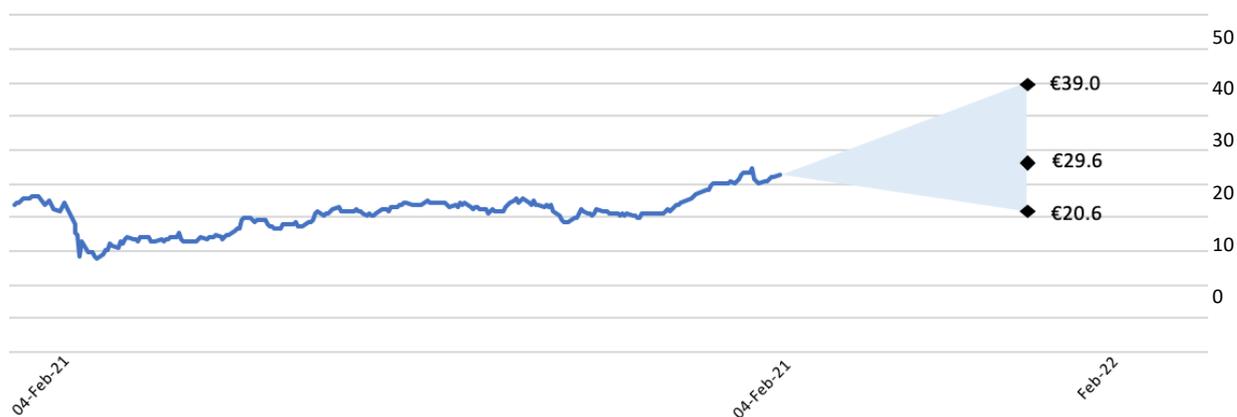
Regulatory evolution and country risk: the lack of a stable legislative framework, the application of penalizing laws and unilateral changes to contracts, increases in tax burden and bureaucratic complexity are factors that could affect Company's revenues. **Climate change and availability of renewable resources:** adverse climatic conditions and geographical positions of operating sites could affect production and revenues, as well as increase O&M expenses. **Financial risks:** changes in the rating of the Parent Company, high investments to expand business and forex risks due to the exposure in countries with different currencies could negatively impact on ERG's revenues.

Financial highlights

According to our analysis, ERG's business potential leads to a promising growth of **profitability**. We assumed that total **revenues will initially decrease** due to the hypothetical **disposal** of Hydro and Thermoelectric in 2022; however, **investments in Wind and Solar segments** will allow to recover the current amount (**€1.1bn**) of Revenues thanks to higher **production efficiency**. In **2025E-2035E** period, Total Revenues are expected to **grow** at a **10%** year-on-year rate, reaching **€2.8bn** in 2035, driven by the increasingly demand for electricity produced from green sources. Without Hydro and Thermoelectric, we estimate **higher marginality: EBIT** will reach **€271.6m** in 2025E (**+7.4%** CAGR 2020-2025E), with a margin on revenues of **25.5%** in 2025E. The estimated growth in **ROE** (6.3% in 2019 vs. **9.2%** in 2025E) is mainly driven by the **optimal D/E ratio (60%** 2025E) that Company will achieve. The estimated high **cash generation**, following the disposal, that will be invested in wind and solar segments and the **reduction of debt** will lead to an increase of **CFO/Debt ratio** (15.2% in 2020 vs **20.5%** in 2025E).

Valuation

The **Target Price** resulting from our valuation is **€29.6** which implies a **13.6% potential upside** from the actual market price (€26.1 per share, closing price 4th February 2021) and supports our **BUY recommendation**. To determine ERG's fundamental value we implemented a **four-stage DCF model** to take into account the initial probable disposal of hydro and thermoelectric assets, followed by a period of **strong growth** driven by European transition to a decarbonised economy and the rise of green hydrogen global production and concluded by a **fading-out growth** towards a final mature phase. To sustain our **BUY** recommendation, we also executed a **Multiples Analysis**, taking into account two groups of peers and estimating a **16.1x EV/EBITDA** and **2.7x Price to Book Value**. At last, we performed a **Dividend Discount Model** considering a 30 years period divided into **4 stages** in which we apply a discount rate (**WACC**) of **5.32%**. We stress our result through a **sensitivity analysis** (WACC, Beta, and TV growth rate). We also assess a **scenario analysis considering** a Bull and Bear (Appendix 12), and complete our valuation with an **As-Is scenario**, not considering the disposal of Hydro and Thermoelectric (Appendix 14). We also take into consideration a **bull, bear, and as-is scenario** (see Appendix 14).



Source: Team Estimates

BUSINESS DESCRIPTION

ERG S.p.A. is an Italian industrial group founded in **Genoa** in **1938** by Edoardo Garrone. The Company started as an individual entity operating on the trading of products derived from the processing of oil and tar. Today, it is a multi-energy company and a **European leader** in the power generation from renewable sources. The company went public in 1997 with the listing on the Italian Stock Exchange; in 2005 it moved from the STAR segment to the Blue-Chips one (now FTSE Mid Cap). It is **mainly controlled** by the Garrone-Mondini family through San Quirico S.p.A. (**55.6%**) and Polcevera S.r.l. (**6.9%**) (see Exhibit 1), with a current **Market Cap** of **€3,082m** and **€1,091m** in **Revenues**.

COMPANY PRESENTATION

ERG S.p.A. is a producer of electricity from **renewable sources**: its **core business** is based on the combination of clean, renewable and sustainable sources such as **wind, water, sun** and **natural gas**. Originally an oil company, it soon became a multi-energy provider and one of the **main players** in the European renewable energy sector.

Intuition, long-term vision and entrepreneurial spirit are the main features of the business model, focused on **sustainable development** and **energy transition**. Its mission of being an independent energy producer is supported by the discovery and exploitation of new opportunities, which benefits from the sound know-how, the flexibility of the organisational structure and the financial solidity. Its organizational structure is defined by two macro-roles: **ERG S.p.A. – Corporate**, which provides the strategic orientation and generates the business development processes; **ERG Power Generation S.p.A.**, which is in charge of the industrial and commercial processes. The **growth profile** of the company and the managerial culture have been paired over time by a **brand strategy** which focused on **green innovation**: in particular, the most recent communication campaign (see Exhibit 1) has been able to catch the new **green positioning** and tells us, as the Company states, “*We are #GreenEnERgyMakers*”.

Business Segments

The ERG Group has entrusted the management of its production and commercial processes to the subsidiary ERG Power Generation S.p.A., which operates in four Electric Power generation sectors: Wind, Water, Sun and Thermolectric (see Exhibit 2 and 3). Since 2015, Erg Group has **increased its installed wind capacity** by **12.1%** (CAGR 2.3%), reaching **1,967MW** in September 2020 and becoming the **leader** of wind power production in Italy and one of Europe’s **top ten** onshore wind power producers. These results were achieved thanks to a business approach focused on highly specialised skills, which range from the development of greenfield investments for the construction of wind farms to turbine maintenance (Repowering & Reblading) and weather forecast.

The **wind farms** are mainly concentrated in **Italy** (1,093MW), but with a significant and increasing presence in Europe (874 MW operational), mainly in **France** (397MW), **Germany** (272MW), **Poland** (82MW), **Romania** (70MW) and **Bulgaria** (54 MW). In addition, 280MW are under construction in 2020 in the **UK**, France and Poland.

In the **Water** segment, ERG Group operates in the hydroelectric sector through its company ERG Hydro, which consists of a complex of 19 plants, 7 dams, 3 reservoirs and a pumping station that in 2019 allowed to reach a total efficient power of 527MW and an annual clean energy production of 1.4TWh. It is a programmable, flexible, and efficient energy source, which ensures production continuity and flexibility.

Producing from renewable sources, the emission of 2,901 thousand tons of CO2 into the atmosphere was avoided. In the **Sun** segment, since January 2018, ERG has been active in the production of Electricity from solar sources. In January 2019, Erg Group finalized the acquisition of 78.5% stake in Perseo s.r.l (51.4MW) allowing the Group to become one of the five leading photovoltaic operators in Italy, with an installed capacity of 141MW and 33 photovoltaic plants, located in nine different Italian regions. In the Thermolectric segment, ERG operates in the sector of electricity generation from **thermolectric** sources through the combined cycle CCGT (Combined Cycle Gas Turbine) plant located in Sicily. It is a low-emission cogeneration plant powered by natural gas, which produces electricity and steam. Its production capacity is 480 MW. Like the hydroelectric, also natural gas is a programmable and flexible energy source. (Appendix 1)

Key Drivers of Revenues and Expenses

Company’s revenues mainly consist of:

a) **Sales of electric energy**: during 2019, the **total volume** of energy sold were equal to **15.1TWh** (13.6TWh in 2018), compared to a **total production** of about **8TWh** (7.5TWh in 2018) of which 1.8TWh abroad and 6.1TWh in Italy. The energy is sold through wholesale channels, including four types of markets in the Power Exchange (IPEX): a) “*the market of the day before*”; b) “*intraday market*”; c) “*market for the dispatching service*” and d) *OTC market*.

b) **Incentives** related to the production of wind farms and hydroelectric and solar plants: these incentives consist of: i) *Feed-in Tariff*; ii) *Feed-in Premium*; iii) *Green Certificates/Incentive Rate*: ERG, as renewable energy producer, can sell the certificates obtained to the entities forced to its purchase, achieving **extra revenues** (these Certificates have recently been replaced by an Incentive Rate, which guarantees the additional payment of a tariff from the GSE based on net energy production and commensurate with the average energy price of the previous year (equal to €53/MWh in 2019). Company’s costs are mainly represented by: i) **Purchasing costs** (related to the purchase of electric energy from the Energy Market); ii) **Operation & Maintenance** (O&M); iii) **Other operating costs** (concessions feeds, consultancies, and cost of labour). In addition, unexpected weather conditions could have a significant impact on both revenues and costs, especially in terms of lower production volumes from solar and wind, which need to be counterbalanced by higher volumes from hydroelectric and gas, and higher O&M costs. Accurate weather forecasts are necessary to limit the impact of this phenomenon.

FUTURE GROWTH STRATEGY

The integration of sustainability with the business model is the starting point for defining future priorities and objectives. The three principles of **decarbonization**, **innovation** and **internationalization** will be the basis of the future growth and result in an **investment program** of **€1.7bn**. Furthermore, the company adopted an “Open Innovation” approach that will improve operational efficiency and will allow to seize disruptive ideas in order to anticipate new global trends and gain market positions.

ERG’s strategy is to keep growing in renewables through: i) **Greenfield and co-Development** (ERG has created an organization to extend its presence in France, Germany and United Kingdom because of their high wind potential and

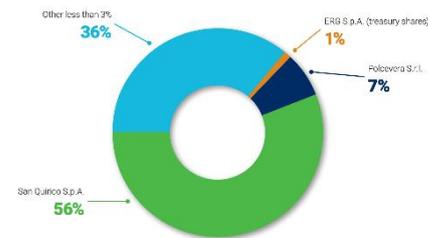


Exhibit 1 – Shareholders structure as February 4th 2021 – Source: Company Data

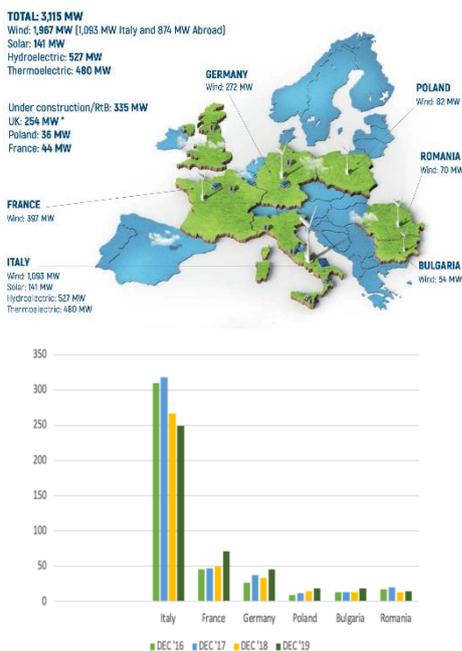


Exhibit 2 – Revenues breakdown by Geographical Area – Source: Team Estimates

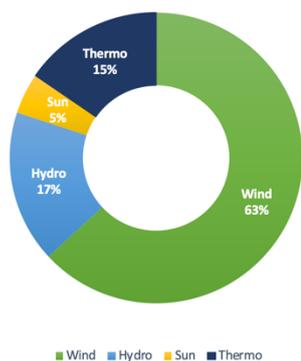


Exhibit 3 – ERG’s energy segments – Source: Company Statement

regulatory stability. The aim is to set up a sustainable greenfield growth implementing a local organizational structure, with a total investment of €444m); ii) **Repowering and Reblading** (in Italy the company will intervene on wind farms with the purpose of increase the installed capacity, the production and extend the useful life of plants. The total investments in this segment amounts to €418m, €402m for Repowering and €16m for Reblading); iii) **M&A** (the company will support growth in target countries to expand wind and solar power).

INDUSTRY DESCRIPTION

Major Player	Segment
NextEra Energy	Solar, Wind
First Solar	Solar
Albioma	Solar, Thermo
EDP Renewable	Wind
Vestas Wind System	Wind
Enel	Wind, Hydro, Thermo, Solar
Edison	Wind
Brookfield Renewable	Hydro
Partners	Hydro
Verbund	Hydro
A2A	Wind, Hydro
Ormat Technologies	Thermo
Albioma	Thermo
Renewable Energy Group	Byomass

Exhibit 4 – Renewable Utilities Industry -

Sources: Team Estimates



Exhibit 5 – Porter Five Forces Analysis –

Source: Team Estimates

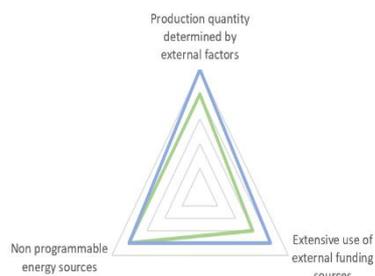


Exhibit 6 – Weaknesses – Source: Team

Estimates

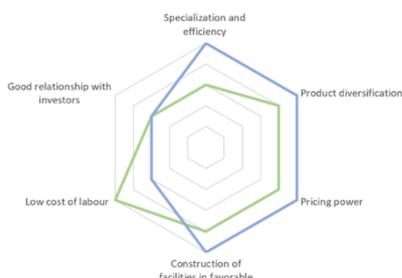


Exhibit 7 – Strengths – Source: Team

Estimates

RENEWABLE UTILITIES INDUSTRY

The **renewable-energy industry** is the part of the energy industry focusing on renewable energy technologies. *Renewable utilities* are the part of utilities in which the sources of the distributed electricity come from clean energy. ERG operates in this industry and in particular, joins the **Independent Power Producers**. IPP is a private entity, which owns facilities to generate electricity for sale. It sells power to the national electricity network and to a single third-party through *Power Purchase Agreement* (PPA) and it is characterized by the internal production and building of the electric energy and equipment. IPPs may use the national electricity networks distribution system if mechanisms exist to permit this or via a private wire direct to the customer. The Italian Electricity Market, where ERG has its entire business, is divided into (i) *Day Ahead Market (DAM)*, (ii) *Intraday Market (IM)*, (iii) *Market for the Dispatching Service (MDS)*, and the most recent (iv) *Capacity Market (CM)*. The last one is characterized by a mechanism of calling of competitive auctions where – on a voluntary basis – market operators (including ERG) offer their production capacity (MW) to a centralized buyer, Terna.

Growth

The industry of renewable energy has grown a lot in recent years and renewable energy is expected to cover the 65% of European energy mix by 2050, driven by cost reduction and strong political support. The **COVID-19 crisis** was an obstacle to this race: full lockdown measures pushed electricity demand down by 20%. The most dramatic decreases were observed in Italy, where in the last week of March demand dropped by 28% compared to the previous year. Since lockdowns were lifted, demand has gradually recovered to levels around 5% lower than the previous year owing in large part to the lower levels of economic activity related to ongoing restrictions. COVID-19 caused also a forced break to supply chain, so there were sharp decreases in capacity additions compared with 2019: first quarter (Q1) capacity additions in 2020 were lower for all technologies, with solar and wind each contracting 25%. In the second half of the year, thanks to the almost total recovery in global activity, there is a **strong acceleration** in capacity additions.

