

## Overview of business valuation parameters in the energy industry

Edition n.3 - 2017

# Contents

Preface	3
Section I - Methodology	5
Section II - Identification of panels	7
Section III - Simulation for calculation of WACC - Sector comparison	11 19
Section IV - The multiples	23
Section V - Multiples by geographic area and by segment	27

This edition of the publication aims to provide some of the basic parameters used when valuing companies and/or groups of companies operating in the Energy industry.

The Deloitte Financial Advisory Valuation Team performed an analysis of the cost of capital (WACC) and the main Asset Side market multiples estimated on an Italian, European and worldwide level.

The purpose is to make a contribution towards the typical work of decision makers in the sector i.e. initial valuation analysis performed for potential M&A transactions and general business valuations in the Energy industry.

# Preface

by Marco Vulpiani

In light of our extensive experience in the valuation of companies and groups operating in the Energy industry and considering the positive interest gathered from the first issue of this study, we are pleased to present this second edition that represents the natural continuation of our analysis focused on this important industry.

The objectives of this periodic publication remain: firstly, to provide insight into the trends in certain value indicators (multiples) and drivers (cost of capital); secondly, to provide average benchmark parameters for the industry to those who have to perform preliminary valuations.

This publication is primarily addressed at those operating in the Energy industry. We would like to take the opportunity to thank all the operators that have supported us with constructive feedback and that with their interest and enthusiasm have contributed to support this second issue. We hope that the results of our analysis might be appreciated and useful for the purposes of preliminary valuations performed during tricky decision making processes that have to be handled in conditions of great volatility, complexity and uncertainty.



In particular, as highlighted in the various sections of this document, our contribution is based on a series of analyses performed in accordance with established practice and, in general, drawing on the vast experience accumulated by Deloitte in the Energy Industry.

Finally, we remind that the data used and the methods applied herewith are compliant with the most recent guidelines in the field of business valuation, including guidelines of the Italian Valuation Board (Organismo Italiano di Valutazione - OIV) of whose Management Board I am a member.

A handwritten signature in blue ink, appearing to read "Marco Vulpiani".

**Marco Vulpiani**

Head of Valuation and Business Modeling Services  
Deloitte Financial Advisory S.r.l.



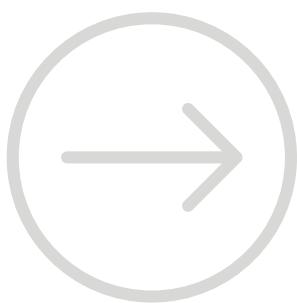
# Section I

## Methodology

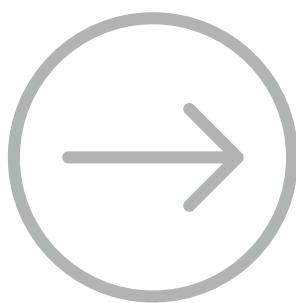
With the aim of providing the basic elements for the analysis of the value of companies and/ or groups of companies operating in the Energy industry, we examined a panel of Energy companies and the related market data as of 31/12/2015 and 31/12/2016.

We conducted our analysis by looking at companies listed on the Italian market and companies listed on international markets.

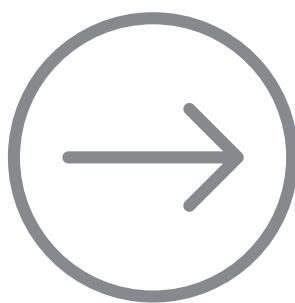
The method adopted is summarized below:



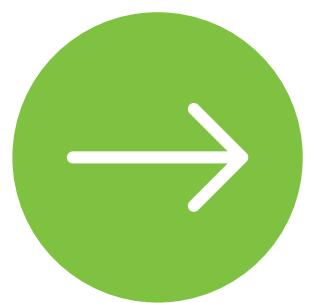
**IDENTIFICATION  
OF PANELS TO BE  
ANALYZED**



**ANALYSIS OF  
IDENTIFIED COMPANIES**



**ESTIMATE OF  
MAIN VALUATION  
PARAMETERS FOR EACH  
IDENTIFIED SEGMENT**



**SUMMARY TABLES**

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**Step 1**

Identify leading companies listed in Italy and internationally and operating in various segments of the Energy industry.

The panels of companies identified were divided into various smaller groups based on specific business segment (i.e. Oil&Gas, Renewables, etc.).

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**Step 2**

For each company, we analyzed listed price trend, P&L and financial performance, price volatility, etc.

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**Step 3**

For each segment, we estimated the following parameters:

- Beta (adjusted)
- D/E ratio
- Cost of Debt
- WACC estimated by third parties (Bloomberg)
- Market Multiples estimated by third parties (Bloomberg)
- Asset side market multiples



# Section II

## Identification of panels

### CHART A

<b>Electricity</b>
A2A S.p.A.
ACEGAS - APS S.p.A.
ENEL S.p.A.
IREN S.p.A.

<b>Oil &amp; Gas</b>
Ascopiave S.p.A.
ACSM - AGAM S.p.A.
ENI S.p.A.
ERG S.p.A.
GasPlus S.p.A.
SARAS S.p.A.

<b>Renewables</b>
Alerion Clean Power S.p.A.
ENEL Green Power S.p.A.
Ergycapital S.p.A.
Falck Renewables S.p.A.
Fintel Energia Group
Frendy Energy S.p.A.
K.R. Energy S.p.A.
Ternienergia S.p.A.

<b>TSO</b>
SNAM S.p.A.
Terna S.p.A.

<b>Multi - utilities</b>
Acque Potabili S.p.A.
Acea S.p.A.
Hera S.p.A.

### CHART B

<b>Electricity</b>
A2A S.p.A.
ENEL S.p.A.
IREN S.p.A.

<b>Oil &amp; Gas</b>
Assopiave S.p.A.
ACSM - AGAM S.p.A.
ENI S.p.A.
ERG S.p.A.
GasPlus S.p.A.
SARAS S.p.A.

<b>Renewables</b>
Alerion Clean Power S.p.A.
Ergycapital S.p.A.
Falck Renewables S.p.A.
K.R. Energy S.p.A.
Ternienergia S.p.A.

<b>TSO</b>
SNAM S.p.A.
Terna S.p.A.

### Introduction

In order to provide estimates that could reflect as much as possible specific features of market sub-segments, the Energy industry was divided into the following main sub-segments:

- Electricity.
- Oil & Gas.
- Renewables.
- Transmission System Operator (TSO).
- Multi-utility.

Our analysis also took account of the differences in results achieved depending on geographic area. For each sub-segment identified, we identified three different panels of companies:

- Italian panel.
- European panel.
- Global panel.

For the purposes of our work, the companies included in the panels were selected based on size-related parameters (stock market capitalization, revenue, etc.) and geographic location.

The European Panel and the Global Panel include both Italian companies with an international presence and the most significant foreign companies in terms of revenue and market capitalization<sup>1</sup>.

The starting point for selection purposes was the European Energy Index as produced by Bloomberg. We identified a total of 45 companies for inclusion in the European Panel and 45 companies for the Global Panel.

### Italian panel

When selecting the Italian Panel, we initially considered all listed Italian companies operating in the Energy Industry and came up with a Panel of 23 companies (chart A).

We then excluded (i) companies listed on the AIM Italy market (i.e. Frendy Energy S.p.A. and Fintel), (ii) companies whose shares have been cancelled following acquisition by another entity (i.e. Acegas-Aps S.p.A) and (iii) companies recently listed for which there are not sufficient data for robust market Beta estimation (i.e. Italgas S.p.a. (IPO October 2016)(iv), companies recently delisted (i.e. ENEL green power S.p.A.).

Therefore, the final panel selected for Italy is as indicated in chart B.

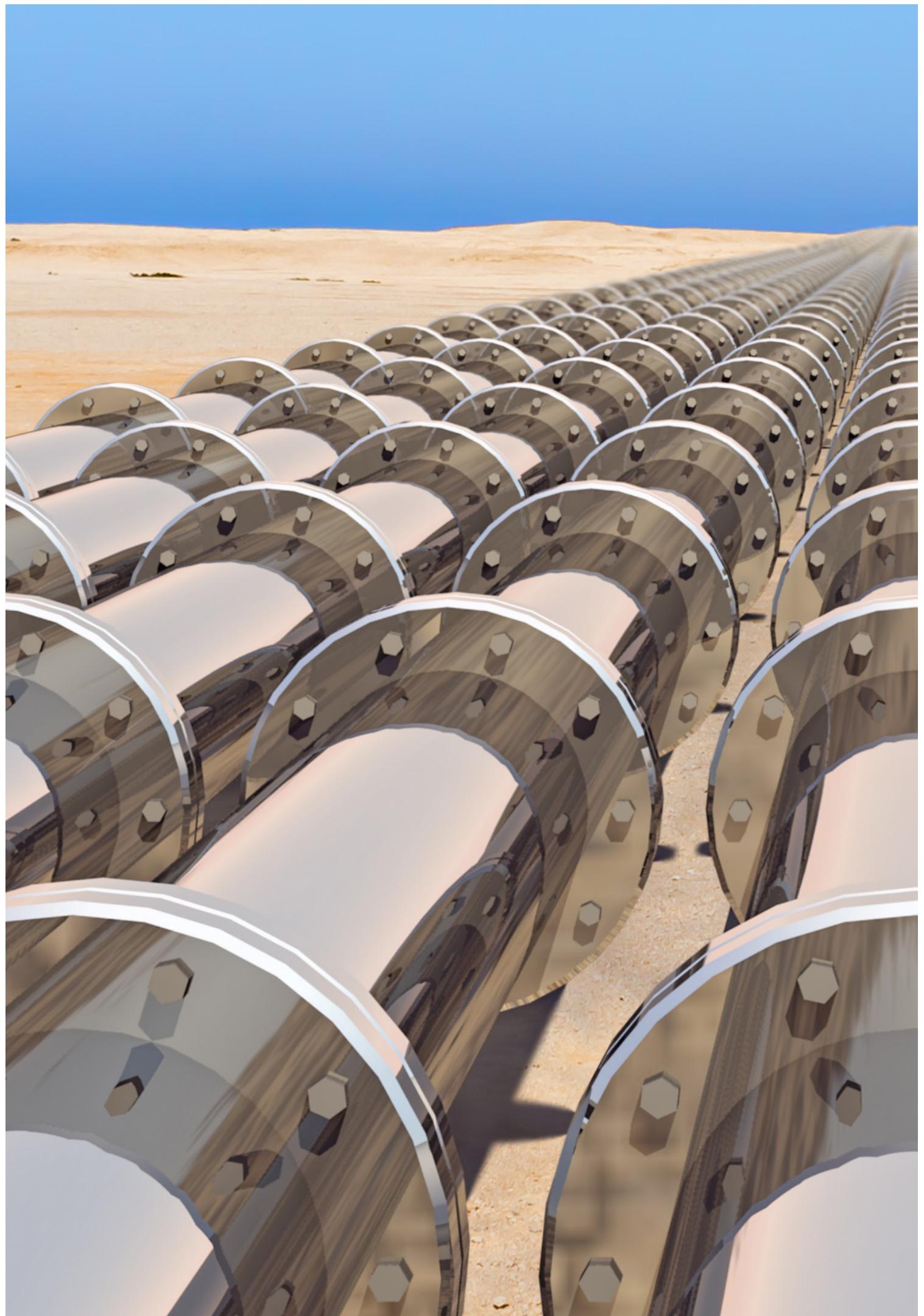
<sup>1</sup>For this purpose, a minimum capitalization requirement of around Euro 2.5 billion.

