

# Renewable Energy Project Developers' Perception of Crowdfunding as a means of project financing

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D2.3: Survey on renewable energy project developers' perception regarding crowdfunding as a means for project financing.

WP2, T2.3

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CrowdFundRES  
*Unleashing the potential of Crowdfunding for Financing Renewable Energy Projects*



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## Technical references

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# Table of contents

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Technical references.....	2
Table of contents.....	4
Introduction and Context .....	5
Methodology .....	6
<b>Design of the survey questions</b> .....	<b>6</b>
<b>Survey dissemination</b> .....	<b>8</b>
<b>Analysis and Results</b> .....	<b>9</b>
<b>Descriptive stats of population surveyed</b> .....	<b>9</b>
Company structure .....	9
Technology .....	10
Size range of the projects .....	11
Geographical coverage .....	12
Countries considered for answering the survey .....	12
Experience with RES projects .....	13
Experience with crowdfunding for renewable energy .....	13
<b>About renewable energy project financing</b> .....	<b>14</b>
Experience with securing finance for RES projects .....	14
Experience of securing finance via bank loans.....	16
Local/ National / Regional / EU funding programs.....	18
Barriers related to RES project finance .....	20
<b>About crowdfunding for renewable energy</b> .....	<b>21</b>
<b>Crowdfunding x Bank Loans x Support Programs</b> .....	<b>25</b>
Difficulty level .....	25
How long it takes .....	26
<b>Conclusions</b> .....	<b>27</b>
<b>Annex I: Survey distribution channels</b> .....	<b>28</b>
<b>Annex II: Survey Questionnaire</b> .....	<b>29</b>

## Introduction and Context

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This report presents the findings of an online survey of renewable energy project developers' perceptions of crowdfunding in the renewables sector, conducted in the second half of 2015 at the European level. It is complemented by two further European level surveys undertaken by the CrowdFundRES consortium at the same time as the survey of project developers' perceptions, one focused on crowdfunding platforms and the other on the general public. In conjunction, these three surveys present an up to date snapshot of the RES crowdfunding sector and will form important inputs to the next stages of the CrowdFundRES project that will feed into the formulation of guideline insights for crowdfunding platforms and RES project developers to help unleash the potential of renewables crowdfunding in Europe. They will also inform policy advice at both national and European level.

The survey was designed to collect the impressions of renewable energy project developers regarding financing through bank loans public funds and crowdfunding, with a focus on perceived benefits, difficulties and potentialities

Crowdfunding is part of the broader "alternative finance market" and involves (social media platform-based) raising of money from individual members of society who are brought together to provide the necessary funding for a specific project. The market in alternative project funding (i.e. outside the normal market for bank lending, traditional venture capital and security-market financing) has grown in the UK alone from £267m in 2012 to nearly £1.75bn in 2014<sup>1</sup>. Within this total, "equity-based" crowdfunding (where shares in a business are sold to investors in its early stages) grew in the UK over the same period by 410% to £84m, with an average amount raised of around £200k; "reward-based crowdfunding" (where individuals donate towards a specific project, with the expectation of a tangible, but non-financial, reward) grew in the UK by 206% to £26m, with an average amount raised of around £4k; and "donation-based" crowdfunding (i.e. where investors donate to provide funding for a charitable project and no tangible rewards are involved) grew in the UK by 77% to £2m, with an average amount raised of around £6k. Whilst the UK continues to dominate the European crowdfunding market, figures for the rest of the EU have also grown for all three types: €120.33m was provided via reward-based crowdfunding in 2014, compared to €24m in 2012; €82.56m was provided via equity-based crowdfunding, compared with €18.4m in 2012; and €16.34m was provided via donation-based crowdfunding compared with €4.3m in 2012.

This report seems particularly timely given the combined effect of recent pressures on the crowdfunding sector in general and European governments' apparent reduction in explicit and implicit support for the renewables sector. In the next section, we will outline the approach we have taken to survey design and methodology. This will be followed by an in depth analysis of survey responses and a discussion of our findings, before we close with some more general remarks on the outcomes of this survey. The complete survey questionnaire is made available in the Appendix.

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<sup>1</sup> Wardrop, R., Zhang, B., Rau, R. and Gray, M. (2015): *Moving Mainstream - The European Alternative Finance Benchmarking Report*. University of Cambridge, Centre for Alternative Finance.

## Methodology

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An initial concept questionnaire was compiled during February and March 2015 through an iterative process led by WIP and involving the lead partners of the other two surveys (UNIDUN, ECN). This concept questionnaire, together with similar drafts from the other two surveys, was tested in moderated feedback sessions conducted at the first project meeting of the consortium in March 2015 to check for relevance of instruments among key stakeholder groups as represented in the CrowdFundRES consortium. Structured feedback gathered from this workshop fed into pilot drafts of the English versions of the three questionnaires, which was implemented on a University of Dundee instance of Survey Monkey and distributed to pilot leads generated through snowballing for volunteers through personal contacts of members of the consortium during April to check for semantic consistency through piloting over a two-week period during which 32 responses were received. Analysis did not suggest more than minor modification and the developers' survey was then translated into French and German and once more piloted for semantic consistency.

### Design of the survey questions

This survey contained a total of 32 questions designed to fulfil the following objectives:

1. Analyse the experience of project developers with RES project financing, considering three methods:
  - a. Bank loans
  - b. Public funding
  - c. Crowdfunding
2. Major gaps and barriers related to RES project financing the have identified.

Input to this survey was sought from renewable energy project developers and other stakeholders relevant to the development of renewable energy projects. The following types of renewable energy project developers were identified:

- **Commercial renewable energy project developers** - private entities that initiate, develop, fund, complete and operate renewable energy projects.
- **Renewable energy cooperatives** - associations of citizens united through a jointly-owned and democratically-controlled enterprise that commits funds to a renewable energy project. This type also includes private partnerships (PPs) involving one or several energy cooperatives and/or one or several commercial project developers.
- **Energy service companies (ESCOs)** - commercial or non-profit businesses providing energy solutions such as designs and implementation of energy savings projects, retrofitting, energy conservation, energy infrastructure outsourcing, power generation and energy supply.
- **Public entities** - municipalities (e.g. a city, town or village and its governing bodies) owning and operating public buildings, spaces and infrastructure as well as municipal energy utilities that supply energy within a certain geographic region. This type also includes public-private partnerships (PPPs) between one or several municipalities and any of the other three types of developers, where each party commits funds.

Other stakeholders not developing projects themselves but closely working with project developers included:

- **Energy Agencies** - national organisations which aim at providing support for research, policy and communication between government and industry. Energy Agencies are engaged in the administration of energy resources, which facilitate project developing in renewable energy.
- **Consultants** – external services providers in the field of project developing in renewable energy.
- **Non - profit organizations** – associations from different sectors of the value chain of renewable energy projects, for example, equipment suppliers and land-owners, which are potential representatives of shareholders in a renewable energy project.

Considering the objectives and the main target groups to this survey, the questions were elaborated in three main sections:

1. Screening/characterization of the project developer;
2. Project developers' experience and impressions regarding RES project financing via bank loans and public funding / support.
3. Project developers' experience and impressions about crowdfunding as a financing method for RES projects.

Financing energy projects depend on many factors combined. The structure itself of the financing scheme will vary upon participants/investors profile, the sources of financing and how the benefits will be distributed. Not only is the project economic feasibility important in terms of future cash flows and technology risks (size, capacity, grid infrastructure, energy resource availability) but other risk factors related to project's location and planning, such as permitting, political interests, economic development and community support, influence in many ways the investment conditions and therefore, the development of a project.

RES projects impose additional finance challenges which are related (among others issues) to variability of the resource availability, volatile regulation environment in Europe, higher capital costs – competitiveness with other sources of energy – and long return timeframes.