Major Players

Most companies operating in the IPP industry have diversified investments, but some focus exclusively on a single source of revenue. For this reason, to identify the major players it was considered appropriate to separate companies according to the energy sector in which it operates. **Solar**: *NextEra Energy*, *First Solar*, and *Albioma* (it holds 150 solar power plants). In Italy, the major companies are *ERG*, *Edison*, and *A2A*. **Wind**: *NextEra Energy*, *EDP Renewable* (it is the world's fourth-largest producer of wind energy), and *Vestas Wind System* (it has a capacity of more than 100GW and wind plants in 80 countries). In Italy *ERG* is the major producer of wind energy, following by *Enel* and *Edison*. **Hydro**: *Brookfield Renewable Partners* (has diversified activities, but 75% of its activity comes from hydropower), *Verbund* (the largest electricity supplier in Austria). In Italy, *Enel* creates 38,1% of hydroelectric production, succeeded by *A2A*, *Edison*, *Alperia*, *Hydro Dolomiti Energia*. **Geothermal**: *Ormat Technologies* (manages its plants in over 6 countries and builds and designs plants for third parties), and *Albioma*. In Italy, *Enel* runs almost all the production. **Bioenergy**: *Renewable Energy Group* (leading biofuel producer in the US), and *Albioma*. In Italy major company are *A2A*, *Hera*, and *Italia Green Energy Holding*. (see Exhibit 4)

Industry Competitive Analysis

The interest in the safeguard the planet and the control of global warming have the attention of Governments that incentivize these renewable sources. The above-average returns for the foreseeable future could lead a high attractiveness on Renewable Utilities Industry. The industry analysis will be run by the team using the **Porter's Five Forces model** (see Exhibit 5). The high barrier to enter in terms of plants, technologies, and licenses makes the **threat of new entrants low/medium** for UI. This is especially true for wind, geothermal, hydro, and biomass sources. Instead, in the solar sector entry the threat is expected to be higher due to the low initial investment required. Relative to the **customer bargaining forces**, these are *high*. The auctions mechanism is particularly rigid because of the system of obligations and penalties that excludes wind and solar from participation, despite formally allowed. Instead, Power Purchase Agreement (PPA) has fewer constrictions and can stabilize revenues. As for this point, the industry has a *medium internal rivalry*; in fact, operators try to be always more efficient, have less costs, be able to set competitive price per MW/h when enter the auctions. However, the demand growth and the concentration of the market suggest an evaluation as moderate. Relative to the **supplier bargaining forces**, the industry is characterized by two type of relationship: (i) the suppliers of parts and materials for the production, who are often selected through questionnaires that assess the ethics and the ESG approach; the rating about it is *very low*. (ii) supply of energy sources (e.g., gas in a CCGT); this lead to a *low* evaluation of the forces. The **threat of new products or services** is *low*, as the appearance of new forms of renewable sources seems an unrealistic scenario in the short-term. (Appendix 2)

Trends

" Shaping a secure and sustainable energy future for all" (International Energy Agency, IEA) seems to have become an increasingly shared motto. The danger of a slow, harmful, and irreversible change on the planet care moved first awareness then investments. CO₂ emissions must be reduced as part of the European Green Deal. Doubtless, the **environmental situation** influences positively the industry; through **technological innovations** operators could produce energy and in a more sustainable and efficient way. Improvements could come directly from more productive turbines or panels and indirectly from better forecasts of climatic conditions that reduce the weather risks. Moreover, **governmental influences** have a key role, as policy makers can drive both private and industrial behavior through incentives and regulations. Finally, transition from *grey sources* to the *green* ones is endorsed by stars from the entertainment system with the purpose of raising awareness to climate change. The **social awareness to the planet** safeguard could be a development leverage for the industry.

Drivers

The main drivers that lead the expansion of this sector are: I) **cost reduction**, II) continuous **evolution** in the **technological field**, III) construction of plants in **favorable areas**, IV) **regulation** that incentivizes production, V) investor/investors' action and VI) **greater awareness** of large part of the world's population on climate change. Renewable energy has a very **competitive cost**. Over the past twenty years, there has been a qualitative leap in environmental policies thanks to technology, which is the driving force behind sustainable development. **The construction of plants in favorable areas** allowing to have maximum efficiency of the plants. In Italy, 80% of wind farms are concentrated mainly in the southern part of the country and in islands where there is greater exposure to wind. **Political institutions** also play a very important role. Increased awareness has fostered government policies in favor of decarbonization (like the Green Deal launched by the European Union). Italy is equipping itself to achieve these objectives through **public incentives** to renewable energy sources, differentiating them by renewable source, size of plants, date of construction or connection to the distribution network. The goal is to achieve a target of 30% renewable energy by 2030 set out in the Integrated National Energy and Climate Plan. **Investors and large companies** have made commitments to support renewable energy. A clear example is ERG's widespread success with the placement of a **€500m green bond** having a demand six times higher than supply. In addition, the weight of **public opinion** is also decisive in the growth of this sector. People are increasingly attentive to climate change and aware of investing in renewable sources.

Swot Analysis

The **strengths** (see Exhibit 7) of this sector can be a leverage to take advantage of the **opportunities** (see Exhibit 9) that will arise on the market. The company can cover a rapidly increasing demand having a wide margin improvement with investments in new technologies and its expansion through the large use of M&A. Expiration of incentives in key markets and long bureaucratic processes, slowed in part also by Covid-19, will affect inevitably the production. Furthermore, another **weak point** (see Exhibit 6) is the inability to determine the quantity of raw material that can be produced due to the dependence on uncontrollable variables: ERG experienced a drop-in production in the hydroelectric plants due to dry season that affected central Italy in 2020. If renewables will become the first source of global energy supply by 2050, then climate change will be a real **threat** (see Exhibit 8) to the sector, facing new risks and scenarios. The insurance market is becoming more and more expensive, and the meteorological risk is hard to be insured against and differs from climate change because it is driven by short term events. Finally, the challenge of this sector is to be able to qualify and manage its IT exposure. (Appendix 3)

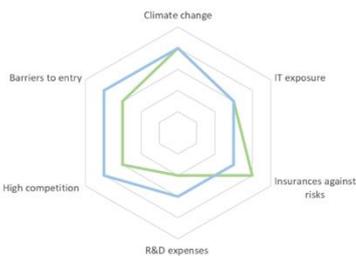


Exhibit 8 - Threats - Source: Team Estimates

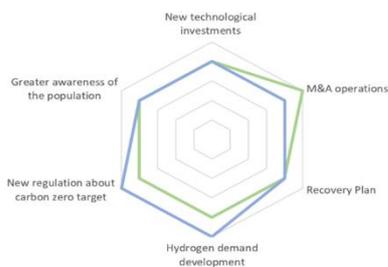


Exhibit 9 - Opportunities - Source: Team Estimates

FINANCIAL ANALYSIS

PAST PERFORMANCE

Revenues and Geographical Expansion

During the last 4 years (2016-2019) ERG Group's **revenues decreased** by **0.1%** 4Y CAGR, reaching **€1,022m** in 2019A, from €1,024m in 2016A: this limited increase in revenues is mainly due to particularly **adverse hydro conditions** in Italy in 2019A (-511GWh), with a negative effect on revenues, which amounted to €119m in 2019A (-22% 2Y CAGR) compared to €194m in 2018A. These effects were more than offset by the increase in 2019A in wind, solar and thermolectric production. In 2019A, growth in the solar sector was mainly due to the acquisition of two photovoltaic plants with an installed capacity of 51.4MW, reaching **€71m** in 2019A compared to €38m in 2018A (35.98% 2Y CAGR). The wind sector shows a €9m decrease in revenues for the period 2016A-2019A (-0.55% 4Y CAGR), with a strong decrease in particular in 2018 (-€56m compared to 2017A) due to lower incentives in Italy and Romania and lower production in Italy. The thermolectric sector recorded an **increase in revenues** in 2019A equal to **€414m**, (+€13m compared to €405m in 2018A).

From 2016A to 2019A, wind sector revenues abroad **increased** by **11%** 4Y CAGR starting from €112m in 2016A to **€170m** in 2019A. The main change in foreign revenues occurred in Poland, reaching €19m in 2019A compared to €10m (+17% CAGR) thanks to the significant **increase** in the **sale price of certificates** of origin as well as the energy sale price. Finally in 2019A a **net increase in revenues (+11%** 4Y CAGR) is attributable to a greater output in France (+242GWh, substantially from plants that were recently acquired or that became operational in the second half of 2018A) and in Germany, where revenues in 2019A were **€46m** compared to €26m in 2016A, (+15% CAGR). For further details on wind revenues developments abroad please (see Exhibit 10).

Margin & Operative Structure

Gross margin slightly increased (see Exhibit 11) from 60.1% in 2017 to **65.1%** (2% 4Y CAGR) in 2020, mainly due to the constant revenues (€1,048.8m on average during the period 2017-2020) and the **decrease of COGS (-14.3%** from 2017 to 2020). **EBITDA grew** with a **4.4%** 5Y CAGR, from €453.3m in 2016 to **€499.1m** in 2020, mainly driven by the decrease of cost items. ERG disclosed details about 2019 EBITDA (€520m): thermolectric and hydroelectric segments are the less profitable, they represent respectively **13%** (€69m) and **17%** (€87m) of the total EBITDA, while they represent 41% (€418m) and 12% (€119m) of global revenues; wind and solar segments are the **most profitable** as wind represents **58%** of EBITDA (€301m) while it weighs **40%** (€413m) in terms of revenues; solar is about **12%** (€63m) of total EBITDA while it weighs **7%** (€71m) in terms of revenues; we think that these results are very positive for the solar segment in which ERG invested only since 2018 and in which the firm have planned large investments. Instead, global **EBIT** had a **slight decline (-1.5%** 5Y CAGR) because the solar segment led to an increase of D&A (+14% in 2019) with a less than proportional increase in revenues (+7% in 2019A). In Exhibit 12 we present a comparison with two groups of peer companies that we have chosen based on geographical area and that will take into account to develop the multiple analysis in the valuation part.

Return & Cash Flows

Returns: In order to understand ERG's profitability, we first conducted a **DuPont Analysis** (see Exhibit 13) to explain ROE's trend. In fact, **ROE decreased** from 7.3% in 2016A to **1.8%** in 2019: this result is certainly influenced by the low net income registered in 2019 (€32.8m). However, except for ROE's growth in 2017A to 11.5%, its trend has always been declining: this decrease is mainly explained by an **increase in tax burden**, i.e. a decrease in Net Income/EBT ratio, which went from 81.3% in 2016A to 62.7% in 2019A (-8.3% 3Y CAGR), and an **increase in interest burden**, i.e. a decrease in EBT/EBIT ratio, which went from 76.9% in 2016A to **27.5%** in 2019 (-29% 3Y CAGR).

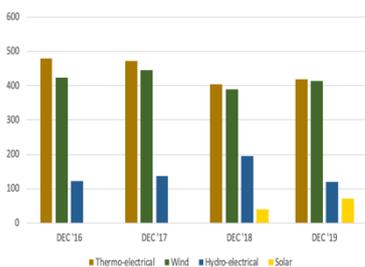


Exhibit 10 – Revenues breakdown by Business Segments – Source: Team Estimates



Exhibit 11 – Gross Margin Evolution – Source: Team Estimates

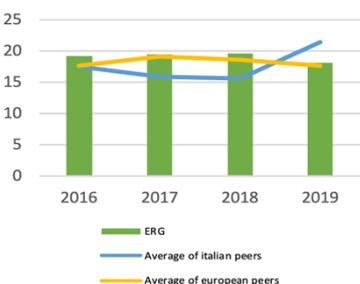


Exhibit 12 – EBIT Margin – Source: Team Estimates

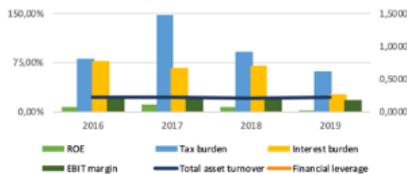


Exhibit 13 – DuPont Analysis – Source: Team Estimates



Exhibit 14 – ROIC, ROS, and ROT Evolution – Source: Team Estimates



Exhibit 15 – Capital Structure – Source: Team Estimates

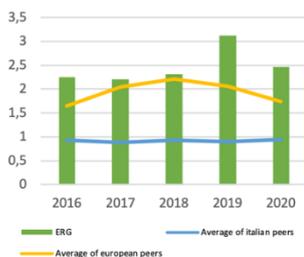


Exhibit 16 – Current Ratio – Source: Team Estimates

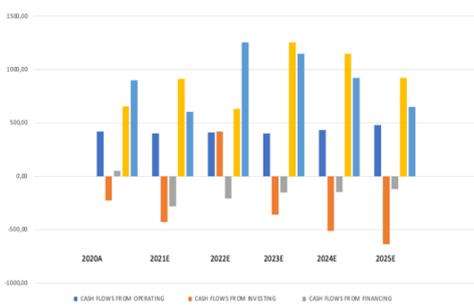


Exhibit 17 – Cash Flow Composition – Source: Team Estimates

In particular, **financial expenses** certainly weighed on ROE's trend: they have always remained quite high, with an average of **€119.8mln** (2016-2020), as a consequence of the Group's transition to become a green company and the high Capex due to the entry in the solar sector and M&A operations. Consistently with all of this, **Financial Leverage** (computed as Average Total Assets on Average Shareholders' Equity) remained steadily at a **high level**, from a 2.7x in 2016 to a **2.5x** in 2019, confirming the importance of debt to fund growth in recent years. On the other side, **EBIT Margin** (computed as EBIT on Revenues) **slightly decreased** from 19.2% in 2016 to **18.2%** in 2019A, while **Asset Turnover** (computed as Revenues on Average total assets) remained **fixed** at **0.22x**. The negative trend of ROE is also explained by the **negative trend of ROI**: in fact, Company's ROI experienced a decline in 2019A and 2020A reaching a level of **3.9%**, while it remained constant at 4.4% in previous years. This decline is mainly due to a **modest decrease in ROS** (see Exhibit 14) from 19.2% in 2016 to **17.8%** in 2020 (**-1.8%** 4Y CAGR) caused by an **increase in D&A expenses** which offset the higher EBITDA Margin. On the other hand, **ROT** also **slightly declined** from 23% in 2016 to **22.2%** in 2020A (**-0.9%** 4Y CAGR), following an increase in Total Assets mainly driven by a greater share of intangible assets and goodwill as a result of the M&A operations.

Cash flows: Despite the important transformation of the Company, ERG has always been able to generate a good amount of **CFO**, which hovered around an average of €371mln reaching **€405.1mln** in 2019. This allowed the Group to: i) **Increase M&A operations** in order to enter the solar business and expand its geographical presence in Europe, as shown by the **increase in Cash Flow from Investing** activities by **85%** 3Y CAGR; ii) **Reduce the Net Financial Position** from 4.1x NFP/EBITDA in 2015 to **3.1x** in 2019A while issuing **2 Green Bonds** which will allow a **lower cost of debt** in future years; iii) **Increase the ordinary dividend** per share from €0.5 to **€0.75**, keeping an average **pay-out ratio of 60%** (excluding extraordinary dividends).

Capital Structure Analysis

From 2016 to 2020 ERG's proportion of **Current Asset to Total Asset** increased from 21% (€953.7mln over €4,531.6mln) to **27%** (€1,285.2mln over €4,755.7mln) with a 5.4% 5Y CAGR, however remaining at levels lower than **Non-Current Asset**. In fact, during the same period Non-Current Asset went **down** with a **1.7%** 5Y CAGR but they remain at 73% (€3,470.5mln) in 2020. The ratio of **Current Liabilities to Total Liabilities**, follows the asset side, growing with a **3.2%** 5Y CAGR reaching 18% (€521.1mln over €4,755.7mln) in 2020 (Exhibit 15). **Non-Current Liabilities on Total Liabilities** **slightly decreased** during the period but remains around **82%** (€2,501.1mln over €3,022.2mln) at the end of 2020. The **Current Ratio** increased by **9%** from 2016 (2.2) to 2020 (2.5). ERG's capacity to face short-term obligations, is guaranteed by the **large amount of cash and cash equivalent**. A comparison with the two peer companies we used in the multiple analysis is shown on Exhibit 16. However, ERG has a large amount of Non-Current Liabilities (€2,375.6mln on average from 2016 to 2020) that guidance discloses to reduce in accordance with the debt-policy in the next future. The **Debt Ratio** (defined as Total Liabilities to Total Assets) remained **unchanged** over the 2016-2020 period at about **62%** (€2,858.8mln over €4,649.9mln on average).

FUTURE PERFORMANCE

Methodology

Considering the news released in December 2020 (Milano Finanza 21-12-2020), we assumed the **sale** by ERG of the hydroelectric and thermoelectric energy segments at the end of 2021, with the aim of **increasing the installed capacity** of wind and solar to meet the new and growing demand for green energy to produce hydrogen. ERG will leave the utilities sector and will become a renewable energy company. The divestiture period runs from 2022 to 2024. During these years the company will receive **cash inflows** from the sale, which we assume will be used to **invest** in the wind and solar segments, to **repay** part of the debt, to pay an **extraordinary dividend** in 2022, and **increase the DPS (+5%** each year). The sale will reduce the total installed capacity, which will return to its current level in 2025 with an **increase in production efficiency**. For the whole period 2021-2025, we estimate revenues through the average percentage of the revenues/installed capacity ratio in the period 2018-2020, which is maintained constant. The contribution of each segment to total revenues is estimated based on the percentage of contribution of each asset to total installed capacity.

2021E:

According to our forecast in 2021 ERG will still have all its assets as the negotiation will be currently underway. That is why we hypothesized that ERG will not invest further in gas and hydro, whereas will continue to improve the production capacity of wind and solar. Through Reblading and Repowering projects, ERG will **improve wind capacity** by a total of **48MW** (from 1041MW in 2020 to **1089MW** in 2021). In solar the capacity will **improve** for a total of **140MW**. This growth will lead to an **increase in revenues of 14%** in solar and **8%** in wind. Regarding hydro and gas, consistently with the hypothesis of dismantling, the production capacity will not vary (stable since 2018) and revenues will remain **unchanged** at around **€117mln** for hydro and **€416mln** for gas. We estimate that **costs will slightly increase by 5%** as a result of the increase in solar and wind capacity. **Amortization will increase by 5.8%**. Furthermore, thanks to the higher growth in revenues compared to costs, **net profit will grow by 6.5%** (from €122.9mln to **€130.9mln**).

2022E-2025E period:

During this phase we assume that ERG's business will only be based on wind and solar after the sale of hydro and thermoelectric assets that will spread between 2022E-2024E: we estimate that **operating costs will decrease by 19%** in the period 2021E-2025E since the sold assets represent the less efficient lines, achieving a **greater EBITDA margin (56%** in 2025E vs. an average of 45.6% in the period 2016-2020).

Since hydroelectric plants represent a very scarce asset in the market, this may lead to a **premium valuation**. We estimated the cash inflow resulting from the sale through a **2.2x EV/Sales multiple** (computed as an average between IPP industry EV/Sales equal to 0.9x and the average between ERG's 2015-2019 EV/Sales equal to 3.5x) multiplied by estimated revenues from each line in 2021E, resulting in a **total cash inflow of €1171.6mln** (consensus range €1.0-1.4 bn), which will be cashed by the Company according to the annual percentage of disposal.

