# UNSUBSIDISED SUN SHINES OVER ÉVORA PV

PORTUGAL IS TAKING BOLD STEPS TOWARDS A FUTURE WHERE RENEWABLE POWER IS BANKED ON MARKET PRICES RATHER THAN SUBSIDISED TARIFFS. HYPERION'S SOLAR PV PROJECT IN ÉVORA SET AN EARLY EXAMPLE OF HOW TO PROJECT-FINANCE AN UNSUBSIDISED RENEWABLE POWER PLANT. BY **DUARTE BRITO DE GOES** AND **MARIA DE ATHAYDE TAVARES** AT **CS ASSOCIADOS**.

> During the last two decades, Portugal has made a sustained commitment to renewable energy, mainly with the purpose of reducing its energy dependence on imports and reducing its carbon emissions. Very recently, Portugal reached the milestone of keeping the lights on only with renewable energy for four consecutive days, which is an achievement for a European country.

> In the last few years, Portugal experienced an impressive growth of solar photovoltaic, due to the decrease in production costs thanks to cheaper technology and the country's exceptional solar conditions – Portugal is the EU territory with the greater number of hours of sun exposure. In fact, recent data reveal that from 2009 to January 2018, photovoltaic was the technology that grew the most, from a residual installed capacity up to 572MW.

In the past few months, Portugal has engaged a new phase of renewables production.

The time of power plants with a guaranteed remuneration scheme – feed-in tariff – seems to have started its final journey. It is well known the government currently in office is keen on expanding renewables production solely remunerated according to market prices, primarily to reduce the tariff deficit in the electricity sector.

Additionally, there is a clear political intention to establish Portugal as a green energy supplier in the near future, pushing for the development of new electricity interconnections between Portugal and Morocco and between the Iberian Peninsula and France.

## Évora – The first step

This change in the Portuguese government's approach to the renewable energy sector has hindered new project financing structures for new plants. The end of the subsidised feed-in tariff prevented the financial sector from financing projects on the assumption that stable cashflows would be paid to the project companies for the power produced.

As a matter of fact, the electricity market price is not sufficiently stable or predictable, and will never be in a liberalised market, to confer adequate comfort to the financial sector in such way that it would permit the structuring of a nonrecourse project financing based on the electricity produced and sold in the market.

The first project that had to face and that has managed to solve the puzzle in the Iberian Peninsula was the Hyperion Évora project, a 28.8MW solar photovoltaic plant in Évora, Alentejo, Portugal.

This project was promoted by Hyperion Renewables, a company that has been investing in this sector for some years and that has a portfolio to be developed under this regime. Dynavolt Renewable Energy Technology was the equity partner for this project, which was later replaced by Mirova, through its fund Mirova-Eurofideme 3.

The need for a stabilised power price has been responded to by the market, which presented several alternatives aiming to provide banks and sponsors with the assurance they were looking for.

At the Hyperion Évora solar plant, Axpo Iberia, a power trading company, has proposed the hedging of the electricity price for a period of 10 years, sufficient to allow the structuring of a long-term financing, matching the hedging period, and supported by sponsors' funds, which will fill the funding gap and confirm the sponsors' commitment to the project. The complex procedure of electricity sale has been converted into a simple financial instrument.

As in all innovative projects, a large stake of innovation, goodwill and permanent communication between the parties has been required. Only the mixture of these features, together with a strong commitment from all the parties to reach a common goal, and the respect and attention to the perspectives and concerns from each party, have permitted the successful

At the Hyperion Evora solar plant, Axpo Iberia, a power trading company, has proposed the hedging of the electricity price for a period of 10 years closing of this first project financing of an Iberian solar photovoltaic plant subject to full market price risk.

## Sponsors' perspective

Hyperion has taken a first decision that required a lot of courage: putting in place the first project financing of a solar photovoltaic plant in the Iberian Peninsula with no subsidised feed-in tariff.

