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FINERGREEN INSIGHT

Issue n°3 – February 2016

EDITO

Just like every year, December has proved to be very intense. The COP21 finally put an end to the negotiation cycle that began after the failure of the Copenhagen Summit in 2009, with a federating agreement signed by 195 countries. In France, the publication of the results of the CRE 3 tender – despite its lack of clarity – allows developers to have a better idea of what to expect for 2016 and to focus on their most relevant growth drivers.

From an internal perspective, December saw the successful closing of several operations that spanned many months.

For instance, we finalized our very first photovoltaic farm refinancing operation. This transaction, which took the form of an OBO (Owner Buy Out), is quite unprecedented on the French market and enabled the developer to invest in new projects, in particular on the international stage, thanks to the new financial resources the operation granted them.

Such refinancing operations are particularly interesting at a time when banks are familiar with the sector and when macro conditions help the optimization of the financing.

This is why we made refinancing the central focus of this Insight, which will present the

ins and outs of it.

In December, the COP21 also led us to give a new humanitarian direction to our actions: thanks to the support of the AFD and to the cooperation of Solvéo Energie and Vol-V, we were able to raise € 80 000 to fund 12 humanitarian micro-projects in the renewables sector.

To conclude, 2015 was a quite dynamic year, despite the general slowdown of the sector in France. On a global level, the solar market exceeded in 2015 the most optimistic forecasts, according to Mercom Capital Group. We can only hope that 2016 continues in the same direction.

This new year will be the occasion for Finergreen to celebrate our 3-year anniversary, and the almost € 200 million raised for renewables projects in France so far. It is now up to us to build on this momentum, in particular with the COP22 that will take place in Marrakech next December, and during which we will renew our partnership with the AFD.

Enjoy the reading and happy new year 2016!



Damien Ricordeau
CEO and Founder



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REFINANCING PROJECT COMPANIES

Why are there so many refinancing operations this year?

2015 witnessed many refinancing operations, in particular during the second semester, when only a few new projects were launched. However, these operations can sometimes seem counterproductive, especially when the purpose is to borrow more and for a longer period, given the high transaction fees they generate. This month, we are therefore shining the light on these particular operations.

INTRODUCTION

Banks play an important role in the development of renewables by supporting investments through substantial long-term financing.

Today, production assets are generally financed as follows: 80% of bank debt and the remaining 20% as equity, at the expense of the shareholder.

It is common for the loans to be issued for 18 years, given that the state (through EDF) signs power purchase agreement for 20 years.

While the financing conditions offered by banks these days are attractive, many renewable energy projects financed in early 2010 have much less optimal financing conditions: shorter maturity (12 to 15 years), low leverage, and interest rates higher than the current market rates.

The renewables sector is now mature and funding agencies have a deeper understanding of it.

This has a positive impact on the trust people put in the sector. In parallel, the increased liquidity in the banking market leads to

lower interest rates and thus, better financing terms.

Project companies that sought financing in early 2010 can take advantage of these more favorable conditions thanks to refinancing operations. These are becoming more and more common in the renewables sector, and we will describe below their characteristics, goals and limits.

DEFINITION : REFINANCING

There are two types of refinancing operations: bank refinancing and equity refinancing.

A bank refinancing operation, unlike a 'first-time financing', aims at replacing existing debt with new debt under more advantageous conditions or under conditions that are better suited to the project or the borrower. It is used to replace original sub-optimal financing plans, or as a fix against broader changes, such as macroeconomic changes.

An equity refinancing operation occurs when the initial investments were financed only with capital, when they could have been financed

partly by debt. In this case, the loan is contracted in order to reimburse the funds initially invested by the shareholder and to replace capital with debt. In practice, the goal of most refinancing operations is financial optimization, as a response to a non-optimal baseline situation.

IN WHAT CASE CAN WE CONSIDER REFINANCING?

In the context of project finance, and more specifically of renewable energy project finance, several situations can be considered as financially sub-optimal.

We highlight three typical such situations that can be the starting point for companies of a project refinancing operation. Some projects will even be plagued by more than one of the issues we highlight.



FINERGREEN INSIGHT

REFINANCING PROJECT COMPANIES

Why are there so many refinancing operations this year?

① **The interest rate of the loan is higher than the current market conditions.**

It is the easiest case to identify. When the interest rate of the current loan is high, it is possible to refinance the former debt through a new loan with better conditions, reducing yearly interest expense.

② **The maturity of the debt can be increased**

Project Finance aims at securing long-term financing. Today, bank

markets usually require a *tail* of two years, which means that the bank financing must be at least two year shorter than the purchase agreement.

