



Guidelines for Investors in Clean Energy Projects via Crowdfunding

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Aim of this document

Prior to reading this guide, we must warn you. You can lose some or all of your investment capital when investing in renewable energy or other types of projects via crowdfunding. In most EU Member States crowdfunding platforms do not provide financial advice to investors. In some countries like France crowdfunding platforms are by laws adviser to their crowdfunders. Each crowd investor must therefore spend time and effort in researching, analysing and comparing information before making an investment decision.

There is also good news. As part of their efforts to enable investors to make well-informed decisions, reputable crowdfunding platforms will try to present relevant information in a well-documented and comprehensive manner. To navigate around the information, the present guide provides you with a non-exhaustive list of questions, structured in three parts. The first part suggests questions an investor might usefully ask themselves when considering supporting renewable energy projects via crowdfunding. The second part contains potential questions that might be asked of the crowdfunding body, whilst the final part covers questions that might be asked of the renewable energy project developers involved.

Please bear in mind that this guide only addresses debt-based crowdfunding for renewable and energy efficiency projects.

Structure of the document

The guidelines are composed of three parts:

- **part one** presents questions that potential investors should ask themselves to help with understanding their own priorities in terms of crowdfunding needs;
- **part two** then presents questions that investors should ask to crowdfunding platforms to establish clearly what crowdfunding is and what the likely benefits and costs are if using this alternative finance method; and
- **part three** presents a number of question related to the type of project in which to invest.

Part I — Questions to ask yourself as a potential Investor

Crowdfunding platforms provide a range of investment opportunities, but they do not provide advice regarding the investments that best suit your particular investor profile. It is therefore critical to invest time and effort to read, understand and compare alternative crowdfunding platforms and campaigns. It is important to emphasise the need to be honest with yourself and seek expert advice if you do not understand the main features of a particular investment vehicle.

How much time and effort should I devote to research before investing via crowdfunding?

Depending on your skills and experience, it will take several hours to fully understand the potential risks and returns associated with particular crowdfunding projects. For first-time investors, we advise a minimum of three dedicated evenings or the equivalent. Another piece of good advice is to start with a relatively small investment level, one where losses would not be critical; this can be thought of as part of an experiential learning process, with any returns viewed as a bonus. The understanding built up in this context can be used to underpin larger scale involvement in future endeavours.

Do I understand enough about the principles of finance?

A sound understanding of financial principles is indispensable when investing in clean energy infrastructure via crowdfunding. In particular, you should be able to answer questions such as: what is the impact of inflation on your investment? Why are interest rates on your savings account lower? In addition, you should fully understand the key features of any financial instrument you invest in, for example, where the loan stands in terms of subordination. Other important issues to consider are the structural terms and conditions of a particular investment, e.g. the difference between a bullet and redeemable loan, and between a secured and unsecured loan.

Some national regulations define criteria to test the financial literacy of crowd investors. In Germany, for example, such tests are mandatory for any investment above EUR 1000, implemented via the investment process on the platforms. We would advise every investor to take an online or offline financial literacy test to identify potential knowledge loopholes. An example of a financial literacy test is presented in Annex I.

Do I understand enough about the underlying technology?

Renewable and energy efficiency projects are particularly complex to understand because specific interest rates will vary according to (project-type specific) underlying risk. Whilst it is not necessary to have an engineering degree or formal green energy education, you should be able to answer questions, such as: why does a project that is already connected to the grid return lower interest rates than those which are under construction? How long will particular classes of renewable and energy efficiency projects take to generate cash-flows that cover their initial outlay?

Part II — Questions for Crowdfunding platforms

The choice of the right crowdfunding platform can help you mitigate some risks¹ such as risk of failure, outright fraud, liquidity, delayed or non-accumulating returns, ownership and intellectual property protection amongst others. The following questions provide further clarity regarding the extent to which platforms operate professionally and on a trustworthy basis.

How many projects have already been successfully financed by the platform?

A strong track record with prior funded projects is one of the key signs of platform strength. Well-operating platforms will be keen to present information about current and past projects online. Evidence of previous success and healthy on-going growth in activity suggest that a platform is operating on a professional and reliable footing. Financial reports, including detailed income statements and balance sheets, should be available on request.