The market mind-set in the last 20 years was based on guaranteed feed-in tariffs that eliminated the risk of price volatility. With the new reality of solar plants' licences, subject to full market price risk, the sponsor could have decided to take the easiest route of finding a purchaser with sufficient funds to finance the projects with equity, or could have reduced its portfolio and funded only part of its projects with its own equity.

However, Hyperion took the decision of accepting the risk of market price volatility, find a way to hedge it and structure the deal in project finance, finding an equity partner and splitting the equity available among the several projects of its portfolio. This has allowed Hyperion to keep a stake in its portfolio and continue to grow the company, and permitted the equity partner to have a new field for investing in this sector.

Among several proposals received, the sponsor decided to negotiate a hedging agreement with Axpo Iberia, a renowned and experienced power trading company, which would guarantee certainty and stability to the revenues arising from the production of energy. This was the first step to convert the licence to construct the power plant into a bankable project.

The second step was to assure the construction and operation of the power plant. Since Hyperion is a management company of power plants, it was necessary to contract an EPC agreement and an O&M agreement with a reputed contractor and operator that could assume the risk of construction.

This responsibility was awarded to Jayme da Costa, a Portuguese contractor with experience in this field in Portugal but also in other European countries. This risk has been mitigated by the contractor's full assurance of complying with the required deadlines, and confirmed by the bank and the power trading company within their legal and technical due diligence over the project.

Another aspect the sponsor had to take into account was the fact that the hedging period and the price that was hedged did not sustain a high debt-to-equity ratio, therefore requiring a significant equity commitment. However, with the structuring of new deals and banks becoming comfortable with less conservative models, it is expected that hedging periods may increase, which in turn could support higher debt-to-equity ratios.

Finally, it should be noted that the sponsor has only hedged a part of the hourly theoretical electricity production and, therefore, all electricity produced exceeding such hedged stake will be an upside for the sponsor and for the project. This will be a strong incentive for the sponsor to improve the operation and production performance of the plant, which indirectly benefits all the parties involved.

# Power traders' perspective

The power trader had three main concerns: (i) to assure the timely and due construction and operation of the power plant, (ii) to secure the payments of the amounts that could be due under the hedging agreement, and (iii) to secure the termination amounts that could be due if the project company terminates or breaches the hedging agreement.

Bearing in mind that the hedging exposure would be backed by a third party, the power trader has demanded some undertakings from Hyperion to mitigate the risk of not having the plant producing sufficient energy as from the hedging date.

For such purpose, the power trader has undertaken legal and technical due diligence for the project, has required guarantees of timely completion of the construction works, and has required interim dates to comply with specific milestones. This has permitted the power trader to have sufficient comfort of having the plant completed on time and fit for purpose, with completion being expected in early 2019, or that indemnities are paid otherwise.

As to the payments due under the hedging agreement, the power trader has been granted security over some project assets, having entered into an intercreditor agreement with the bank in order to regulate the actions upon an enforcement event.

This risk was also mitigated by an operating bank guarantee issued by the project finance bank in favour of the power trader, and by the fact that the power trader has been appointed as selling agent of the project company before the OMIE, and as balancing responsible party towards the Portuguese Electric System Administrator.

As a consequence, the entire process related to the delivery and sale of electricity, including payments, will be managed by the power trader, reducing the risk of failure of the balancing obligations and of misuse of the revenues arising from the power sale.

The consequence of termination of the hedging agreement resulting from a breach by the project company was also a major concern, due to the liabilities that the power trader would have towards counter-hedging third parties. This led to a careful drafting of the termination clause and a comprehensive negotiation of the calculation methods of the damages arising therefrom.

Apart from these concerns, the drafting of this hedging agreement has been thoroughly negotiated, including the usually heavily negotiated change of law clause, force majeure clause and the clauses dealing with the formulae for the calculation of the amounts due and the payment terms and conditions between Hyperion Évora and Axpo Iberia.