2022E: Following our estimates, 2022 is the first year without hydroelectric and thermoelectric sources; we think that the 80% of the disposal occurs during this year. The decrease of the installed capacity by 816MW (422MW from hydro

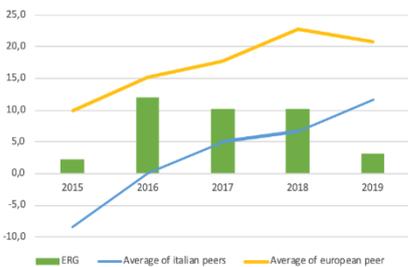


Exhibit 18 – Net Profit Margin – Source: Team Estimates



and 394MW from thermo) leads to a **reduction** of the **revenues** from these segments, respectively for **€93m** and **€333m** (€426m on total revenues). The two sold product lines generates an **inflow** of cash of **€937.3m** for the period. We suppose that ERG is going to use this liquidity to **increase** the **installed capacity** in the remain sources (Wind **+6.3%**, from 1960 MW to 2,083MW, Solar **+167%** from 150 MW to 400 MW). Revenues decrease for about 16% from the precedent year due to the asset disposal but the revenues from Wind and Solar sources increase respectively by 48% (€312m) and 29% (€32m). Moreover, **costs decrease** mainly because those related to hydro and thermo are the most relevant. The large amount of cash held could be used to **decrease** the **long-term debt**, following the debt-reduction policy disclosed by ERG in 2020. The divestment will reduce Property, Plant and Machinery (PP&M) and this will generate **lower depreciation costs**. Finally, in 2022 we estimated an **extraordinary dividend** (Dividend Per Share of **1.15**), as a consequence of the special operation occurred and assuming the potential interest of the controlling shareholders for a one-off increase of the payout ratio (1.48).

2023E: We estimate that the share of disposal of hydroelectric and thermoelectric assets will reach 90%, specifically the remaining capacity of hydroelectric goes from 105 MW to 11 MW, while thermoelectric goes from 96 MW to 10 MW. This additional disposal quota will allow a **cash inflow** of **€210.9m**, which we estimate will be used to i) **increase** the **installed capacity** of wind power by **6%** (from 2083 MW to 2214 MW in 2023E) and of solar power by **37%** (from 400 MW to 550 MW in 2023E); ii) **pay off** the debt and iii) **increase** the **DPS** from €0.75 in 2021E to **€0.83** in 2023E. This strategy will allow an **increase** in total **revenues** of **3.7%** (€ +34 million), consisting of +13% wind (€ +84 million) and 30% solar (€ +44 million). In addition, Depreciation and Amortisation will increase € 10 million, in relation to a greater value of PP&M. As a result, the 2023 **Net Income** will **increase** by **12%** (€ +14 million) compared to the previous year.

2024E-2025E: the disposal of hydro and natural gas will be fully completed. According to our assumptions, in this period, ERG Group will produce renewable energy only through wind and solar sources. **Installed capacity** will **increase** by **6%** from 2784 MW in 2023E to 2952 MW in 2024E, and in 2025E we estimate a further **increase** of **6.7%** reaching 3150 MW of installed capacity. In 2025E, revenues will return to **pre-disposal levels**, marking a **+2.3%** from 2020E (€ 1041 million) to 2025E (€ 1065 million). Furthermore, a slight increase in Depreciation and Amortization and costs is expected, due to higher production. At the end of 2025, we assume that the ERG Group reaches its **optimal capital structure** target, with a debt that stands at €1688.2 million, **22% lower** compared to 2020E (€2058.8 million).

VALUATION

The **TP** resulting from our valuation is **€29.6** (see Exhibit 21) which implies a **13.6%** potential **upside** from the actual market price and supports our **BUY** recommendation. To determine ERG's fundamental value we implemented a **four-stage DCF model** to take into account the initial probable sale of hydro and thermoelectric assets, followed by a period of strong growth driven by European transition to a decarbonised economy and the rise of green hydrogen global production and concluded by a fading-out growth towards a final mature phase. To sustain our **BUY** recommendation, we also executed a **Dividend Discount Model** and a **Multiples Analysis**. We then concluded stressing some key variables of our model performing a **sensitivity analysis** on **WACC**, **beta** and **terminal growth rate**.

DCF MODEL

DCF MODEL	STAGE 1					
	2020A	2021E	2022E	2023E	2024E	2025E
Period	0	1	2	3	4	5
Total Revenues	1041,4	1088,6	908,0	941,7	998,7	1065,6
Revenues growth (%)	-0,3%	4,5%	-16,6%	3,7%	6,1%	6,7%
EBIT	190,5	191,5	195,1	211,7	234,6	271,6
EBIT Margin (%)	18,3%	17,6%	21,5%	22,5%	23,5%	25,5%
Tax Rate (%)	35%	24%	24%	24%	24%	24%
NOPAT	123,8	145,5	148,3	160,9	178,3	206,4
D&A	313,9	332,2	277,1	287,3	304,7	325,1
Change in NWC	-190,1	132,2	-22,9	5,9	12,5	14,7
Capital Expenditures	137,8	412,4	-101,2	348,8	417,3	460,3
Unlevered FCFF	490,0	-66,9	549,4	89,6	52,3	56,5
TV		5,3%	5,3%	5,3%	5,3%	5,3%
WACC						
Present value of free cash flows	490,0	-63,5	495,3	76,7	42,5	43,6

Exhibit 19 – DCF Bridge Analysis – Source: Team Estimates

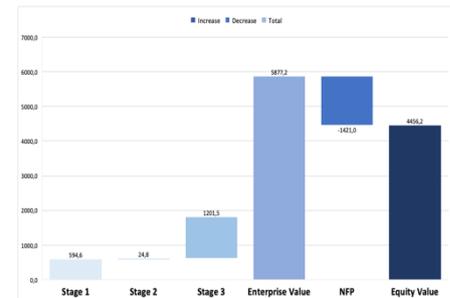


Exhibit 20 – DCF Model – Source: Team Estimates

TV growth rate	2,2%
Enterprise Value	5877
NFP	1421
Equity Value	4456
Shares Outstanding	150,3
TARGET PRICE	29,6

Exhibit 21 – Target Price – Source: Team Estimates

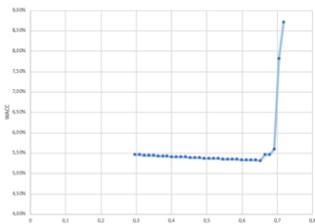


Exhibit 22 – Financial Re-Engineering – Source: Team Estimates

We decided to calculate Company's fundamental value through a **four-stage DCF model**. In the **first phase (2021E-2025E)** (see Exhibit 19 and 20), following the news that ERG mandated Mediobanca and Rothschild to start in the first half of 2021E the competitive process to sell hydro and thermoelectric assets, we assumed that these segments will be completely sold by the end of 2024E and that the Company will focus on wind and solar sectors. During this phase, we assumed that the cash inflow from the sale will be mainly used to **increase installed capacity** in the remaining segments in order to recover the lost installed capacity from the disposal by 2025E. In parallel, we estimated **revenues** through the **average percentage** between revenues and installed capacity in the period 2018-2020, which is assumed to be **constant** for the whole phase. For the **second phase (2026E-2035E)**, we assumed a **stable growth rate** for **revenues** by **10%** year-on-year thanks to the push from **European Green Deal**, which has the target to halve European gas emissions by 2030, and the rising production of **green hydrogen**, which will increase the demand for wind and solar energy. Furthermore, we estimated a stable **EBIT margin** at **25.5%** due to greater efficiency following the disposal of hydro and thermoelectric assets and thanks to the declining costs in solar PV and the increased productivity from wind after Repowering and Reblading. In the **third phase (2036E-2050E)** we assumed a **slower** year-on-year growth (from 10% in 2035E to **2.2%** in 2050E) until reaching a **mature phase**, mainly influenced by **European climate neutrality** goal by 2050 and the demand arising from hydrogen, which is expected to **double** actual European energy demand by the same period. In conclusion, for the last phase, we computed a perpetuity formula resulting in a **long-term growth rate** of **2.2%**, obtained as the estimated average annual **European GDP growth** by 2050 (source: ESPON Program) equal to 2.1% plus a spread due to the hypothesis of **outperforming** for the renewable energies industry. (Appendix 8)

WACC= 5.32%		
Risk Free Rate (Rf)	0.60%	Average between the average yields of the last 3 years of 10Y Treasuries of the countries in which ERG operates most
Equity Risk Premium (ERP)	8.30%	Average between the maximum Earning yield of the last 5Y of FTSE Italia All Share and the maximum Earning yield of FTSE Italia Mid Cap, minus the Rf
Beta	0.91	Linear regression between weekly returns of the last 5 years of ERG's shares and FTSE Italian Mid Cap (un-levered and then re-levered for the optimal capital structure)
Cost of Equity (ke)	8.12%	Capital Asset Pricing Model ($k_e = R_f + \beta \times ERP$)
Cost of Debt (kd)	1.23%	Risk Free + Spread (0.63%) relative to the rating based on the Interest Coverage Ratio of the optimal capital structure
Tax Rate (t)	24.00%	Tax rate under Italian law

WACC

We started assuming that, after the possible sale of hydro and thermoelectric assets, ERG will partially use the amount of cash inflow resulting from the disposal to reduce its debt. To calculate the WACC, we supposed that ERG will reach an optimal capital structure by 2025. We first computed the Cost of Equity through the **CAPM model** assuming a **risk-free rate** equal to **0.60%**, computed as an average between the average yields of the last 3 years of 10Y Treasuries for the countries in which ERG operates most (Italy, France, Germany). Then, we estimated an Equity Risk Premium of 8.3%: we first computed the maximum Earning yield of the last 5 years of FTSE Italia All share, equal to 8.6%, and the maximum Earning yield of FTSE Italia Mid Cap, equal to 9.3%. We decided to consider the maximum value to be prudent in relation to economic environment uncertainty, due to pandemic, and the new Company's strategic development that may be affected by volatility in its future growth trend. In conclusion, we decided to take the average between the two results

and subtracted the risk-free rate, obtaining an ERP equal to 8.3%. In conclusion, we estimated an alternative **Cost of Debt** through a **financial re-engineering** valuation (see Exhibit 22 and Appendix 10) equal to **1.23%**, obtaining a **WACC** equal to **5.32%**. (Appendix 9)

EUROPEAN PEERS		
2017	EV/EBITDA	Price to Book Value
ERG	7,9x	1,2x
Median	11,6x	1,5x
2018	EV/EBITDA	Price to Book Value
ERG	8,7x	1,3x
Median	15,7x	2,5x
2019	EV/EBITDA	Price to Book Value
ERG	9,8x	1,6x
Median	20,9x	4,0x
Median Average	16,1x	2,7x
Average Forecasted	526,2	12,4
Target price for each multiple	46,8	33,1
TARGET PRICE (European)	40	
Net Debt	1421	
# of shares	150,3	
Equity Market Value (European)	6006,4	
Target Price		29
Equity Market Value		4365,1

MULTIPLES ANALYSIS

We use a **Multiples Analysis** to test and **confirm** the recommendation resulting from our DCF and DDM models, which are, from our point of view, the most appropriate valuation models for the Company. It is difficult to find company strictly similar to ERG because of its distinctive features: companies that produce renewable energy could use only one source of energy or (as ERG) many ones, they could also produce energy from grey source (like oil), and they could sell energy to a private entity, take part in auctions or stipulate PPA contract. (Appendix 15)

Peers selection

ERG is a utility company that produces energy from renewable sources, and it operates mainly in Italy and in Europe. For these reasons we consider two peer groups: i) **mid-cap Italian utility** companies that mainly produce renewable energies (see Exhibit 23); ii) **mid-cap European utility** companies that produce renewable energies. Each group contributes 50% to our calculations (see Exhibit 24).

Methodology

Considering the peculiarity of the company, we take into consideration two different multiples: **EV/EBITDA** and **Price to Book Value**. In particular, EV/EBITDA is less affected by different accounting policies compared to other metrics (e.g., P/E). We obtain the Equity Market Value by multiplying the average income statement's values from our forecasted period (2021E-2025E) to the median value on average over three years of the multiple. To conclude, after repeating this process for each multiple, we calculate the target price through EV/EBITDA and Price to Book Value and take the **average** to find the target price.

Multiple Analysis Target Price

From our analysis, we calculate the following multiples values: **9.4x EV/EBITDA** and **1.8x Price to Book Value**, considering the Italian peers' sample; **16.1x EV/EBITDA** and **2.7x Price to Book Value**, considering the European peers' sample. Through this approach, we derive an **Equity Market Value of €4,365.1mln** which implies a **TP of €29**, i.e. a potential **upside of 11%** and a **BUY** recommendation, consistent with the results of our DCF and DDM models.

SCENARIO ANALYSIS

We use a scenario analysis to stress the impact of changes in the model assumptions on the target price.

Bull scenario: to achieve the European Green Deal goal of "Zero Pollution and Carbon Neutral in 2050", the production of Green Hydrogen could become the largest user of electricity. We assume that hydrogen will be **completely green**, produced entirely from renewable energy (wind and sun) by 2050E.

This will result in an **increase in European renewables** (from 35 GW to 90 GW) by 2050E to power electrolyzers. This will increase the proportion of renewable energy in Europe to 90% of the total. In this scenario, we forecast a **long term growth rate of 11% YoY** (2026E-2035E) driven by i) **increased demand** for renewable energy; ii) **increased investments** in renewables (+8% YoY aimed at doubling the capacity produced in wind and solar power by 2050E); iii) **higher margins** (EBIT margin 26.5%), thanks to less production costs regarding solar segment and a higher efficiency after Repowering and Reblading for wind.

Bear scenario: we assume that the Company will not sell its assets (hydroelectric and thermoelectric). We forecast a lower **long-term growth rate of 7.5% YoY** driven by i) **lower investments**, hampered by high expenses deriving from the thermoelectric and hydroelectric segment; ii) **lower margins** (EBIT 17%); iii) **unfavorable climate conditions** for the hydroelectric segment.

Results and Conclusions: The Bull Scenario provides a TP of €39 (+49.6% upside from current market price €26.1, closing price of 4th February 2021). The Bear Scenario provides a TPP of €20.6 (-21% downside). Due to the fact that we assign a greater probability to the success of the asset disposal by the Company and to the **Green Energy super-cycle** (thanks in particular to the favorable regulatory environment), we confirm our **BUY** recommendation. (Appendix 12)

SENSITIVITY ANALYSIS

We also perform a **sensitivity analysis** (see Exhibit 25). To evaluate different economic environments, their effect on the cost of capital, we evaluate how changes on **WACC** impact on target prices: our recommendation is maintained as **BUY** in about **64%** of cases (TP 10%+ above actual price). In 30% of cases our recommendation shifts to HOLD (TP -/+10% around the actual market price) and just in 13% of occurrences our recommendation will move to SELL (TP 10%+ below actual market price). The latter scenarios are the result of quite extreme cases in which the TV growth rate is lower than 1.3% and WACC is above 6.5%. We think that this low TV growth rate appears not very credible given our hypothesis of an incoming super-cycle for the industry while a higher WACC level is not consistent with the low interest rates environment we will supposedly witness for the foreseeable future, given the monetary policies announced by major Central Banks globally. We also teste how our **TP** reacts to different **Beta** values, in relation to different TV growth rate scenario. Results are again encouraging: **60%** of occurrences still support a BUY recommendation. Finally, we stress the **Terminal Value to Enterprise Value** ratio to better understand how it reacts to the TV growth rate and the Beta. (Appendix 11)

DDM MODEL

To stress the valuation made with the DCF and with the multiple analysis, we implement a **DDM model**, in which we apply a discount rate (WACC) of 5,32%, in line with the assumptions described before. We consider a 30 years period divided into **4 stages**. The first stage goes from 2021 to 2025: for each year we assess a DPS that increases by 5% each year, with an extraordinary dividend in 2022, when we assume a higher cash flow will be reserved to Shareholders following the Company's assets disposal. The second stage goes from 2025 to 2045: during these years we estimate a growth rate of 10% and through it, we estimate the EPS and apply a conservative Pay-out ratio of 45%. The third stage goes from 2036 to 2050: in this period the growth rate fades up to the long period growth rate of 2,2% and the pay-out

Exhibit 23 – Italian Peers Multiple Analysis –
Source: Team Estimates

ITALIAN PEERS		
2017	EV/EBITDA	Price to Book Value
ERG	7,9x	1,2x
Median	7,2x	1,4x
2018	EV/EBITDA	Price to Book Value
ERG	8,7x	1,3x
Median	7,5x	1,4x
2019	EV/EBITDA	Price to Book Value
ERG	9,8x	1,6x
Median	7,5x	2,0x
Median Average	9,4x	1,8x
Average Forecasted	526,2	12,43
Target price for each multiple	16,5	19,8
TARGET PRICE (Italian)	18,2	
Net Debt	1421	
# of shares	150,3	
Equity Market Value (Italian)	2732,2	

Exhibit 24 – European Peers Multiple Analysis
– Source: Team Estimates

	3,82%	4,12%	4,42%	4,72%	5,02%	5,32%	5,62%	5,92%	6,22%	6,52%	6,82%
0,7%	47,9	39,5	33,4	28,4	24,2	20,6	17,6	15,0	12,8	10,8	9,2
1,0%	51,5	42,9	36,1	30,4	25,8	21,9	18,6	15,9	13,5	11,4	9,6
1,3%	57,1	47,1	39,2	32,9	27,7	23,4	19,9	16,8	14,3	12,1	10,2
1,6%	64,1	52,2	43,0	35,7	29,9	25,2	21,2	17,9	15,2	12,8	10,8
1,9%	73,4	58,6	47,7	39,2	32,6	27,2	22,8	19,2	16,2	13,6	11,5
2,2%	86,0	67,2	53,6	43,5	35,8	29,6	24,7	20,7	17,4	14,6	12,2
2,5%	104,5	78,8	61,5	49,0	39,8	32,6	27,0	22,4	18,7	15,6	13,1
2,8%	133,7	95,8	72,2	56,2	44,8	36,3	29,7	24,5	20,3	16,9	14,1
3,1%	187,4	122,7	87,8	66,1	51,4	40,9	33,1	27,0	22,2	18,4	15,2
3,4%	317,5	172,0	112,6	80,5	60,5	47,0	37,3	30,1	24,5	20,1	16,6
3,7%	1093,8	291,7	157,9	103,2	73,7	55,4	43,0	34,1	27,4	22,3	18,2

Exhibit 25 – Sensitivity Analysis – Source:
Team Estimates

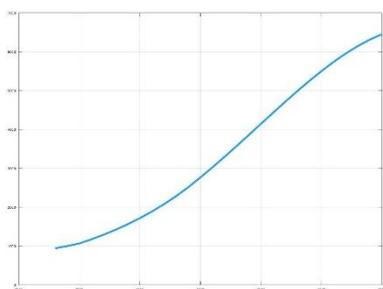


Exhibit 26 – Revenues Growth Curve –
Source: Team Estimates

ratio fades up to just 30% of EPS. The final stage is the TV, which is calculated through the Gordon Growth model. Applying a four-stages DDM allows us to estimate the impact of the super-cycle trend that will transform the European energy industry from grey to green sources by 2050.