Having in mind that RES project financing is a topic that cannot be generalized because it depends on the unique conditions of the project, this survey follows a qualitative approach. This approach aims at collecting perceptions, experience and intentions regarding RES project developing in terms of difficulty levels, degrees of importance, barriers, gaps, perceived potential, as well as advantages and disadvantages. In addition, this survey provides a participative approach, with several complementary open ended responses aiming at providing an opportunity for the respondents to express their ideas freely.

This survey also attempts to analyse regional / national perceptions on RES project financing. During the screening section, respondents were asked to choose one country of which they would consider to respond questions with a specific regional and national scope. The intention behind this is to understand the regional / national / local variations of the different aspects related to financing of RES project in Europe.

## Survey dissemination

The three surveys went live on 15th June 2015, and survey dissemination was vigorously pursued according to a strategically oriented survey recruitment plan (Annex I). All project partners (and therefore representing academic institutions, law firms, crowdfunding platforms and renewable energy firms) disseminated them via their social media networks to ensure that a reasonably knowledgeable sample of the target groups would engage with the questionnaires.

The distribution channels used for reaching the identified types of project developers for collecting the input analysed in this report include:

- European and national associations of renewable energy industry associations that also have commercial project developers as members (e.g. SolarPower Europe, APERe, EWEA)
- Associations of energy cooperatives and citizens communities (e.g. REScoop.eu, REScoop.be, Climate Alliance, CO-POWER and Citizenenergy projects)
- Associations of Energy Service Companies (ESCOs)
- The network of European Energy Agencies (ManagEnergy)
- Conferences attracting renewable energy project developers
- Communication networks and platforms of renewable energy experts (e.g. Leonardo Energy and Solarplaza)
- Partners contacts and social networks

With the objective to widen the dissemination geographical scope, the survey was made available in three languages: English, French and German. The choice of the languages follows the trends of crowdfunding for renewable energy developments, with the largest markets being the UK, France and Germany<sup>2</sup>. The survey aimed at all countries of the EU with the target countries being Austria, Belgium, France, Germany, the Netherlands and the UK.

It is difficult to gauge the exact response rate as we do not know the total number of recipients to all different lists used. We do know that the initial invitation was sent to more than 2500 contacts with a project developer profile (see Annex I), from which 239 users responded to the invitation visiting the survey (9,6% maximum) with 132 of them actually entering the survey space which indicates a response rate of 5.3% maximum.

Out of the 132 active survey respondents, 66 provided significant input, which has been processed to produce this report. From these 66 respondents, 32 responded to all questions of the survey.

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<sup>2</sup> Crowdsurfer & EY (2015): *Crowdfunding: Mapping EU markets and events study*.



## Analysis and Results

### Descriptive stats of population surveyed

The project developers who have answered the survey were characterized considering the following aspects:

- Company structure
- Renewable energy technology expertise
- The size range of the projects
- The geographical coverage of their activities
- Experience in RES development
- Previous experience with crowdfunding

#### Company structure

Number of answers	
Limited company	37
Cooperative	8
Energy service company (ESCO)	6
Public entity (e.g. municipality)	3
Other	12
<b>Total</b>	<b>66</b>

Others:	
Energy Agencies	2
Non-profits	6
Consultants	2
Corporation	1
Not identified	1

Social enterprise	1
Associations	4
Not identified	1

The targeted groups for this survey are the main actors from RES project developing activities, such as commercial project developers, renewable energy cooperatives, municipalities and ESCOs.

The survey has reached all its main target groups with a balanced distribution of the participation of different actors involved, where most of the survey respondents (37) represent privately owned commercial developers, within the category “Limited company”. The survey also reached 8 cooperatives, which is an important target group for RES project developing with crowdfunding. Energy cooperatives represent important forms of local community based ownership of renewable energy projects. The cooperative concept often shares similar principles with the crowdfunding concept and has a complementary potential when it comes to RES project developing.

Six respondents have identified themselves as an ESCO. ESCOs are also a relevant target group in this survey, since the central scope of their activities are compatible with the profile of crowdfunded projects. ESCOs are normally associated with the developing of small and medium scale sized projects that have the potential to bring revenues/savings, for example, solar thermal, solar PV in combination with energy efficiency measures.

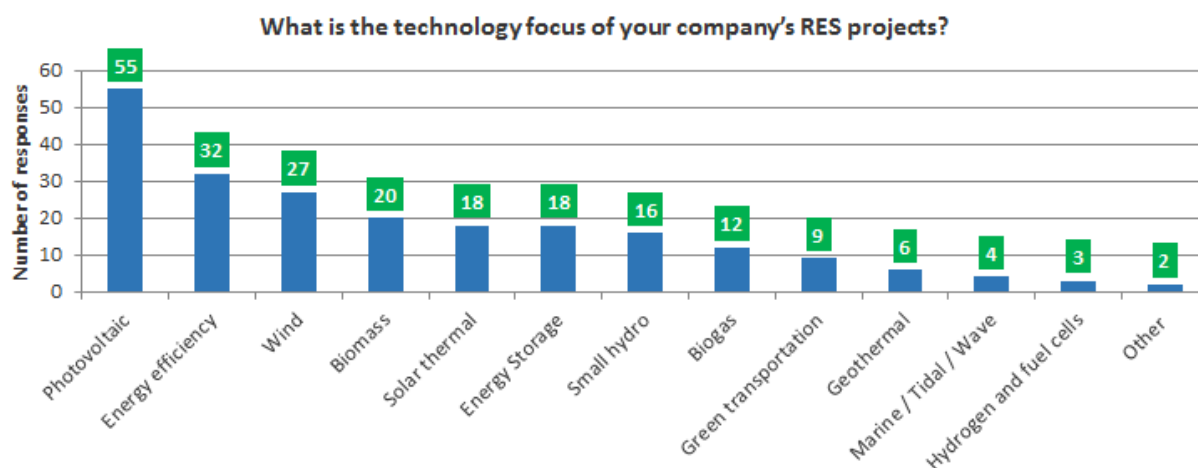
In the “Others” category, project developers represent different groups such as energy agencies, international and non-profit organizations as well as consultants. Six respondents have claimed to be a

non-profit and have further identified themselves as one social enterprise and four associations, for which one is a farmers' association. Farmers are often land owners with the potential of using their land for hosting RES projects.

Although with a smaller representation, three respondents from public entities have replied to the survey. Their view is important to us because public entities have roles in different stages relevant to RES project developing, for example:

- As one party in energy provision, e.g. generation, transmission, distribution or operator.
- Elaborating policy, regulation and incentives.
- Being the control authority for permitting and licensing, construction, performance and security regulation.
- Promoting and engaging the community.
- A direct beneficiary in RES projects for public use.

## Technology



In this question, the term technology refers to different sources of renewable energy generation as well as to different kinds of projects such as energy efficiency and green transportation.

The range of different technology expertise covered in this survey is quite wide. Around 80% (55) of the respondents of this question are involved in PV project developing. Besides PV, energy efficiency and wind energy are among most of the project developers' capabilities. The category "Others" includes the involvement of two respondents in smart grid projects, clean coal and clean gas technologies, which involve approaches that mitigate emissions of carbon dioxide.