## EUROPEAN PANEL

Electricity	Oil & Gas	Renewables	TSO	Multi - utilities
Cez AS	BP Group Plc.	Albioma SA	Elia System Operator (SA/NV)	Acea S.p.A.
Edf SA	ENI S.p.A.	Arise Windpower AB	Enagas SA	Pennon Group Plc.
Endesa SA	Galp Energia SA	Capital Stage AG	Gas Natural SDG SA	United Utilities Group Plc.
ENEL S.p.A.	Lukoil PJSC	EDP Renovaveis SA	National Grid Plc.	Veolia Environment SA
ENEL Russia PJSC	Lundin Petroleum AB	Falck Renewables S.p.A.	Redes Energeticas Nacionais SA	
ENEA SA	MOL Magyar Olaj	Fersa Energias Renovables SA	Red Electrica SA	
E.ON SE	Neste Oyj	Voltaria Regr	Snam S.p.A.	
ENGIE	OMV AG		Terna S.p.A.	
Fortum Oyl	Repsol SA			
Iberdrola SA	Royal Dutch Shell Plc.			
Tauron Polska Energia SA	Statoil ASA			
RWE AG	Total SA			
Verbund AG	Tullow Oil Plc			

**GLOBAL PANEL**

<b>Electricity</b>	<b>Oil &amp; Gas</b>	<b>Renewables</b>	<b>TSO</b>	<b>Multi - utilities</b>
 American Electric Power Inc.	 BP Plc.	 EDP Renovaveis SA	 Enagas SA	 Acea S.p.A.
 China Resources Power Holdings Ltd.	 Chevron Corp.	 Engie Brasil SA	 Federal Grid Corp.	 American States Water Co.
 Datang International power Generation Co.	 EXXON Mobil Corp.	 Nextera Energy Inc.	 Gas Natural SA	 American Water Works Inc.
 Dominion Resources Inc.	 Gazprom OAO	 NHPC LTD	 National Grid Plc.	 Guangdong Investment Ltd.
 Edf SA	 Lukoil OAO	 Meridian Energy Ltd.	 Power Grid Corp of India Ltd.	 Suez Environment Co.
 ENEL S.p.A.	 Petrobras SA		 Red Electrica SA	 United Utilities Group Plc.
 ENGIE	 PTT. Global Chemical Plc.		 SSE Plc.	 Veolia Environment
 E.ON SE	 Repsol SA		 Snam S.p.A.	
 FirstEnergy Corp.	 Royal Dutch Shell SA		 Terna S.p.A.	
 Fortum Oyj	 Statoil ASA			
 Iberdrola SA	 Tullow Oil Plc.			



# Section III

## Simulation for calculation of WACC

### Deloitte estimate

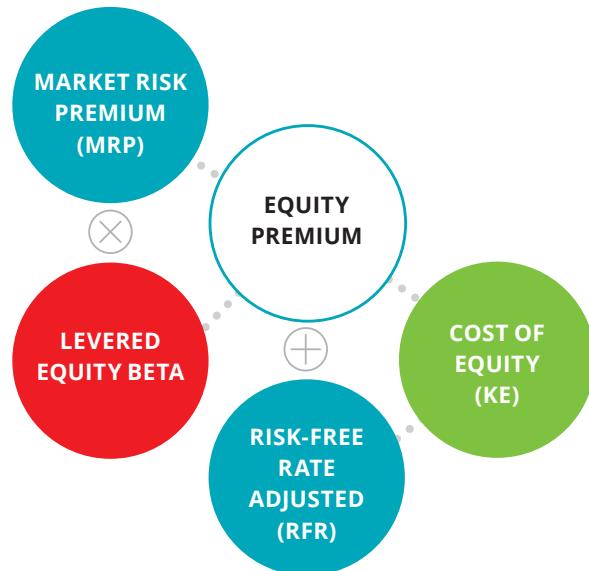
#### Method used to estimate Cost of Equity (Ke)

In order to provide a useful means of valuing companies, we estimated the Cost of Equity by looking at established practices.

For the purposes of this analysis we used the **Capital Asset Pricing Model** (C.A.P.M.) and examined the following parameters, with specific focus on company related (in red) and macroeconomic (in blue) parameters:

The C.A.P.M. model considers only the systematic risk for the Equity. In some cases, adjustments for specific risk premium (such as size premium) may be deemed<sup>2</sup> (not contemplated in the following Cost of Equity estimation).

The main features of the analysis performed and the input date used for each of the parameters estimated are described below.



Parameters in the energy industry | Edition No. 2 - 2015

#### Levered Equity Beta

The beta expresses the sensitivity of a share to market variations as expressed by the related market portfolio. Several methods may be used to estimate the beta coefficient. Using the summary estimate criterion, we may determine the beta coefficient looking at the ratio between:

- The covariance in return from the i-th security and the return offered by a market portfolio.
- The variance in the market portfolio.

$$\beta_i = \frac{\text{cov}(r_i; r_m)}{\text{var}(r_m)} = \frac{\sigma_{(r_i; r_m)}}{\sigma^2(r_m)}$$

Therefore, the expected return from the i-th security is directly proportionate to its co-variance with the market portfolio.

For the purposes of this analysis, the levered betas of the companies included in the panels selected were determined based on the following method:

- Frequency of statistical measurement: **Weekly**
- Time period for measurement: **Three years**

<sup>2</sup> M. Vulpiani – Special Cases of Business Valuation, McGraw-Hill 2014.

With regard to macroeconomic parameters, we focused on estimating the Risk Free Rate (RFR) and the Market Risk Premium (MRP). The issues regarding the choice of this parameter have been the subject of detailed analysis, especially in the last years, in light of the accommodative monetary policies put in place by the European Central Bank, in particular the "expanded asset purchase program" (better known as "Quantitative Easing").

As consequence of the aforementioned monetary policies, there has been a general reduction in government bond yields across Euro countries. Moreover, the decline in government bond yield has been more significant for the countries previously involved in the European Sovereign Debt Crisis (Greece, Portugal, Spain and Italy).

As far as concern Italy, the graph on the right hand – side shows the change in the 10y BTP yield since the creation of the European common currency. The average BTP yield observed in the period 2001 – 2011 was equal to 4.4% while after 2011 yield have become more volatile, growing in 2012 as consequence of the European Debt Crisis and sharply decreasing during the years 2014 – 2015 due to ECB monetary policies. In the last two years (2015-2016) the average BTP yield was 1,6%. The difference between the risk free of the last two years with its historical means can be explained by considering two factors:

- Inflation expectations reduced. The 10 year CPI inflation expectations were 3% in the year pre crisis, 2% in 2013 and 1,5% as of 2016. As long as the change in expectations are persistent and due to the new context, the decline of the risk free due to this components is structural and not expect to revert and come back to its historical average.
- ECB monetary policies have reduced yields thanks to the purchase of BTP. In particular, QE has lowered the effect due to higher country risk of Italy compared to more solid European Countries (i.e. Germany). The effect due to ECB monetary policies is expected to revert in the long run, and in particular it clearly emerges that is necessary to consider the country risk that should be imply in the risk free.

Because of the change in the European scenario, the Italian Valuation Board has recommended two approaches for the estimation of the Cost of Equity (Ke), which can be defined as (i) **conditional** and (ii) **unconditional**.



Under the **conditional** method, country risk, in the estimation of Ke, is included in the Market Risk Premium. Thus, risk free rate used in the estimation is equal to a "real" risk free rate (e.g. Interest Rate Swap - IRS).

Under the **unconditional** approach, in the estimation process of the Ke, the country risk is included in the risk free rate (equal to the rate of return on long-term government bonds). In this case the Ke is estimated under the unconditional approach.

For the purpose of this study we have adopted an unconditional approach by choosing to compute an "adjusted risk free rate" that takes into account the country risk premium of countries.