Valuation

The result of this analysis is a **TP of €32**, i.e., a potential upside of 22,8% and a **BUY** recommendation, consistent with the results of our DCF model and multiple analysis. (Appendix 13)

INVESTMENT RISKS

MACRO	[M1] REGULATORY EVOLUTION AND COUNTRY RISK (Likelihood 3/5, Impact 4/5): The main points subject to regulatory evolution concerns: a) the reform of the Electricity Market at European level; b) the reform of the incentive systems for renewable sources; c) the duration and conditions of the hydroelectric concessions; d) the authorizations for the construction and operation of the renewable plants. For these reasons, the lack of a stable legislative framework, the application of penalizing laws and unilateral changes to contracts, increases in the tax burden and bureaucratic complexity are fundamental factors that could affect Company's performance. This risk is mitigated by the fact that the Group is present only in European countries, and therefore the regulation is likely to be harmonized, but continuous monitoring and the maintenance of relationships with the institutions and the stakeholders are necessary.
	[M2] CLIMATE CHANGE (Likelihood 4/5, Impact 2/5): Climate change risk identifies the possibilities that climatic variations may impact ERG's business, mainly under these points of view: a) decrease in the availability of renewable resources; b) limitations or impediments to the operation; c) increase in O&M costs and d) increase in insurance costs. In this regard, the Company first identified the possible future scenarios, taking up the most accredited ones by the scientific literature. The impact of climate change on ERG's business is certainly smoothed by its complete transition to green sources; nonetheless, risk monitoring is essential to avoid damages to plants or a reduction in their performance, a break in the Supply Chain and a negative impact on hydroelectric production due to the scarcity of rain. In parallel, the exploitation of opportunities such as an increase in energy demand for cooling and an increase in energy prices due to the transition to a decarbonised economy, is the key to further reduce climate change risk.
OPERATIONAL	[O1] AVAILABILITY OF RENEWABLE RESOURCES (Likelihood 2/5, Impact 3/5): The natural variability in the availability of renewable resources, which changes because of climatic conditions and the geographical position of the operating sites, could affect Company's production and revenues. Moreover, this risk is linked to the possible occurrence of natural, incidental and catastrophic phenomena. Accurate weather forecasts, technological and geographical diversification and an efficient scheduling of plant shutdowns are the main factors that ERG operate to reduce this type of risk.
	[O2] COMMODITY PRICES (Likelihood 2/5, Impact 2/5): The possible fluctuations in purchasing and selling prices of commodities could produce changes in economic results and compromise the achievement of the objectives in the business plan. In particular, ERG is mainly exposed to these risks: a) fluctuations in the energy prices for the part of production sold in the Electricity Market and b) fluctuations in Gas, CO ₂ and White Certificates prices attributable to the CCGT Central. The aggregate portfolio view under Company's Energy Management together with a good hedging through derivatives keep this risk very low.
	[O3] LOSS OF KEY SUPPLIERS (Likelihood 1/5, Impact 3/5): In the eventuality of a loss of a strategic supplier or the excessive concentration on a single one, the Group may incur a loss or higher costs, as well as a business disruption and reputational damage, at least in the short run. The Company implements some strategies to manage this risk: i) the selection of suppliers with a good economic and financial condition; ii) the identification of a sufficient number of suppliers; iii) the development of safeguard clauses in the contracts; iv) the continuous monitoring of suppliers' financial condition and purchasing processes. All of this must keep falling within the context of quality, sustainability and social responsibility that the Company wants to pursue.
	[O4] HEALTH, SAFETY AND ENVIRONMENT (Likelihood 1/5, Impact 3/5): Health risks are those with a potential impact on biological balance of the staff employed in industrial processes, caused by the emission of chemical, physical and biological factors. These risks would require extraordinary emergency measures which would have economic, financial and reputational consequences. From this point of view, the Company adopted all the security measures needed, including the most recent ISO 45001 norm, which ensures a low risk in this area.
STRATEGIC	[S1] NEW INVESTMENTS (Likelihood 2/5, Impact 5/5): With the objective of increasing the generation portfolio by 850MW both in Italy and in Europe, it is clear that ERG is continuously looking to implement new investments. A new investment always involves a risk, which can impact economically, financially and also reputationally against the Company. To minimize the effects of this risk, the Group must keep a solid process of evaluating new investments, through legal-regulatory analysis and financial assessment/planning models. Furthermore, a continuous update of the discount rate (WACC) is recommended in order to ensure an adequate return with respect to the expected risk profile.
	[S2] RATING OF THE PARENT COMPANY (Likelihood 2/5, Impact 4/5): The valuation of the creditworthiness assigned to the ERG Group plays a fundamental role in accessing financial sources and in the brand image. Through our optimal capital structure analysis, we note that the current debt level of Erg (D/E equal to 69.15% corresponds to a cost of debt equal to 2.16%, WACC 5.59% and a spread of 1.56% which affects creditworthiness (B-), as the level of debt decreases, the optimal capital structure is approached, the cost of debt is lowered, consequently the WACC (5.32%) and the spread also decrease, and the creditworthiness rises to (BBB). The ERG's rating is influenced, not only by variables that develop within the market, but also by Italy's sovereign rating. During 2019, the update of Company's risk profile assessment, attributed by the Fitch rating agency, is always Investment Grade "BBB-" with a stable Outlook. In order to improve or maintain this assessment over time, the Group must: i) consolidate a financial structure that is balanced in terms of duration and composition; ii) continuously monitor the final and expected results and iii) protect its reputational capital.
FINANCIAL	[F1] FOREX RISK (Likelihood 3/5, Impact 3/5): ERG's Consolidated Financial Statements are drawn up in Euro, which is the Group's functional currency. In 2019, Net Revenues exposed to the risk of fluctuations in the exchange rate amounted to €47mln, equal to 9% of the Total Net Revenues of the ERG Group. The exposure comes from operations denominated in PLN, RON, BGN, GBP. The possible economic impacts related to the volatility of exchange rates on the financial market are mitigated by ERG through a strategy aimed at: i) definition of risk exposure limits; ii) define the processes and responsibilities for monitoring the level of exposure by means of suitable indicators; iii) the pursuit of a balance between assets and liabilities expressed in foreign currencies, minimizing net exposure; Finally, the use of derivative instruments to hedge the risk of fluctuation in exchange rates is allowed only in the presence of an underlying.
	[F2] INTEREST RATE RISK (Likelihood 2/5, Impact 3/5): Changes in the future trend of interest rates may have negative effects such as compromising its ability to generate sustainable income. In 2019, changes in the interest rate of +/-1%, keeping all the other variables fixed, impacted on pre-tax profit by €4.5mln (shock-up +1%) and €8mln (shock-down -1%). ERG's strategy aimed to limit this risk focuses on: i) researching and finding financial resources under the best market conditions; ii) regular monitoring of the level of risk exposure and iii) use of derivative contracts such as Interest Rate Swaps and Interest Rate Options.
	[F3] CREDIT RISK (Likelihood 1/5, Impact 2/5): The probability of insolvency (default) of a given counterparty is managed by the ERG Group with internal analysis and assessments, attributing to each counterparty a certain risk profile (Internal Rating Based), which is carefully monitored and which must never be exceeded. Furthermore, the Group defines various tools to mitigate this risk, such as bank guarantees or sureties and a counterparty diversification strategy (e.g. depositing cash at different banks and/or using mutual funds). Erg has always paid great attention to diversification, indeed the concentration risks, both by customer and by sector, do not present a threat to the Group.
	[F4] LIQUIDITY RISK (Likelihood 2/5, Impact 4/5): The ERG Group ensures adequate coverage of its financial requirements primarily through the generation of cash flows and the availability of credit lines provided by various counterparties. Nevertheless, ERG has a low solvency ratio due to the capital structure adopted in the last 5 years (average 131.4% Debt/Equity ratio, computed on market values). In order to achieve its risk mitigation objectives, the stock of financial assets of the ERG Group is invested in liquid financial instruments, favouring a very low risk profile. The use of short selling is never allowed. In 2019, the amount of medium-long term debt has increased due to the issue of a non-convertible Green Bond (€500mln). Furthermore, the decrease in cash and cash equivalents in 2019 is due to the payment of dividends to shareholders for €112mln. Finally, the Group implements a prudential estimate of the expected incoming and outcoming cash flows, which also takes into account impact assessments of different scenarios, such as stress scenarios.

(Appendix 17)

ENVIRONMENTAL SOCIAL AND GOVERNANCE

ENVIRONMENTAL

Resource use, emissions, and environmental innovations are all components of the environmental score given to a company. For the fiscal year ended in December 2019, ERG received an ESG score of **74.88** (Grade: **B+**) slightly down compared to 2018 score equal to 77.45 (Grade: A-). This down grade is due to a worse Governance score. For ERG, *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. With regard to the **Environmental pillar score** was **A** thanks to the fully compliance with the mission and the goals pursued by the company. In line with ERG's 2018-2022 sustainability commitment of consolidating the Group's leadership in the production of electricity from renewable sources, ERG decided to set up the Green Bond Framework, under which could issue **Green Bonds**. This framework was established in accordance with the Green Bond Principles (GBP) 2018 and their four core components: (i) *Use of proceeds*, (ii) *Process for project evaluation and selection*, (iii) *Management of proceeds*, and (iv) *Reporting*. In 2020 ERG issued Green Bond, for about €600,000,000 (€100mln more than 2019). The 2020 Green Bonds were issued in two series: the first on the September 11 for about €500mln with a coupon of 0.50%, maturity in 7 years, an issue price of 99.208%, and a Fitch rating of BBB-. The second on December 23 for an amount of €100mln have the same terms as the first one with the only exception of effective yield (0.334% against 0.616%). The eligible green project category is renewable energy, i.e. solar and wind energy. The proceeds standing from the issue of these Green Bonds are used to sustainable objectives. In line with the path taken by ERG about the process of integration between business model and sustainability, the Group is developing its strategy consistently with the Sustainable Development Goals (SDGs) defined by the United Nations. In this respect, company's main goals are tackling change and people enhancing. The development of generation of electricity from renewable sources represents ERG's commitment to combat climate change. Relative to **emissions and waste**, the Group makes also implement activities to protect biodiversity in the areas where our plants are located. Bird monitoring in its wind farms or support WWF Oasis of Alviano and of Marmore Falls natural park are two examples. With regard to recovery processes, the waste produced by the grate cleaners is used as a resource for the timber from Lago di Corbara. Finally, this process aims to reduce the total amount of waste produced. This is mainly through (i) *the implementation in the hydroelectric plants*, (ii) *maximization the recycled percentage*, (iii) *the use of materials and substances ensuring better environmental compatibility*.

SOCIAL

ERG's goal is not only to create a green business model that only affect the group, but even a solid promotion of cultural, social, and economic development of society. The main issues are: i) **Security**: implemented through "Evolving Safety" project and new measure to avoid the repetition of accidents that occurred in previous years. Furthermore, they incentivize the reporting system "near miss"; ii) **People**: define training and development plans that increase Human Capital Coverage (target: +3% than 2018), improve work environment and the welfare system in favour of employees through "One Health" project; iii) **Communication**: transparency and promptness in the disclosure of information to stakeholders. The company manage relations with its shareholders, institutional investors and the market through the role of Investor Relations. The focus of Investor Relations activity is the dissemination to the financial community of all useful information for the evaluation of investment opportunities in the ERG stock. For its communication activity the Investor Relations periodically organize meetings, both in Italy and abroad, and conference call with analysts and investors. With this activity ERG has received rating B from CDP and it is included in some sustainability indexes. iii) **Territory**: "A tutta Acqua!" and "Vai col Vento!" are the two initiatives that ERG has organized in favour of local students where the plants reside. Also "Clean Up the World" project, dedicated to cleaning up urban centres. The main attention is mainly given to new generations that are in the middle of a project able to create values over time. Since 2014 with ReStartApp and ReStartAlp campuses, the Edoardo Garrone Foundation born in 2004, offers an educational opportunity for the realization of innovative and sustainable entrepreneurial projects. Furthermore, aware that schools are the main educational institutions, in 2019 Edoardo Garrone Foundation confirmed the Genova Scoprendo and AppenninoLAB projects.

GOVERNANCE

ERG's corporate governance complies with the Italian Civil Code and regulations relating to companies, as those contained in the TUF and Corporate Governance Code. Corporate Governance incorporates **Statutory bodies** (shareholders' meeting, board of director, and board of statutory auditors), **board committees** (control and risk committee, nominations and remuneration committee and strategic committee), and the **corporate governance documents** (figure 1). The BoD is composed of 12 members (see Exhibit 27, 28, 29 and 30), elected by the shareholders' meeting of 23 April 2018 on the basis of lists presented by shareholders. The Nominations and Remuneration Committee makes recommendations to the Board of Directors regarding the remuneration of the Chairman and of Directors with powers or specific duties and, upon indication by the Chief Executive Officer, regarding the determination of criteria for the remuneration of the Company's top management and for the definition of incentive plans for the Group management. The compensation shall be such to **attract, retain, and motivate** highly qualified individuals and aims at assigning a value to their skills demanded by the position held and the risk related to the powers granted. The remuneration structure is based on 4 components: **fixed remuneration**; **Short-term variable remuneration (MBO)**; **long-term Variable Remuneration (LTI)**; and **Non-Monetary benefits**. The down grade of Governance Score from B to C+ is due to the distinctive feature of ERG of being a family company, owned by 62,5% by the Garrone's family through San Quirico SpA (55,6%) and Polcevera Spa (6,9%), that may have a negative impact on minority shareholders, and to the MBO remuneration system that is only linked-with *sustainability clause* based on workplace accidents, consistently with the provisions of the Code of Ethics of the ERG group. The variable remuneration referred to the company target will not be paid out, for the reference year, if there is a fatal accident involving a Group employee or an accident causing a level of permanent disability greater or equal to 46% (Appendix 18).

Member	Office
Edoardo Garrone	Chairman -Executive
Alessandro Garrone	Deputy Chairman - Executive
Giovanni Mondini	Deputy Chairman
Luca Bettonte	Chief Financial Officer
Massimo Belcredi	Director - Independent
Mara Anna Rita Caverni	Director - Independent
Barbara Comitelli	Director - Independent
Marco Costaguta	Director
Paolo Francesco Lanzoni	Director
Silvia Merlo	Director - Independent
Elisabetta Olivieri	Director - Independent
Mario Paterlini	Director - Independent

Exhibit 27 – Board of Direction Composition – Source: Company Data



Exhibit 28 – BoD by gender – Source: Company Data

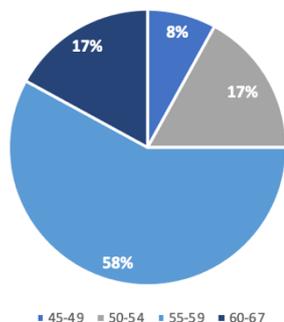


Exhibit 29 – Average age BoD – Source: Company Data

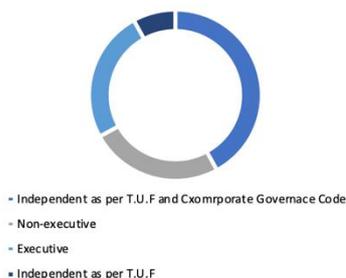


Exhibit 30 – BoD Composition by status – Source: Company Data

Appendix – Table

1. Segment Mix
2. Porter Five Forces Analysis
3. SWOT Analysis
4. Balance Sheet
5. Income Statement
6. Cash Flow Statement
7. Financial Ratios
8. Discounted Cash Flow Model
9. WACC Computation
 - Risk Free-Rate estimates
 - Beta
 - Cost of Equity
 - WACC
10. Financial Re-Engineering
11. Sensitivity Analysis
12. Scenario Analysis
 - BULL Case
 - BEAR Case
13. Dividend Discount Model
14. As-Is Analysis
15. Multiple and Peers Analysis
16. Relative Valuation
17. Investment Risk
18. Environment, Social, and Governance
 - Corporate, social responsibilities
 - Corporate Governance

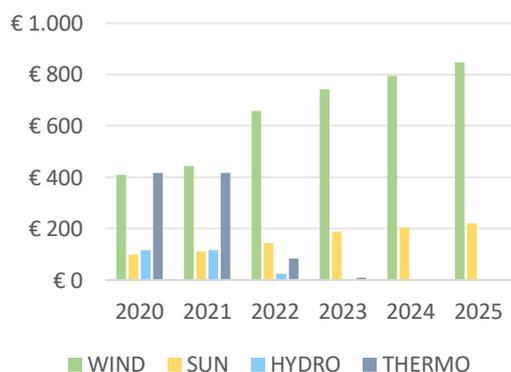
1. SEGMENT MIX

We estimate the evolution of ERG's segment mix through the assumptions underlying our model, which consider the disposal of hydro and solar assets. The goal of the Company's strategy is to increase wind and solar capacity, to provide more renewable energy, useful to power green hydrogen. For the whole period 2021-2025, we estimate revenues through the average percentage of the revenues / installed capacity ratio of the period 2018-2020, which we maintain constant. The contribution of each segment to total revenues is estimated based on the percentage of contribution of each asset to total installed capacity. The divestiture will reduce the total installed capacity in 2022E by -17% compared to the previous year, which will return to its current level (3150 MW) in 2025 thanks to an increase in production efficiency.