A few years ago, bank requirements were more stringent, projects were financed on shorter terms, and therefore with smaller debt amounts than what one could get nowadays. Lengthening the maturity enables raising more debt than the current outstanding capital and can therefore release immediate excess

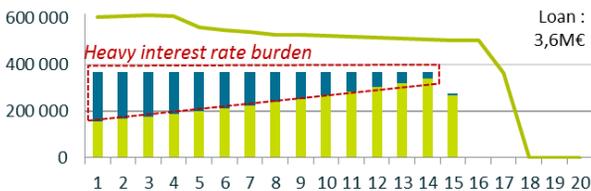
cash flow.

③ **The yearly repayments are too low given the project cash-flows**

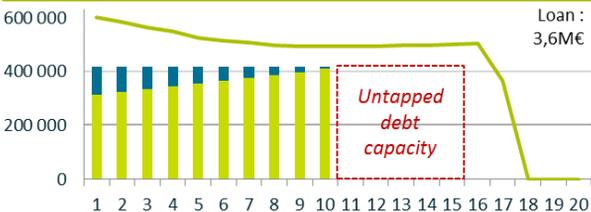
When the financing is set up, we generally try to shape the debt schedule to maintain a DSCR (Debt Service Coverage Ratio, i.e. coverage of the debt service by the operational cash-flows) of 115% to 120%.

When assets outperform initial forecasts – what happened, as a whole, suite regularly on the

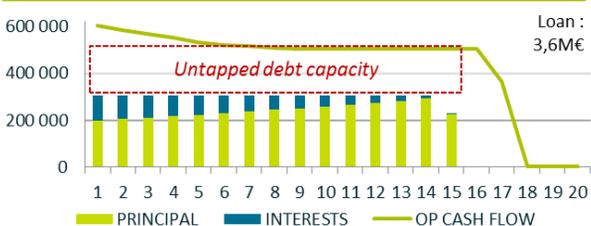
1 **Interest rate conditions struck under a different regime burden the project**



2 **Sub-optimal debt maturities : 11 years when there is potential for 15**



3 **Low payments (capital + interests) when compared to the available cash flows**



Refinancing aims to :

- » Optimize the interest rate by taking advantage of current conditions which are more favorable than in 2010
- » Extend the maturity of the debt while keeping a minimum *tail* of 2 years (i.e. the debt maturity is shorter than the PPA by at least 2 years)
- » Structure the bank loan to match future cash flows as best as possible : we can shape the repayment schedule to keep the DSCR between 115% and 120%

This will generate **excess cash flows** that can be used to invest in new projects

Example of a financing schedule shaped to match the project





REFINANCING PROJECT COMPANIES

Why are there so many refinancing operations this year?

French solar market – or when repayments to the bank are small compared to the annual operating cash flow (i.e. a high DSCR), we can consider increasing the loan total amount during the same period. We can also shape the debt repayments in order to precisely follow the evolution of the project cash flows.

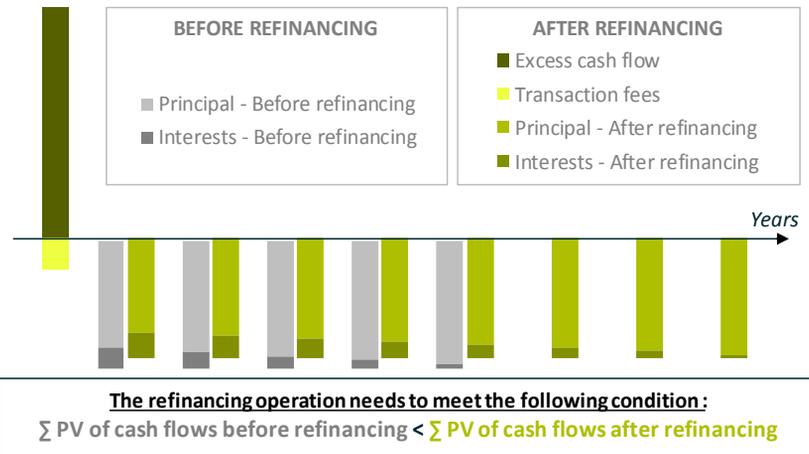
While the positive impact of lower interest rates is obvious, that of increasing the length and the annual repayments is more subtle and requires a finer analysis.

THE FINANCIAL INTEREST OF GETTING EVEN MORE INDEBTED

The profitability of financial investments is measured by the IRR (Internal Rate of Return) which takes into account the time value of money: a euro received today is more valuable than a euro received in a few years.