A final note to flag is that the guarantees of origin arising from the production of renewable energy were also included in the deal, although they are still not being negotiated in the Portuguese market due to a delay by the Portuguese government to regulate and issue such certificates.

#### **Banks' perspective**

Portuguese banks have significant experience in project finance, including in the renewable energy sector, where the large majority of the projects were financed with non-recourse project financing structures. For this first deal, Hyperion mandated Banco BPI to structure the project finance, based on its large experience in this field and in this sector.

In this context, the bank has assessed as usual the consistency and robustness of the project through detailed and thorough legal and technical due diligences.

The main difference from this project was the power price hedging agreement, which was a first in the Portuguese power market. For such reason, Banco BPI was highly involved in negotiating this innovative solution, which was accepted subject to the selection of an experienced and reputed power trader, with a strong balance sheet.

Another important aspect of the deal was the negotiation of the security package partially granted in co-benefit to the power trader. It is unusual in Portuguese deals to have the banks sharing security with non-financial institutions, and therefore it required an open-minded approach from the bank, and an exhaustive negotiation to give comfort to all parties involved.

Consequently, should the project not be fully successful, all secured parties would benefit from the project security, and the relevant enforcement would be regulated in a clear fashion.

# **Overall perspective**

Upon the closing of the deal, it was clear that a new door had been opened in the solar photovoltaic sector in Portugal. There is a clear interest from all the parties involved to have this kind of deal repeated in Portugal.

The Portuguese government is keen to increase the renewables sector power production and industry, which will reduce power imports, increase foreign investment and increase the use of green energy, without having to grant new subsidies.

The sponsors will have profitable projects significantly financed by the financial sector, with limited recourse to the shareholders, in a country with the perfect climate conditions to produce energy from solar resources.

The contractors will continue to have a market more and more efficient and with reasonable margins to develop their activity, and all component suppliers will continue seeing this market evolution, profiting from the current positive outlook of this sector.

The power traders have opened a new market that will be required for all new projects and that will replace, in the near future, the feed-in tariffs that still exist, including for other technologies.

The banks will continue to have projects to finance in a sector they know well and are comfortable with, replacing political risk – as manifested in Spain in the form of tariff cuts – with power traders' risk.

The market as a whole will profit from this new era, which will benefit from the innovation that was gathered by the parties involved in the Évora deal and that evidenced an uncommon willingness to get the deal through, being creative and opened-minded in order to cope with the concerns of the other parties involved.

The know-how acquired by the parties and relevant advisers during these months cannot and will not be wasted or forgotten.

At the end of this first-in-kind project, after all the walls that we have faced and climbed, finding solutions for each and every problem identified, a balanced outcome has been reached with a clear upside for all the parties involved and the market as a whole.

#### The future is now

In taking this innovative step, the renewables energy sector reached another stage of maturity, which is likely be followed in other jurisdictions and by other renewable energy technologies.

In the coming years, some wind farms will cease to benefit from feed-in tariffs and it is likely that the relevant sponsors will try to refinance or to enter into new financings that may benefit from the structure set out by Hyperion.

After more than 20 years of subsidised tariffs, the renewable energy sector is emancipating and has begun waiving the state's support. Like a young adult leaving its parents' home, where he was "subsidised", the renewable energy sector is becoming independent from the state and thriving on its own.

#### But the future is every day

The future is unpredictable and life – as well as technology, politics and markets – moves in mysterious ways. There are numerous risks that all parties must be aware of, anticipate and mitigate.

Raw material prices, new technologies, storage solutions, changes in consumer patterns, grid connection difficulties, end of priority dispatch for renewable plants with increasing curtailment risks, new European electricity rules and market, creditworthiness of the new market players such as power traders are some of the risks that will have to be at the back of all the parties' minds in this new era.

The Hyperion Évora project has welcomed us into the future, but the future will also be tomorrow with all the new challenges that it always so kindly offers us.