Installed capacity will increase by 6% from (2784 MW) in 2023E to (2952 MW) in 2024E, and in 2025E we estimate a further increase of 6.7% reaching (3150 MW). In addition, we use this new product mix to compute a Revenues breakdown by segment for each year from 2020E to 2025E. In particular, the wind sector will record a growth of 16% 5Y CAGR in terms of revenues, while the solar sector will grow 18% 5Y CAGR.



Installed Capacity						
(MW)	2020	2021	2022	2023	2024	2025
WIND	1930	1960	2083	2214	2352	2500
SUN	141	150	400	550	600	650
HYDRO	527	527	105	11	0	0
THERMO	480	480	96	10	0	0
TOTAL	3078	3218	2684	2784	2952	3150



Revenues Breakdown						
€ mln	2020	2021	2022	2023	2024	2025
WIND	411	444	657	743	796	846
SUN	98	112	144	188	203	220
HYDRO	117	117	23	2	0	0
THERMO	416	416	83	8	0	0
TOTAL	1041	1089	908	942	999	1066

2. PORTER FIVE FORCES ANALYSIS

The degree of threat or power affecting ERG and its industry is represented by five green leaves. According to Porter five forces analysis a higher rating reflects a worst condition. In our analysis “one leaf” is the best rating and “five leaves” is the worst; intermediate ratings take into account moderate levels of threat or power.

<p>Threat of new entrants</p>	<p>In the renewable utilities industry, barriers to entrance are medium/high. In fact, solar sources are the most exposed to face new competitors; ERG itself started to produce electric power from solar panels only in 2018. In other segments in which ERG operates, barriers are very high. Wind requires to install plants in strategic locations characterized by high wind exposure, not easily to achieve as well as implement high performing technologies and obtain relative licenses. Thermo sources are characterized by high plant, property and equipment investments and by the need of identifying favourable locations for the supply of gas, aspects that make it not very accessible or replicable. Hydroelectric sources have the highest barrier to entry, mainly related to natural e physical features which characterized the location of dams and plants.</p>	
<p>Bargaining power of Supplier</p>	<p>ERG targets two types of suppliers. The first group includes suppliers of raw materials, parts and semi-finished products for the internal production: their bargaining power is very low. In fact, ERG selects new suppliers through questionnaires to choose the most qualified one, above all in terms of Environment, Social and Governance (ESG) considerations. The second group is made by gas suppliers for CCGT plant. This power can be considered little higher due to the connection to the productivity; however, energy production from wind, solar, and hydro sources is completely independent. Moreover, ERG collaborates to develop new technologies to improve efficiency in terms of MW/h production.</p>	
<p>Bargaining power of Buyers</p>	<p>ERG does not operate as a retail operator and all its electricity is sold in Italy. ERG sells the energy produced to other Companies that deal with distribution network (Terna S.p.A.). The market is characterized from an auction mechanism (Capacity Market) that is particularly rigid because of the system of obligations and penalties; it excludes wind and solar from participation, despite formally allowed. Therefore, we estimate that the bargaining power of buyers is high. However, ERG has planned to develop its business through customized sales contracts: Power Purchase Agreement (PPA), that has fewer limits. Relative to these bilateral contracts the costumer power can be considered medium.</p>	
<p>Threat of substitute Products or Services</p>	<p>In the electricity market, renewable sources are the substitute products compared to grey sources. In fact, ERG radically turned its portfolio products over the years. The appearance of new forms of renewable sources seems an unrealistic scenario in the short-term. The most likely substitute to energy production seems to be Hydrogen. The European Commission established a 3-stage program to reach the creation of a clean hydrogen market for 2050. The first step of the program is to complete the decarbonization of hydrogen extraction, with a deadline in 2030. Finally, hydrogen production is closely related with other renewable sources, especially wind and solar that allow to produce green hydrogen efficiently in terms of costs. The threat of substitute appears very low and probably the weaker among the Porter's 5.</p>	

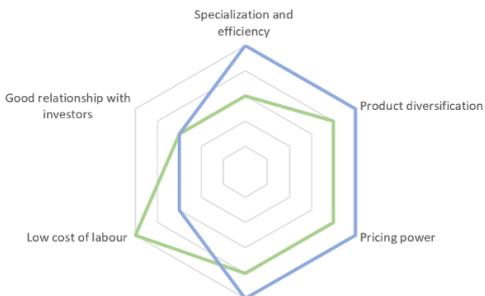
<p>Rivalry among existing firms</p>	<p>As we will specify in our report, the renewable utilities industry is expected to grow significantly as a whole. The 2050 carbon zero goal set by the European Green Deal will increase the trend of the demand growth. The support of the demand and the transition to a sustainable energy production leads to a low internal rivalry. As a result, numerous grey producers are expected to exit the market.</p>	
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3. SWOT ANALYSIS

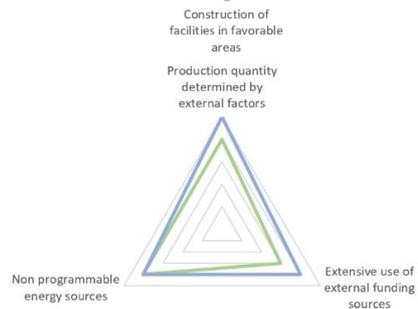
We evaluate the four areas of SWOT Analysis associating for each elements a score from 1 to 5. In particular, in **ERG's points section** we analyse the Company's positioning in terms of ability to leverage strengths and opportunities and suffer from weaknesses and threats.

In **Effect on Returns (EoR)** we want to show how the relative item should be addressed by the Company. A higher score on EoR means that the company should keep exploiting its strength/opportunity or undertake measure to reduce its weaknesses or exposure to future threats. A lower score implies the item has lower importance in generating returns and should not be given more strategic importance.

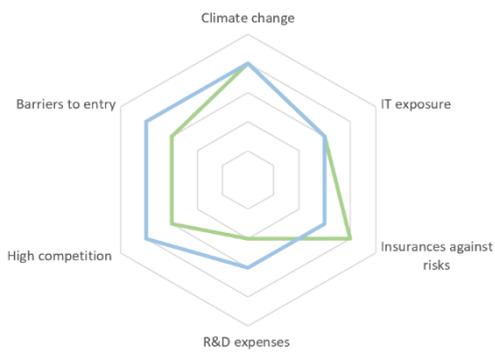
STRENGTHS	Points	Effect on Return
Specialization and efficiency	3	5
Product diversification	4	5
Pricing power	4	5
Construction of facilities in favorable areas	4	5
Low cost of labour	5	3
Good relationship with investors	3	3



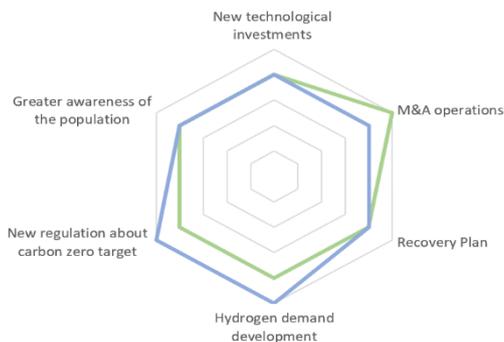
WEAKNESSES	Points	Effect on Return
Production quantity determined by external factors	4	5
Extensive use of external funding sources	3	4
Non programmable energy sources	4	4



THREATS	Points	Effect on Return
Climate change	4	4
IT exposure	3	3
Insurances against risks	4	3
R&D expenses	2	3
High competition	3	4
Barriers to entry	3	4



OPPORTUNITIES	Points	Effect on Return
New technological investments	4	4
M&A operations	5	4
Recovery Plan	4	4
Hydrogen demand development	4	5
New regulation about carbon zero target	4	5
Greater awareness of the population	4	4



4. BALANCE SHEET

(€ millions)	2016A	2017A	2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E
TOTAL ASSETS	4276,7	4352,3	4564,4	4602,8	4696,7	4574,2	4776,8	4745,0	4652,9	4535,8
Non-current assets	3322,9	3075,2	3347,1	3587,7	3411,5	3491,7	3113,5	3174,9	3287,5	3422,7
Intangible fixed assets	676,6	634,6	782,5	889,8	844,1	844,1	844,1	844,1	844,1	844,1
Goodwill	125,9	125,9	148,3	220,9	223,4	234,3	245,8	257,8	270,4	283,6
Property, plant and machinery	2360,3	2181,9	2288,3	2257,9	2118,0	2214,4	1847,1	1915,5	2031,6	2167,6
Deferred tax assets	160,0	132,9	128,0	42,3	44,8	32,6	23,7	17,2	12,5	9,1
Investments and other financial assets	0,0	61,0	0,0	176,8	181,2	166,4	152,8	140,3	128,8	118,3
Current assets	953,7	1216,1	1217,3	1015,1	1285,2	1082,5	1663,3	1570,1	1365,4	1113,1
Inventories	20,4	20,6	21,6	22,3	23,1	21,5	16,6	16,8	17,5	17,8
Trade receivables	293,0	255,5	251,0	193,5	165,1	249,8	208,4	216,1	229,2	244,5
Cash and cash equivalents	427,2	813,0	774,2	653,5	914,7	630,9	1253,2	1147,0	923,5	650,0
Current financial assets	108,8	29,4	49,7	22,4	60,9	54,2	54,2	54,2	54,2	54,2
Other receivables and current assets	104,4	97,6	120,8	123,5	121,4	126,1	130,9	135,9	141,1	146,5
TOTAL LIABILITIES AND EQUITY	4276,6	4352,3	4564,4	4602,8	4696,7	4574,2	4776,8	4745,0	4652,9	4535,8
Shareholders' equity	1729,1	1877,5	1828,8	1786,1	1733,5	1771,7	1811,3	1855,5	1905,9	1966,1
Reserve from disposal of PP&M	0,0	0,0	0,0	0,0	0,0	0,0	276,4	280,3	211,1	81,4
Equity attributable to the owners of the parents	1729,1	1877,5	1828,8	1774,6	1722,1	1760,1	1799,4	1843,3	1893,4	1953,2
Minority interests	0,0	0,0	0,0	11,5	11,4	11,7	11,9	12,2	12,5	12,9
TOTAL LIABILITIES	2526,9	2474,8	2589,7	2816,7	2963,2	2796,3	2689,1	2609,3	2535,8	2488,3
Non-current liabilities	2215,2	2060,4	2162,7	2491,1	2438,6	2322,9	2234,2	2151,3	2072,4	2018,5
Employees' benefits	6,7	6,4	5,8	5,4	5,3	6,9	5,3	5,4	5,6	5,7
Deferred tax liabilities	274,4	265,3	288,6	209,1	200,2	185,0	171,0	158,1	146,1	135,0
Non-current financial liabilities	1934,1	1788,7	1868,2	2102,8	2058,8	1959,9	1877,7	1804,6	1734,4	1688,2
Other non-current liabilities	0,0	0,0	145,9	173,9	174,3	177,2	180,2	183,3	186,4	189,5
Current liabilities	311,8	414,4	427,0	325,6	524,6	473,5	454,8	457,9	463,4	469,8
Trade payables	152,7	126,8	92,3	87,8	62,4	110,3	92,0	95,4	101,2	108,0
Current financial liabilities	159,1	287,7	334,7	129,0	351,0	252,3	252,3	252,3	252,3	252,3
Other current liabilities	20,6	0,0	0,0	108,8	111,2	110,9	110,5	110,2	109,9	109,5

5. INCOME STATEMENT

(€ millions)	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Total revenues	1041,8	1064,1	1045,6	1044,4	1041,4	1088,6	908,0	941,7	998,7	1065,6
% Revenues growth	11,3%	2,1%	-1,7%	-0,1%	-0,3%	4,5%	-16,6%	3,7%	6,1%	6,7%
Cost of purchases and services	526,2	537,8	499,3	481,4	474,6	499,6	381,4	386,1	399,5	404,9
% Costs growth	-16,2%	2,2%	-7,2%	-3,6%	-1,4%	5,3%	-23,7%	1,2%	3,5%	1,4%
Personnel expenses	62,3	68,7	66,8	67,1	62,5	65,3	54,5	56,5	59,9	63,9
EBITDA	453,3	457,6	479,6	495,9	504,4	523,6	472,2	499,1	539,3	596,7
Depreciation and Amortisation	253,7	250,9	274,1	306,0	313,9	332,2	277,1	287,3	304,7	325,1
NET OPERATING INCOME	199,7	206,7	205,5	189,9	190,5	191,5	195,1	211,7	234,6	271,6
Net financial income/expenses	-46,1	-66,5	-61,5	-45,5	-44,5	-42,3	-40,6	-39,0	-37,5	-36,5
EBT	153,5	140,2	144,0	144,5	145,9	149,2	154,5	172,7	197,0	235,1
Income taxes	28,7	33,0	39,7	19,5	35,0	35,8	37,1	41,4	47,3	56,4
% Tax rate	0,2	0,2	0,3	0,1	0,2	0,2	0,2	0,2	0,2	0,2
Net profit/loss for the period	124,9	107,2	104,3	124,9	110,9	113,4	117,4	131,3	149,8	178,6
Minority interests	-2,4	0,0	-0,1	-1,2	-0,7	-0,7	-0,8	-0,9	-1,0	-1,2
Net profit/loss attributable to the owners of the parent	122,5	107,2	104,2	123,7	110,2	112,7	116,6	130,4	148,8	177,5

6. CASH FLOW STATEMENT

<i>(€ millions)</i>	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
TOTAL CASH FLOWS FROM OPERATING ACTIVITIES	381,9	400,4	296,8	405,1	419,9	404,1	410,6	402,3	433,9	481,6
Net profit/loss for the period	124,9	107,2	104,3	124,9	110,9	113,4	117,4	131,3	149,8	178,6
Depreciation and Amortisation	253,7	252,2	274,1	306,0	313,9	332,2	277,1	287,3	304,7	325,1
Net change in deferred tax assets and liabilities	-3,2	8,4	-9,6	-9,2	-11,4	-3,0	-5,1	-6,5	-7,3	-7,6
Net change in employees' severance indemnities	1,2	-0,3	-0,6	-0,4	-0,1	1,6	-1,6	0,1	0,2	0,1
Change in inventories	0,9	-0,2	-1,0	-0,7	-0,8	1,6	4,9	-0,3	-0,6	-0,4
Change in trade receivables	53,6	34,7	22,3	64,7	28,4	-84,7	41,4	-7,7	-13,1	-15,3
Change in trade payables	-12,4	-26,1	-46,3	-5,6	-25,4	47,9	-18,3	3,4	5,8	6,8
Net change in other receivables/payables and other assets/liabilities	-36,8	-75,2	-75,6	66,6	4,4	-5,0	-5,2	-5,4	-5,5	-5,7
TOTAL CASH FLOWS FROM INVESTING ACTIVITIES	-25,1	7,2	186,2	-161,2	-223,2	-430,3	418,0	-358,0	-509,9	-634,7
Changes in intangible fixed assets and goodwill	-3,9	-3,6	-7,5	-4,2	43,2	-10,9	-11,5	-12,0	-12,6	-13,2
Changes in property, plant and machinery	-55,6	-50,8	-52,7	-63,7	-174,1	-428,5	90,1	-355,7	-420,8	-461,1
Changes in equity investments and other non-current financial assets	0,8	-4,9	-6,1	-1,2	-4,4	14,8	13,6	12,5	11,5	10,5
Capital gain/losses	33,6	94,1	279,2	-92,7	-87,9	-5,7	325,7	-2,7	-88,0	-170,9
TOTAL CASH FLOWS FROM FINANCING ACTIVITIES	-661,9	-8,6	-375,2	-364,5	51,7	-282,1	-206,3	-150,5	-147,6	-120,3
Repayment of non-current loans	-321,9	-128,1	-73,8	-736,7	-43,9	-105,1	-76,0	-73,1	-70,2	-46,2
Net change in short-term bank borrowings	-255,5	79,7	-78,4	-20,0	222,0	-98,7	0,0	0,0	0,0	0,0
Change in other non-current financial asset/liabilities	0,0	0,0	0,0	500,0	0,4	2,9	3,0	3,0	3,1	3,1
Change in other current financial asset/liabilities	64,5	4,0	-42,3	12	38,5	-6,7	0,0	0,0	0,0	0,0
Changes in equity reserves	-38,2	82,3	-158,3	0,0	0,0	0,0	270,2	4,2	-68,7	-129,3
Dividends paid	-142,8	-74,4	-171,1	-112,4	-112,7	-112,7	-172,9	-124,7	-130,9	-137,5
Changes in shareholders' equity	-6,2	16,0	-10,9	0,0	-52,6	38,2	39,6	44,2	50,5	60,2
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD	770,6	427,2	813,0	774,2	653,5	914,7	630,9	1253,2	1147,0	923,5
<i>Net cash flows for the period</i>	-343,4	387,1	-38,8	-120,7	248,3	-308,3	622,3	-106,2	-223,6	-273,4
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD	427,2	814,3	774,2	653,5	901,9	606,4	1253,2	1147,0	923,5	650,0