The track record might not always be clear, particularly if a crowdfunding platform emerged from a project developer or cooperative. In such cases, the crowdfunding website launched may contain details of all previously funded or developed projects. If you are not sure whether the examples shown were financed under the crowdfunding scheme, please ask the platform to clarify.

How many projects paid back their loans and made all interest payments on time?

Not all platforms show the percentage of successful repayments and interest payments, but where this information is available a rate of 90%+ can be taken as a signal of underlying strength.² While delays in interest payments are clearly not a positive signal, this does not - necessarily - imply a significant default rate.

What are the other signs of a good platform?

To get a quick first impression of the 'best' platforms, you should contact the crowdfunding association in your country. Search the internet for conferences that attract favourable comment and feedback, and see which platforms are represented as speakers. Research the patrons and board members of the platforms. Some European countries have investor associations or weblogs.³ You could also consider getting in touch with individuals who have commented on the Facebook page of the platform concerned to explore their opinions in more detail. As for the platforms themselves, questions that go beyond FAQ should be quickly answered via e-mail and direct contact in the form of a telephone call made available.

¹ Nine Risks Associated with Crowdfunding: <http://crowdfund.co/nine-risks-associated-with-crowdfunding>

Invest through Equity Crowdfunding: Risks and Rewards (FB):

<https://www.investopedia.com/articles/investing/102015/invest-through-equity-crowdfunding-risks-and-rewards.asp>

² See Crowdfunding - Statistics & Facts : <https://www.statista.com/topics/1283/crowdfunding>

³ Critical Investor- the finance portal for Germany : <https://www.kritische-anleger.de>

UK Crowdfunding Association: <https://www.ukcfa.org.uk>

The French Crowdfunding Association (Financement Participatif France)

The Spanish Crowdfunding association - <http://www.worldcoo.com/blog/en/the-spanish-crowdfunding-association>

Another sign of a good platform is evidence of a founder and management team's professional background. CVs that indicate several years working experience in reputable financial institutions (and/or renewable energy companies) can signal robust capability in assessing potential investment opportunities in a cost-efficient and accurate manner.

What are the underlying data privacy terms and conditions?

When subscribing as a new user, you must typically agree to the platform's terms and conditions. Please read the agreement you enter with the platform carefully. The agreement shall for example outline what kind of data is collected, how it is used and how it is shared with third parties.

The use of data is particularly relevant when crowdfunding platforms offer integrated payment services. Prior to entering any financial details, please make sure you understand how your data is used. Moreover, please check if your data is encrypted via the use of a secure socket layer (SSL) when sent from your web browser. Encrypted data is more difficult to read data when stolen. However, it does not provide 100% security.

What kind of borrower management services does the platform provide?

Good platforms provide additional services to investors relating to borrower management activities. In particular, once a project has been successfully financed, follow-up reporting is required. This process might usefully include ex-post auditing of the extent to which specific forecasts provided in the project description (e.g. daily, weekly and annual energy productions or energy savings) have been met. As soon as new renewable production capacity is connected to the grid, the borrower should report on its energy production outcomes on a regular basis. Where a project is generating regular energy savings, accurate reporting is also possible and a lack thereof might represent a negative signal. In addition, crowdfunding platforms can check as to whether borrowers keep insurance and other related contract up-to-date; in this context, platforms can request official documents and communicate them to the crowdfunding lenders. Borrower non-compliance should be communicated immediately to the crowd investors.

What is the underlying system of crowdfunding platform regulation in my country?

The report by Osborne Clarke Germany "Review of Crowdfunding Regulation & Market Developments for RES project financing in the EU"⁴ (December 2015) discusses underlying regulation in all EU Member States. You should ensure that any platform being considered for investing through offers the allowed investment products and adheres to all the regulatory standards as outlined in the document. When you set up an account with a platform, the underlying regulation of the platform must be clearly explained. In case of uncertainty, you should ask the platforms to show you their underlying licence or to put you in contact with their legal advisors. Any reluctance to help in these matters on the part of a platform should suggest that more than a little caution is needed.

⁴ "Review of Crowdfunding Regulation & Market Developments for RES project financing in the EU" (December 2015) discusses underlying regulation in all EU Member States at: <http://www.crowdfundres.eu/wp-content/uploads/2016/06/CrowdFundRES-Crowdfunding-RES-Regulation-in-EU.pdf>

What is the dispute settlement process? What happens if the project does not pay interest on time or at all?

