



## Miguel Stilwell de Andrade

Well, good morning, everyone. So, my objective is basically to go through the Iberian business and talk a little bit about the value drivers that we see over the next couple of years.

So, just to start off and remind you that the Iberian business is basically split evenly on a 50/50 basis between regulated networks and what is our generation and supply portfolio. We manage this on an integrated basis. And as Antonio mentioned, I think this is a very important part of what we think about risk control and the way we manage the business between generation and supply.

If you look at some of the key drivers, I think there are basically six that I'd like to focus on over the next couple of minutes:

- The first one is improving market environment, and I'll talk a little bit about how we see demand and how we see energy prices.
- Our generation portfolio and why we think it's distinctive, and there are really a couple of points that I think are worth mentioning and that distinguish it from other generation portfolios in Iberian Peninsula.
- Our client portfolio, basically, a lot of SMEs, a lot of domestic customers, again, important for our risk management, but also important just from a client management perspective.
- Risk management, and that is a source of a lot of value that we've had over the last couple of years.
- The stable regulatory frameworks and the financial position that we have over the deficit;
- And then, finally, further efficiency improvements.

Just to start off talking about market environment. One of the things that we believe over the next couple of years is demand will basically grow moderately over the next – at approximately 1% per annum. This is driven on one hand by the economic growth, both in Portugal and Spain. We are seeing a pickup in both countries, also, by increasing electrification. On the supply side, what we see is basically we have a tapering off of coal.

So, as you know, there are new DeNOx emission standards, which mean that coal plants basically have restrictions on the emissions that they can emit, unless they do certain amount of investments. A lot of coal plants won't be making this investment, and so they will be restricted in their generation capacity and their production, and eventually, they will come offline around 2020. So, this is an important part to take into account. And this probably represents around half of the coal fleet in the Iberian Peninsula which will come offline over the next couple of years.

Another important point is the gas contracts. As you know, that's also an important part of what drives demand and a lot of that will be either renegotiated or the contracts will be coming to an end. So, as there is less gas in the system, there will be



less pressure on the take-or-pay. And so from the supply side, there will be also less pressure from the combined cycle. So, the combination of these mean that we expect a moderate tightening of the reserve margin, mostly driven by coal but not only that.

In terms of prices, obviously, this is a critical variable when we look at the Iberian market. We're assuming a gradual increase over the next couple of years and an average over this period 2017-2020 of around €50 per megawatt hour. This is driven mostly by the increase that we expect in the commodity prices and obviously based on a lot of sector experts and market consensus. We aren't expecting a material change in the thermal spreads, so this is just a function of basically how we see the evolution of the commodities. I think there are a couple of points that are worth highlighting when we talk about the power prices.

The first one is gas. As I say, as coal begins coming off, gas will be an increasingly dominant technology. A lot of that still links to oil, a lot of those gas contracts. The second, and as you know, in Spain, there are relatively heavy generation taxes, both the 7% and the green tax which also seem – makes us sort of the Iberian – well, the Spanish marginal cost is higher than obviously in other markets. This is an important part of managing the tax deficit in Spain. So, we don't expect that there should be a lot of pressure to reduce this within the next couple of years.

The marginal cost of coal in Spain, again, typically there are older plants and less efficient than in other parts of Europe, and so that produces a higher marginal cost. And then also focusing just on the last point in terms of CO2 price, what we've seen is basically a stronger political will both by the European Union but even at a country level, and we need only to think about the UK here or in France where there's specific taxes on CO2 to increase the CO2 price. So we think that this will also be a driver, and although we're expecting a moderate price of CO2 of around €10 per ton, we think there is political will behind it to sustain this.

So, let's talk about our generation portfolio. First thing to recognize is that more than half of it is hydro, and of this, around 40% is pumping so that means over 20% is pumping. I'll talk a little bit about the value of that. The rest of it basically CCGTs and coal. If you look at it, most of our coal either already has the emission standards, the DeNOx investments made or has them in, in course. So, they will typically have a longer life than the average coal fleet. And in our hydro, as you know, a lot of them are new plants. So, they have a relatively large residual useful life. So, our overall portfolio useful life is around 29 years, which is significantly longer than our peers.

And this brings me to the next slide which is I think an important slide. One of the reasons why we think it's a distinctive value. The fact that we have a higher residual value means that we deserve a higher multiple on our generation portfolio. How do we interpret this graph? Basically, if we take our average peer's portfolio as being 100, we have more hydro and the hydro typically has a higher multiple than the average because it has a much larger useful life. So, that obviously skews our portfolio towards a higher multiple. Our coal also has a longer useful life for the reasons I've mentioned,



that we've already done or are doing most of the DeNOx investments. So, again, we have higher life in our coal.

