

PV Financing Guidelines

PV Financing Project

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France



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France PV Environment

The photovoltaic sector represented 6.2 GW_p in France at the end of 2015 and it generated 1.4% of the total produced electricity of the country in that same year. The industry is mostly led by large-scale (above 1 MW_p) ground-mounted projects. The small rooftop market (below 9 kW_p) is hardly reaching a mere 60 MW_p installed in 2015 and installations between 100 kW_p and 250 kW_p are in turmoil due to inappropriate Feed-in Tariffs (FiT) in 2015, according to SOeS, the French office for observation and statistics.

In the past years, when PV remuneration was ruled by a FiT, large financial institutions learned about the photovoltaic market and its main risks. Nowadays, banks and investors know how to evaluate PV technology and its productivity, at least at a national level. This led to projects becoming larger and larger every year.

At the beginning of 2016, France took a major turn in its PV support scheme. The electricity produced by plants above 500 kW_p is now sold according to electricity market prices, only supported by the addition of a premium. This is coupled with the guarantee that in a worst-case scenario, a last-recourse buyer should buy the electricity produced. In the past years, France developed its large projects through calls for tenders. This model should not change and France will implement calls for tenders based on premium tariffs on a biannual basis.

The largest financial institutions should adjust to this shift quite quickly but it will require an adaptation of their profitability analysis. Some of the PV financing schemes could also be impacted, such as crowdfunding, even if new tenders will prioritize projects partly financed through crowdfunding. On a brighter side, one should notice that the French government announced its plan to install 1 GW_p per year through a tender with a detailed calendar for the next years. This offers a visibility to project developers that they strongly called for in the past years. They now have more visibility on a longer term, making it easier to develop business plans.

The financial environment around photovoltaic is now built on several years of experience. Moreover, the past two years witnessed a few innovations on the topic. Major banks and many private equity companies are now financing projects that are larger every year and more and more innovative, either with respect to their technical aspects (components) or their financial aspects. Moreover, for important projects, subordinated debt and especially mezzanine was available. For smaller projects, local banks did not acquire as much expertise as national ones. Crowdfunding also has risen sharply since 2014 as an alternative source of finance.

This report describes two financing schemes:

1. Financing scheme 1: Direct Financing by banks

It is the most common scheme that is used for photovoltaic projects of any scale. Nevertheless, it is important for consumers to know how to get a loan in a stressed credit environment. Moreover, as many banks are offering such services, this report may help consumers to find the offer that is the best suited for their specific project.

2. Financing scheme 2: Crowdfunding

Crowdfunding spread quickly in France and a few platforms specialized in renewable energy projects exist. Although general platforms are struggling with fierce competition, renewable platforms are still on a path of growth based on the evolution of the renewable energy market. Now that developers are aware of this solution, it would be interesting for them to know the process of this financial mechanism and all the possibilities that it offers.

Other financing mechanisms also help to implement photovoltaic installations across the country. Equity can be provided by private equity for large projects. The latter can also be financed through the capital market thanks to green bonds or quasi equity with new junior debt products such as mezzanine debt. For local projects, mechanisms based on leasing are attractive to building owners (for supermarkets or social housing for example). And finally, energy cooperatives are emerging in France and could help citizens take part in local projects.

Financing Schemes

Financing Scheme 1: Direct financing by banks

A bank loan is the most commonly used tool for financing photovoltaic. Banks have specific offers for individuals, companies and for project financing.

Application Segments

A bank loan is suitable for small installations (< 3 kW_p) that cost up to 12,000 EUR and for ground-mounted farms of multiple MW_p that cost several millions. It can finance a PV installation for all application segments providing debt directly to the project developer.

A bank can also provide financing through project finance. In this case, the loan will specifically be used for this project and will be paid back by the cash flow of the project. It cannot be paid back by other sources of cash. In project finance, the bank can cover up to 80% of project finance and the other 20% will be financed through equity.

For small individual projects standard loans exist while it is negotiated on a case-by-case basis for larger projects. Some banks have a network of regional banks that can help them by co-financing a project.

Related Business Models

Banks are used to finance secured projects based on Feed-in-Tariffs (FiT). At a national level, they are easily financing large photovoltaic projects. At a local scale, it may be harder for citizens and small organizations to convince their banks. Banks are more reluctant to finance innovative schemes such as PPAs or self-consumption, when the revenue stream is not as secured as with a FiT, but some experiences are being financed.

Implementation

Banks can finance a company directly on its balance sheet or a private person on his income or it can finance a project, by giving a loan to a Special Project Vehicle. The approach of the bank will be different from one case to another but the way a project developer should approach a bank would not change much. This section gives a step-by-step methodology to contact a bank.