The adjusted risk free rate is calculated as follows:

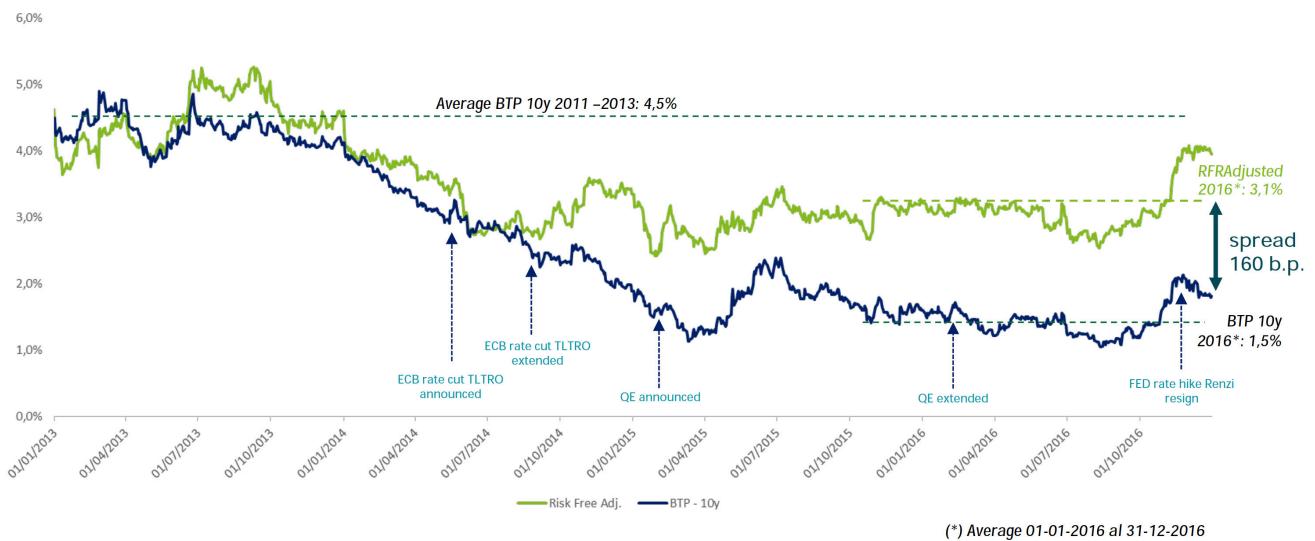
The country risk free rate is derived by considering the yield of a 10-year note of benchmark AAA country (namely United States for the purpose of this study) and by adjusting the yield for the inflation differential between the country and the benchmark country according to the Fisher Rules. In notation:

$$R_{f \text{ local}} = (1 + R_{f \text{ U.S.}}) * \left( \frac{1 + \text{Inflation}_{\text{local}}}{1 + \text{Inflation}_{\text{U.S.}}} \right) - 1$$

The inflation adjusted risk free rate is then summed to the Country risk Premium estimated through the difference of the 10-year US CDS and the country 10-year CDS. The country risk premium component allows to take into consideration the risk implied in investing in the country with respect to the benchmark.

$$R_{f \text{ adjusted}} = R_{f \text{ local}} + CDS_{\text{spread}}$$

The graph displays both the 10-year BTP yield as well as the 10-year adjusted Italian risk free rate computed by applying the aforementioned methodology. The graph clearly shows that the two lines follow a divergent pattern after the announcement and implementation of the most significant ECB monetary policy actions. The average 2015 – 2016 BTP yield equals to 1.5% against the risk free adjusted average of 3%. The methodology allows to build a risk free rate for the reference country that takes into account the country risk and is not affected by ECB monetary policies.





## Bloomberg estimate

### Method used to estimate the Cost of Debt (Kd)

The cost of debt was estimated considering a reference rate (the risk free rate) plus a spread to reflect the risk premium.

The spread to be added to the risk free rate was determined using the **Interest Coverage Ratio (ICR)**<sup>3</sup> approach whereby risk profile is measured using the ratio of EBIT to interest expenses.

In order to **estimate the WACC**, with reference to the **financial structure (D/E)** of each individual company, we considered the parameters noted by Bloomberg<sup>4</sup> for the companies under analysis as of 31/12/2015 and 31/12/2016.

### Method adopted

The analysis performed by Deloitte was compared with the results obtained using data from an independent third party source in the form of the Bloomberg database.

Data on Cost of Capital and Cost of Debt of the companies in each panel was weighted on the same basis of the Deloitte estimate.

<sup>3</sup>See the "Summary of results" section for further analysis.

<sup>4</sup>International database, widely used in professional practice to estimate the main valuation parameters. It provides companies and professionals with up to date financial information and is recognised by valuation experts as an independent source of data.

The following graphs show the results of our work in order to calculate the WACC in the various Energy segments in Italy, Europe and the World as a whole

## Summary of results

### WACC

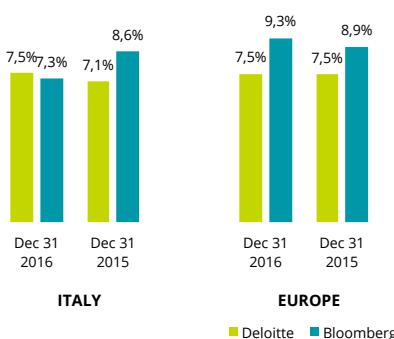
WACC in the energy business shows few changes between the year 2015 and 2016. As expected, the Oil & Gas panel shows the highest WACC within the industry while on the other end the multi-utility panel shows the lowest one.

The cost of capital for Italian companies approximates that of European regions for all segments with the only exception of the multi-utility segment for which the WACC of Italian firms is higher compared to their European peers.

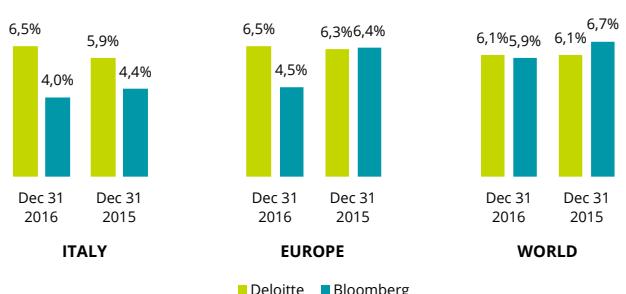
**Figure 1: WACC Electricity**



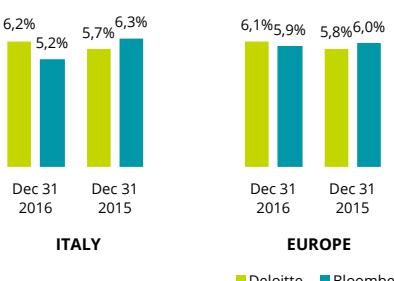
**Figure 2: WACC Oil & Gas**



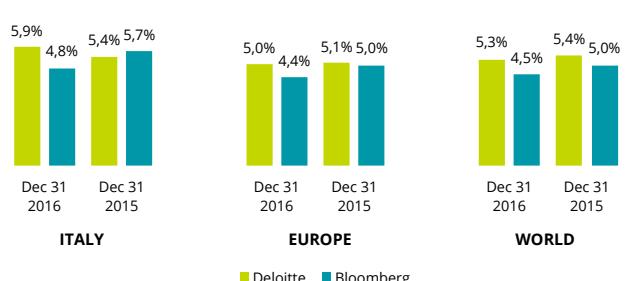
**Figure 3: WACC Renewables**



**Figure 4: WACC TSO**



**Figure 5: WACC Multi - utilities**



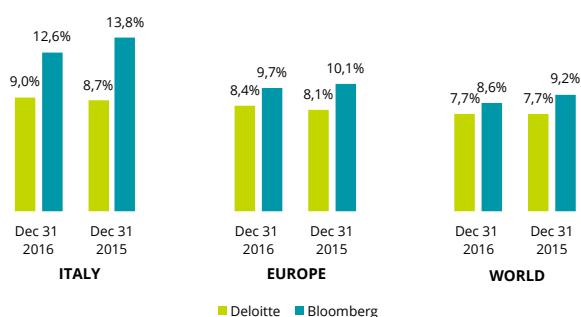
The following graphs show the results of our work in order to calculate the WACC in the various Energy segments in Italy, Europe and the World as a whole

#### **Cost of Equity (Ke)**

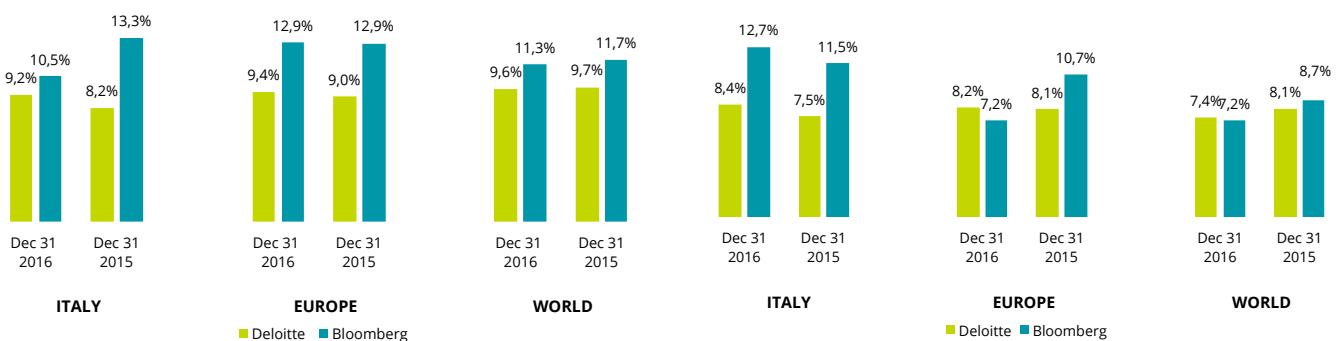
Based on the Ke analysis, the lowest Cost of Equity on average is seen in the **Multi-utility** sector globally.

The cost of equity slightly increases in all segments, with few minor exceptions. The increase can be attributed partially to the rf rates spike observed at the end of 2016.

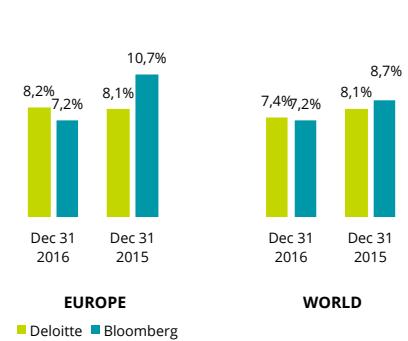
**Figure 6: Ke Electricity**



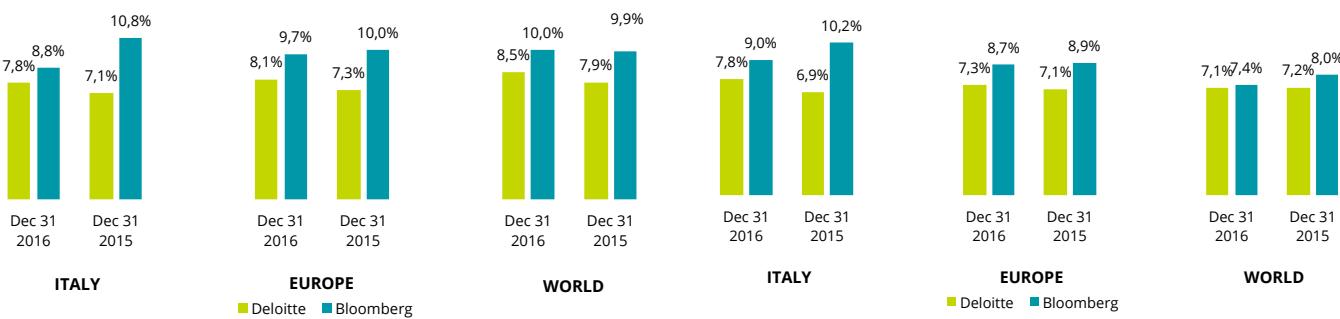
**Figure 7: Ke Oil & Gas**



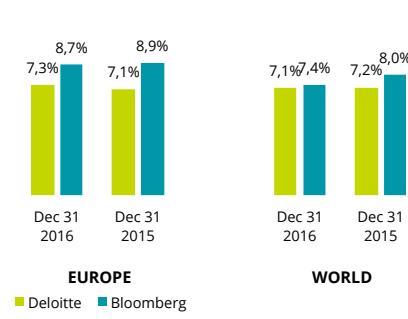
**Figure 8: Ke Renewables**



**Figure 9: Ke TSO**



**Figure 10: Ke Multi - utilities**



The table below shows the levels of Market Risk Premium used by Deloitte and Bloomberg to estimate the Cost of Equity for different countries.

