



Project Title:

**THE EUROPEAN PLATFORM FOR CITIZEN INVESTMENT IN
RENEWABLE ENERGY**

Project Acronym:

CITIZENERGY

Contract Number:

IEE/13/403/SI2.675223- CITIZENERGY



Co-funded by the Intelligent Energy Europe
Programme of the European Union

Subject:

**Work Package 4
Deliverable 4.1 – Pilot Projects Planning**

Dissemination Level:

PUBLIC

Version:

1.1

Project Coordinator:

Boa Energia



Document revision history

Version	Date	Comments
1.1	16/01/2015	Minimum information requirements to be fulfilled - by BOA
1.2	19/01/2015	Final by BOA



Table of Contents

Executive Summary	5
Description of Task D4.1 – Pilot Project Planning	5
Terminology and Acronyms.....	6
1 Pilot Projects.....	7
1.1 Summary.....	7
1.2 Pilot Pitch – Greencrowding	8
1.2.1 Arval Photovoltaic Project	8
1.2.2 ? Photovoltaic Project.....	9
1.3 Pilot Pitch - Lumo.....	10
1.3.1 Abaux Photovoltaic Project	10
1.3.2 Ferme Photovoltaic Project.....	11
1.4 Pilot Pitch - De Windvogel	12
1.4.1 Zuidenwind Eolic Project	12
1.5 Pilot Pitch - Boa Energia.....	13
1.6 Pilot Pitch - Som Energia.....	14
1.7 Pilot Pitch – Abundance Generation	15
2 Minimum Information requirements	16
3 Common Template evaluation	16
4 Conclusions.....	17
5 Annex – Greencrowding	17
5.1 Arval Photovoltaic Project.....	17
5.1.1 Executive Summary	17
5.1.2 Project Details	18
5.1.3 Promoter Details.....	18
5.1.4 Management Details	19
5.1.5 Technical Details	19
5.1.6 Financial Details	20
5.1.7 Operational Details.....	20
5.2 ? Photovoltaic Project	21
5.2.1 Executive Summary	21
5.2.2 Project Details	22
5.2.3 Promoter Details.....	22
5.2.4 Management Details	23
5.2.5 Technical Details	23
5.2.6 Financial Details	23
5.2.7 Operational Details.....	24
6 Annex – Boa Energia.....	25
6.1 Escolas Solar Photovoltaic Project	25
6.1.1 Executive Summary	25
6.1.2 Project Details	25
6.1.3 Promoter Details.....	26
6.1.4 Management Details	27
6.1.5 Technical Details	27



6.1.6	Financial Details	27
6.1.7	Operational Details	28
7	Annex – Lumo	28
7.1	<i>Abaux</i> Photovoltaic Project	28
7.1.1	Executive Summary	28
7.1.2	Project Details	28
7.1.3	Promoter Details	29
7.1.4	Management Details	30
7.1.5	Equipment	30
7.1.6	Financial Details	30
7.1.7	Operational Details	31
7.2	<i>Ferme</i> Photovoltaic Project	31
7.2.1	Executive Summary	31
7.2.2	Project Details	32
7.2.3	Promoter Details	32
7.2.4	Management Details	33
7.2.5	Technical Details	33
7.2.6	Financial Details	33
7.2.7	Operational Details	34
8	Annex – Som Energia	34
8.1	<i>Viure de l'Aire del Cel</i> Eolic Project	34
8.1.1	Executive Summary	34
8.1.2	Project Details	35
8.1.3	Promoter Details	35
8.1.4	Management Details	36
8.1.5	Technical Details	36
8.1.6	Financial Details	37
8.1.7	Operational Details	37
9	Annex – Windvogel	38
9.1	<i>Zuidenwind</i> Eolic Project	38
9.1.1	Executive Summary	38
9.1.2	Project Details	38
9.1.3	Promoter Details	39
9.1.4	Management Details	40
9.1.5	Technical Details	40
9.1.6	Financial Details	40
9.1.7	Operational Details	41
10	Annex – Abundance Generation	41
10.1.1	Executive Summary	41
10.1.2	Project Details	42
10.1.3	Promoter Details	42
10.1.4	Management Details	43
10.1.5	Technical Details	43
10.1.6	Financial Details	43
10.1.7	Operational Details	44

Executive Summary

In this document it is presented the first deliverable of Work Package 4 (WP4). This WP will represent the first effective implementation stage. It will aim at funding at least 6 citizen RES pilot projects, one per RES promoter in the consortium, using the newly developed platform beta version in cooperation with citizen organizations and regional/national authorities. It will also include the collection of reviews, evaluation and user experience by all relevant stakeholders. It was planned to start with the fourth trimester of year 1 (month 9).