So, overall, this means that, if you look at our portfolio, it represents around 15% to 20% premium. And so, just based on a very simple DCF, so, all else being equal, looking at the different generation portfolios in the Iberian Peninsula. And I think this is an important point which is worth highlighting.

Another very important point and probably one of the most important points in this generation section is around the CMEC. So, till now when we will be protected both from price and hydro conditions until June 2017, we have on our balance sheet a CMEC receivable. This CMEC receivable will then be adjusted around mid-2017. So, the final adjustment is a function of what are the main terms are already contractually defined.

The final adjustment – or the initial CMEC receivable, when it was calculated, assumed the power price of €61 per megawatt hour in 2017 growing with inflation to around €70 in 2024. The actual price will be lower, which means that the final adjustment will be relevant and it should be included as a part of the CMEC receivable in our balance sheet.

This receivable is then received as an annuity until 2027. But I think it's important to note that not only is there already receivable in our balance sheet, but with the final adjustment, this receivable will grow and will be significantly larger and it will then be received over time. So, this is a different – and obviously, as we approach the end of the – well, as we approach 2017, we have much greater clarity on what that value is which is why we bring it up now.

Another point which is often highlighted is our generation portfolio and it's very exposed to power price, obviously, the fact that we have a lot of hydro. This is obviously – it's a fact, so we will have a growing hydro exposure growing to around 14 TWh in the 2018 to 2020 period. However, I think there are three things to note. The first is typically hydro has a higher realized price, around 10%. This is just a function of the fact that it provides ancillary services and particularly can be profiled on an hourly basis, and so you can really choose the best hours.

The second point is that there is a natural hedging. So, when we look at the gross margin of the hydro power plant, it's obviously price times volume. Typically, when there's a lot of more volume, it's lower price. When there's lower volume, there's a higher price. So, you can't look at any of these two variables independently. You need to look at the price and the volume at any given time, and so there's this natural hedge to an extent in the hydro resources.

The third is that we have a balanced client portfolio, which is sticky, which is stable, and which provides basically a hedge also to our generation portfolio. And I'll talk a little bit about that later on. But I think it's important to note that that serves also as a hedge to our hydro portfolio.



So, let's talk a little bit about pumping. As I mentioned, we have around 40% of pumping. This will be growing. So, we will expect to have around 4.6TWh in 2018 to 2020. One of the key things about pumping at that its value is independent of the absolute power price. So, it really depends on the peak/off-peak. So, that is the spread and that's where we make money in the pumping.

This is an illustrative example based on a recent day in February where you basically – with pumping from midnight to 5:00 in the afternoon. Why? Because the wind was blowing, so the power prices were very low. The wind died down, power prices started going up and you start to produce with what you've just been pumping. The spread on that day was €25 per megawatt hour. I think we expect an attractive double-digit spread on our pumping volumes going forward. So, I think this is an important part also of the value of our portfolio which is often – which is different and which is, I think, unique versus some of the other players.

A word about coal. Again, our coal fleet typically has a higher average load factor than our peers. And why is that? Because our coal plant, basically, Sines, Aboño and Soto have a higher efficiency and are very well located because they are located right by seaports, so they have very low transportation costs. This means that they are among the most efficient in the Iberian Peninsula with the lowest costs, and that, obviously, reflects in the load factors that you see.

Again, and I stress this, a lot of the DeNOx investments have already been made. In the case of Sines, they have been made and will basically be recovered in the CMEC by mid of next year. In the case of Aboño and in Soto, they are being made. Aboño will be finished this year and Soto by the end of the year. And that, obviously, reduces or eliminates any restriction on their ability to produce and basically extends the useful life to 2030 or beyond depending on, obviously, market conditions.

Word about gas. Again, often we talked about the gas portfolio and the take-or-pays. An important point to note here is that approximately 30% of our gas volumes will basically come off. The contracts will end over the next couple of years. On the remaining contracts, we have the option to renegotiate both prices and volumes. So, we basically expect to have less gas and to be able to renegotiate the conditions on those contracts. What do we do with this gas? Basically, it's either use in our CCGTs or we sell them in the wholesale markets if we find interesting arbitrage position. And so, in the past, for example 2014, very attractive in Japan, so, we diverted the gas there or another alternative is to place it with our clients both industrial and domestic. So, this is our gas portfolio, important for our generation portfolio, but also useful for, as I say, both wholesale and clients.

So, this brings me on to the third point, regarding the Iberian business, which is basically supply. I like to focus a little bit on the supply business in Portugal. So, over the last couple of years, we basically had a huge switching of customers from the regulated to the free market, one of the highest switching rates in Europe over this period.