Although a technology focus seems to be apparent for PV projects developers, it is important to note that most of the developers who answered this survey work with a portfolio of different technologies. It is unknown to the extent of this survey results what is the share of project expertise of each company here represented. A few facts about the mix of project types covered in this survey:

- From the 37 privately owned companies (Limited company):
  - 29 develop PV projects,
  - 13 develop wind projects,
  - 13 develop energy efficiency projects.
  - 11 develop energy storage projects.
- From 8 cooperatives:

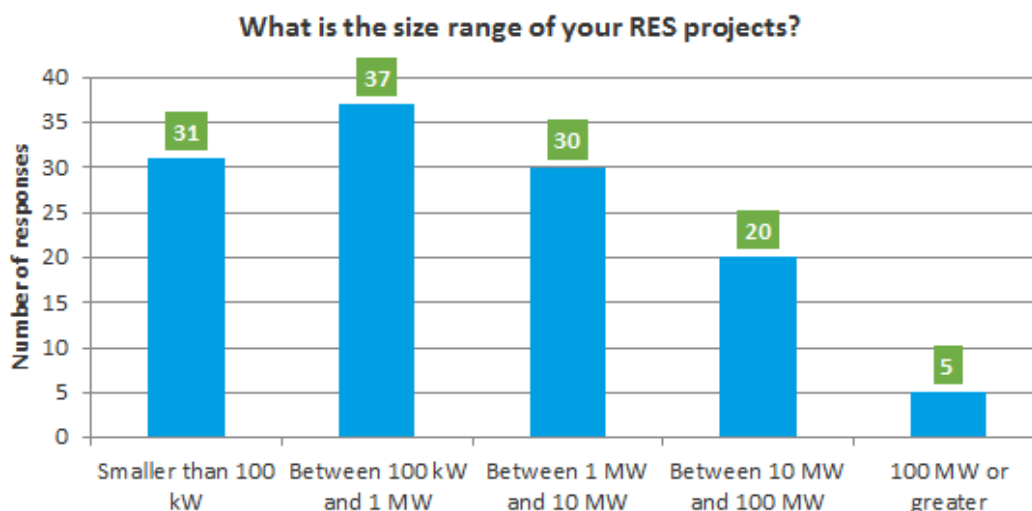
- All work with PV projects.
- 6 work with wind projects.
- 6 work with energy efficiency projects.
- 4 work with Biogas.
- All of the wind developers also work with PV.
- About 90% of energy efficiency project developers also work with PV projects.

The involvement of project developers with experience in renewable energies technologies with lower levels of market uptake, such as geothermal (6), and marine / tidal / wave (4), and hydrogen and fuel cells (3) might be worth to consider for further exploration by both project developers and crowdfunding platforms in terms of innovative financing mechanisms: could crowdfunding fill the gaps as an alternative and viable financing method in order to improve competitiveness of these sources?

This could be beneficial for the crowdfunding platforms to shape innovative investment tools which could fit with their interests of broaden their scope of projects and attract more project developers' and investors.

### Size range of the projects

The project developers who answered the survey have experience with projects with a wide range of sizes, with the majority having developed projects under 10MW. More than 50% however, have developed projects between 100kW to 1MW.



The size scale of a RES project influences the volume of necessary investment, affecting directly the suitability of the project for different types of investments models, including crowdfunding. Larger projects require larger investments volumes which are more accessible by traditional financing via banks. On the other hand, medium to small scale projects are harder to be financed by banks and this is the case where crowdfunding holds great potential for offering investment solutions. Another important factor influencing financing is the regulation and respective financial incentives policies which vary accordingly to project's capacity.

## Geographical coverage

Respondents were asked where their companies are active and allowed to select as many countries as they would like to. Therefore, the answers provided a good indication that the survey covered a broad geographical scope of project developer's activities.

The project developers who responded to this survey are active in most of the EU28, except for Cyprus, Lithuania and Slovenia. In the "Others" category, respondents claimed activity in parts all over the world, with focus on Middle Eastern countries, South America and Africa.

Activities involved in RES project developing have become in the recent years a quite dynamic and expanding market, especially overseas. For that reason, it is possible to observe a tendency for global operations from the results of this question.

The UK and France are the countries with the largest shares of representation in the survey. Significant input was also given from Ireland, Belgium, Spain, Germany, Italy and the Netherlands.

## Countries considered for answering the survey

Respondents were then asked to follow up the survey by selecting one country of which they would consider to respond questions with a specific regional and national scope. The intention behind this question was to understand the regional / national / local variations of the different aspects related to financing of RES project in Europe approached in this survey.

Our goal was to cover the main crowdfunding and renewable energy markets in Europe, since little data is available on the market of crowdfunding specifically for renewable energy.

The distribution of the countries selected for answering the survey is similar with the geographical coverage of developers' activities. The main represented countries are still the UK, France, Ireland, Belgium, Spain, Germany, Italy and the Netherlands, which are among the EU leading markets in renewable energy. The UK, France, Germany, the Netherlands, Italy and Spain are also between the largest crowdfunding markets, considering the number of active crowdfunding platforms and raised investment<sup>3</sup>. The share of "Others", however, has changed from 15 to 4 which allow us to narrow down more precisely the boundary for European level responses for the survey as an aggregate result. In addition, it is possible to narrow down to national level the specific opinions expressed by the respondents.

Number of responses			
<b>United Kingdom</b>	<b>16</b>	Portugal	4
<b>France</b>	<b>15</b>	Austria	3
<b>Others</b>	<b>15</b>	Bulgaria	3
Ireland	10	Croatia	3
Belgium	9	Luxembourg	3
Spain	9	Estonia	2
Germany	8	Hungary	2
Italy	8	Latvia	2
Netherlands	8	Poland	2
Sweden	6	Czech Republic	1
Finland	5	Denmark	1
Romania	5	Malta	1
Greece	4	Slovakia	1

Selected countries	
France	9
Ireland	7
Belgium	5
Germany	5
Spain	5
United Kingdom	5
Italy	4
Netherlands	4
Other	4
Greece	3
Sweden	3
Croatia	2
Bulgaria	1
Estonia	1
Latvia	1
Slovakia	1
<b>Total</b>	<b>60</b>

<sup>3</sup> Crowdsurfer & EY (2015): *Crowdfunding: Mapping EU markets and events study*.

## Experience with RES projects

Has your company implemented a RES project in the specified country?	
Yes	37
No	6
Currently planning to build a RES project	12
Tried to build a RES project but gave up	3
<b>Total</b>	<b>58</b>

Not all respondents are experienced project developers or have actually been involved in project developing. From the ones who have responded “No” to this question, 2 are associations and 4 are commercial organisations, which could be that they are starting their activities, but also, it could mean they are involved in developing RES projects only indirectly.

The 12 who have responded that they are currently planning to build a RES project in the selected country are part of a combination of commercial companies, cooperatives, non-profit organisations and ESCOs.

Three project developers in this question claimed not to have been able to conclude a RES project in the specified country: Croatia, Spain and Belgium. When further investigated about the reason for giving up, most of the answers involved bad experience with local bureaucracy and uncertainty regarding legislation.

Finally, 37 respondents have confirmed previous experience in implementing a RES project in the selected country. This particular result confirms the inclusion of the main target group in this survey which are the commercial organisations directly involved in the RES project developing. However, the other 21 respondents who have not been involved in RES project developing also represent an important perspective of different backgrounds and experiences related to RES project developing which also have the potential to bring useful input.

## Experience with crowdfunding for renewable energy

All of respondents are familiar with crowdfunding and most of them are capable of relating it to RES project developing although they have never used it. Out of 42 respondents to this question, 8 are not aware of the possibility of using crowdfunding as a RES project financing mechanism.

How familiar are you with Crowdfunding?	Total
What is crowdfunding? (No knowledge)	-
I've heard about it, but what does it have to do with RES project financing?	8
I know crowdfunding, but I have never used it for financing any part of a RES project.	26
I know crowdfunding and I have used it for financing at least a part of a RES project.	8
<b>Total</b>	<b>42</b>

The survey reached a few developers with experience in crowdfunding for renewable energy, which in total represent an exact number of 8 out of 42 project developers' responses. Further in this report, their responses will be analysed in more detail.

## About renewable energy project financing

This section of the survey corresponds to the questions regarding RES projects financing. The objective was to analyse what are the perceptions of project developers in RES project financing as well as identify some of the biggest gaps.

In some countries, there are requirements for projects to have a define proportion of equity capital and project developers were asked about this. These requirements vary significantly not only from different regulations, but also from business to business and case by case circumstances.