As a crowd investor, you enter a direct contract with the borrower (i.e. the project developer, SPV or project owner). Thus, any disputes will have to be settled between the borrower and the crowd investor. Trustworthy platforms offer services for its investors in cases of delayed payments or default and you should investigate these provisions in advance of any financial commitment (these can include penalties for delayed payments in the contracts). Reputable claim management companies (for example, Creditreform or Bürgel in Germany) may be recommended and best practice processes explained as part of the process.

How is the money flow process structured?

It will be worth your while undertaking research about the name of the account into which you will be transferring the money. A key issue in this regard relates to whether the bank account is the crowdfunding website's own or that of an escrow. Professional platforms work with independent escrow services that are fully compliant with national law and regulation. The platform should therefore clearly indicate the name (and underlying regulation environment) of the escrow service.

You should examine the underlying Payment Service Regulation in your country via the aforementioned CrowdFundRES document "Review of Crowdfunding Regulation & Market Developments for RES project financing in the EU." You should, however, also check with the regulatory authority if you are uncertain about the extent of the escrow bank account's compliance with national law.

You should next check the timing of the transfer from the escrow bank account to the loan participant's bank account. Good practice involves the full amount being transferred at the point where a project is fully funded. For repayment and interest payments, the loan participant makes one payment to the escrow bank account, with the money then dispersed to the bank accounts of all individual crowd investors.

What happens if the crowdfunding platform ceases to operate during a project's life?

As a crowdfunding investor you will enter an agreement with the loan participant. If the platform ceases operations during the investment's life you retain the same contractual rights. To ensure that this is practical, the loan participant must be able to demonstrate that another service provider or platform handles the bank transfers. Finding a service provider to handle the transfers is possible in most EU Member States.

Does the platform finance projects they own themselves, or ones in which close relatives are involved?

To avoid conflict of interests and guarantee an unbiased approach, a platform should be able to demonstrate that they do not finance projects they, or family members, own. In fact, the law in

some EU Member States⁵, e.g., the United Kingdom⁶ and France, specifically requires platforms to state any such possible conflicts of interest. The ownership structure of the entity to which you are lending should be transparently displayed on the platform website. Information regarding how the money collected via crowdfunding is used must also be clearly shown, including all relevant costs and salaries. An omission or incomplete display of such information is a bad signal.

Can I visit the project?

Tangibility is a key feature of modern crowdfunding investment. The physical location of all projects should be indicated on the crowdfunding platform. The platforms should facilitate and encourage investors to see the project in action and talk to its owners. A well-functioning platform will also display videos and photos of the project, including its location and pictures of the project owners, as evidence of openness and transparency.

How many projects are currently live on the platform?

Each platform will have its own policy concerning the number of projects running in parallel. Whilst donation platforms such as KIVA crowdfund hundreds of projects simultaneously, platforms facilitating crowd investment in renewable energy typically work with only three or four projects at the same time. Therefore, when you are considering a platform for investing in such projects it is more important for it to be able to show a consistent and continuous flow of successful investments than a large number per se. However, the ratio of accepted projects to application numbers is also important. As a rule of thumb, reputable platforms generally take on less than 5% of the applications they receive.⁷

⁵ European Commission (2016), Commission Staff Working Document: Crowdfunding in the EU Capital Markets Union, SWD (2016) 154 final, Brussels : <https://ec.europa.eu/transparency/regdoc/rep/10102/2016/EN/10102-2016-154-EN-F1-1.PDF>

⁶ United Kingdom Financial Conduct Authority, “Interim feedback to the call for input to the post-implementation review of the FCA’s crowdfunding rule”, FS16/13 December 2016 : <https://www.fca.org.uk/publication/feedback/fs16-13.pdf>

⁷ As evident in the synopsis of “3 Top Crowdfunding Platforms of 2017” at: <https://www.investopedia.com/small-business/top-crowdfunding-platforms>

Part III — Questions relating to projects

The questions set out below are designed to help you assess the potential of specific investments in renewable and energy efficiency projects typically presented on modern crowdfunding platforms.

What are reasonable interest rates and payback terms?