COUNTRY	MARKET RISK PREMIUM AS OF 31/12/2016		MARKET RISK PREMIUM AS OF 31/12/2015	
Country	Deloitte	Bloomberg	Deloitte	Bloomberg
Austria	5,40%	14,02%	5,70%	10,37%
Belgium	5,60%	9,15%	5,50%	6,73%
Brazil	8,20%	0,51%	7,50%	-0,98%
Britain	5,30%	10,11%	5,20%	9,21%
China	8,30%	9,93%	8,10%	10,23%
Czech republic	6,30%	11,81%	5,60%	8,47%
Denmark	5,30%	8,75%	5,50%	8,79%
Finland	5,50%	7,49%	5,70%	8,24%
France	5,80%	7,91%	5,60%	8,74%
Germany	5,30%	8,40%	5,30%	8,89%
Hong Kong	7,60%	10,01%	8,10%	10,23%
Hungary	8,10%	16,73%	8,80%	25,76%
India	8,10%	4,60%	8,40%	3,94%
Italy	5,60%	8,99%	5,40%	12,45%
Netherlands	5,10%	13,40%	5,90%	12,03%
Norway	5,50%	10,65%	5,50%	11,68%
Poland	6,20%	9,68%	5,20%	6,34%
Portugal	7,90%	9,53%	5,70%	7,58%
Russia	7,90%	16,10%	9,70%	14,20%
Spain	6,20%	10,12%	5,90%	10,31%
Sweden	5,20%	8,06%	5,40%	8,71%
Thailand	8,40%	8,29%	7,30%	9,28%
United States	5,30%	6,53%	5,50%	7,14%

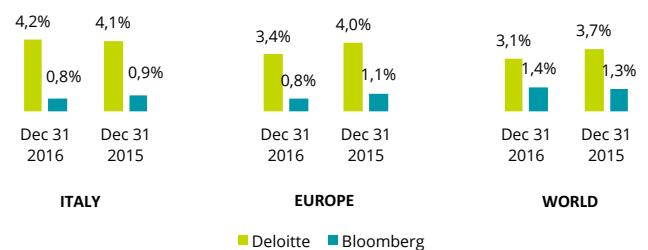
The following graphs show the results of our work in order to calculate the Cost of Debt in the various Energy segments in Italy, Europe and the World as a whole

#### **Cost of Debt (Kd)**

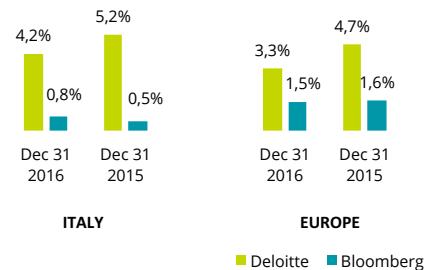
The lowest levels of cost of debt were seen in the **Electricity** and **TSO** segments in Italy where companies have a relatively low degree of leverage.

The Multi-utilities segment in Europe and globally also has fairly low Kd.