When a loan is refinanced by a new and bigger debt, it is necessary to analyze the impact in terms of cash flows. The interest is to receive a cash surplus today and, in counterpart, to reimburse in the future a bigger bank load than in the initial situation.

Therefore, a refinancing operation is beneficial, and carried through,



only when the gains (recorded at the refinancing date) outweigh the costs (recorded in the future).

It must be noted that a higher interest expense will generally lead to a reduction of tax on earnings.

From a mathematical perspective, we must check that the present value of the shareholder flows after refinancing (including transaction fees) are higher than before refinancing. The exceeding cash generated can then be used to invest in new projects.

Therefore, without any extra equity contribution, a project holder will be able to acquire or build new plants and reinforce his portfolio.

The following graph illustrates a refinancing operation that generates

an extra cash flow of 24 (for a refinanced amount of 100) to serve new investments.

Refinancing still have some limits and entry barriers that have to be analyzed and taken into account before kicking off on the operation, such as the evaluation of early repayment fees.

THE LIMITS OF SUCH OPERATIONS

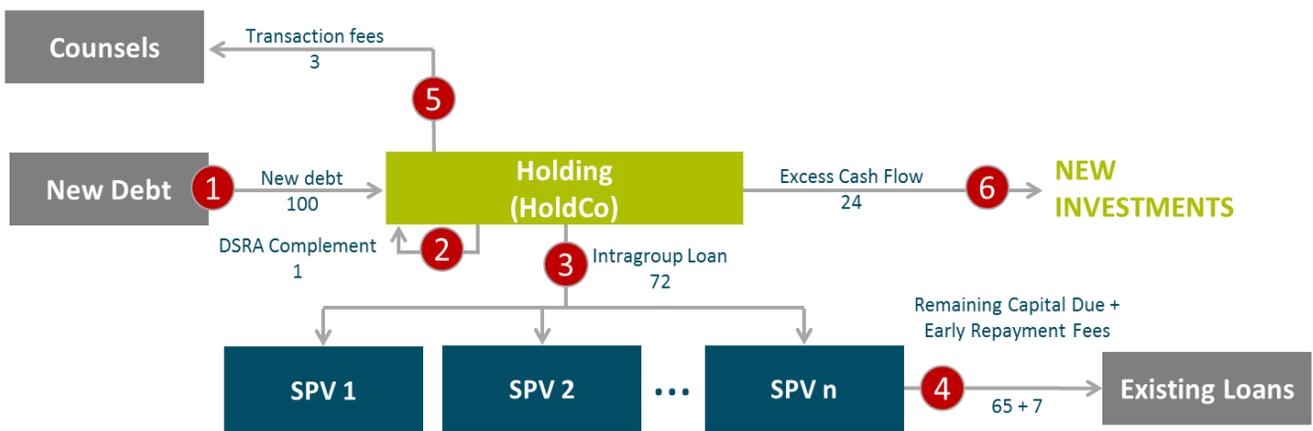
The bank loans often go hand-in-hand with SWAP agreements (rate-hedging contracts against variable rate loans). It is important to study the termination conditions of both contracts : the early repayment conditions for the loan contract, and the exiting cost for swap agreements.



REFINANCING PROJECT COMPANIES

Why are there so many refinancing operations this year?

A bank (old or new) issues a new loan with value 100 **1** to the Holding which then puts in place a DSRA (reserve account) **2** for the benefit of the lender. With an intragroup loan **3**, the SPV repay the entirety of the existing loans ahead of schedule **4**. After paying the transaction fees to all parties **5** (legal, financial and accounting counsels), the holding is left with excess cash flows **6** which can be used to invest in new assets.



Variable rate loan + SWAP :

Variable rate loan contracts generally have low termination costs : around 3% of the capital outstanding. Termination costs for SWAP agreements are very variable, and can reach 15% of the capital outstanding.

Their calculation relies on market finance concepts and depends on the rates difference between the initial SWAP and an equivalent SWAP if it was struck today.

Fixed rate loan :

Fixed rate loan contracts include sometimes complex early reimbursement clauses, which

are based on proprietary formulas which belong to the banks, but which generally represents the administrative and financial costs for the bank if the internal mechanism in place to offset the rate risk is terminated.

As a result, the refinancing operation hinges on the cost of early reimbursement for these various contracts. The preliminary calculation of these termination costs and a precise analysis of the project characteristics are necessary to make a well-informed decision regarding a refinancing operation.

This operation can also be an opportunity to reorganize and legally rationalize groups that hold a

multitude of project companies.

Often, a holding company (either existing already or created during the refinancing operation) will carry the new debt used to reimburse the existing debt of the underlying project companies through intra-groups loan.