The range of interest rates on crowdfunding platforms for renewable and efficiency projects generally vary between 3% and 10% for 3- to 20-year maturities.⁸ Technologies, maturities and country-specific subsidies and feed-in tariffs are the main drivers. Hence, a PV park installed in 2016 in Germany should deliver similar rates across different projects.

The platform should explain why the project owner offers particular terms. The project should be designed so that the energy savings or energy production involved is commensurate with full amortization of the initial investment. For refinanced projects, the terms of the investment may be different, but it should be possible to examine and calculate the appropriate terms from the published financial plan.

Another important variable is collateral. As with any loan instrument, crowdfunding arrangements can involve property or other assets as security, with borrower failure to pay back the loan triggering monetization. Again as per the capital market as a whole, where collateral is part of the contract, crowdfunding-based interest rates should be relatively low. In this context, you should carefully check the terms and conditions of other loans financing the project – it may be co-financed via a bank loan secured by collateral while the money you invest via the platform is not. Your interest rate should of course be higher than the bank's in such a situation because your risk is unsecured - if this is not the case you should see this as a negative sign.

What information should be covered in the technical report?

Before embarking on a renewable energy project, dependable crowd funders should seek out an independent technical report on the proposed activity and upload it to the relevant project page. Where this is the case, you should consider researching the company that drafted the report to satisfy yourself that they are fully independent from the crowdfunding platform (and the project) and that they have good references.

A meaningful technical report will detail all costs and expected production or energy savings associated with the investment. Specific elements in the report are likely to include (amongst others):

For energy efficiency:

- Instalment costs
- Energy consumption and costs prior to the instalment

⁸ "Crowdfunding for Renewables Attracts Ethical Investors" by Miriam Heale 27 March 2017 Allen & York Pub : <https://www.allen-york.com/blog/2017/03/crowdfunding-for-renewables-attract-ethical-investors>

- Energy consumption and costs after the instalment
- Load profiles of the energy consumers
- On-going costs such as maintenance and insurance fees
- Other possible energy efficiency measures, explaining why they are not part of this project
- Details about installed products, including their reliability over the long-term
- Evidence as to whether a service contract exists, one that ensures all technology will operate reliably over the project's payback period
- Finally, and most importantly – documentary support for all figures, e.g. valid contracts, data sheets, energy bills and valid service contracts (with prices noted)

For energy production:

- All the points mentioned above (except pre-instalment energy consumption and costs)
- Evidence that all necessary permits are in place
- A copy of the rental or purchase agreement for the land where the infrastructure will be built
- An 'Expected production' report, supported by a reliable source such as, in the case of a wind project, one-year wind measurements
- Information regarding the laws which secure energy selling prices, with supporting documents from the authorities
- Selling contracts
- Insurances and guarantees for all equipment

What information should be covered in the financial plan?

In addition to the technical report, each project should supplement its funding request with a comprehensive financial plan. The plan must detail (and explain) all financial costs and returns associated with the project. Assessment of the following elements is vital:

- CAPEX and OPEX over time, including all loan costs
- Energy savings or energy production over the same time period
- The corresponding selling price of the energy produced or saved
- The level of own equity in the project
- Securities that can be monetized in the event of the project failing

How can I get access to information about the company and the people behind the project?

The webpage of the crowdfunding campaign should provide (in an easily accessible manner) a description of the company, plus full contact details, balance sheet and other financial statements, website details and references. Many crowdfunding platforms also provide the name of the owner, together with a video where he/she introduces himself/herself. Additionally you may want to check the project owners' website and ask them for a ratings report on the company. It is in the interest of any professional platform to feature companies that have a good reputation and track record; the best platform should therefore be happy to share any relevant information they have with you.

How can I assess the credit worthiness of the borrower?

The obvious key risk with any lending activity relates to borrower bankruptcy and crowdfunding-based investments in renewables are no different. The following are potentially useful in providing further insights about the credit worthiness of the borrower:

- Annual accounts and supporting documents prepared by a certified accountant and covering at least three years
- Documentary evidence that clearly outlines the ownership of the company
- Credit scores are not always the best indicators, not least because a new company or Special Purpose Vehicle may have been founded to finance, manage and run the project. In this case, there will be no company track record and an element of uncertainty is introduced. If the borrower is an existing company, however, credit scores such as those provided by Creditreform may give useful insights, as long as it is clear how a certain credit score has been reached. In any case, it is worthwhile examining the company's buyer and supplier contracts to check the expected volume and/or price of the energy produced/saved over the lifetime of the project. Equally, it is important to find out whether the supply of feedstock and other important fixed inputs are variable over the lifetime project's life.