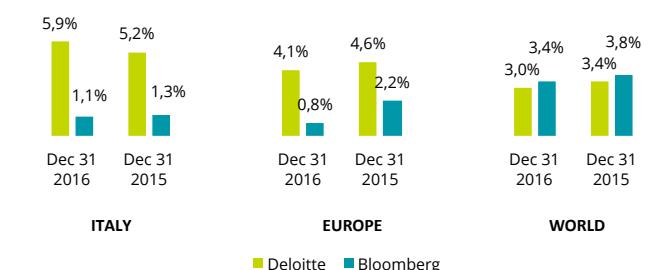
**Figure 11: Kd Electricity**



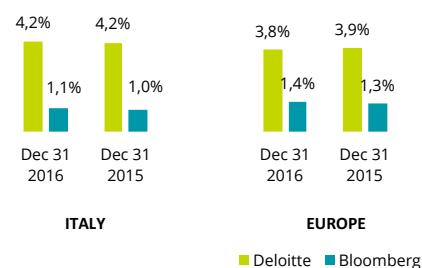
**Figure 12: Kd Oil & Gas**



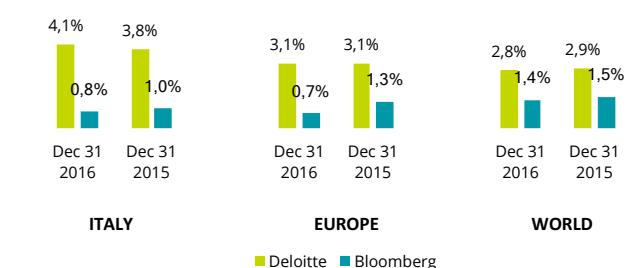
**Figure 13: Kd Renewables**



**Figure 14: Kd TSO**



**Figure 15: Kd Multi - utilities**



# Sector comparison

Figure 16: WACC - World

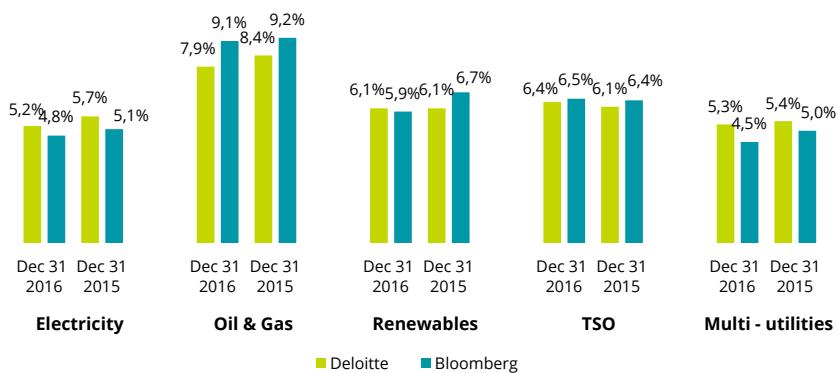


Figure 17: Ke - World

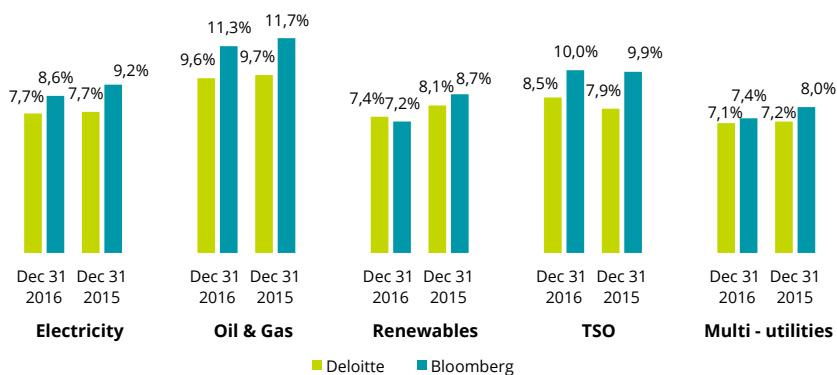


Figure 18: Kd - World

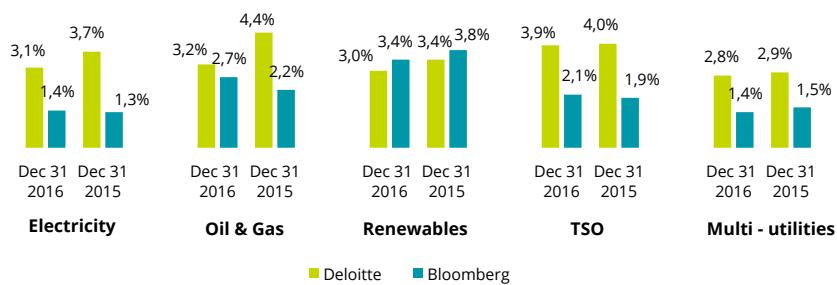




Figure 19: WACC - Europe

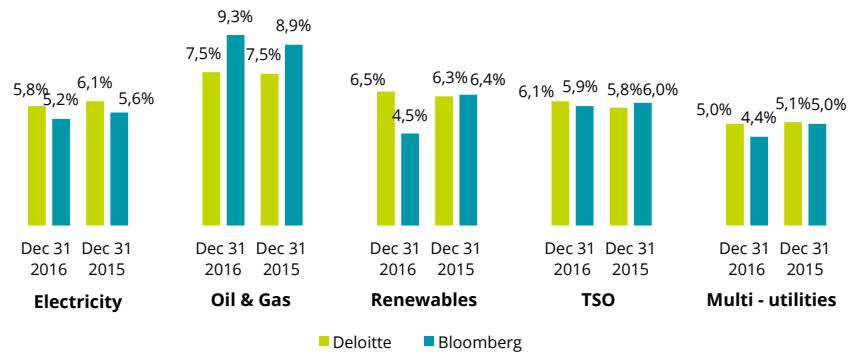


Figure 20: Ke - Europe

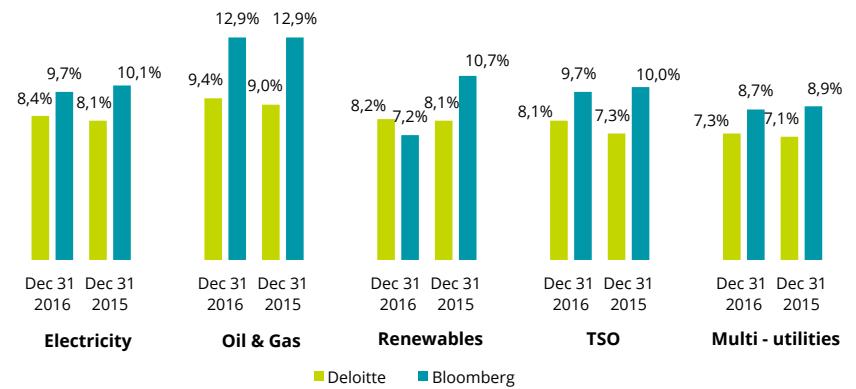


Figure 21: Kd - Europe

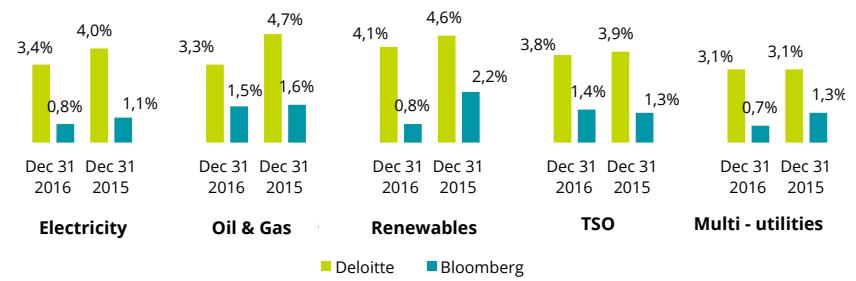


Figure 22: WACC - Italy

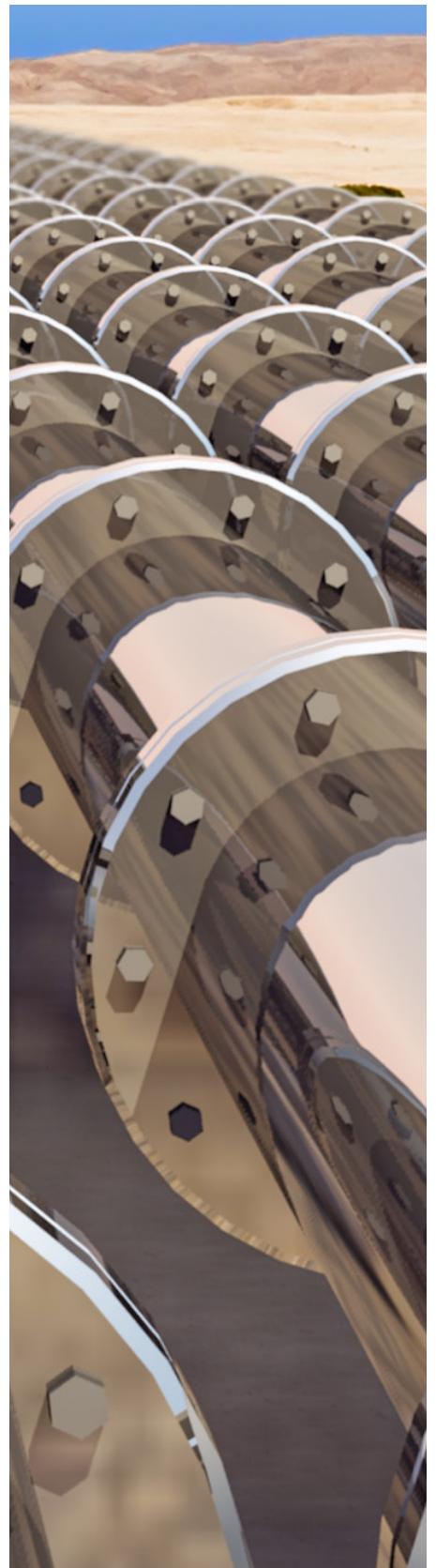
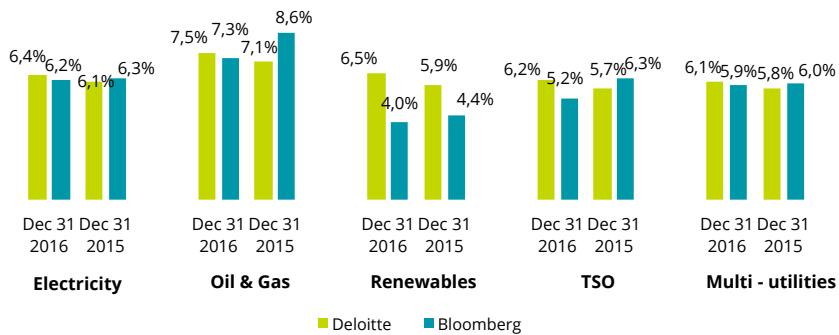


Figure 23: Ke - Italy

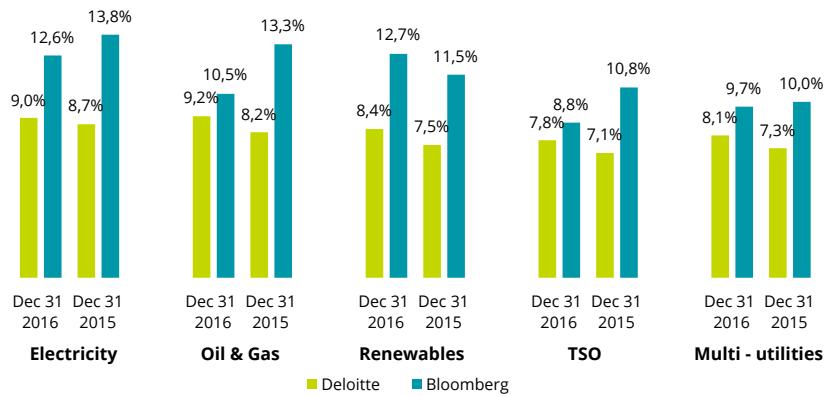
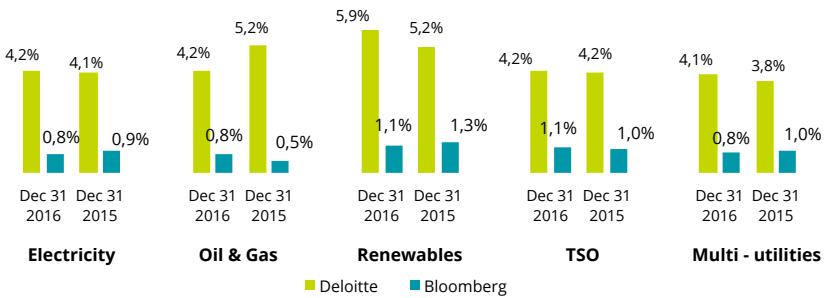


Figure 24: Kd - Italy





# Section IV

## The multiples

### Deloitte estimate

#### **Method used to estimate stock market multiples**

In line with developments on the financial markets, international theory and practice, market multiples are frequently used in valuation processes. This method involves estimating the theoretical economic value of an entity based on prices listed on regulated markets for comparable companies.

Therefore, the theoretical economic value of the company under valuation is determined by applying market multiples to key parameters of the company (P&L, financial or balance sheet).

The market multiples method is applied by:

- Identifying a sample of listed companies with characteristics similar to those of the company whose theoretical economic value is to be estimated. Normally, such companies are selected based on factors such as business sector, size, market, lifecycle phase, financial structure and profit potential.
- Determining the multiples i.e. the ratio of the market valuation of comparable companies in terms of Market Capitalization or Enterprise Value (market value of invested capital) to their key parameters (e.g. revenues, EBITDA, EBIT, net income, book value of equity, cash flow). The multiples must be determined in a way that ensures the numerator and denominator are consistent and that the values expressed by the market and the key parameters of comparable companies are suitable for comparison (e.g. application of the same accounting policies).

The estimate performed by Deloitte took into account the most recent annual figures available at 31/12/2015 and 31/12/2016 as income statement parameters.

Meanwhile, Enterprise Value was estimated based on average amounts for the last year.

For the purposes of this analysis, we considered the same panels selected for the WACC estimate. For these panels we estimated the **EV/Revenues** and **EV/EBITDA** asset side multiples and P/E equity side multiples, by taking the median of the multiples of the individual companies belonging to each panel.

### Bloomberg estimate

#### **Method used to estimate market multiples**

The Bloomberg estimate was based on the same assumptions in terms of sample of comparable companies and market multiples (median of the Panel for each segment).

The only difference regarding the estimated multiples for each company was the amount of time over which parameters were considered.

Specifically, Bloomberg calculates income equivalent to Trail for last twelve months and when calculating Enterprise Value it considers the precise amount at the starting date used for income Trail calculation purposes.

The following graphs show the results of our work in order to calculate EV/Revenues multiple in the various Energy segments in Italy, Europe and the World as a whole

## Summary of results

### EV/Revenues multiple

Our analysis showed that the multiple was highest for the **TSO** and **Renewables** segments where the composition of companies' value of production is primarily characterized by (i) the presence of subsidized and regulated revenues and (ii) by a lower level of competition.

Figure 25: Multiple EV / Revenues Electricity



Figure 26: Multiple EV / Revenues Oil & Gas

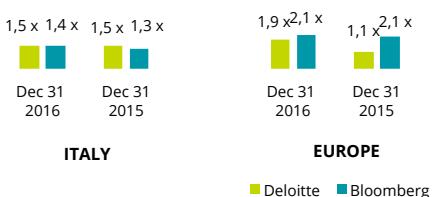


Figure 27: Multiple EV / Revenues Renewables

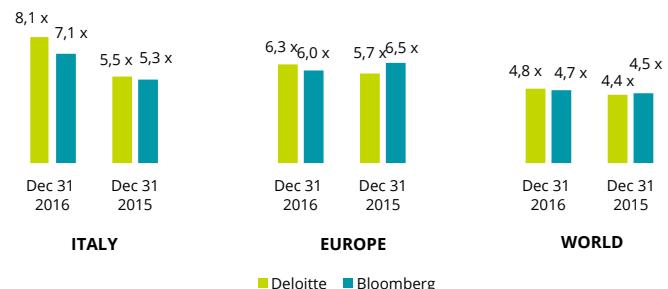


Figure 28: Multiple EV / Revenues TSO

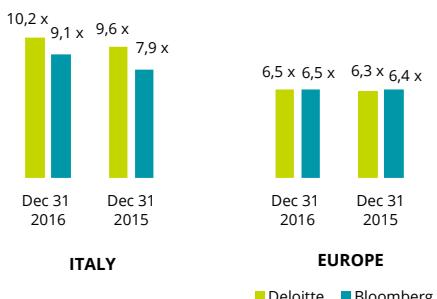
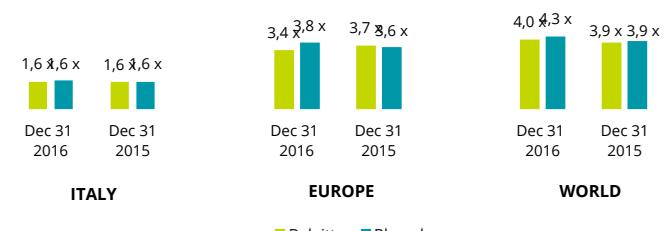