The equity percentage required by a developer is a strategic decision usually made based on risk assessments. Therefore, the reason behind this question is to understand what percentage developers are usually willing to cover by themselves in order to see if there's space for crowdfunding.

Is there a requirement for your project to have a defined proportion of equity capital in the specified country?	
No	35
Yes	20
<b>Total</b>	<b>55</b>

Most of respondents replied that there are no such requirements regarding this, because this is related to each project's investment profile. The respondents, who answered "yes" for their respective country, were asked to further indicate the percentages of required equity capital in RES project financing.

Ranges	Number of answers
10% - 20%	8
21% - 30%	4
31% - 40%	4
More than 40%	3
Skipped	1
<b>Total</b>	<b>19</b>

The results show higher number of responses between 10-20% and up to 40%. This indicates that there is a potential for crowdfunding to fill this requirements. However, care should be taken, since the share of equity of a project does not only depend on local regulation, but it depends on the financing structure of the project.

### Experience with securing finance for RES projects

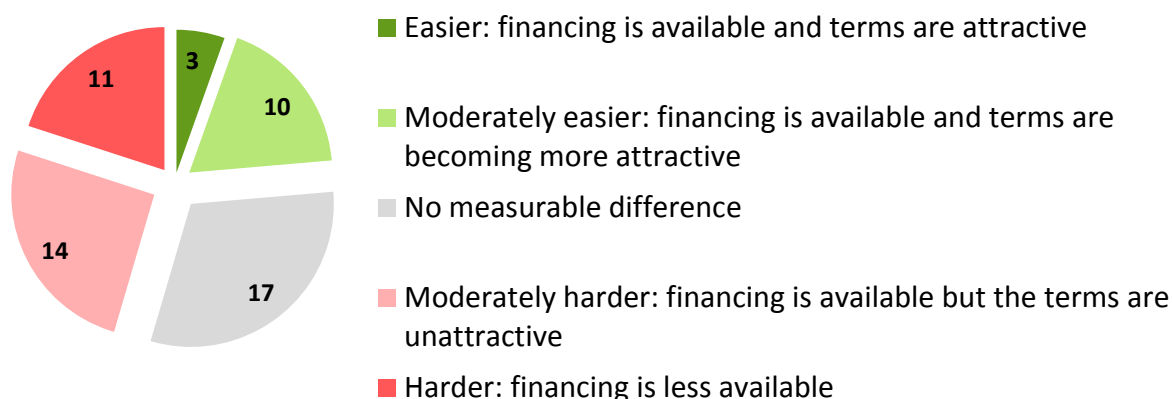
Survey participants were also asked to assess any perceptible changes in securing finance for RES projects in the short term for their selecting countries. This question aimed at collecting a general trend for financing RES projects in the EU in the view of project developers. The objective was to understand the potential scenario for crowdfunding to play a role as an alternative financing method.

The RES market and therefore its sources of financing are sensitive to policy and regulatory signals. RES policy has been changing drastically for the past 10 years and we would like to detect how RES project

financing can be dependent on short term changing in financing / policy context. In a further step, these results will be combined with the annual report on crowdfunding and energy regulation also being developed under the CrowdFundRES project.

It is possible to observe that 25 respondents believe that in the short time obtaining finance for RES projects has become harder, whereas 13 believe it has improved. A large portion remained neutral (17), claiming no measurable difference within the past year.

**Which option best describes your experience of securing finance for your RES projects now, as compared to 12 months ago in the specified country?**



In order to further analyse this result, a breakdown by country has been performed, visible in the following table.

	Easier	Moderately easier	No measurable difference	Moderately harder	Harder	Total of answers per country
Belgium	-	1	3	-	-	4
Bulgaria	-	1	-	-	-	1
Croatia	-	1	-	1	-	2
France	2	4	1	-	2	9
Germany	1	1	1	1	2	6
Greece	-	-	-	1	2	3
Ireland	-	1	2	3	1	7
Italy	-	-	1	1	2	4
Latvia	-	-	1	-	-	1
Malawi	-	-	1	-	-	1
Netherlands	1	-	1	-	1	3
Slovakia	-	-	-	1	-	1
Spain	-	-	2	3	-	5
Sweden	-	-	2	1	-	3
United Kingdom	1	-	1	2	1	5
<b>Total</b>						<b>55</b>

The difference in responses for the same countries is associated to the subjectivity of the question and the individual experiences from project developers. Rules change for each different project depending on technology, price, project's scale, investment's size and profile of investors.

An important issue here is to comprehend what makes the financing environment so volatile for RES projects. Further analysis is necessary to understand variations of perception between countries for example:

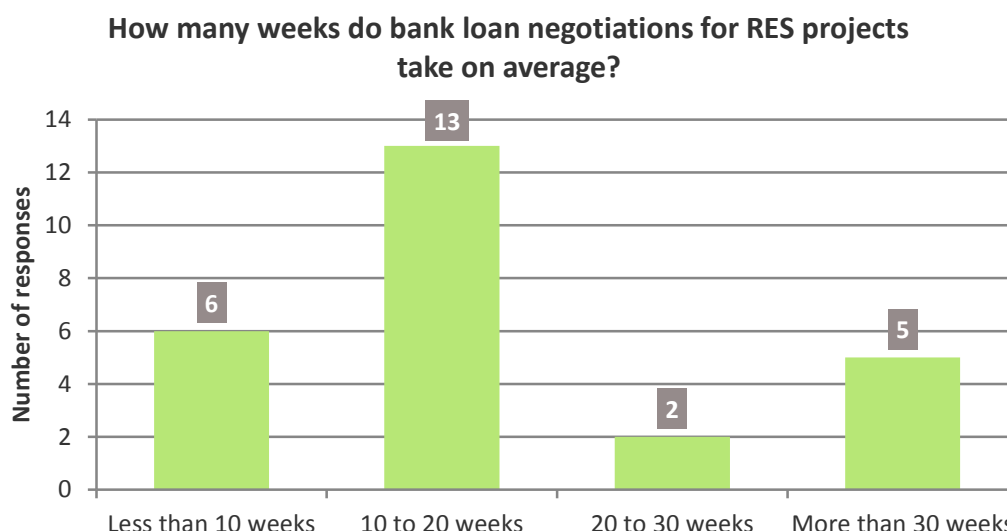
- About France, 6 out of 9 express financing to be easier, at the same time 2 expressed it to be harder.
- For Germany, 2 out of 6 believe financing to be easier while 3 believe it to be harder.
- In Ireland, 4 out of 7 agree financing is harder in opposite to 2 who claim neutrality and 1 a moderately easier scenario.

### Experience of securing finance via bank loans

The questions in this section aimed to obtain a qualitative perspective of project developers in financing RES projects through bank loans. The majority of project developers who took the survey have experience in obtaining bank loans for RES projects.

Have you ever used a bank loan for financing your RES projects?		
	Yes (27)	No (16)
Limited companies	18	8
Cooperatives	4	4
ESCOs	3	-
Public entity	-	2
Energy Agency	-	1
Association	1	-
Corporation	1	-
Social Enterprise	-	1

In order to obtain a comparison of the duration of the different financing process evaluated in this survey, the developers who had experience with financing RES projects via bank loans were asked to insert how many weeks it takes to conclude the process on average.



Project developers were asked in sequence about the level of difficulty in getting bank loans. More than half of the project developers (27 out of 46) agree that it is currently difficult to obtain bank loans for RES projects.

### For the specified country - It is currently



**difficult to get back loans for RES projects:**

Strongly Agree	12
Agree	15
Neither Disagree nor Agree	12
Disagree	7
Strongly Disagree	0
<b>Total</b>	<b>46</b>

As the table presents, 12 have demonstrated neutrality, while 7 disagree to the affirmation and none of the respondents selected "Strongly Disagree".