From an operational point of view, this is also an opportunity to harmonize and optimize the conditions applied to an entire renewable energy park, for example by putting in place a unique maintenance or insurance contract.



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WHAT DOES THE MARKET SAY ?

Our questions to ...



 NATIXIS

Stéphane Pasquier

General Director
Natixis Energieco

Natixis Energieco, one of Finergreen's partners, is a leading bank for financing renewable energy projects in France. As a key actor of the banking market, Natixis is naturally aware of current refinancing trends and issues.

Stéphane, could you quickly introduce the field of intervention of Natixis Energieco on the renewables market?

Natixis Energieco is a 'Sofergie', a financial company specialized in financing renewable energy. We are a subsidiary of Natixis Lease and our activity is dedicated to BPCE Group's clients. Over the last 15 years, Natixis has arranged the financing of over 300 transactions for more than 2,5 GWe of installed power.

During the end of this year, there were many refinancing operations for renewable energy projects, and such operations were at the heart of the discussions between different market actors and their bank partners. What was Natixis' part in this context?

It is quite common that, when the financing demand slows down, optimization of existing financing is considered. Given the low interest rates and the forecast reliability in the PV sector, many projects were renegotiated. Natixis arranged or took part in some of these refinancing operations, provided that they are part of a win-win

relationship with the client, in terms of both profitability and business relations.

As we saw during recent operations, the costs associated with early reimbursement can be very high. Can you explain the origin of such costs?

The main costs comes from the necessary break of the rate coverage, in particular if there is a huge difference between long-term rates when the original debt was struck and the date of anticipated reimbursement. Early repayment requires the bank to break up the refinancing contracts its own treasury set up in the first place. This cost is passed on by the bank treasury to the borrower, according to the terms of the initial contract.

Would you advise operators to look at these refinancing operations? Do you think that bank conditions can be improved when a park showed its ability to produce energy as forecasted, on a regular basis?

To set up this kind of operation, it is essential to make sure that the installation's revenues are resilient

and have low volatility.

The banking conditions will then not only depend on the quality of the underlying, but also on whether the proposed financing structure is conservative or aggressive, as well as on the nature of the operation itself.

Indeed, ranking up competition between banks can help reach more aggressive business proposals, but it increases the risk of failure of the operation in case of a syndicated loan. As a result, it is necessary to make sure that the ties between the arranger and the other banks of the market are strong and that they share a common commercial interest.

We thank Stéphane Pasquier for answering our questions after the refinancing of the Insam project, led by Finergreen and arranged by Natixis Energieco.



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WHAT ABOUT FINERGREEN... ?

We were there:

On December 1st, Finergreen was at Le Bourget to award the COP21 Prize, with Solvéo Energie and Vol V, in collaboration with the French Agency for Development (AFD). 12 humanitarian projects were selected and received a grant of up to 10 000 euros, for promoting renewable energy as a development tool for vulnerable people of Southern countries.



In its first 3 years, Finergreen has achieved :

COMPLETED
TRANSACTIONS

168

M€

TOTAL
POWER

57

MWp

FINANCED
PROJECTS

361

PLANTS

The € 26 M refinancing of 4,3 MWp solar rooftop

Finergreen led the set-up of a refinancing operation under the form of an OBO (Owner Buy Out). The ownership structure remains the same after the operation and the project owners (local entrepreneurs) were given immediate access to funds in order to develop their activities.

The banking conditions and the optimized business plan helped raising a debt higher than the project initial total cost.

And a relocation!

In three years of existence, Finergreen has grown nicely, with four new hires joining the team. Now a little cramped in the Montparnasse premises, Finergreen changed neighborhood and found a new home close to Gare de Lyon.

You can now contact us at:

FINERGREEN, 96 boulevard Diderot, 75 012 Paris

or by phone:

+33 1 44 75 42 45

Finergreen becomes more feminine with two new collaborators



Marie-Madeleine THOMAZO

Associate
HEC Paris - IPFEN

« I heard about Finergreen during my last year of study – a master's degree in Entrepreneurship – as I was finishing a specialized Master's in Energy Economics. I saw it as an unique opportunity to combine two exciting sectors, finance and renewables, within a booming start-up : I did not hesitate to jump on board ! »



Amélie BEAUJARD

Communication Manager
Sciences Po Paris

« As I graduated from a Master's degree in International Affairs from Sciences Po Paris, and had previously worked in NGOs and Think Tanks, I wanted to turn to Renewables. Finergreen promotes renewables as a means to support the energy transition but also to fight against energy poverty and to address humanitarian challenges. This combination is what particularly seduced me and brought me to join the team. »



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