Of that, we've managed to retain approximately 85% market share of the domestic customers. So, the clients have actually chosen to stay with EDP and it's a proactive choice. This is relevant because domestic customers are extremely stable, sticky. We've basically had incurred already the acquisition costs of those customers. And so, now, basically, our focus will be to retain them. And we expect to retain them based on quality of service. And I've highlighted here, we typically have a higher quality of service, perceived satisfaction from our clients than our peers. The growth, going forward, will not be as significant as it was in the past because most of the customers have already migrated from the regulated market to the free market. And so, we will have less acquisition costs going forward. And what we expect to do is also use this portfolio to increase the revenue per customer, so diversify and increase the loyalty of those customers by offering them other value-added services. So, we think this adds value to the customer and it also obviously adds value to us.

Overall, as a result, we expect that in our supply business, our margins will go on increasing, driven a lot by, obviously, our pricing policy, the fact that we sell value-added services to these customers and a lot obviously by greater efficiency. So, not only because we have less acquisition costs, we have much greater economies of scale from managing all these clients in the free market. A lot of investment on the digitalization of our relationship with the customer. So, for example, everything to do with electronic invoicing, sending SMSes to customers, so moving it really online where you have much lower cost.

All these means that we significant – well, we expect to improve our EBIT margins and clearly converges with more attractive benchmarks in the sector of around 1% to 3%. So, that's clearly our target. If you think that these are significant sales volumes, we're talking about relevant, absolute EBIT number, obviously, for our business which has very little capital investment.

So, moving on to risk management. Talked about generation, talked about client, risk management, and this is obviously, as António mentioned, the great source of value. So, we look at this on an integrated basis. On one hand, we have the generation. Part of it is still in the CMECs. And so, obviously, it has its own hedge. As this moves on to the free market, if you notice, we will still be completely balanced from this generation supply point of view. So, we will have a natural balance even in 2018, 2020 just based on the current number.

Very importantly, we will have approximately 1.4 times the volume in SMEs and domestic customers as we have with hydro. And as I say, these are typically the stickier, less price-sensitive customers, and so these serve as a natural hedge to our hydro portfolio. Most of the supply volume is split between Portugal and Spain. So, again, we have also a geographical diversification there.

So, let me talk a little bit about networks. And as I said, this is a very important part of our overall portfolio, representing about half of our EBITDA in 2015. I think a couple of points here in terms of Portugal. The regulators come out now with a proposal around the gas distribution where he's basically proposing a rate of return of around 6.2%.



Electricity is basically closed until end of next year, and then we will have an update on some of the key terms for the next triennial after that. Basically, we expect – or I'll talk a little bit about that. But the discussions will be around, obviously, the rate of return and the efficiency deflator.

And in terms of Electricity Spain, very important part of the reform that was done by the Spanish government. Basically, what they've done is they've made the retribution of the distribution business explicit. And so, now, we have an explicit RAB based on physical quantities and standard unit cost. This gives much greater certainty to the regulation of the distribution business in Spain. We expect, based on the proposal, which was preferred by the CNMC, that our Spanish distribution business and electricity distribution business could get around a 17% increase in its EBITDA as a result of this.

This RAB is then fixed – the starting RAB is then fixed until 2039. So, we're talking about having very good visibility over very relevant part of the value of our distribution business. In terms of Gas Spain, again, this was closed recently. This will only be updated in 2020. So, we can also consider that this is a relatively stable part of the distribution business. Again, so, overall, I think in our distribution businesses in Iberia we have pretty good clarity and stability.

And this is very important when we look at the tariff deficits. And António talked a little bit about the tariff deficits in Portugal and Spain. In both of these markets, there's a surplus. So, if you look at certainly on a combined basis, if you look at Spain, a clear surplus. And we're talking probably around €1 billion this year, no longer the €250 million that we've seen announced but probably also what will come through in the final liquidation. This is pretty much securitized. In Portugal, we've also seen the peak. We're now beginning to see a downward trend in the overall system debt. And we expect that to come to less than €1 billion of system debt in Portugal by 2020.

So, obviously, these debt projections have been updated based on energy prices, on interest rates, inflation. But I think the important point is that we've clearly seen the peak and are beginning to see the downward trend on the tariff debt in the system.

Now, this is driven, certainly in the case of Portugal, by, on one hand, recognizing a moderate increase in demand but, on the other hand, also by what we see as being an increase in the retail tariffs. So, we maintained our belief that tariffs will continue to increase, the retail tariffs will continue to increase at around 1.5% to 2% above inflation over the next couple of years. And that is what will drive the reduction in the debt in the system.