There is no apparent difference in terms of difficulty perceptions between those with concrete experience with bank loans and those who have claimed not having used bank loans for financing. As the following table disaggregates, many have showed neutrality to the affirmation and in both cases more have agreed to the fact that is currently difficult to finance RES projects via bank loans.

**For the specified country - It is currently difficult to get bank loans for RES projects:**

	From those who have used bank loans:	From those who have <b>NOT</b> used bank loans:
Strongly Agree	5	5
Agree	9	4
Neither Disagree nor Agree	6	5
Disagree	6	1
Strongly Disagree	0	0
Skipped question	1	1
<b>Total</b>	<b>27</b>	<b>16</b>

Project developers were also asked about their impressions on banks having negative biases on RES projects, for example due to challenges that result in high financial risk, for example, unforeseeable development issues and reliability of technology.

**Do you think that banks in the specified country have biases against renewable energy projects?**

No	13
Neutral	19
Yes	15
<b>Total</b>	<b>47</b>

More than one third of the respondents to this question answered yes and the reasons why are related to their individual experience according to the further explanations given by some of them during the survey.

Most of them mention the limited knowledge of bankers in RES in order to properly assess risks. Another aspect frequently said is that banks are negatively biased due to the high uncertainties caused by the constant changes in the RES legal framework and low support from governments financially.

Some respondents provided feedback to local issues. More specifically for example, respondents from Greece mentioned the role that the current financial situation plays in contributing to the increase in the opposition of the banks in offering loans for RES projects.

Input from Ireland attempts for biases against small community projects, for example in the case of renewable energy cooperatives. Besides a general lack of training and qualification about renewable

energy and the risks of a project, they also claim that the process has some extent of political interference.

In Italy it is mentioned that there is a larger necessity for warranties when it comes to RES projects: “Although banks have generally developed, in previous years, specific products for renewable projects, they tend not to encourage their use and suggest instead the use of standard financial products with high cost and ask for a large support of customer warranties.”

**Ireland** Biased against small community owned projects (RESCOOPs), due to lack of knowledge of risks and political interference.

**Spain** High financial risk and low government support. It depends on the developer and of the project characteristics, since no FITs are in place the ROI is low. The uncertain legal framework contributes for projects being not attractive.

**Germany** Bankers have limited knowledge of RES. High financial risks and no support in the development of innovative ideas or research.

**Sweden** With the present low market situation for renewables

**Italy** High risk and low guarantees. Although banks have generally developed, in previous years, specific products for renewable projects, they tend not to encourage their use and suggest instead the use of standard financial products with high cost and ask for a large support of customer warranties.

**Croatia** Lack of knowledge and current trends. .

**Greece** The "new deal" imposed by the Greek government along with the great delay (~8months) in payments, have created an opposition, not only from the investors, but from the banks as well.

**France** Changes in legal framework very often leading to uncertainty and risk.

### Local/ National / Regional / EU funding programs

In this part of the survey, the questions aimed at identifying available sources of public funding and the project developer's perceptions about it.

Have you ever received support from local / national / regional / European programs for financing a RES project?	
No, I have never attempted.	9
No, I attempted but was not successful.	7
Yes	10
<b>Total</b>	<b>26</b>

From those of who answered “Yes”, here is the list of existent regional support programs for RES mentioned in the survey per country:

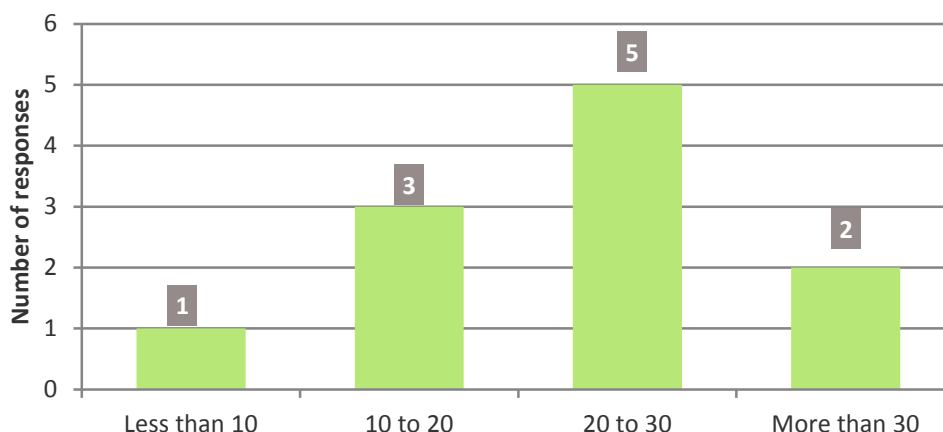
<b>Netherlands</b>	<ul style="list-style-type: none"> <li>• Stimulation of Sustainable Energy Production (SDE+)</li> <li>• TKI (annual budget available to provide financial aid for innovative projects in renewable energy)</li> </ul>
<b>Germany</b>	<ul style="list-style-type: none"> <li>• Germany Renewable Energy Act (EEG)</li> <li>• Grants from the Federal Ministry for Economic Affairs and Energy</li> </ul>
<b>Italy</b>	<ul style="list-style-type: none"> <li>• Tax deduction of the total cost for natural persons.</li> <li>• Feed-in Tariffs</li> <li>• Conto termico: partial reimbursement of expenditure for thermal energy production projects.</li> <li>• Tenders issued by local public administrations.</li> </ul>
<b>Croatia</b>	<ul style="list-style-type: none"> <li>• Business Innovation Croatian Investment Agency (BICRO)</li> </ul>
<b>Spain</b>	<ul style="list-style-type: none"> <li>• JEREMIE energy</li> </ul>
<b>France</b>	<ul style="list-style-type: none"> <li>• Fond Chaleur</li> <li>• Fonds BEI</li> <li>• Subventions françaises Bercy DG Trésor, programme</li> <li>• Agence française de développement local</li> <li>• Fonds Régional d'Excellence Environnementale Poitou-Charentes (FREE)</li> <li>• OSEO - ADEME</li> </ul>
<b>Ireland</b>	<ul style="list-style-type: none"> <li>• SEAI grants</li> </ul>
<b>Europe</b>	<ul style="list-style-type: none"> <li>• Horizon 2-2-</li> <li>• European Regional Development Funds (ERDF)</li> </ul>

The majority of the respondents of this question (16 out of 26) have never obtained funding via support programs from regional authorities. The reasons for the low adhesion in local support programs can be related to the difficulty (or impression of being difficult) in obtaining the funding. Project developers with experience with support programs have a more positive view on the difficulty of the process.

Have you ever received support from local / national / regional / European programs for financing a RES project?			
	No, I have never attempted.	No, I attempted but was not successful.	Yes
Very Easy	0	0	0
Easy	0	1	4
Neither Easy nor Difficult	2	2	4
Difficult	0	4	2
Very Difficult	2	0	0
Skipped questions	5	0	0
<b>Total</b>	<b>9</b>	<b>7</b>	<b>10</b>

Regarding the duration of the process in obtaining support from EU or local programs, most of the project developers with experience in this kind of financing mechanism replied to be difficult to evaluate, since it varies quite significantly or because they did not have the access to this information. From the rest, it is possible to see that the majority says it takes about 20 to 30 weeks.

**How many weeks did it take until this public fund was made available to you for financing your project?**



### Barriers related to RES project finance

Following the assessment of project developers' experience with bank loans and regional support programs, the survey questions focus on the barriers in securing finance for RES projects. When asked about the main obstacles, project developers ranked the issues listed below in the following graph, from different levels, from "Very important" to "Very unimportant".

The following table only shows however the ranking of the issues according to what the majority of the project developers have chosen. In conclusion, uncertainties involving policy framework, infrastructure such as the grid access as well as over planning and consenting processes represent the major obstacles.