Figure 29: Multiple EV / Revenues Multi - utilities

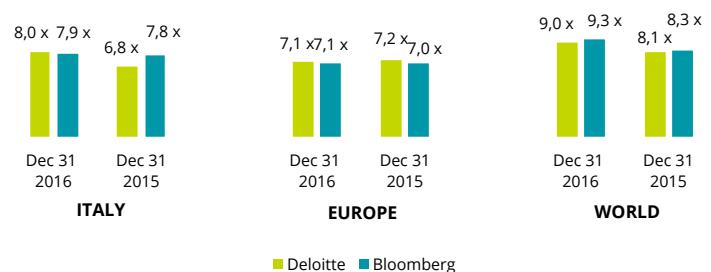


The following graphs show the results of our work in order to calculate EV/EBITDA multiple in the various Energy segments in Italy, Europe and the World as a whole

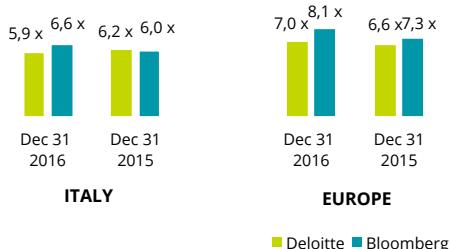
#### **EV/EBITDA multiple**

The highest EV/EBITDA multiples is shown in the **Renewables** and **Multi - utilities** segments in Europe and the world as a whole.

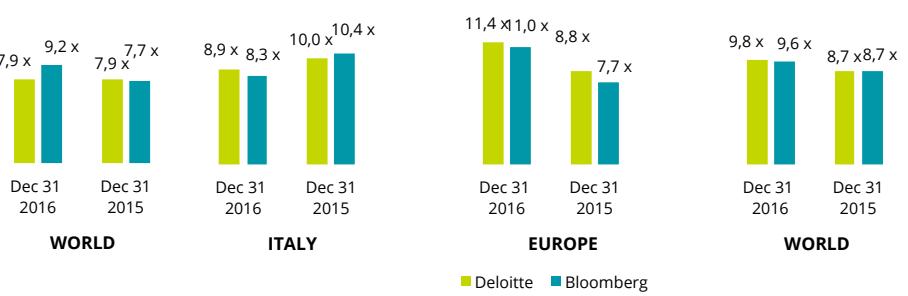
**Figure 30: Multiple EV / Ebitda Electricity**



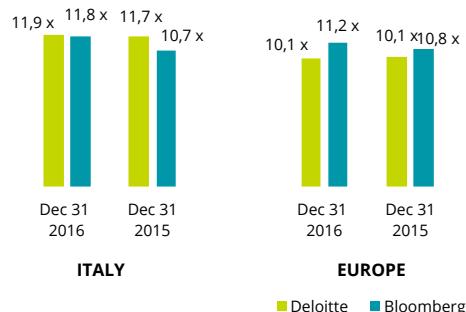
**Figure 31: Multiple EV / Ebitda Oil & Gas**



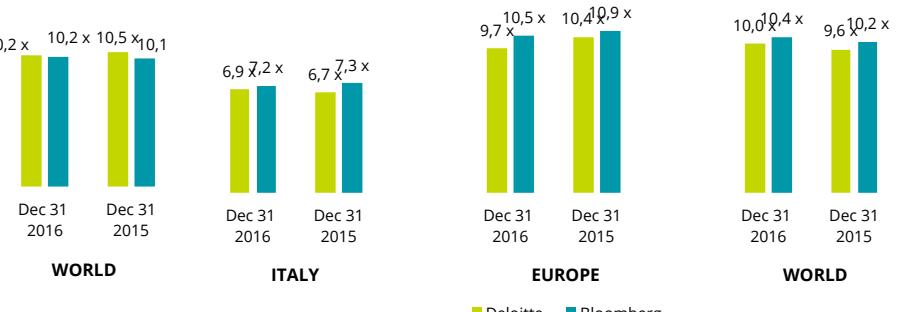
**Figure 32: Multiple EV / Ebitda Renewables**



**Figure 33: Multiple EV / Ebitda TSO**



**Figure 34: Multiple EV / Ebitda Multi - utilities**





# Section V

## Multiples by geographic area and by segment

### Multiples: italian panel

#### Oil & Gas Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E
ENI SPA	1,2 x	6,7 x	n.a.
ERG SPA	3,1 x	7,1 x	13,0 x
GAS PLUS	1,9 x	6,3 x	18,9 x
SARAS SPA	0,2 x	2,1 x	7,4 x
ASCOPIAVE SPA	1,4 x	7,5 x	10,9 x
ACSM - AGAM SPA	1,3 x	5,6 x	11,2 x
<b>Mean</b>	<b>1,5 x</b>	<b>5,9 x</b>	<b>12,3 x</b>
<b>Median</b>	<b>1,3 x</b>	<b>6,5 x</b>	<b>11,2 x</b>
<b>Standard deviation</b>	<b>1,0 x</b>	<b>2,0 x</b>	<b>4,2 x</b>
<b>Minimum</b>	<b>0,2 x</b>	<b>2,1 x</b>	<b>7,4 x</b>
<b>Maximum</b>	<b>3,1 x</b>	<b>7,5 x</b>	<b>18,9 x</b>

EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
1,1 x	7,9 x	n.a.
3,0 x	6,2 x	n.a.
2,5 x	8,4 x	25,7 x
0,2 x	2,2 x	7,1 x
1,1 x	6,9 x	11,6 x
1,2 x	5,8 x	8,9 x
<b>1,5 x</b>	<b>6,2 x</b>	<b>13,3 x</b>
<b>1,1 x</b>	<b>6,5 x</b>	<b>10,3 x</b>
<b>1,1 x</b>	<b>2,2 x</b>	<b>8,5 x</b>
<b>0,2 x</b>	<b>2,2 x</b>	<b>7,1 x</b>
<b>3,0 x</b>	<b>8,4 x</b>	<b>25,7 x</b>

#### Electricity Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E
A2A SPA	1,5 x	11,9 x	n.a.
ENEL SPA	1,4 x	6,4 x	15,1 x
IREN SPA	1,4 x	5,8 x	10,0 x
<b>Mean</b>	<b>1,5 x</b>	<b>8,0 x</b>	<b>12,6 x</b>
<b>Median</b>	<b>1,4 x</b>	<b>6,4 x</b>	<b>12,6 x</b>
<b>Standard deviation</b>	<b>0,1 x</b>	<b>3,4 x</b>	<b>3,6 x</b>
<b>Minimum</b>	<b>1,4 x</b>	<b>5,8 x</b>	<b>10,0 x</b>
<b>Maximum</b>	<b>1,5 x</b>	<b>11,9 x</b>	<b>15,1 x</b>

EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
1,5 x	8,3 x	n.a.
1,4 x	6,6 x	17,6 x
1,4 x	5,5 x	13,0 x
<b>1,4 x</b>	<b>6,8 x</b>	<b>15,3 x</b>
<b>1,4 x</b>	<b>6,6 x</b>	<b>15,3 x</b>
<b>0,1 x</b>	<b>1,4 x</b>	<b>3,2 x</b>
<b>1,4 x</b>	<b>5,5 x</b>	<b>13,0 x</b>
<b>1,5 x</b>	<b>8,3 x</b>	<b>17,6 x</b>

## Renewables Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
ALERION CLEANPOWER	6,5 x	10,5 x	n.a.	7,0 x	11,3 x	n.a.
ERGYCAPITAL SPA	4,9 x	9,9 x	n.a.	5,8 x	11,7 x	n.a.
FALCK RENEWABLES SPA	3,6 x	6,2 x	n.a.	3,7 x	6,9 x	n.a.
K.R. ENERGY SPA	17,4 x	n.a.	n.a.	n.a.	n.a.	n.a.
Mean	8,1 x	8,9 x	n.a.	5,5 x	10,0 x	n.a.
Median	5,7 x	9,9 x	n.a.	5,8 x	11,3 x	n.a.
Standard deviation	6,3 x	2,4 x	n.a.	1,7 x	2,6 x	n.a.
Minimum	3,6 x	6,2 x	0,0 x	3,7 x	6,9 x	0,0 x
Maximum	17,4 x	10,5 x	0,0 x	7,0 x	11,7 x	0,0 x

## TSO Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
SNAM SPA	11,1 x	12,4 x	16,7 x	10,9 x	12,5 x	n.a.
TERNA SPA	9,4 x	11,4 x	14,8 x	8,4 x	11,0 x	14,2 x
Mean	10,2 x	11,9 x	15,7 x	9,6 x	11,7 x	14,2 x
Median	10,2 x	11,9 x	15,7 x	9,6 x	11,7 x	14,2 x
Standard deviation	1,2 x	0,7 x	1,3 x	1,8 x	1,1 x	n.a.
Minimum	9,4 x	11,4 x	14,8 x	8,4 x	11,0 x	14,2 x
Maximum	11,1 x	12,4 x	16,7 x	10,9 x	12,5 x	14,2 x

## Multi - utilities Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
ACEA SPA	1,7 x	5,4 x	9,7 x	1,7 x	5,4 x	14,6 x
HERA SPA	1,5 x	8,4 x	17,4 x	1,4 x	8,0 x	18,9 x
Mean	1,6 x	6,9 x	13,6 x	1,6 x	6,7 x	16,8 x
Median	1,6 x	6,9 x	13,6 x	1,6 x	6,7 x	16,8 x
Standard deviation	0,2 x	2,1 x	5,4 x	0,2 x	1,8 x	3,0 x
Minimum	1,5 x	5,4 x	9,7 x	1,4 x	5,4 x	14,6 x
Maximum	1,7 x	8,4 x	17,4 x	1,7 x	8,0 x	18,9 x