What we also think is important is that the fact that there's been a social tariff, that there is a social tariff both in Portugal and Spain, but in this case, talking about Portugal, means that those that are vulnerable customers will be protected. And so, there's less limitation or restriction on the increase in the retail tariffs going forward. So, we believe a social tariff is an important part of the system, and then we certainly believe it's important for energy inclusion and social justice what we defend, and we



defend it publicly, that the allocation of this cost should follow the European guidelines. In other words, should either being borne by the general budgets – state budget, or it should be socialized by the other consumers. So, that's the European guidelines. That's what we defend, and that's certainly what we've been defending in all the various forms.

So, talking a little bit about our electricity distribution business in Portugal. This represents approximately two-thirds of the RAB, of our total networks. The distribution is relatively insensitive to demand. So, a great part of it is fixed in terms of its retribution. We have an extremely good quality of service, both in Portugal and Spain. So, there's a very clear downward trend over the average interruption time, so year-after-year of improvement. Energy losses, also improving. So, we think it's a good well-managed business. There's a part of the costs, which are subject to efficiency incentives. The rest is basically either passed through or related to capital.

In terms of our RAB, two thirds of it is medium and high voltage with an extremely long concession period. So, around 2044. So, this is from 2009 and then 35-year concession period. The remaining low voltage concessions, there's good visibility on all of them, 99% of them until 2020. Then, there will be a renewal process following 2020. Obviously, we believe and are confident that EDP is very well placed to carry on doing and to continue and to take advantage of the renewal of these concessions because obviously we have the economies of scale, we have know-how, we have the expertise. So, we think we're well placed obviously for all of these renewals of the low voltage concessions going forward.

So, in the distribution business, overall, we expect that our investments will be around €360 million per year over the next couple of years. This is a reduction versus what it was historically of around €380 million. A very significant part of this investment will be around smart grids. So, smart meters and all of the investments also associated with that to make the network more intelligent, so that we can get better quality of service, lower losses and basically less OpEx because we can also be more efficient. So, have less manual reading, faster reduction of interruption times. So, I think there are several advantages associated with this investment beyond simply the rate of return on that investment.

António has also mentioned – so, the financial investments. Typically, we've done them on a very selective basis and if we see value in the divestments or in the acquisitions, I'll mention here just a selective investment we did with Repsol. So, after we sold Murcia, which I think a very attractive arbitrage multiple, so sold for 13 times, bought at 9 times. And those assets that we bought are in our incumbency areas. So, there are in areas that we know very well, where they fit in with our current assets. So for example, we didn't even – we just bought the assets. We didn't even have to bring any people on board because we just use the current operations.

Also, the selective acquisition of the process in the gas business in Portugal, so the minority position at a discount to RAB. And there will also be a small acquisition of the



remaining 5% in our gas business in Spain. So, selective acquisitions if we can do it at a good price.

Finally, on efficiency. And I think we showed in the track records that we've managed to really squeeze costs and continue to reduce costs in our Iberian business. So, going forward, we expect flat operating costs in our Iberian business, which represents a reduction. If you weight on the increase of new hydro and the fact that we have additional investments in our client portfolio, so a 2% reduction from 29% to 27% in the OpEx over gross profit.

So how are we going to do this? On one hand, by continuing to reduce the headcount, and we showed how we've done this over the last couple of years and we will continue to do that. In our generation, so as we have a larger portfolio, we'll continue to have economies of scale and reduce the O&M.

In terms of our supply business, obviously, as we have a larger client portfolio in the free market, we can continue to squeeze economies of scale out of that, as I mentioned as well, the fact that we're doing digitalization and really moving things online really allows us to get a lot of cost reduction out of that. So, overall, I think there's plenty of opportunities to continue to reduce our cost base and increase our efficiency.

So, basically, wrapping up, basically in four numbers, four key pillars. The first is our CapEx is going to be selective. Around €1.8 billion in networks, so this is a reduction versus the average over the last couple of years. Obviously, continue to do maintenance CapEx in our generation business. In our expansion, we're basically finishing the hydro projects that we had. Doing the DeNOx, investments that we still need to do or are doing actually in coal in Spain. This represents approximately €300 million. Just to give you a comparison, this compares with approximately €400 million per year over the last couple of years, the €300 million is combined over the next five years. So, significant reduction in CapEx here.

In efficiency improvement, as I've just mentioned, so reduction in the OpEx per gross profit. In terms of risk, talked about that. So, we are fully hedged, so we have more supply than generation so that allows us to carry on with our energy management strategy and take advantage of the opportunities when we see them. And then a strong improvement in free cash flow generation. So, we expect an increase of 1% in EBITDA. But I would associate this with the first point, the reduction in CapEx. So, the combined effect is really a very big increase in the generation of cash flow coming out of Iberia. So, this becomes a very attractive cash flow generating business. I think a very attractive and distinctive portfolio which is often not appreciated or valued by the market.

And so, with that, I would conclude the presentation, and obviously, afterwards, we're ready for questions. Thank you.