Uncertainties over policy framework relating to incentives or support mechanisms	1
Uncertainties over securing the necessary infrastructure including grid access	2
Uncertainties over planning and consenting processes	3
Uncertainties over securing a satisfactory offtake / Power Purchase Agreement	4
Uncertainties over the availability of other sources of funding to sustain the company's growth plans	5
Too much documentation required in order to process the loan request	6
No low interest loans provided by state owned or private banks	7
Too much equity capital required	8
Uncertainties over securing a satisfactory EPC / Turnkey / O&M contract, level of defect and performance warranties	9
Interest rates are too high	10
Due diligence requirements including deal timetable	11
Inappropriate size of your request (project too small)	12
Inexperienced management team (no track record)	13
Uncertainties over technology performance	14

Survey respondents were also encouraged to explore further the barriers and bottlenecks related to project finance and leave their own remarks in an open response field. Their visions on the main barriers regarding RES project finance could be summarized in the following:

- Cost-competitiveness with other sources of energy.
- Uncertainties regarding support schemes and RES incentives.
- Lack of knowledge in renewable energy.
- Lack of incentives.

<b>Bulgaria</b>	“Uncertainties regarding support from EU and other sources.” “Still conventional energy is cheap”
<b>France</b>	“Uncertainties over FITs in the future.” “Complexity and timetable of banks' due diligence.” “Constant changes to legal framework for FITs. “ “Equity requirements of legal framework.”
<b>Germany</b>	“Bureaucracy in many institutions.” “Lack of expertise in renewables.”
<b>Greece</b>	“Regulation” “Lack of knowledge”
<b>Ireland</b>	“Lack of knowledge of RESCOOPs.” “No FITs for small scale generators.” “No government support.” “Uncertainty in policy.”
<b>Italy</b>	“Legislation and rules on energy distribution for private Smart micro Grid.” “Competition from existing utilities.” “Politics compromised with fossil fuels industry.”
<b>Latvia</b>	“Lack of knowledge about Energy Performance Contracting and ESCO.”
<b>Netherlands</b>	“Obtaining equity.”
<b>Spain</b>	“Policy and legal framework are not stable.” “Equity capital and guarantees required.”
<b>Sweden</b>	“Farmers’ lack of market and customer focus.” “Low quality business models and market plans.” “Equity capital for larger plants.” “Uncertainties concerning future legislation.” “Low energy prices and competition from other energy sources.”
<b>United Kingdom</b>	“High interest rates.” “Technology performance warranties.”

## About crowdfunding for renewable energy

The questions in this section aimed at collecting the perception about crowdfunding for RES projects from developers who answered that they have already used crowdfunding.

How familiar are you with crowdfunding?	Total
What is crowdfunding? (No knowledge)	-
I've heard about it, but what does it have to do with RES project financing?	8
I know crowdfunding, but I have never used it for financing any part of a RES project.	26
I know crowdfunding and I have used it for financing at least a part of a RES project.	8
<b>Total</b>	<b>42</b>

The results of this question show that project developers are aware of crowdfunding. Zero project developers have replied not having knowledge about crowdfunding. This is a positive result because it shows that the concept of crowdfunding is already known by the respondents.

However, 8 project developers would do not relate crowdfunding as an actual mechanism for financing of RES projects. A good sign is that, even though the majority (32) has never used crowdfunding, 26 are aware that this could be used as a method of financing RES projects, although they have never used as such.

The results of this question cannot be extrapolated to a larger number of project developers, because the sample obtained here is likely not representative of the real population. The dissemination efforts were performed for this survey included a dedicated effort to collect input from project developers who have used crowdfunding. In reality, we believe the proportions of project developers with familiarity with crowdfunding are much smaller.

Of those who have experience with using crowdfunding as a source of RES financing, their countries were:

- Netherlands
- Germany
- Sweden
- Spain
- France

Also, from the 8 organisations that have used crowdfunding involve:

- 3 private companies
- 2 cooperatives
- 1 public entity
- 1 association
- 1 no-reply to type of association

All of them have project sizes in the range of 100kW – 1 MW, but also work with projects of larger and smaller sizes depending on the organisations.

The mix of technology covered by these organisations is also quite diverse. The majority works with PV and Energy Efficiency; however, they have claimed to work with several other technologies, such as storage, biomass and wind.

The project developers who have used crowdfunding have experience with both equity-based crowdfunding (contributors become shareholders in the project) and debt or lending based crowdfunding (contributors receive interest on amount lent). One developer mentioned having participated in a compensation based crowdfunding campaign, namely Sweat Equity, for a project aiming at developing a new technology.

**How difficult did you find the process of crowdfunding your RES project?**

Very easy

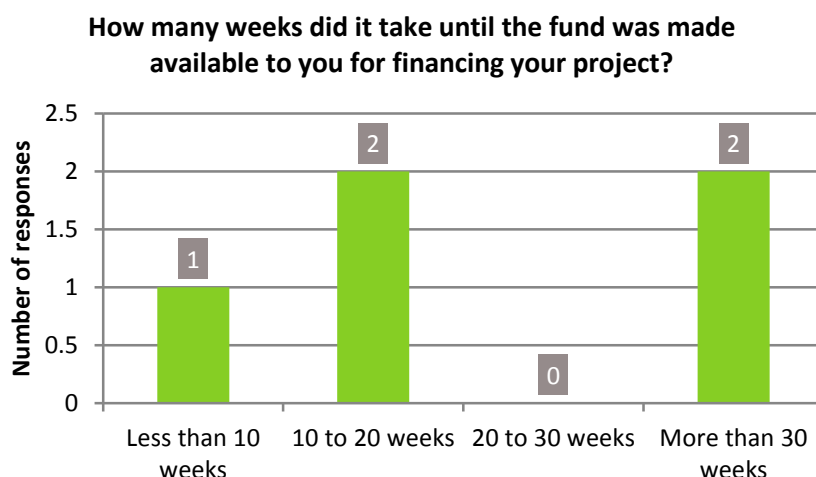
3

Easy	3
Neither Easy nor Difficult	1
Difficult	1
Very difficult	0
<b>Total</b>	<b>8</b>

Most of the project developers had positive experience with crowdfunding. According to RES project developers who have used crowdfunding, the main advantage of this financing mechanism is related to the facility and the time length of the process (see table below). According to 2 project developers, crowdfunding made financing easier and faster. Also, crowdfunding helped to improve the project visibility in terms of public acceptance. Regarding the costs, some of the respondents seem quite divided: one believes it was cheaper, but one believes it was more expensive.

Answer Options	Total
It delayed the implementation of the project	0
It made the permitting process faster	0
It made the permitting process slower	0
It reduced local public opposition of the project	1
It made financing easier or faster	2
It was cheaper than traditional financing	1
It was more expensive than traditional financing	2
Other (please specify)	0
<b>Total</b>	<b>6</b>

The differences related to costs of crowdfunding are associated to the individuality of each project and country. Costs vary from case to case and depend on many factors associated to investment risks and expected return from the investors. Trying to understand these factors will be part of the following project activities.



Out of 8 project developers with crowdfunding experience, five have replied the following question regarding the time length to obtain the funding. One developer mentioned his project to take 8 weeks for being funded and other two participants have responded saying it took about 12 weeks, while another one mentioned 40 weeks.

One cooperative described a campaign that lasted for 10 months which was organized by them and not via a crowdfunding platform. The rest of the respondents mentioned the campaign to be ongoing or that this information was not available.

When asked about their overall experience with crowdfunding for RES financing, project developers are positively in favour of repeating the experience and recommend it. Seven would consider using it again and one claimed "Undecided". This question was also asked to all of the project developers' survey participants, as presented in the next table.

Would you consider using crowdfunding for financing your project (again) in the future?	
Yes, definitely.	16
Yes, maybe.	12
Undecided.	2
No, I don't think so.	1
No, definitely not.	1
<b>Total</b>	<b>32</b>

Participants were further encouraged to explain why they would or would not use/recommend crowdfunding for RES projects. The reasons given are:

"Crowdfunding is the perfect way to connect people in the area of the RES project."