## Multiples: european panel

### Electricity Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
ENEL SPA	1,4 x	6,4 x	15,1 x	1,4 x	6,6 x	17,6 x
ENEL RUSSIA PJSC	0,7 x	3,8 x	6,5 x	0,7 x	n.a.	n.a.
ENEA SA	0,9 x	14,7 x	n.a.	0,9 x	14,3 x	n.a.
E.ON SE	0,5 x	6,9 x	n.a.	0,7 x	5,3 x	n.a.
ENGIE	0,9 x	8,4 x	n.a.	1,1 x	n.a.	n.a.
FORTUM OYJ	3,0 x	10,7 x	24,5 x	n.a.	n.a.	n.a.
IBERDROLA SA	2,4 x	8,8 x	14,0 x	2,1 x	8,9 x	16,1 x
RWE AG	0,4 x	6,5 x	n.a.	0,5 x	4,1 x	n.a.
TAURON POLSKA ENERGIA SA	0,8 x	5,4 x	13,1 x	0,8 x	n.a.	n.a.
VERBUND AG	2,0 x	5,4 x	5,1 x	2,1 x	7,1 x	11,6 x
CEZ AS	1,7 x	5,7 x	16,0 x	2,2 x	7,2 x	14,6 x
EDF	0,6 x	2,6 x	7,6 x	0,8 x	3,9 x	n.a.
ENDESA SA	1,2 x	6,9 x	13,6 x	1,2 x	7,7 x	17,8 x
<b>Mean</b>	<b>1,3 x</b>	<b>7,1 x</b>	<b>12,8 x</b>	<b>1,2 x</b>	<b>7,2 x</b>	<b>15,5 x</b>
<b>Median</b>	<b>0,9 x</b>	<b>6,5 x</b>	<b>13,6 x</b>	<b>1,0 x</b>	<b>7,1 x</b>	<b>16,1 x</b>
<b>Standard deviation</b>	<b>0,8 x</b>	<b>3,1 x</b>	<b>5,9 x</b>	<b>0,6 x</b>	<b>3,1 x</b>	<b>2,5 x</b>
<b>Minimum</b>	<b>0,4 x</b>	<b>2,6 x</b>	<b>5,1 x</b>	<b>0,5 x</b>	<b>3,9 x</b>	<b>11,6 x</b>
<b>Maximum</b>	<b>3,0 x</b>	<b>14,7 x</b>	<b>24,5 x</b>	<b>2,2 x</b>	<b>14,3 x</b>	<b>17,8 x</b>

## Oil & Gas Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
BP PLC	0,7 x	10,5 x	n.a.	0,6 x	n.a.	n.a.
ROYAL DUTCH SHELL PLC-A SHS	0,7 x	5,8 x	23,2 x	0,5 x	5,9 x	n.a.
REPSOL SA	0,8 x	6,5 x	9,5 x	0,8 x	n.a.	n.a.
STATOIL ASA	1,4 x	5,6 x	n.a.	1,1 x	5,2 x	n.a.
TOTAL SA	1,1 x	8,3 x	18,8 x	1,0 x	8,9 x	23,5 x
ENI SPA	1,2 x	6,7 x	n.a.	1,1 x	7,9 x	n.a.
OMV AG	0,9 x	8,9 x	n.a.	0,7 x	n.a.	n.a.
GALP ENERGIA SGPS SA	1,0 x	9,8 x	n.a.	0,8 x	10,6 x	n.a.
LUKOIL PJSC	0,6 x	4,0 x	11,7 x	0,5 x	3,3 x	n.a.
LUNDIN PETROLEUM AB	8,3 x	n.a.	n.a.	n.a.	n.a.	n.a.
MOL HUNGARIAN OIL AND GAS PL	0,8 x	4,3 x	6,6 x	0,6 x	3,6 x	n.a.
NESTE OYJ	0,8 x	6,3 x	9,0 x	0,7 x	7,3 x	10,9 x
TULLOW OIL PLC	5,8 x	n.a.	n.a.	4,7 x	n.a.	n.a.
<b>Mean</b>	<b>1,9 x</b>	<b>7,0 x</b>	<b>13,1 x</b>	<b>1,1 x</b>	<b>6,6 x</b>	<b>17,2 x</b>
<b>Median</b>	<b>0,9 x</b>	<b>6,5 x</b>	<b>10,6 x</b>	<b>0,7 x</b>	<b>6,6 x</b>	<b>17,2 x</b>
<b>Standard deviation</b>	<b>2,4 x</b>	<b>2,1 x</b>	<b>6,5 x</b>	<b>1,2 x</b>	<b>2,6 x</b>	<b>8,9 x</b>
<b>Minimum</b>	<b>0,6 x</b>	<b>4,0 x</b>	<b>6,6 x</b>	<b>0,5 x</b>	<b>3,3 x</b>	<b>10,9 x</b>
<b>Maximum</b>	<b>8,3 x</b>	<b>10,5 x</b>	<b>23,2 x</b>	<b>4,7 x</b>	<b>10,6 x</b>	<b>23,5 x</b>

## Renewables Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
EDP RENOVAVEIS SA	6,2 x	8,7 x	n.a.	6,4 x	8,6 x	32,9 x
ALBIOMA SA	2,8 x	7,8 x	13,0 x	2,9 x	8,6 x	16,0 x
FALCK RENEWABLES SPA	3,6 x	6,2 x	n.a.	3,7 x	6,9 x	n.a.
CAPITAL STAGE AG	12,6 x	14,1 x	n.a.	6,9 x	7,7 x	20,6 x
VOLTALIA-REGR	10,0 x	17,5 x	n.a.	8,9 x	15,7 x	n.a.
ARISE AB	2,9 x	14,4 x	n.a.	4,1 x	5,2 x	n.a.
FERSA ENERGIAS RENOVABLES SA	6,2 x	n.a.	n.a.	7,3 x	n.a.	n.a.
<b>Mean</b>	<b>6,3 x</b>	<b>11,4 x</b>	<b>13,0 x</b>	<b>5,7 x</b>	<b>8,8 x</b>	<b>23,2 x</b>
<b>Median</b>	<b>6,2 x</b>	<b>11,4 x</b>	<b>13,0 x</b>	<b>6,4 x</b>	<b>8,2 x</b>	<b>20,6 x</b>
<b>Standard deviation</b>	<b>3,7 x</b>	<b>4,5 x</b>	<b>n.a.</b>	<b>2,2 x</b>	<b>3,6 x</b>	<b>8,8 x</b>
<b>Minimum</b>	<b>2,8 x</b>	<b>6,2 x</b>	<b>13,0 x</b>	<b>2,9 x</b>	<b>5,2 x</b>	<b>16,0 x</b>
<b>Maximum</b>	<b>12,6 x</b>	<b>17,5 x</b>	<b>13,0 x</b>	<b>8,9 x</b>	<b>15,7 x</b>	<b>32,9 x</b>

## TSO Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
SNAM SPA	11,1 x	12,4 x	16,7 x	10,9 x	12,5 x	n.a.
TERNA SPA	9,4 x	11,4 x	14,8 x	8,4 x	11,0 x	14,2 x
RED ELECTRICA CORPORACION SA	8,2 x	10,6 x	16,1 x	8,3 x	11,0 x	16,8 x
ENAGAS SA	8,8 x	11,9 x	14,9 x	8,8 x	11,8 x	15,3 x
ELIA SYSTEM OPERATOR SA/NV	6,7 x	15,7 x	15,4 x	6,4 x	15,3 x	n.a.
REDES ENERGETICAS NACIONAIS	7,3 x	8,0 x	12,2 x	7,2 x	7,9 x	12,3 x
NATIONAL GRID PLC	3,8 x	10,0 x	13,0 x	3,9 x	11,4 x	17,8 x
GAS NATURAL SDG SA	1,6 x	7,6 x	13,0 x	1,5 x	7,9 x	13,5 x
<b>Mean</b>	<b>7,1 x</b>	<b>11,0 x</b>	<b>14,5 x</b>	<b>6,9 x</b>	<b>11,1 x</b>	<b>15,0 x</b>
<b>Median</b>	<b>7,8 x</b>	<b>11,0 x</b>	<b>14,8 x</b>	<b>7,8 x</b>	<b>11,2 x</b>	<b>14,8 x</b>
<b>Standard deviation</b>	<b>3,1 x</b>	<b>2,6 x</b>	<b>1,6 x</b>	<b>3,0 x</b>	<b>2,4 x</b>	<b>2,1 x</b>
<b>Minimum</b>	<b>1,6 x</b>	<b>7,6 x</b>	<b>12,2 x</b>	<b>1,5 x</b>	<b>7,9 x</b>	<b>12,3 x</b>
<b>Maximum</b>	<b>11,1 x</b>	<b>15,7 x</b>	<b>16,7 x</b>	<b>10,9 x</b>	<b>15,3 x</b>	<b>17,8 x</b>

## Multi - utilities Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
PENNON GROUP PLC	4,2 x	12,9 x	18,6 x	4,4 x	15,2 x	n.a.
ACEA SPA	1,7 x	5,4 x	9,7 x	1,7 x	5,4 x	14,6 x
UNITED UTILITIES GROUP PLC	6,9 x	12,9 x	14,5 x	7,8 x	13,4 x	25,5 x
VEOLIA ENVIRONNEMENT	0,8 x	7,4 x	28,9 x	0,8 x	7,8 x	24,6 x
<b>Mean</b>	<b>3,4 x</b>	<b>9,7 x</b>	<b>17,9 x</b>	<b>3,7 x</b>	<b>10,4 x</b>	<b>21,6 x</b>
<b>Median</b>	<b>3,0 x</b>	<b>10,1 x</b>	<b>16,5 x</b>	<b>3,1 x</b>	<b>10,6 x</b>	<b>24,6 x</b>
<b>Standard deviation</b>	<b>2,7 x</b>	<b>3,8 x</b>	<b>8,2 x</b>	<b>3,2 x</b>	<b>4,6 x</b>	<b>6,0 x</b>
<b>Minimum</b>	<b>0,8 x</b>	<b>5,4 x</b>	<b>9,7 x</b>	<b>0,8 x</b>	<b>5,4 x</b>	<b>14,6 x</b>
<b>Maximum</b>	<b>6,9 x</b>	<b>12,9 x</b>	<b>28,9 x</b>	<b>7,8 x</b>	<b>15,2 x</b>	<b>25,5 x</b>