7. FINANCIAL RATIOS

		2016A	2017A	2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E
ACTIVITY	Receivables Turnover	3,3	3,9	4,1	4,7	5,8	5,2	4,0	4,4	4,5	4,5
	Payables Turnover	6,7	7,6	9,5	11,6	13,9	12,6	9,0	10,0	10,2	10,2
	Working Capital Turnover	1,7	1,8	1,5	1,5	2,8	2,6	2,1	2,3	2,3	2,4
	Fixed Asset Turnover	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3
	Total Asset Turnover	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2
LIQUIDITY	Current ratio	2,2	2,2	2,3	3,1	2,4	2,3	3,7	3,4	2,9	2,4
	Quick ratio	1,9	1,9	1,9	2,6	2,3	2,1	3,5	3,3	2,8	2,2
	Cash ratio	1,2	1,5	1,5	2,0	2,1	1,7	3,2	2,9	2,4	1,8
SOLVENCY	Debt-to-Assets	49,6%	47,3%	48,9%	48,7%	58,7%	56,9%	43,1%	41,9%	41,3%	41,4%
	Debt-to-Capital	56,5%	54,0%	55,7%	55,7%	58,7%	57,0%	52,7%	51,6%	51,3%	51,8%
	Debt-to-Equity	129,9%	117,3%	125,5%	125,5%	159,1%	147,0%	138,7%	131,8%	125,1%	119,4%
	Financial leverage	2,7x	2,5x	2,5x	2,6x	2,6x	2,6x	2,6x	2,6x	2,5x	2,4x
	Debt-to-EBITDA	5x	4,8x	4,8x	4,5x	5,5x	5x	5,3x	5x	4,4x	3,9x
	Interest coverage	1,9	2,3	2,1	1,0	4,3	4,5	4,8	5,4	6,3	7,4
PROFITABILITY	Gross margin	62,3%	60,1%	62,3%	65,7%	48,4%	48,1%	52,0%	53,0%	54,0%	56,0%
	Operating profit margin	19,2%	19,4%	19,7%	18,2%	18,3%	17,6%	21,5%	22,5%	23,5%	25,5%
	Pretax margin	14,7%	13,2%	13,8%	5,0%	14,0%	13,7%	17,0%	18,3%	19,7%	22,1%
	Net profit margin	12,0%	19,4%	12,7%	3,1%	10,6%	10,4%	12,9%	13,9%	15,0%	16,8%
	ROA	2,7%	4,5%	2,8%	0,7%	2,4%	2,4%	2,5%	2,8%	3,2%	3,9%
	Operating ROA	4,3%	4,5%	4,4%	4,1%	4,1%	4,1%	4,2%	4,4%	5,0%	5,9%
	Return on Total Capital	4,4%	4,4%	4,4%	4,1%	4,1%	4,2%	4,1%	4,5%	5,0%	6,0%
	ROE	7,3%	11,5%	7,2%	1,8%	6,3%	6,5%	6,6%	7,2%	8,0%	9,2%
	ROIC	3,8%	3,7%	3,5%	3,7%	3,1%	3,2%	3,1%	3,4%	3,8%	4,6%
	ROS	19,2%	19,4%	19,7%	18,2%	18,3%	17,6%	21,5%	22,5%	23,5%	25,5%
	ROT	23,0%	22,8%	22,3%	22,7%	22,2%	23,8%	19,0%	19,8%	21,5%	23,5%
	ROI	4,4%	4,4%	4,4%	4,1%	4,1%	4,2%	4,1%	4,5%	5,0%	6,0%
	Revenue per employee	1,3	1,4	1,4	1,4	1,3	1,4	1,2	1,2	1,3	1,4
Net income per employee	0,2	0,3	0,2	0,0	0,1	0,1	0,2	0,2	0,2	0,2	
VALUATION	Capex/D&A	21,9%	20,3%	19,2%	20,8%	43,9%	124,2%	-36,5%	121,4%	136,9%	141,6%
	Payout ratio	58,8%	54,0%	84,2%	353,8%	101,7%	99,4%	147,2%	95,0%	87,4%	77,0%
	Retention rate	41,2%	46,0%	15,8%	-253,8%	-1,7%	0,6%	-47,2%	5,0%	12,6%	23,0%
	CFO/Debt	14,5%	15,9%	10,6%	15,2%	15,2%	15,5%	16,3%	16,4%	18,2%	20,5%

8. DISCOUNTED CASH FLOW MODEL

DCF MODEL	STAGE 1						
	2020E	2021E	2022E	2023E	2024E	2025E	
Period	0	1	2	3	4	5	
Total Revenues	1041,4	1088,6	908,0	941,7	998,7	1065,6	
Revenues growth (%)	-0,3%	4,5%	-16,6%	3,7%	6,1%	6,7%	
EBIT	190,5	191,5	195,1	211,7	234,6	271,6	
EBIT Margin (%)	18,3%	17,6%	21,5%	22,5%	23,5%	25,5%	
Tax Rate (%)	35%	24%	24%	24%	24%	24%	
NOPAT	123,8	145,5	148,3	160,9	178,3	206,4	
D&A	313,9	332,2	277,1	287,3	304,7	325,1	
Change in NWC	-190,1	132,2	-22,9	9,9	13,5	14,7	
Capital Expenditures	137,8	412,4	-101,2	348,8	417,3	460,3	
Unlevered FCFF	490,0	-66,9	549,4	89,6	52,3	56,5	
TV							
WACC		5,3%	5,3%	5,3%	5,3%	5,3%	
Present value of free cash flows	490,0	-63,5	495,3	76,7	42,5	43,6	

STAGE 2									
2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
6	7	8	9	10	11	12	13	14	15
1172,1	1289,3	1418,3	1560,1	1716,1	1887,7	2076,5	2284,1	2512,5	2763,8
10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
298,9	328,8	361,7	397,8	437,6	481,4	529,5	582,4	640,7	704,8
25,5%	25,5%	25,5%	25,5%	25,5%	25,5%	25,5%	25,5%	25,5%	25,5%
24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
227,2	249,9	274,9	302,4	332,6	365,8	402,4	442,7	486,9	535,6
331,6	338,3	345,0	351,9	359,0	366,2	373,5	380,9	388,6	396,3
16,1	17,7	19,5	21,5	23,6	26,0	28,6	31,4	34,6	38,0
494,9	532,0	571,9	614,8	660,9	710,4	763,7	821,0	882,6	948,8
47,8	38,4	28,5	18,1	7,1	-4,4	-16,4	-28,8	-41,6	-54,8
5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%
35,0	26,7	18,8	11,3	4,2	-2,5	-8,8	-14,7	-20,2	-25,2

STAGE 3														
2036E	2037E	2038E	2039E	2040E	2041E	2042E	2043E	2044E	2045E	2046E	2047E	2048E	2049E	2050E
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
3025,8	3296,9	3575,2	3858,3	4143,8	4428,9	4710,6	4985,7	5250,9	5503,0	5738,5	5954,3	6147,2	6314,4	6453,3
9,5%	9,0%	8,4%	7,9%	7,4%	6,9%	6,4%	5,8%	5,3%	4,8%	4,3%	3,8%	3,2%	2,7%	2,2%
726,2	791,3	858,0	926,0	994,5	1062,9	1130,5	1196,6	1260,2	1320,7	1377,2	1429,0	1475,3	1515,5	1548,8
24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%
24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
551,9	601,4	652,1	703,8	755,8	807,9	859,2	909,4	957,8	1003,8	1046,7	1086,1	1121,3	1151,8	1177,1
396,3	396,3	396,3	396,3	396,3	396,3	396,3	396,3	396,3	396,3	396,3	396,3	396,3	396,3	396,3
38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0
948,8	948,8	948,8	948,8	948,8	948,8	948,8	948,8	948,8	948,8	948,8	948,8	948,8	948,8	948,8
-38,6	10,9	61,7	113,3	165,4	217,4	268,8	318,9	367,3	413,3	456,3	495,6	530,8	561,3	586,6
5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%
-16,8	4,5	24,3	42,3	58,6	73,2	85,9	96,8	105,9	113,1	118,5	122,3	124,3	124,8	124,8

TV growth rate	2,2%
Enterprise Value	5877
NFP	1421
Equity Value	4456
Shares Outstanding	150,3
TARGET PRICE	29,6

9. WACC COMPUTATION

Risk-free rate estimates

We considered the three countries in which ERG operates the most (Italy, France, Germany): first we computed the average yields of 10Y Treasuries of the last 3 years and then we calculated the average between these rates (0.60%).

Beta

We estimated it with a linear regression between weekly returns of the last 5 years of ERG's share and FTSE Italia Mid Cap for the same period, resulting in 0.87. Then, we un-levered it obtaining a 0.61 beta, and re-levered it according to the optimal capital structure, with a final result of 0.91.



Cost of Equity

Equity Risk Premium: In order to calculate the cost of equity we estimated the Equity Risk Premium, equal to 8.3%, through the average between the maximum Earning yield of the last 5 years of FTSE Italia All Share (8.8%) and the maximum Earning yield of FTSE Italia Mid Cap (9.3%) for the same period, and then subtracted the risk-free rate. We computed the **Cost of Equity** using the Capital Asset Pricing Model formula, resulting in 8.12%. (For further details on the debate regarding ERP calculation we refer to CFA Institute Research Foundation working paper “Rethinking the Equity Risk Premium” (Dec. 2011)).

Cost of Debt

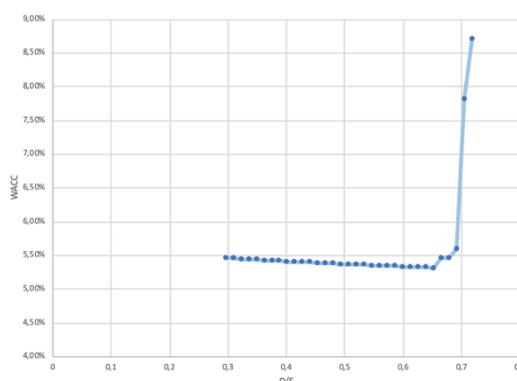
For the evaluation of the cost of debt we considered an alternative cost of debt starting by the values of the Interest Coverage Ratio for ERG which in 2020 has a value of 4.1. Companies in developed markets with a capitalization smaller than 5bn USD and Interest Coverage Ratio bigger than 4.0 have a Baa2/BBB rating which commands a spread for the cost of debt of these companies equal to 1.6% (*Source: FactSet*). We developed these estimates with a financial re-engineering analysis. For our valuation we picked the **Cost of Debt** of the optimal capital structure that we assumed ERG will achieve. According to the optimal D/E ratio (0.63) which commands an Interest Coverage Ratio of 14.9 and a rating of Aaa/AAA, we obtain a spread of 0.63% and a final cost of debt equal to **1.23%**.

WACC

The WACC is computed using the market capitalization for equity and the level of debt we assumed ERG will achieve by 2025. For the equity portion, we considered a market capitalization of €3.8bn (number of shares outstanding times the stock price). Assuming a level of debt equal to €2.4bn, a Cost of Debt equal to 1.23%, a 24% tax rate, and 7.8% Cost of Equity, we obtain a 5.32% WACC.

10. FINANCIAL RE-ENGINEERING

In order to evaluate the debt-reduction policy disclosed by ERG, we estimate an optimal capital structure corresponding to a 5.32% WACC and a Debt to Equity ratio of about 63%. We assume that ERG will reach this optimal structure in 2025. We consider a constant Equity Market Value, EBIT, Risk Free, Tax rate, and Equity Risk Premium. We start from the actual debt level and reduce it for €50mIn each period. Through the Net financial Expenses, we are able to evaluate the Cost of Capital and consequently a Spread, deducting the Risk-Free Rate, that give us a level of Interest Coverage Ratio. According to this estimated ratio and the fixed level of EBIT, we valued the next amount of financial expenses for the following period. The optimal WACC level is highlighted with a green line in the table below. Greater amounts of debt (greater than the current level) are associated with higher WACC levels, corresponding to worse credit ratings.



D	E	D/E	Net financial expenses	EBIT	Interest coverage ratio	Risk Free	Spread	Rating	Tax Rate	Kd	Beta re-levered	Risk premium	Ke	WACC
2017,23	3785	0,53295	15	185,20	12,4	0,60%	0,63%	Aaa/AAA	24%	1,23%	0,86	8,30%	7,71%	5,36%
2067,23	3785	0,54616	15	185,20	12,7	0,60%	0,63%	Aaa/AAA	24%	1,23%	0,86	8,30%	7,76%	5,35%
2117,23	3785	0,55937	14	185,20	13,0	0,60%	0,63%	Aaa/AAA	24%	1,23%	0,87	8,30%	7,82%	5,35%
2167,23	3785	0,57258	14	185,20	13,3	0,60%	0,63%	Aaa/AAA	24%	1,23%	0,88	8,30%	7,87%	5,34%
2217,23	3785	0,58579	14	185,20	13,7	0,60%	0,63%	Aaa/AAA	24%	1,23%	0,88	8,30%	7,92%	5,34%
2267,23	3785	0,599	13	185,20	14,0	0,60%	0,63%	Aaa/AAA	24%	1,23%	0,89	8,30%	7,97%	5,33%
2317,23	3785	0,61221	13	185,20	14,3	0,60%	0,63%	Aaa/AAA	24%	1,23%	0,89	8,30%	8,02%	5,33%
2367,23	3785	0,62542	13	185,20	14,6	0,60%	0,63%	Aaa/AAA	24%	1,23%	0,90	8,30%	8,07%	5,33%
2417,23	3785	0,63863	12	185,20	14,9	0,60%	0,63%	Aaa/AAA	24%	1,23%	0,91	8,30%	8,12%	5,32%
2467,23	3785	0,65184	15	185,20	12,5	0,60%	0,63%	Aa2/AA	24%	1,23%	0,91	8,30%	8,17%	5,32%
2517,23	3785	0,66505	29	185,20	6,3	0,60%	1,13%	A2/A	24%	1,74%	0,92	8,30%	8,22%	5,46%
2567,23	3785	0,67826	44	185,20	4,2	0,60%	1,15%	A3/A-	24%	1,75%	0,92	8,30%	8,27%	5,47%
2617,23	3785	0,69147	45	185,20	4,1	0,60%	1,56%	Baa2/BBB	24%	2,16%	0,93	8,30%	8,32%	5,59%
2667,23	3785	0,70468	57	185,20	3,3	0,60%	8,64%	Ca2/CC	24%	9,24%	0,94	8,30%	8,37%	7,82%
2717,23	3785	0,71789	247	185,20	0,8	0,60%	11,34%	C2/C	24%	11,94%	0,94	8,30%	8,43%	8,70%
2767,23	3785	0,7311	325	185,20	0,6	0,60%	11,34%	C2/C	24%	11,94%	0,95	8,30%	8,48%	8,73%
2817,23	3785	0,74431	330	185,20	0,6	0,60%	11,34%	C2/C	24%	11,94%	0,95	8,30%	8,53%	8,76%
2867,23	3785	0,75752	336	185,20	0,6	0,60%	11,34%	C2/C	24%	11,94%	0,96	8,30%	8,58%	8,79%

11. SENSITIVITY ANALYSIS

We take into account three different sensitivity analysis to better understand how our estimates react to different economic conditions. First, we stress the target price changing the TV growth rate and WACC, to observe how the price target changes under different cost of capital levels; our BUY recommendation still holds, with almost 64% of the cases resulting in fair values at least 10% above the current price. Second, we observe how the target price is affected by the Beta in multiple TV growth rate scenarios. 67% of the instances still support a BUY recommendation. Finally, we stress the Terminal Value over the Enterprise Value.

		WACC										
		3,82%	4,12%	4,42%	4,72%	5,02%	5,32%	5,62%	5,92%	6,22%	6,52%	6,82%
TV growth rate	0,7%	47,0	39,5	33,4	28,4	24,2	20,6	17,6	15,0	12,8	10,8	9,2
	1,0%	51,5	42,9	36,1	30,4	25,8	21,9	18,6	15,9	13,5	11,4	9,6
	1,3%	57,1	47,1	39,2	32,9	27,7	23,4	19,9	16,8	14,3	12,1	10,2
	1,6%	64,1	52,2	43,0	35,7	29,9	25,2	21,2	17,9	15,2	12,8	10,8
	1,9%	73,4	58,6	47,7	39,2	32,6	27,2	22,8	19,2	16,2	13,6	11,5
	2,2%	86,0	67,2	53,6	43,5	35,8	29,6	24,7	20,7	17,4	14,6	12,2
	2,5%	104,5	78,8	61,5	49,0	39,8	32,6	27,0	22,4	18,7	15,6	13,1
	2,8%	133,7	95,8	72,2	56,2	44,8	36,3	29,7	24,5	20,3	16,9	14,1
	3,1%	187,4	122,7	87,8	66,1	51,4	40,9	33,1	27,0	22,2	18,4	15,2
	3,4%	317,5	172,0	112,6	80,5	60,5	47,0	37,3	30,1	24,5	20,1	16,6
	3,7%	1093,8	291,7	157,9	103,2	73,7	55,4	43,0	34,1	27,4	22,3	18,2

		BETA										
		0,66	0,71	0,76	0,81	0,86	0,91	0,96	1,01	1,06	1,11	1,16
TV growth rate	0,7%	38,6	33,7	29,6	26,1	23,1	20,6	18,4	16,6	14,9	13,5	12,3
	1,0%	42,2	36,6	31,9	28,0	24,7	21,9	19,5	17,5	15,7	14,2	12,8
	1,3%	46,6	40,0	34,7	30,2	26,5	23,4	20,8	18,5	16,6	14,9	13,4
	1,6%	52,1	44,3	38,0	32,9	28,7	25,2	22,2	19,7	17,6	15,7	14,1
	1,9%	59,0	49,5	42,1	36,1	31,2	27,2	23,9	21,1	18,7	16,7	14,9
	2,2%	68,3	56,3	47,2	40,0	34,3	29,6	25,8	22,7	20,0	17,7	15,8
	2,5%	81,1	65,4	53,8	45,0	38,1	32,6	28,2	24,5	21,5	19,0	16,9
	2,8%	100,1	78,0	62,6	51,4	42,9	36,3	31,0	26,8	23,3	20,4	18,0
	3,1%	131,0	96,9	75,1	60,1	49,1	40,9	34,6	29,5	25,5	22,2	19,4
	3,4%	190,1	128,4	94,0	72,4	57,6	47,0	39,1	32,9	28,1	24,2	21,1
	3,7%	349,5	190,8	126,2	91,4	69,9	55,4	45,0	37,3	31,4	26,8	23,1

		BETA										
		0,66	0,71	0,76	0,81	0,86	0,91	0,96	1,01	1,06	1,11	1,16
TV growth rate	0,7%	74,0%	71,3%	68,4%	65,6%	62,6%	59,7%	56,8%	53,9%	51,0%	48,1%	45,4%
	1,0%	75,8%	73,1%	70,2%	67,3%	64,4%	61,4%	58,4%	55,4%	52,5%	49,6%	46,7%
	1,3%	77,7%	75,0%	72,1%	69,2%	66,2%	63,2%	60,1%	57,1%	54,1%	51,1%	48,2%
	1,6%	79,7%	76,9%	74,0%	71,1%	68,1%	65,0%	61,9%	58,8%	55,8%	52,7%	49,7%
	1,9%	81,8%	79,0%	76,1%	73,1%	70,1%	67,0%	63,8%	60,7%	57,5%	54,4%	51,3%
	2,2%	84,0%	81,2%	78,3%	75,3%	72,2%	69%	65,8%	62,6%	59,4%	56,2%	53,1%
	2,5%	86,2%	83,4%	80,5%	77,5%	74,4%	71,2%	68,0%	64,7%	61,4%	58,1%	54,9%
	2,8%	88,6%	85,8%	82,9%	79,9%	76,7%	73,5%	70,2%	66,9%	63,5%	60,2%	56,8%
	3,1%	91,1%	88,4%	85,4%	82,4%	79,2%	75,9%	72,6%	69,2%	65,8%	62,3%	58,9%
	3,4%	93,8%	91,0%	88,1%	85,0%	81,9%	78,5%	75,2%	71,7%	68,2%	64,7%	61,2%
	3,7%	96,5%	93,8%	90,9%	87,9%	84,7%	81,3%	77,9%	74,3%	70,8%	67,2%	63,5%

12. SCENARIO ANALYSIS

To assess the bull scenario, we start from the assumptions of our base model, which considers the future sale of Hydro and Natural Gas assets. To evaluate the bear scenario, instead, our hypothesis is based on the assumption that the company will not proceed with the disposal of its assets.