"Easy way to raise money from people that are willing to invest (and have the money) at low interest rates."

"As alternative and faster finance device."

"It is a great alternative to the common financing options."

"Less loans available in the financing banks."

"Crowdfunding could be used to promote renewables in regions that they lack electricity, better than private investments..."

"Very limited financing alternatives."

"Need of a decentralization policy for energy production and a new appropriation of RES power plants by citizens: "energy by people for people"."

"We already have the full infrastructure set up. Very low cost of obtaining the money. Investing means more involvement from our members."

"It's a good way to get people in the community involved in the process as well as opening the process to other people across Ireland."

"Community buy in."

"New laws allow easier equity funding from unaccredited investors."

"Facilitates local public acceptance of projects, including wind power, involving the local population."

"Facilitates financing from own funds in projects."

"Contributes to the citizen energy transition."

"To promote local acceptance and raise equity cheaper than current market conditions."

"Increase local acceptance - reducing the required equity interest."

"Interesting approach."



The reason for not using crowdfunding from one of the respondents was related to one of the stakeholder of RES project developers, the land owners:

“Farmers are generally sceptic against involving Equity capital and loans to develop new business”

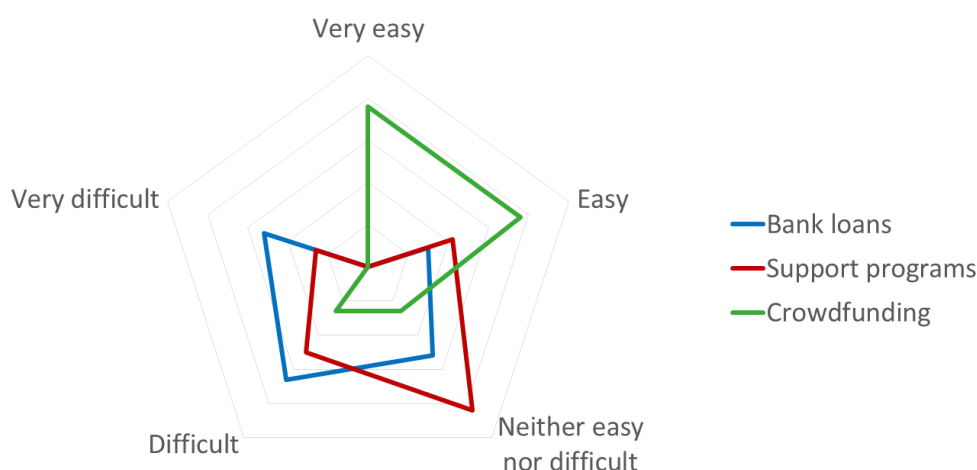
## Crowdfunding x Bank Loans x Support Programs

In this section, we make a comparison between the different financing mechanisms approached in this survey in terms of the project developers' impressions on difficulty levels and their data provided for duration of the financing process.

### Difficulty level

The summary of the answers regarding the difficulty level of each type of financing mechanism is shown in the following table and graph. The integer values in the table mean the number of responses for each item. The fractions inside the parenthesis mean the index: number of responses / total of responses. Although there is different amount of responses and perhaps too low of a sample to withdraw concrete conclusions, the index provides us with a notion of proportion.

<i>How difficult did you find the process?</i>	Bank loans	Support programs	Crowdfunding
Very easy	0 (0.00)	0 (0.00)	3 (0.38)
Easy	7 (0.15)	5 (0.21)	4 (0.38)
Neither easy nor difficult	12 (0.26)	10 (0.42)	1 (0.13)
Difficult	15 (0.33)	6 (0.25)	2 (0.13)
Very difficult	12 (0.26)	3 (0.13)	0 (0.00)
<b>Total</b>	<b>46 (1.00)</b>	<b>24 (1.00)</b>	<b>8 (1.00)</b>



Apparently, there is a positive reaction from those with experience in crowdfunding regarding the easiness of the project, although with exceptions. For bank loans and support programs, zero project developers affirmed to be “very easy” and more respondents have identified the process as difficult or very difficult. On the other hand, the answers for crowdfunding show a different trend; more respondents have identified the process to be easy or very easy, while no project developers have

identified it to be “very difficult”. For support programs, there could be an indication that perhaps they are easier than bank loans, due to a larger proportion of neutral answers.

### How long it takes

It was investigated during the survey how long it takes for each of the financing mechanisms to be completed in the experience of the project developers. In the table below, the integer values in the table mean the number of responses for each item. The fractions inside the parenthesis mean the index: number of responses / total of responses.

No concrete conclusion can be taken from this comparison. Although one of the main advantages cited for crowdfunding is the speed of the process, the examples cited in the survey show that the time duration of completing a crowdfunding campaign can be quite variable. Since it is a collection of investments from the crowd, the time duration of the process can depend strongly on the amount of necessary investment and this relationship / dependency needs to be further investigated.

<i>How many weeks did it take for your project to get the necessary financing?</i>	Bank loans	Support programs	Crowdfunding
Less than 10 weeks	6 (0.23)	1 (0.09)	1 (0.20)
10 to 20 weeks	13 (0.50)	3 (0.27)	2 (0.40)
20 to 30 weeks	2 (0.08)	5 (0.45)	0 (0.00)
More than 30 weeks	5 (0.19)	2 (0.18)	2 (0.40)
<b>Total:</b>	<b>26 (1.00)</b>	<b>11 (1.00)</b>	<b>5 (1.00)</b>

Half of the project developers who answered this question affirmed that bank loans take 10 to 20 weeks in their experience, which could indicate some consistency. It is with bank loans type that the highest share of developers saying in average taking less than 10 weeks to complete the process which could be an indication that bank loans are the faster process.

## Conclusions

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This section summarises the findings of the survey: renewable energy project developers – perception of crowdfunding. This survey was designed to collect the impressions of renewable energy project developers regarding financing, public funds and crowdfunding.

The survey collected input from a range of 32 – 66 valid responses, covering representatives of:

- All target groups.
- Most of the countries in the EU.
- A wide scope of sustainable energy projects and projects capacity.
- Experience in different financing mechanisms, including crowdfunding.

In general, project developers identify a hostile environment for financing renewable energy projects with bank loans as well as with public funding from regional support programs. The reasons project developers raised for that can be summarized as:

- Cost-competitiveness with other sources of energy.
- Uncertainties regarding support schemes and RES incentives.
- Lack of knowledge in renewable energy.
- Lack of incentives.

Eight project developers claimed to have experience with crowdfunding for RES projects from the Netherlands, Germany, Sweden, Spain and France. The different countries here represented could mean that crowdfunding is already a European spread financing mechanism, despite the low uptake.

These project developers have identified themselves as part of different target groups, such as commercial companies, cooperatives, one public entity and one association. This indicates that crowdfunding has the potential to broaden the ownership models of RES projects.

In terms of overall satisfaction, most of the project developers had a positive experience with crowdfunding and are positively in favour of repeating the experience and recommend it. The main advantages of using crowdfunding raised by developers are:

- Simpler and faster process
- Improvement of public acceptance

Regarding the costs of financing via crowdfunding no concrete conclusion could be extracted in this survey and will be further investigated.

Participants with no experience in using crowdfunding have shown positive intentions regarding the possibility of using it in the future.