First, prior to contacting a bank, a project developer should prepare its photovoltaic project and a business plan, in order to assess the financial aspects of the latter such as revenue streams. Moreover, he should think about the type of loan that he will require: on balance sheet or on the project. Project finance is more often implemented for large projects than for small ones due to a high share of transaction costs.

For private persons financing a small installation, the loan is equivalent to an on-balance sheet loan i.e. the reimbursement can be based on the individual income.

Second, the project developer should be aware of the main aspects of loans proposed by the banks. This will help him to choose a bank (next step). For small renewable energy or energy efficiency projects, banks can propose standardized loans with attractive offers, usually described on their website, such as the “Prêt d’économie d’Energie” of Crédit Agricole or the Prevoir of Banque Populaire.

For larger projects, the project developer should be aware of the main tendencies that are applied (under FiT schemes):

- Loan tenor: usually going from 15 to 18 years. As FiT contracts are signed for 20 years (with a degressive tariff), banks will require at least a two years tail, in case the loan has to be extended during the project.
- Debt/equity ratio: currently at 80%.

Third, the project developer has to choose a bank. Usually, he will work with a bank that he is used to work with¹. A developer should consult several banks in order to compare the different propositions. He should not only look at the rate that is proposed, but also at the guarantees required by the bank, the possibility of anticipated payment and the procedures in case of default.

For larger projects, banks will look at the stakeholders of the project, at its financial aspects and sometimes at its technical aspects in order to assess the risk. In a project finance scheme, the bank will take an in-depth look at the revenue streams.

Fourth, the bank and the project developer will sign a contract. It establishes the amount of the loan and the reimbursement procedure.

¹ For large projects that require a loan above 5 million EUR, several banks can be involved in the financing scheme.

In the case of a project finance scheme, the bank will be very careful about covenants and guarantees because if the project fails, the mother company does not have to reimburse the loan. The bank can also establish a Debt Service Coverage Ratio (DSCR) of reference (usually at 115% to 120%) that will have to be respected. Then the bank will provide the amount required, by transfer, based on invoice or through credit lines.

Fifth, the follow-up of the project will be the responsibility of the bank back-office. If the bank sees a difficulty in the evolution of the project (a low DSCR or a missing payment) it will organize a meeting with the project developer in order to understand the situation. If the situation seems too risky for the bank it will use the covenants of the contract.

External Conditions

Loans have mostly been provided for models based on FiTs. At the beginning of 2016, France adopted an incentive mechanism for PV based on the electricity market price plus a premium for larger projects. The attitude of banks regarding this new model will change, the cost of debt should rise and the share of equity should increase, because revenue streams will be harder to assess. Small individual projects will still be based on FiTs.

It is hard to evaluate now what will be the banks' new standards. The first projects based on this premium should appear at the end of 2016. Banks are waiting for this moment to evaluate their financial criteria. Project developers find it hard to predict what will be the behaviour of banks.

Financing Scheme 2: Crowdfunding

Crowdfunding rose in the past years in France, especially since 2014. Some platforms specialized in renewable energy projects and renewable energy companies. The government is pushing for the development of crowdfunding. The call for tenders of the beginning of 2016 grants a better grade to projects partly financed through crowdfunding. This helps to give visibility to the citizens about renewables and imply them in the evolution of their environment. Project developers are experimenting this new source of finance.

Application Segments

This mechanism is best suited when a stakeholder of the project needs to communicate about the project for a better social acceptance. For example, for ground-mounted projects that could impact the landscape, it is important to inform citizens living nearby. This acceptance is emphasized as citizens are implied in the project through its financing.

Therefore, it can also be used for financing a project on a public building. In this case, the part financed by crowdfunding should be small in order to avoid criticism stating that the investment of citizens is doing what public funds should be doing.

It may also be useful for projects on multifamily houses roofs and social housing in order to increase the acceptance of the inhabitants.

Related Business Models

Crowdfunding platforms prefer to propose to its investors projects that are as safe as possible. Therefore, they will prefer business models that are based on secured revenue streams such as Feed-in-Tariffs.

Nevertheless it can also procure an alternative source of funding for innovative projects based on self-consumption or Power Purchase Agreements (PPA), when the project developer wants to communicate. As long as the project is financially well structured, one should not have difficulties to find finance through crowdfunding.

Implementation

As for renewable energy projects in France, Crowdfunding is a financing scheme that is complementary to other schemes. No project should be based on 100% crowdfunding finance. Although it may seem attractive to project developers, it is not easy nor provides free money.