BULL CASE

DCF MODEL	STAGE 1					STAGE 2										
	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
Period	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total Revenues	1041,4	1086,4	1133,3	1182,2	1233,3	1286,6	1428,1	1585,2	1759,5	1953,1	2167,9	2406,4	2671,1	2964,9	3291,1	3653,1
Revenues growth (%)	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
EBIT	190,5	228,0	276,3	339,4	422,9	534,9	378,2	419,8	466,0	517,3	574,2	637,3	707,4	785,3	871,6	967,5
EBIT Margin (%)	18,3%	19,7%	21,2%	22,8%	24,6%	26,5%	26,5%	26,5%	26,5%	26,5%	26,5%	26,5%	26,5%	26,5%	26,5%	26,5%
Tax Rate (%)	35%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
NOPAT	123,8	173,3	210,0	258,0	321,4	406,6	287,5	319,1	354,2	393,1	436,4	484,4	537,7	596,8	662,5	735,3
D&A	313,9	313,9	318,6	323,4	328,2	333,2	338,2	343,2	348,4	353,6	358,9	364,3	369,8	375,3	380,9	386,6
Change in NWC		158,6	-27,4	11,9	16,2	17,6	21,4	26,0	31,6	38,5	46,8	56,9	69,2	84,2	102,3	124,5
Capital Expenditures	137,8	495	-121	419	501	552	597	644	696	752	812	877	947	1022	1104	1193
Unlevered FCF		-166,3	677,5	150,9	132,8	169,7	7,6	-8,0	-25,0	-43,3	-63,2	-84,8	-108,5	-134,5	-163,2	-195,1
TV																
WACC		5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%
Present value of free cash flows		-157,9	610,8	129,2	107,9	131,0	5,6	-5,6	-16,5	-27,1	-37,6	-48,0	-58,3	-68,6	-79,0	-89,6

STAGE 3														
2036E	2037E	2038E	2039E	2040E	2041E	2042E	2043E	2044E	2045E	2046E	2047E	2048E	2049E	2050E
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2766,6	2954,6	3144,8	3336,2	3527,5	3717,3	3904,2	4086,6	4263,2	4432,3	4592,4	4742,1	4880,0	5004,6	5114,7
7,15%	6,79%	6,44%	6,09%	5,73%	5,38%	5,03%	4,67%	4,32%	3,97%	3,61%	3,26%	2,91%	2,55%	2,20%
470,3	502,3	534,6	567,2	599,7	631,9	663,7	694,7	724,7	753,5	780,7	806,2	829,6	850,8	869,5
17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%
24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%
357,5	381,7	406,3	431,1	455,8	480,3	504,4	528,0	550,8	572,7	593,4	612,7	630,5	646,6	660,8
397,6	397,6	397,6	397,6	397,6	397,6	397,6	397,6	397,6	397,6	397,6	397,6	397,6	397,6	397,6
103,7	103,7	103,7	103,7	103,7	103,7	103,7	103,7	103,7	103,7	103,7	103,7	103,7	103,7	103,7
561,6	561,6	561,6	561,6	561,6	561,6	561,6	561,6	561,6	561,6	561,6	561,6	561,6	561,6	561,6
89,7	114,0	138,6	163,3	188,0	212,5	236,7	260,2	283,1	304,9	325,6	344,9	362,8	378,8	393,1
														11839,9
5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%
37,6	45,2	52,0	58,1	63,3	67,8	71,5	74,4	76,7	78,2	79,1	79,4	79,0	78,2	2390,5

TV growth rate	2,2%
Enterprise Value	7289
NFP	1421
Equity Value	5868
Shares Outstanding	150,3
TARGET PRICE	39,0

BEAR CASE

DCF MODEL	STAGE 1					STAGE 2										
	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
Period	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total Revenues	1041,4	1125,8	1217,5	1227,7	1239,3	1252,8	1346,8	1447,8	1556,4	1673,1	1798,6	1933,5	2078,5	2234,4	2401,9	2582,1
Revenues growth (%)	-0,25%	8,1%	8,1%	0,8%	1,0%	1,1%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%
EBIT	190,47	184,42	227,44	204,19	206,58	209,33	229,0	246,1	264,6	284,4	305,8	328,7	353,3	379,8	408,3	439,0
EBIT Margin (%)	18,3%	16,4%	18,7%	16,6%	16,7%	16,7%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%
Tax Rate (%)	35,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%	24,0%
NOPAT	123,8	140,2	172,9	155,2	157,0	159,1	174,0	187,1	201,1	216,2	232,4	249,8	268,5	288,7	310,3	333,6
D&A	313,90	343,59	343,59	371,58	374,67	378,24	380,1	382,0	383,9	385,9	387,8	389,7	391,7	393,6	395,6	397,6
Change in NWC	-190,1	132,2	-22,9	9,9	13,5	14,7	17,8	21,7	26,4	32,1	39,0	47,4	57,7	70,1	85,3	103,7
Capital Expenditures	137,8	412,4	-101,2	348,8	417,3	460,3	469,6	479,0	488,6	498,5	508,5	518,7	529,1	539,7	550,6	561,6
Unlevered FCF	490,0	-60,8	640,5	168,1	100,9	62,3	66,7	68,4	70,0	71,5	72,7	73,4	73,5	72,5	70,1	65,9
TV																
WACC		5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%
Present value of free cash flows	490,0	-57,6	574,5	142,8	81,2	47,5	48,1	46,7	45,3	43,8	42,2	40,4	38,2	35,7	32,7	29,1

STAGE 3														
2036E	2037E	2038E	2039E	2040E	2041E	2042E	2043E	2044E	2045E	2046E	2047E	2048E	2049E	2050E
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
4033,5	4429,8	4839,2	5257,9	5682,0	6107,1	6528,0	6939,7	7336,7	7713,3	8064,0	8383,4	8666,2	8907,6	9103,6
10,4%	9,8%	9,2%	8,7%	8,1%	7,5%	6,9%	6,3%	5,7%	5,1%	4,5%	4,0%	3,4%	2,8%	2,2%
1008,4	1107,5	1209,8	1314,5	1420,5	1526,8	1632,0	1734,9	1834,2	1928,3	2016,0	2095,8	2166,5	2226,9	2275,9
25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%
24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
766,4	841,7	919,5	999,0	1079,6	1160,4	1240,4	1318,6	1394,0	1465,6	1532,2	1592,9	1646,6	1692,5	1729,7
386,6	386,6	386,6	386,6	386,6	386,6	386,6	386,6	386,6	386,6	386,6	386,6	386,6	386,6	386,6
124,5	124,5	124,5	124,5	124,5	124,5	124,5	124,5	124,5	124,5	124,5	124,5	124,5	124,5	124,5
1193	1193	1193	1193	1193	1193	1193	1193	1193	1193	1193	1193	1193	1193	1193
-164,0	-88,7	-11,0	68,6	149,2	229,9	309,9	388,2	463,6	535,1	601,8	662,4	716,2	762,1	799,3
														26175,4
5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%
-71,6	-36,8	-4,3	25,6	52,9	77,4	99,1	117,8	133,6	146,4	156,3	163,4	167,7	169,5	5695,5

13. DIVIDEND DISCOUNT MODEL

To stress our analysis, we use a DDM model. As for the DCF model we consider 4 stages: 2021-2025; 2026-2035; 2036-2050 and TV. The result is a TP of €32, i.e., an upside of X% compared with the actual market price and a difference of +8,1% relative to the fair price obtained through our DCF model. We believe this estimate fairly reflects the possibility of an extraordinary dividend in 2022 and an increase of DPS by 5% each year, continuing the trend

FY	Y	Growth rate %	EPS	DPS	Payout	PV
2021E	1		0,75	0,75	100,06%	0,712
2022E	2		0,78	1,15	148,21%	1,037
2023E	3		0,87	0,83	95,68%	0,710
2024E	4		0,99	0,84	84,87%	0,683
2025E	5		1,18	0,91	77,08%	0,702
2026E	6	10	1,30	0,58	45,00%	0,428
2027E	7	10	1,43	0,64	45,00%	0,447
2028E	8	10	1,57	0,71	45,00%	0,467
2029E	9	10	1,73	0,78	45,00%	0,488
2030E	10	10	1,90	0,86	45,00%	0,510
2031E	11	10	2,09	0,94	45,00%	0,532
2032E	12	10	2,30	1,04	45,00%	0,556
2033E	13	10	2,53	1,14	45,00%	0,581
2034E	14	10	2,78	1,25	45,00%	0,606
2035E	15	10	3,06	1,38	45,00%	0,633
2036E	16	9,48	3,35	1,48	44,00%	0,644
2037E	17	8,96	3,65	1,57	43,00%	0,651
2038E	18	8,44	3,96	1,66	42,00%	0,654
2039E	19	7,92	4,27	1,75	41,00%	0,655
2040E	20	7,40	4,59	1,84	40,00%	0,651
2041E	21	6,88	4,91	1,91	39,00%	0,644
2042E	22	6,36	5,22	1,98	38,00%	0,634
2043E	23	5,84	5,52	2,04	37,00%	0,620
2044E	24	5,32	5,82	2,09	36,00%	0,604
2045E	25	4,80	6,10	2,13	35,00%	0,584
2046E	26	4,28	6,36	2,16	34,00%	0,562
2047E	27	3,76	6,60	2,18	33,00%	0,537
2048E	28	3,24	6,81	2,18	32,00%	0,511
2049E	29	2,72	7,00	2,17	31,00%	0,482
2050E	30	2,20	7,15	2,15	30,00%	0,452

TV growth rate	2,2%
Enterprise Value	4521
NFP	1421
Equity Value	3100
Shares Outstanding	150,3
TARGET PRICE	20,6

of the last five years.

14. AS-IS ANALYSIS

We also want to analyze the case in which the Company does not proceed with the disposal of the hydro and natural gas assets. For the period 2020-2022 we consider the explicit Company's guidance and add our own analysis. To meet the growing demand for renewable energy, the Company will have to commit to greater investments in the Wind and Solar segments (repowering and reblading), thanks to which it will have greater operational efficiency. We estimate a revenue growth rate of 8% YoY, from € 1041m in 2020E to € 1227.6 mln in 2023E. In the two-year period 2024E-2025E, revenues will remain almost unchanged, with a growth rate of 1% YoY, compared to 2023E. In addition, depreciation and amortization will increase by 22% (2020E-2025E), following the increase in PP&M. The EBIT margin will remain constant at 16% during 2021E-2025E, hampered by high costs and low margins for the Natural Gas and Hydro segments. We reach a target price of € 21.85 equal to -X% compared to the actual market price (and 33% lower than our base-case target price of € 29.6). The lower value highlights how the Company's strategy of disposing its Hydro and Thermo assets will allow ERG to position itself more competitively in the market, achieving better results.

DCF MODEL		2020E	2021E	2022E	2023E	2024E	2025E			
Period		0	1	2	3	4	5			
Total Revenues		1041,41	1125,82	1217,54	1227,67	1239,35	1252,81			
Revenues growth (%)		-0,3%	8,1%	8,1%	0,8%	1,0%	1,1%			
EBIT		190,47	184,42	199,45	201,10	203,02	205,22			
EBIT Margin (%)		18%	16%	16%	16%	16%	16%			
Tax Rate (%)		35,0%	24%	24%	24%	24%	24%			
NOPAT		123,80	140,16	151,58	152,84	154,29	155,97			
D&A		313,90	343,59	371,58	374,67	378,24	382,35			
Change in NWC se variazione. +, metto - se variazione -, metto +		71,07	132,18	-22,87	9,91	13,49	14,66			
Capital Expenditures (CON ammortamento)		137,77	587,60	547,04	384,85	392,25	400,64			
Unlevered FCF		228,87	-236,03	-1,01	132,75	126,79	123,02			
STAGE 2										
	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
	6	7	8	9	10	11	12	13	14	15
	1346,8	1447,8	1556,4	1673,1	1798,6	1933,5	2078,5	2234,4	2401,9	2582,1
	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%
	235,7	253,4	272,4	292,8	314,7	338,4	363,7	391,0	420,3	451,9
	17,5%	17,5%	17,5%	17,5%	17,5%	17,5%	17,5%	17,5%	17,5%	17,5%
	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
	179,1	192,6	207,0	222,5	239,2	257,2	276,4	297,2	319,5	343,4
	382,3	382,3	382,3	382,3	382,3	382,3	382,3	382,3	382,3	382,3
	16,1	17,7	19,5	21,5	23,6	26,0	28,6	31,4	34,6	38,0
	414,7	429,2	444,2	459,7	475,8	492,5	509,7	527,6	546,0	565,1
	130,7	128,0	125,6	123,7	122,1	121,0	120,5	120,5	121,2	122,6
	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%
	95,6	88,9	82,8	77,4	72,6	68,3	64,5	61,3	58,5	56,2

STAGE3														
2036E	2037E	2038E	2039E	2040E	2041E	2042E	2043E	2044E	2045E	2046E	2047E	2048E	2049E	2050E
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2766,6	2954,6	3144,8	3336,2	3527,5	3717,3	3904,2	4086,6	4263,2	4432,3	4592,4	4742,1	4880,0	5004,6	5114,7
7,1%	6,8%	6,4%	6,1%	5,7%	5,4%	5,0%	4,7%	4,3%	4,0%	3,6%	3,3%	2,9%	2,6%	2,2%
442,7	472,7	503,2	533,8	564,4	594,8	624,7	653,9	682,1	709,2	734,8	758,7	780,8	800,7	818,3
16,0%	16,0%	16,0%	16,0%	16,0%	16,0%	16,0%	16,0%	16,0%	16,0%	16,0%	16,0%	16,0%	16,0%	16,0%
24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
336,4	359,3	382,4	405,7	428,9	452,0	474,7	496,9	518,4	539,0	558,4	576,6	593,4	608,6	621,9
382,3	382,3	382,3	382,3	382,3	382,3	382,3	382,3	382,3	382,3	382,3	382,3	382,3	382,3	382,3
38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0	38,0
565,1	565,1	565,1	565,1	565,1	565,1	565,1	565,1	565,1	565,1	565,1	565,1	565,1	565,1	565,1
115,6	138,5	161,6	184,9	208,1	231,2	253,9	276,1	297,6	318,1	337,6	355,8	372,6	387,7	401,1
														13041,7
5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%
50,3	57,1	63,3	68,8	73,5	77,5	80,8	83,4	85,3	86,6	87,2	87,3	86,7	85,7	2820,2

TV growth rate	2,2%
Enterprise Value	4706,00
NFP	1421
Equity Value	3285,00
Shares Outstanding	150,32
TARGET PRICE	21,85

15. PEERS AND MULTIPLE ANALYSIS

BRAND	
EUROPEAN PEERS	
ALERION	Alerion Clean Power Spa is an Italian-based holding company included in the utilities industry. The firm has a lower market capitalization than ERG, but has higher operating margins. The Company's power plants are located in Italy, Romania, Bulgaria.
SOLARIA	Solaria y Medio Ambiente is a leading company in the development and generation of solar energy in Southern Europe. For this reason and for ERG's desire to increase its capacity in the solar sector, we have considered Solaria among ERG's competitors. Its goal is to reach 6.2GW in 2025. It is based in Spain and manages solar energy in Spain, Greece, Portugal, Italy and Uruguay.
ORSTED	Orsted is a Denmark-based energy company engaged in procuring, producing, distributing and trading energy in North-western Europe. The Company operates only in two segments of Renewable energies: Wind Power and Thermal Power. Comparable to ERG it was founded to manage gas and oil resources. To date it has completed its transition process to full renewable energy production. Orsted is the largest offshore wind farm company in the world with a market share of 16%.
NEOEN	Neoen SAS is a French company. Like ERG, it operates in the solar and wind sectors. Its peculiarity is its presence in countries outside Europe such as Australia, Jordan, Zambia, Mozambique, Argentina, Jamaica. Its total capacity in operation and under construction is currently over 3 GW, with a target of reaching more than 5GW at the end of 2021.