## Multiples: global panel

### Electricity Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
E.ON SE	0,5 x	6,9 x	n.a.	0,7 x	5,3 x	n.a.
ENEL SPA	1,4 x	6,4 x	15,1 x	1,4 x	6,6 x	17,6 x
EDF	0,6 x	2,6 x	7,6 x	0,8 x	3,9 x	n.a.
ENGIE	0,9 x	8,4 x	n.a.	1,1 x	n.a.	n.a.
AMERICAN ELECTRIC POWER	3,2 x	16,0 x	n.a.	2,8 x	8,5 x	13,6 x
FIRSTENERGY CORP	2,5 x	n.a.	n.a.	2,4 x	8,6 x	24,9 x
DOMINION RESOURCES INC/VA	6,7 x	14,4 x	21,2 x	5,9 x	13,2 x	22,1 x
CHINA RESOURCES POWER HOLDIN	2,4 x	6,1 x	8,0 x	2,7 x	6,4 x	8,9 x
DATANG INTL POWER GEN CO-A	3,8 x	9,7 x	n.a.	4,3 x	11,2 x	23,0 x
FORTUM OYJ	3,0 x	10,7 x	24,5 x	n.a.	n.a.	n.a.
IBERDROLA SA	2,4 x	8,8 x	14,0 x	2,1 x	8,9 x	16,1 x
<b>Mean</b>	<b>2,5 x</b>	<b>9,0 x</b>	<b>15,1 x</b>	<b>2,4 x</b>	<b>8,1 x</b>	<b>18,0 x</b>
<b>Median</b>	<b>2,4 x</b>	<b>8,6 x</b>	<b>14,5 x</b>	<b>2,2 x</b>	<b>8,5 x</b>	<b>17,6 x</b>
<b>Standard deviation</b>	<b>1,8 x</b>	<b>4,0 x</b>	<b>6,9 x</b>	<b>1,6 x</b>	<b>2,9 x</b>	<b>5,7 x</b>
<b>Minimum</b>	<b>0,5 x</b>	<b>2,6 x</b>	<b>7,6 x</b>	<b>0,7 x</b>	<b>3,9 x</b>	<b>8,9 x</b>
<b>Maximum</b>	<b>6,7 x</b>	<b>16,0 x</b>	<b>24,5 x</b>	<b>5,9 x</b>	<b>13,2 x</b>	<b>24,9 x</b>

## Oil & Gas Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
BP PLC	0,7 x	10,5 x	n.a.	0,6 x	n.a.	n.a.
CHEVRON CORP	2,2 x	16,9 x	n.a.	1,7 x	11,7 x	n.a.
EXXON MOBIL CORP	2,0 x	17,3 x	n.a.	1,6 x	12,4 x	21,5 x
ROYAL DUTCH SHELL PLC-A SHS	0,7 x	5,8 x	23,2 x	0,5 x	5,9 x	n.a.
REPSOL SA	0,8 x	6,5 x	9,5 x	0,8 x	n.a.	n.a.
STATOIL ASA	1,4 x	5,6 x	n.a.	1,1 x	5,2 x	n.a.
ENI SPA	1,2 x	6,7 x	n.a.	1,1 x	7,9 x	n.a.
GAZPROM PJSC	0,8 x	2,8 x	3,9 x	0,9 x	3,0 x	4,3 x
LUKOIL PJSC	0,6 x	4,0 x	11,7 x	0,5 x	3,3 x	n.a.
PETROBRAS - PETROLEO BRAS-PR	1,5 x	6,3 x	n.a.	1,2 x	14,7 x	n.a.
PETROCHINA CO LTD-A	1,0 x	6,2 x	n.a.	1,4 x	8,3 x	n.a.
PTT GLOBAL CHEMICAL PCL	0,9 x	6,3 x	10,2 x	0,8 x	6,9 x	12,8 x
TULLOW OIL PLC	5,8 x	n.a.	n.a.	4,7 x	n.a.	n.a.
<b>Mean</b>	<b>1,5 x</b>	<b>7,9 x</b>	<b>11,7 x</b>	<b>1,3 x</b>	<b>7,9 x</b>	<b>12,9 x</b>
<b>Median</b>	<b>1,0 x</b>	<b>6,3 x</b>	<b>10,2 x</b>	<b>1,1 x</b>	<b>7,4 x</b>	<b>12,8 x</b>
<b>Standard deviation</b>	<b>1,4 x</b>	<b>4,6 x</b>	<b>7,1 x</b>	<b>1,1 x</b>	<b>3,9 x</b>	<b>8,6 x</b>
<b>Minimum</b>	<b>0,6 x</b>	<b>2,8 x</b>	<b>3,9 x</b>	<b>0,5 x</b>	<b>3,0 x</b>	<b>4,3 x</b>
<b>Maximum</b>	<b>5,8 x</b>	<b>17,3 x</b>	<b>23,2 x</b>	<b>4,7 x</b>	<b>14,7 x</b>	<b>21,5 x</b>

## Renewables Segment

Company	EV/Revenues	Dec 31 2016 V/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
EDP RENOVAVEIS SA	6,2 x	8,7 x	n.a.	6,4 x	8,6 x	32,9 x
MERIDIAN ENERGY LTD	3,5 x	13,0 x	37,9 x	2,4 x	9,7 x	19,0 x
NHPC LTD	4,9 x	8,1 x	9,6 x	5,0 x	7,8 x	9,2 x
ENGIE BRASIL ENERGIA SA	4,0 x	8,5 x	15,8 x	3,8 x	7,9 x	14,9 x
NEXTERA ENERGY INC	5,4 x	10,8 x	19,0 x	4,2 x	9,5 x	16,7 x
<b>Mean</b>	<b>4,8 x</b>	<b>9,8 x</b>	<b>20,6 x</b>	<b>4,4 x</b>	<b>8,7 x</b>	<b>18,5 x</b>
<b>Median</b>	<b>4,9 x</b>	<b>8,7 x</b>	<b>17,4 x</b>	<b>4,2 x</b>	<b>8,6 x</b>	<b>16,7 x</b>
<b>Standard deviation</b>	<b>1,1 x</b>	<b>2,1 x</b>	<b>12,2 x</b>	<b>1,5 x</b>	<b>0,9 x</b>	<b>8,8 x</b>
<b>Minimum</b>	<b>3,5 x</b>	<b>8,1 x</b>	<b>9,6 x</b>	<b>2,4 x</b>	<b>7,8 x</b>	<b>9,2 x</b>
<b>Maximum</b>	<b>6,2 x</b>	<b>13,0 x</b>	<b>37,9 x</b>	<b>6,4 x</b>	<b>9,7 x</b>	<b>32,9 x</b>

## TSO Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
SSE PLC	0,7 x	15,5 x	29,5 x	0,7 x	15,0 x	30,5 x
GAS NATURAL SDG SA	1,6 x	7,6 x	13,0 x	1,5 x	7,9 x	13,5 x
NATIONAL GRID PLC	3,8 x	10,0 x	13,0 x	3,9 x	11,4 x	17,8 x
SNAM SPA	11,1 x	12,4 x	16,7 x	10,9 x	12,5 x	n.a.
POWER GRID CORP OF INDIA LTD	8,6 x	9,9 x	13,6 x	9,7 x	11,3 x	15,7 x
FEDERAL GRID CO UNIFIED ENER	1,3 x	2,8 x	2,5 x	1,4 x	2,7 x	1,8 x
TERNA SPA	9,4 x	11,4 x	14,8 x	8,4 x	11,0 x	14,2 x
RED ELECTRICA CORPORACION SA	8,2 x	10,6 x	16,1 x	8,3 x	11,0 x	16,8 x
ENAGAS SA	8,8 x	11,9 x	14,9 x	8,8 x	11,8 x	15,3 x
<b>Mean</b>	<b>5,9 x</b>	<b>10,2 x</b>	<b>14,9 x</b>	<b>5,9 x</b>	<b>10,5 x</b>	<b>15,7 x</b>
<b>Median</b>	<b>8,2 x</b>	<b>10,6 x</b>	<b>14,8 x</b>	<b>8,3 x</b>	<b>11,3 x</b>	<b>15,5 x</b>
<b>Standard deviation</b>	<b>4,1 x</b>	<b>3,5 x</b>	<b>6,9 x</b>	<b>4,0 x</b>	<b>3,5 x</b>	<b>7,8 x</b>
<b>Minimum</b>	<b>0,7 x</b>	<b>2,8 x</b>	<b>2,5 x</b>	<b>0,7 x</b>	<b>2,7 x</b>	<b>1,8 x</b>
<b>Maximum</b>	<b>11,1 x</b>	<b>15,5 x</b>	<b>29,5 x</b>	<b>10,9 x</b>	<b>15,0 x</b>	<b>30,5 x</b>

## Multi utilities Segment

Company	EV/Revenues	Dec 31 2016 EV/EBITDA	P/E	EV/Revenues	Dec 31 2015 EV/EBITDA	P/E
AMERICAN WATER WORKS CO INC	6,0 x	12,9 x	27,6 x	5,0 x	10,4 x	20,5 x
ACEA SPA	1,7 x	5,4 x	9,7 x	1,7 x	5,4 x	14,6 x
SUEZ	1,2 x	8,1 x	19,4 x	1,3 x	9,3 x	22,5 x
UNITED UTILITIES GROUP PLC	6,9 x	12,9 x	14,5 x	7,8 x	13,4 x	25,5 x
VEOLIA ENVIRONNEMENT	0,8 x	7,4 x	28,9 x	0,8 x	7,8 x	24,6 x
GUANGDONG INVESTMENT LTD	7,2 x	11,0 x	17,5 x	6,8 x	10,4 x	17,1 x
AMERICAN STATES WATER CO	4,3 x	12,1 x	25,4 x	3,7 x	10,7 x	24,6 x
<b>Mean</b>	<b>4,0 x</b>	<b>10,0 x</b>	<b>20,4 x</b>	<b>3,9 x</b>	<b>9,6 x</b>	<b>21,3 x</b>
<b>Median</b>	<b>4,3 x</b>	<b>11,0 x</b>	<b>19,4 x</b>	<b>3,7 x</b>	<b>10,4 x</b>	<b>22,5 x</b>
<b>Standard deviation</b>	<b>2,8 x</b>	<b>3,0 x</b>	<b>7,1 x</b>	<b>2,8 x</b>	<b>2,5 x</b>	<b>4,2 x</b>
<b>Minimum</b>	<b>0,8 x</b>	<b>5,4 x</b>	<b>9,7 x</b>	<b>0,8 x</b>	<b>5,4 x</b>	<b>14,6 x</b>
<b>Maximum</b>	<b>7,2 x</b>	<b>12,9 x</b>	<b>28,9 x</b>	<b>7,8 x</b>	<b>13,4 x</b>	<b>25,5 x</b>



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