First, the developer has to decide whether it would be pertinent to be financed through crowdfunding or not. This financial mechanism would not necessarily offer better financial conditions than a bank, a bond or an equity financing. Nevertheless, a crowdfunding platform offers a large visibility on the project itself and can be used as a communication tool. This communication can be very useful when the project developer needs to develop pedagogy about its project or when the project has a strong local impact. It helps citizens that will be impacted to better accept the project and even to be part of it.

Second, the developer has to choose the platform that he would like to contact. He should look at several aspects prior to his decision:

- He has to look at the financial services the platform offers, the financing tool it uses and the maximum amount of money that he can raise so he can build his financing scheme. Some platforms are emitting bonds, others are proposing loans, and some are investing in equity.
- He should look whether the platform is approved or not by the “*Organisme pour le registre unique des intermédiaires en assurance, banque et finance*” (ORIAS).
- He should look whether the platform uses a strategy of “all or nothing” i.e., if the amount of money that was targeted has not been reached, is the operation cancelled or not?
- The developer should look at the way the platform is paid. Some may take a portion of the money that is raised; others may take a fixed fee.
- The developer has to look at how the platform participates in the communication about the project.
- And finally, the developer can evaluate the quality of the platform by looking at its track record.

Third, the developer has to make the first contact with the crowdfunding platform. The financial director or the communication director of the company can initiate this contact. This can be done by phone, e-mail, or during a fair. The platform and the representative of the company will then talk about the project (size, place, global impact) and the need of financing. This will be followed by a financial analysis of the project based on financial documents provided by the project developer. This documentation may change if a corporate finance or a project finance scheme is being used. It will include balance sheets, profit and loss statement and the forecast of cash flows. The crowdfunding platform may also require an overview of all financing sources and insurance. It will look at the DSCR, the previous

results of the company and its debt rate. It is also usual that the crowdfunding platform looks at the environmental impact as well as the technical aspects of the project: total production of green electricity, sourcing of project components and the proper use of the land where the project is implemented.

Fourth, the developer and the platform will agree on the financing terms and edit a contract.

- This contract can be signed between the platform and the project developer or between each participating citizen and the project developer. In both cases, the platform will carry the responsibility of being the representative of financiers. The anticipated exit conditions have to be looked at precisely, especially if bilateral contracts are signed with citizens.
- The project developer may have to sign the General Conditions of Use of the platform.
- Sometimes, the project developer can sign a framework agreement. Under this framework, the developer will be able to use several times the services of the platform in order to develop several projects, with less complex contracts.

Fifth, the project is published online and the platform makes its best to attract citizens. The duration has been set up by the project developer and the platform. If the targeted amount has not been raised at the end of this duration, they may have to discuss about the possibility to extend this duration.

Sixth, when the duration is at its term and the targeted amount of financing has been raised, the crowdfunding platform can transfer it to the project developer. The latter can use it according to the business plan he showed to the platform management.

Seventh, when the project is on-going, the platform can monitor it and require a follow-up. The project developer may have to submit its actualized financial data on a yearly basis. Moreover, it should feed the platform with information that will help the platform communicate about the project to the financiers i.e. the citizens.

External Conditions

Two external conditions should be kept in mind for the project developer: the regulation and the market structure of crowdfunding platforms.

Regulation

A law from November 2014 now structures the market of crowdfunding. A platform needs to choose between two statuses: it can be a Participative Investment Adviser (Conseiller en Investissement Participatif, CIP) or an Intermediary for Participative Finance (Intermédiaires en Financement Participatif, IFP). Both have to be declared to the Organization for the Register of Insurance Intermediaries (ORIAS).

- CIP emits bonds available to citizens, used to finance a project. For one project, this form of platform cannot raise more than 1 million EUR.
- IFP implies raising debt. The financiers have to be physical persons and cannot provide more than one thousand euros each. IFP platforms are now offering the possibility to finance projects to organizations (non-physical persons) thanks to the emission of cash vouchers, without limitation at one thousand euros. This form of platform cannot raise more than 1 million EUR for one project.

Market structure

It is worth noticing that the crowdfunding market is nowadays slowing down. Many platforms exist and they have sometimes difficulties to find projects to finance. In this global environment, platforms that are focused on renewable energy are in good shape. Nevertheless, a movement of consolidation of the market could be a scenario for the coming years.

Example of key players and sources of information

In France, four major crowdfunding platforms are dedicated to renewable energy.

Three are based on a CIP scheme:

- Enerfip: www.enerfip.fr
- GreenChannel: www.greenchannel.fr
- Lumo: www.lumo-france.com

One is based on an IFP scheme:

- Lendosphere: www.lendosphere.com