Are you investing via a Special Purpose Vehicle (SPV)?

An SPV is a legal entity set up for the purpose of financing a particular project. It allows the project developer to isolate the financial risk and attribute financial returns directly to the investment's infrastructure. It is important to thoroughly investigate the underlying ownership and set up of the SPV; in particular, all rights associated with the SPV should be clear from the beginning. For example, you should check whether the SPV has the power to take on additional borrowing from third parties over the maturity of your loan.

Is the project good for the environment?

Most projects report expected annual CO₂ savings. For energy production, the benchmark is typically average CO₂ per kWh emitted in the nation concerned. This formulation implies a country-specific production mix, i.e. x% coal, x% gas, x% renewables etc. For energy savings, annual CO₂ emissions prior to the new project are relevant.

Factors such as country of origin of the hardware will also play a role. You should be able to access information about where all project materials are produced. For larger-scale renewable projects, reports on the impact on certain fauna and fowl are sometimes provided.

Some projects will also report positive effects on communities and individuals. For example - and particularly in poorer regions, where access to electricity is not common - a solar roof may have a significantly positive impact on people's lives.

Individuals have different standards when judging what is 'good' or 'bad' for the environment. Similarly, crowdfunding platforms and project developers may have alternative perspectives regarding the nature and extent of projects' environmental benefits. For example, some platforms promote biomass projects, whilst others do not. In addition, some platforms prefer small-scale

projects, others large-scale. Our advice is to compare different platforms and projects and pick the one in line with your own beliefs and aims.

What are the critical elements of the contractual agreement with the borrower?

In crowdfunding you enter a direct contractual agreement with the party borrowing your money. In the case of renewables and efficiency crowdfunding, it can be an SPV, the project developer, the contracting party or the project owner. Such legal documents are often signed electronically, but you should first print out the contract, read it carefully and make sure you fully understand the content. A (non-exhaustive) list of items to check in this context includes:

- Contracting party. Who is the entity you are lending the money to? What is their address? Which person represents the entity? What is their title? How can you contact them via phone, mail and email?
- What are your cancellation rights?
- What happens if the fundraising limit has been / has not been reached?
- What are the interest and repayment deadlines?
- How and when will the crowdfunded investment be paid to the contracting party?
- What kind of reporting and documentation will you receive and at what time?
- Are any extraordinary termination rights included?
- What is the applicable legal / jurisdictional framework?

ANNEX 1

The the questionnaire is available in the following link:
<https://www.surveio.com/survey/d/H9M4E6C5T6I2W3I5R>

1 Imagine you invest in a crowdfunding project. The project goes bankrupt. What is likely to happen?

- a) The crowdfunding platforms will pay back the whole amount of my investment.
- b) The project will pay back the whole amount of my investment.
- c) I will lose part or all of my investment.

2 Suppose you invest EUR 1.000 in a renewable project. The duration of the loan is 5 years, but after 2 years you are in need of money. Will it normally be possible to recover this amount?

- a) Yes
- b) No

3 When assessing the riskiness of your investment in an energy project via crowdfunding, which of these two are most important?

- a) The operational, technical and financial risk associated with the crowdfunding website.
- b) The operational, technical and financial risk associated with the energy project.
- c) Both risks are equally important.

4 True or False: Crowdfunding platforms normally put all the money invested into their own bank account before they transfer it to the project.

- a) True
- b) False

5 True or False: The risks of an on-shore wind project in the construction phase are normally lower than for an equivalent project that is already connected to the grid?

- a) True
- b) False

6 True or False: The profitability of a renewable project is normally less dependent on subsidies than is an energy efficiency project.

- a) True
- b) False

7 True or False: Investments in established renewable projects such as on-shore wind projects normally have lower risks than start-ups.

- a) True
- b) False

8 An investment in a solar roof on a school is best characterised as which of the following:

- a) Working capital finance
- b) Project finance
- c) Startup finance

Technical references

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4.0	19/07/2017	Green Crowding; WIP	Sissy Windisch (GC), Pablo Alonso, Silvia Caneva (WIP)
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