ITALIAN PEERS	
FALCK RENEWABLES SPA	We include Falck Renewables Spa among ERG's competitors because it is a mid-cap company, it is based in Italy and the largest part of its installed capacity is based in Italy (354 MW). Falck Renewables Spa is among the pure players in Europe in the renewable energies sector. Its activities include the development, financing, construction and operational management of renewable energy plants. The company operates through several segments, such as Biomass, Solar, Wind, Waste of Water, Services and Other Businesses.
ENEL	Enel Spa is an Italian-based multinational power company and an integrated operator in the global power, gas and renewables markets. Enel Spa is engaged in more renewable energy sources, such as hydroelectric, wind, solar, geothermal and biomass. Its plants are installed mainly in Europe (around 600 plants with a total installed capacity of 14000 MW), the Americas, Africa, Asia and Oceania.

A2A	A2A Spa is an Italian-based company that operates in the electric utility sector. The Energy segment covers electricity generation through hydroelectric and thermoelectric plants, energy management and sale of electricity and gas. Like ERG, A2A is undergoing a decarbonisation process: the aim is to increase the portion of energy produced from renewable sources. In 2019, A2A produced 54% of its thermic energy from renewable sources and has an installed photovoltaic capacity of 99 MW, that will become 500MW in 2024.
EDISON	Edison is a mid-cap company based in Italy, that like ERG produces energy from renewable sources as CCGT (14 thermal power plants based in Italy), hydro (1018 MW installed capacity), solar (64 plants based in Italy, with a total installed capacity of 87 MW) and wind (46 plants based in Italy, with a total installed capacity of 922 MW). Edison does not use only renewable sources, but it will have a productive mix with 40% of renewables by 2030.

Company Name	EBIT Margin	EBITDA Margin	Net Margin FY1	Net Margin FY2	EV/SALES FY1	EV/SALES FY2	Price to Earnings Actual	Earnings per Share FY1	Earnings per Share FY2
ERG SpA	16,1%	47,4%	10,8%	12,4%	5,51x	5,16x	38,64x	0,70	0,86
Solaria Energia	40,6%	73,9%	40,8%	29,0%	56,25x	34,01x	87,68x	0,17	0,26
Orsted	-17,1%	3,4%	19,3%	14,8%	8,25x	8,30x	30,60x	3,17	2,77
Neon	59,9%	93,0%	8,7%	9,9%	23,45x	18,66x	120,48x	0,37	0,50
Falck Renewables	26,7%	47,8%	8,8%	10,4%	7,31x	6,89x	43,96x	0,11	0,14
Enel	16,2%	26,6%	6,7%	6,8%	1,77x	1,72x	20,18x	0,50	0,54
Edison	3,9%	9,1%	-	-	-	-	-	-	-
Alerion Cleanpower	34,2%	70,2%	-	-	-	-	33,68x	-	-
A2A	9,7%	17,8%	4,4%	4,1%	1,16x	1,16x	12,94x	0,10	0,10
Average	21,8%	42,7%	14,8%	12,5%	16,37x	11,79x	49,93x	0,74	0,72
Median	21,4%	37,2%	8,8%	10,1%	7,78x	7,59x	33,68x	0,27	0,38

Source: Factset (2020)

16. RELATIVE VALUATION

To support our DCF model, we perform an assessment based on stock market multiples.

Due to ERG's distinctive features, it's difficult to find company strictly similar to it: companies that produce renewable energy could use only one source of energy or (as ERG) many ones; they could also produce energy from grey source (like oil), and they could sell energy to a private entity, take part to auctions or stipulate PPA contract. For these reasons, to select ERG's competitors we take into account the geographic area in which they operate, their market capitalization, and focus to companies that produces mainly energy from renewable sources and that have the aim to become carbon zero company in the foreseeable future (as ERG). We calculate, in each year (from 2017 to 2019), the medians of the competitors' multiples. Applying these median values we derive a Target Price obtained of 29€ (slightly lower than our DCF base-case target price and implying a 11% potential upside from the actual market price).

2017	EV/EBITDA	Price to Book Value
ITALIAN PEERS		
Falck Renewables SpA	9,8x	1,4x
Enel Spa	8,5x	1,5x
A2A	7,0x	1,67x
Edison Spa	7,2x	0,9x
Alerion Clean Power Spa	4,3x	1,1x
AVERAGE	7,4x	1,31x
MEDIAN	7,2x	1,4x
ERG	7,9x	1,2x
EUROPEAN PEERS		
Solaria Energia	16,9x	3,2x
Orsted	13,3x	2,6x
Neon	-	-
Falck Renewables SpA	9,8x	1,4x
Enel Spa	8,5x	1,5x
AVERAGE	12,1x	2,2x
MEDIAN	11,56x	1,5x
ERG	7,9x	1,2x

2018	EV/EBITDA	Price to Book Value
ITALIAN PEERS		
Falck Renewables SpA	7,8x	1,4x
Enel Spa	9,1x	1,6x
A2A	6,7x	1,56x
Edison Spa	7,5x	0,9x
Alerion Clean Power Spa	1,2x	1x
AVERAGE	6,5x	1,29x
MEDIAN	7,5x	1,4x
ERG	8,7x	1,3x
EUROPEAN PEERS		
Solaria Energia	21,6x	2,9x
Orsted	35,4x	2,7x
Neon	15,7x	2,5x
Falck Renewables SpA	7,8x	1,4x
Enel Spa	9,1x	1,6x
AVERAGE	17,9x	2,22x
MEDIAN	15,7x	2,5x
ERG	8,7x	1,3x

2019	EV/EBITDA	Price to Book Value
ITALIAN PEERS		
Falck Renewables SpA	11,3x	2,5x
Enel Spa	7,5x	2,4x
A2A	6,8x	1,58x
Edison Spa	10,9x	1,0x
Alerion Clean Power Spa	6,3x	-
AVERAGE	8,6x	1,9x
MEDIAN	7,5x	2,0x
ERG	9,8x	1,6x
EUROPEAN PEERS		
Solaria Energia	40,9x	4,4x
Orsted	49,3x	4,0x
Neon	20,9x	4,0x
Falck Renewables SpA	11,3x	2,5x
Enel Spa	7,5x	2,4x
AVERAGE	26,0x	3,5x
MEDIAN	20,9x	4,0x
ERG	9,8x	1,6x

ITALIAN PEERS	EV/EBITDA	Price to Book Value
FAIR VALUE	9,4x	1,8x
Target price for each multiple	16,5	19,8
TARGET PRICE (Italian)	18,2	
Net Debt	1421	
# of shares	150,32	
Equity Market Value (Italian)	2732,2	
Average Forecasted	526,2	12,43

EUROPEAN PEERS	EV/EBITDA	Price to Book Value
FAIR VALUE	16,1x	2,7x
Target price for each multiple	46,77	33,1
TARGET PRICE (European)	40	
Net Debt	1421	
# of shares	150,32	
Equity Market Value (European)	6006,4	
Average Forecasted	526,2	12,4

TARGET PRICE	29
EQUITY MARKET VALUE	4365,1

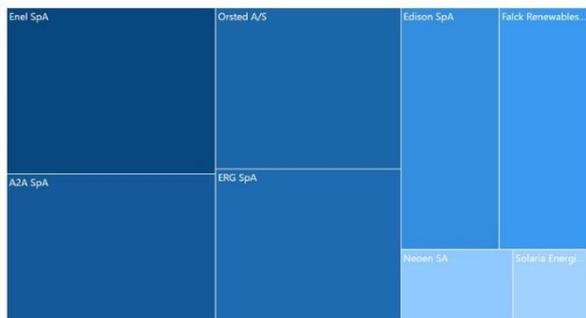
17. INVESTMENT RISK

Category	Risks	Appetite	Response Plan
Macro	[M1] REGULATORY EVOLUTION AND COUNTRY RISK	Zero tolerance	Continuous monitoring of the national and international reference regulations. Total compliance with local and general laws.
	[M2] CLIMATE CHANGE		Risk monitoring and use of accurate weather forecasting instruments.
Operational	[O1] AVAILABILITY OF RENEWABLE RESOURCES	moderate	Technological and geographical diversification and an efficient scheduling of plant shutdowns.
	[O2] COMMODITY PRICES		Definition of risk exposure limits by the Company's Energy Management and use of derivative instruments for hedging (authorized exclusively in view of the existence of an underlying asset).
	[O3] LOSS OF KEY SUPPLIERS	Low	Identifying of a sufficient number of suppliers and continuous monitoring of suppliers' financial condition and purchasing processes.
	[O4] HEALTH, SAFETY AND ENVIRONMENT		Continuing to adopt safety standards and operating procedures of high quality and reliability in compliance with the regulations.
Strategic	[S1] NEW INVESTMENTS	zero tolerance	Keeping a solid process of evaluating new investments, through legal-regulatory analysis and financial assessment/planning models
	[S2] RATING OF THE PARENT COMPANY		Continuous monitoring of the stakeholders' perception of the ERG brand and continuously enhance of the Corporate Social Responsibility process.
Financial	[F1] FOREX RISK	moderate	Monitoring the level of exposure to the risk and compliance with the restrictions set by the Risk Committee.
	[F2] INTEREST RATE RISK		Use of derivative contracts to hedge the risk, (such as Interest Rate Swaps and Interest Rate Options).
	[F3] CREDIT RISK	Low	Bank guarantees or sureties and a counterparty diversification strategy (e.g. depositing cash at different banks and/or using mutual funds).
	[F4] LIQUIDITY RISK		Pursuing the current strategy aimed at achieving higher levels of solvency and adopting an optimal capital structure.

		LIKELIHOOD				
		Rare	Unlikely	Possible	Likely	Almost certain
IMPACT	Severe		[S1]			
	Major		[F4] [S2]	[M1]		
	Moderate	[O3] [O4] [F3]	[O1] [F2]	[F1]		
	Minor		[O2]		[M2]	
	Not significant					

18. ESG

Thanks to the use of Treemap we classify ERG and its competitors on the basis of ESG scores and ESG grades obtained by every company in 2020. The chart is constructed using ESG scores for slot sizes and ESG grades for colours. A darker colour corresponds to a higher ESG grade. We can see that ERG has a score of 74.64, above the average of 59.46.



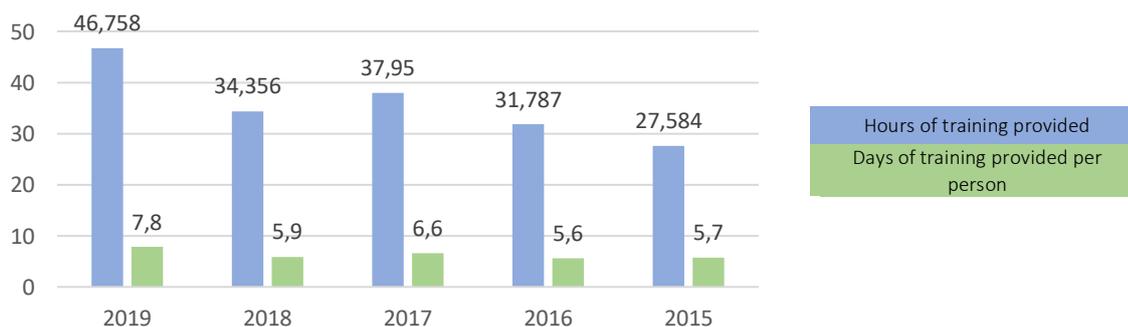
FIRMS	ESG score	ESG grade
ERG SpA	74,64419	B+
Enel SpA	88,85985	A
Falck Renewables SpA	56,31272	B-
Edison SpA	60,87398	B
Solaria Energia y Medio Ambiente SA	15,11166	D
Orsted A/S	76,52415	A-
Neoen SA	21,97504	D+
A2A SpA	81,40774	A-

CORPORATE SOCIAL RESPONSIBILITIES

		2019	2018	2017	2016
Employees at 31/12	n.	754	737	714	715
Female employment	%	20,80%	20,10%	20,90%	21,00%
Average employee age (years)		43.2	43,8	43.6	43.8
Ongoing labour disputes	n.	1	3	2	4

	2019			2018			2017		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Italy	535	141	676	528	134	662	531	135	666
France	37	9	46	33	8	41	14	7	21
Germany	20	4	24	22	3	25	17	4	21
UK	2	1	3	3	-	3	-	-	-
Bulgaria	1	-	1	1	-	1	1	-	1
Poland	-	1	1	-	1	1	-	1	1
Romania	2	1	3	2	2	4	2	2	4
Group Total	597	157	754	589	148	737	565	149	714

TRAINING



CORPORATE GOVERNANCE

STRUCTURE OF THE BOARD OF DIRECTORS

Director	Office	Role	Independent	M/m*	CRC**	NRC**
Edoardo Garrone	Chairperson	Executive	No	M		
Alessandro Garrone	Deputy Chairperson	Executive	No	M		
Giovanni Mondini	Deputy Chairperson	Non-executive	No	M		
Luca Bettonte	Chief Executive Officer	Executive	No	M		
Massimo Belcredi	Director***	Non-executive	Consolidated Finance Act	M	X	
Mara Anna Rita Caverni	Director	Non-executive	Corporate Governance Code	M	C	
Barbara Cominelli	Director	Non-executive	Corporate Governance Code	M		X
Marco Costaguta	Director	Non-executive	No	M		
Paolo Francesco Lanzoni	Director	Non-executive	No	M		X
Silvia Merlo	Director	Non-executive	Corporate Governance Code	M		C
Elisabetta Oliveri	Director	Non-executive	Corporate Governance Code	M	X	
Mario Paterlini	Director	Non-executive	Corporate Governance Code	m		

* Drawn from the list presented by majority (M) or minority (m) shareholders.

** CRC: Control and Risk Committee; NRC: Nominations and Remuneration Committee - they provide to the Board of Directors and to the relevant bodies the opinions provided by the Procedure for Transactions with Related Parties. Appointed on 23 April 2018.

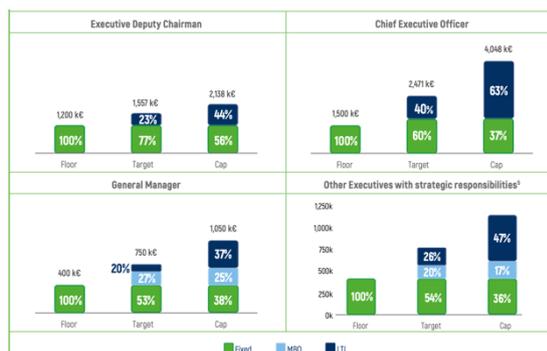
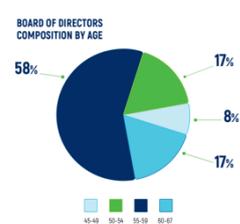
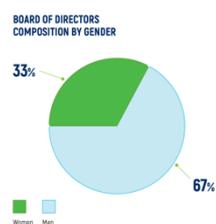
*** Responsible for coordinating the requests and contributions of non-executive directors (with particular reference to those who are independent) on matters of interest with respect to the operation of the Board of Directors or the management of the company, as well as working with the Chairperson of the Board of Directors to ensure that directors receive full and timely information.

C: Chairperson of the relevant Committee.

X: Member of the relevant Committee.

The BoD meets at least once a quarter to inform the Board of Statutory Auditors on the Company's activities and on the most important business, financial, and capital transactions undertaken by the Company or its subsidiaries, and particularly those on which there may be a potential conflict of interests. 83% of the members of the BoD are younger than 60 years old, and the percentage of gender diversity complies with the gender balance criteria established by current legislative and regulatory provisions, which require that at least one-third of the elected Directors must be reserved for the less represented gender.

The pay-mix is shown in the figure below and is composed by a **fixed remuneration**, **Short-term variable remuneration (MBO)**, **long-term Variable Remuneration (LTI)**. The MBO system is linked to a *sustainability clause* based on workplace accidents, the LTI System provides for the allocation of a prespecified number of Shares ("Performance Shares"), free of charge, at the end of a three-year vesting period (2018-2020). It is subject to **(i) Performance Condition**: if it is not met, the assignment of the Performance Shares to the beneficiaries of the LTI System will not take place (if the price of the Shares is equal to or less than the Target Price - EUR 16.00 -, the Assigned Shares shall be equal to the Allocated Shares; if the price of the Shares is equal or above the Cap Price - EUR 21.00 -, the Assigned Shares shall be equal to 200% of the Allocated Shares; if the price of the Shares is above the Target Price but less than the Cap Price, Shares shall be allocated following a linear incentive strategy); **(ii) clause of clawback**, according to which, if it appears that the data were clearly incorrect, or were the result of manipulation or unlawful conduct, the Company may withdraw the right of beneficiaries to the allocation of Shares, or ask the beneficiaries to reimburse an amount equivalent to the benefit received as a result of the vesting of the Shares; **(iii) clauses that specify the consequences** deriving from the termination of employment and/or of the mandate of the current beneficiaries of the LTI System, according to which in "bad leaver" situations, the beneficiary will lose for good the right to any assignment of Shares at the end of the vesting period, while in "good leaver" situations, if the Performance Condition is met, Shares shall be assigned in proportion to the duration of the employment/mandate; **(iv) clause for the revision of the Performance Condition**, because of the LTI System has a multi-annual time span, if events like change in scope of ERG or significant changes in the macro-economic and/or business scenario appears, they may affect the consistency of the Plan's incentive strategy and this has to be revised.



Disclosures:

Ownership and material conflicts of interest:

The author(s), or a member of their household, of this report does not hold a financial interest in the securities of this company.

The author(s), or a member of their household, of this report does not know of the existence of any conflicts of interest that might bias the content or publication of this report.

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Compensation of the author(s) of this report is not based on investment banking revenue.

Position as a officer or director:

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CFA Institute Research Challenge