## Annex I: Survey distribution channels

Channel	Means	Date	Nr.	Target group
COPOWER event (Brussels, Belgium)	Oral presentation	17.06.2015	70	Cooperatives, communities
Green Venture's website	Online article	29.06.2015	?	Project developers
COPOWER website	Online article	30.06.2015	?	Cooperatives, communities
Belgian Association for the Promotion of Renewable Energy (APERe)	E-Mail	01.07.2015	?	Energy experts
Citizen cooperatives for renewable energy (REScoop.eu / REScoop.be)	E-Mail	02.07.2015	?	RES cooperatives
Association of European Renewable Energy Research Centres (EUREC)	Newsletter	07.07.2015	?	RES research centres
EU farmers association	E-Mail	17.07.2015	102	Farmers cooperatives
Climate Alliance's LinkedIn group	LinkedIn Post	17.07.2015	81	Municipalities
Climate Alliance's Facebook group	Facebook Post	17.07.2015	?	Municipalities
EC's list of ESCOs	E-Mail	21.07.2015	44	ESCOs
Largest PV project investors in EU	E-Mail	21.07.2015	70	Large PV investors
WIP's contacts	E-Mail	23.07.2015	674	Solar related stakeholders
Leonardo Energy	E-Mail	24.07.2015	550	Energy stakeholders
ManagEnergy network	E-Mail	03.08.2015	797	Energy agencies
European Renewable Energies Federation (EREF)	E-Mail	19.08.2015	?	EREF members
Climate Alliance's Facebook group	Facebook Post	17.07.2015	?	Municipalities
European Renewable Energies Federation (EREF)	E-Mail	07.09.2015	?	EREF members
Participants at the Sustainable Places 2015 conference (Savona, Italy)	Oral presentation	16.09.2015	30	Energy experts
Solarplaza's newsletter	Newsletter	07.10.2015	?	?
SPE's newsletter and website	Newsletter / Online article	30.10.2015	?	Solar related stakeholders
Renewable Energy Crowdfunding Conference (London, UK)	Oral presentation	05.11.2015	150	Project developers, platforms
Participants at EWEA's annual event (Paris, France)	Oral presentation	19.11.2015	100	Wind project developers
		<b>Total</b>	<b>&gt; 2668</b>	

## Annex II: Survey Questionnaire

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## Crowdfunding Renewable Energy in Europe: Survey of Project Developers

### Introduction

Thank you for taking this survey. The survey is sent to you by CrowdFundRES, a Horizon 2020 research project funded by the European Commission, and is being carried out by a team of renewable energy and crowdfunding experts. Full details of the project and the team can be found on our project website [CrowdFundRES](#).

You can complete this survey in English, French or German. Please choose how to continue:

- I would like to complete this survey in English.
- Je voudrais répondre au questionnaire en Français.
- Ich möchte die Umfrage auf Deutsch beantworten.

## Crowdfunding Renewable Energy in Europe: Survey of Project Developers

### Overview

Crowdfunding, broadly conceived, involves raising money from individual members of society in order to fund a particular project, typically through interaction via a website or crowdfunding 'platform'. This survey seeks to determine the extent of the knowledge and preferences of renewable energy project developers regarding investment in renewable energy through crowdfunding. For more details and explanations of crowdfunding see the [Crowdfunding Guide](#), published by the European Commission.

Please continue to the next page and read the information on informed consent. Thank you for your time and participation in this research.

# Crowdfunding Renewable Energy in Europe: Survey of Project Developers

## 1. Personal Details

<b>Name</b>	<input type="text"/>
<b>Company</b>	<input type="text"/>
<b>Email Address</b>	<input type="text"/>
<b>Phone Number</b>	<input type="text"/>

## Country and company specifications

### 2. What is your company structure?

- Limited company
- Public entity (e.g. municipality)  Cooperative
- Energy service company (ESCO)
- Farmer
- Other (please specify)

3. What is the technology focus of your company's renewable energy sources (RES) projects? (tick as many as applies)

- Photovoltaic
- Wind
- Small hydro
- Biomass
- Biogas
- Solar thermal
- Geothermal
- Hydrogen and fuel cells
- Marine / Tidal / Wave
- Green transportation
- Energy Storage
- Energy efficiency
- Other (please specify)

4. What is the size range of your RES projects? (tick as many as apply)

- Smaller than 100 kW
- Between 100 kW and 1 MW
- Between 1 MW and 10 MW
- Between 10 MW and 100 MW
- 100 MW or greater



5. Where is your company based? (tick as many as apply)

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- United Kingdom
- Other (please specify)

6. In which of the following countries is your company active? (tick as many as apply)

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- United Kingdom

Other (please specify)

### Country Specific Questions

The following section requires you to generally answer questions for a specific country.

Please specify that country in the following question.

10. Specify which country will be considered when answering questions in this section?

Other (please specify)

11. Has your company implemented a RES project in the specified country?

Yes

No

Currently planning to build a RES project

Tried to build a RES project but gave up due to the following reason(s):

12. Is there a requirement for your project to have a defined proportion of equity capital in the specified country ?

No

Yes, (Please specify minimum percentage here)

13. Which option best describes your experience of securing finance for your RES projects now, as compared to 12 months ago in the specified country?

- Easier: financing is available and terms are attractive
- Moderately easier: financing is available and terms are becoming more attractive
- No measurable difference
- Moderately harder: financing is available but the terms are unattractive
- Harder: financing is less available

**General satisfaction with traditional financing procedures**

14. Have you ever used a bank loan for financing your RES project(s)?

Yes

No

15. How many weeks do bank loan negotiations for RES projects take on average?

16. For the specified country:

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
It is currently difficult to get bank loans for RES projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Do you think that banks in the specified country have biases against renewable energy projects (e.g., high financial risk, unforeseeable development, etc.)

No

I do not know

Yes (please identify issues).

18. Do you know any local / national / regional / European support programs for financing of RES projects?

No

There are no programmes available.

I do not know.

Yes. (Please name them:)

## Crowdfunding Renewable Energy in Europe: Survey of Project Developers

19. Have you ever received support from local / national / regional / European programs for financing a RES project? (bit

- No, I have never attempted.
- No, I attempted but was not successful.
- Yes (please list which support programme(s))

20. How many weeks did it take until this public fund was made available to you for financing your project?

21. How difficult did you find the process until your received support from national or European programmes for financing a RES project?

- VeryEasy
- Easy
- Neither Easy nor Difficult
- Difficult
- Very Difficult



	1 (Very Important)	2 (Important)	3 (Neither Important nor Unimportant)	4 (Unimportant)	5 (Very Unimportant)	Do not know / No opinion
Inappropriate size of your request (project too small)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interest rates are too high	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inexperienced management team (no track record)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: Please describe in the following question	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Which are, in your opinion, the main bottlenecks for financing renewable energy plants in the specified country? List up to three.

1.
2.
3.



**Personal experience with crowdfunding for financing of RES projects**

24. How familiar are you with crowdfunding?

- What is crowdfunding? (No knowledge)
- I've heard about it, but what does it have to do with RES project financing?
- I know crowdfunding, but I have never used it for financing any part of a RES project.
- I know crowdfunding and I have used it for financing at least a part of a RES project.

## Crowdfunding Renewable Energy in Europe: Survey of Project Developers

25. What kind of crowdfunding did you use?

- Equity-based crowdfunding (contributors become shareholders in the project)
- Debt or lending based crowdfunding (contributors receive interest on amount lent)
- I don't know
- Other (please specify)

26. How many weeks did it take until the fund was made available to you for financing your project?

27. How difficult did you find the process of crowdfunding your RES project?

- Very  
easy
- Easy
- Neither Easy nor  
Difficult  Difficult
- Very difficult

28. Did you see any of the following pros and cons by using crowdfunding for financing your RES project?

- It delayed the implementation of the project
- It made the permitting process faster
- It made the permitting process slower
- It reduced local public opposition of the project
- It made financing easier or faster
- It was cheaper than traditional financing
- It was more expensive than traditional financing
- Other (please specify)

29. Did your crowdfunding platform offer you guidelines or checklists for launching a successful campaign?

- No
- I do not know.
- Yes, such guidelines are offered by:

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30. Would you consider using crowdfunding for financing your project (again) in the future? Please list reasons in comment box.

- Yes,  
definitely.  Yes,  
maybe.
- Undecided.
- No, I don't think so.
- No, definitely not.

Why?