The project implementation predicts direct involvement by all members of the consortium and several organisations outside the consortium such as international organisation's (in the consortium) members, citizen associations, local authorities and other stakeholders that have provided letters of support¹ referring their intention of actively participating on the promotion, implementation, or dissemination stages.

Each of the 6 pilot projects should involve at least:

- One RES promoter in the consortium
- One regional, national or local citizens organization
- One or more regional, national or local authority or agency

Description of Task D4.1 – Pilot Project Planning

This task consists of the initial planning for the validation stage of the Citizenenergy project and of the pilot projects that will be implemented. Including regular information to the citizens/investors

At least six pilot projects should be defined by RES promoters that will, on this stage, make sure all needed procedures to prepare for funding stage – bureaucratic, technical and financial – are implemented.

The selection of project sites, registration with authorities, contract arrangements, proposals negotiations and establishing the local/regional/national network of partners are all implemented by this task, while the platform (WP3) is being developed.

It will result in the development and presentation of the pilot project plan, one by each of the RES promoters, using the common template suggested by BOA and approved by the executive committee.

The Template includes, among others:

Project description, capacity, estimated electricity production, estimated profitability, location, minimum investment, calendar, partners involved, type of crowdfunding/contract model etc.



Terminology and Acronyms

WP	Work Package
RES	Renewable Energy System
PV	Photovoltaic
FIT	Feed in Tariff
PPA	Power Purchase Agreement
LLC	Limited Liability Company

1 Pilot Projects

A brief presentation of the pilot projects to be implemented in the Citizenenergy platform kickoff will be presented in this point.

The objective to launch six pilot projects from six different consortium member is being achieved, with more than one project for some of the RES promoters as a positive extra result.

All the information about the Projects and Promoter details was collected through a common template, approved by the executive committee, which was sent to all the RES promoters interested in the developing a pilot project. All the data and values related to the projects here forward were submitted by the specific RES promoter. The full template received from the RES promoters is available in the annex of the present deliverable.

1.1 Summary

Country	Promoter	RES type	Nº of RES
Belgium	Greencrowding	Solar Energy	2
France	Lumo	Solar Energy	2
Holland	Windvogel	Wind Energy	1
Portugal	BOA	Solar Energy	1
Spain	SOM	Wind Energy	1
United Kingdom	Abundance Generation	Solar Energy	1

1.2 Pilot Pitch – Greencrowding

1.2.1 Arval Photovoltaic Project

The plant was built in July 2013, and since then has generated the predicted income. Daily and annual solar production data can be accessed online at any time.

The project, valued at EUR 182 000, was financed entirely out of equity funds. The project owner and loan participant is Celtis SPRL.

Project

Project Name	Arval	PV
Promoter	Celtis	SPRL
Location	Brussels, Belgium	Belgium
Development Stage	Operation	

Technical

Installed Power	117
Total Cost	181 922 €
Remuneration Type	Certificates

Funding

Crowdfunded	30 000 €	Debt
Estimated Interest rate (debt)	5%	%
Project Duration	5 yrs-loan final term	distributed Yearly?

Performance

Production	99 450	kWh/year
Tariff	0,3100	€/kWh
Revenue	30 812	€/year

Why should an investor support the project?	Return high due to regulatory benefits in Belgium, equity > 80% hence low risk, quick repayment, very experienced installer
--	---

1.2.2 ? Photovoltaic Project

Projects are realized with commercial or industrial companies consuming a large quantity of electricity and disposing of a large unused surface, generally the roof of their building.

Project

Project Name	0	PV
Promoter	PVFinvest	S.A.
Location	Walloon Belgium	Belgium
Development Stage	Planning	

Technical

Installed Power	250 kWp
Total Cost	362 500 €
Remuneration Type	Certificates

Funding

Crowdfunded	54 375 €	debt
Estimated Interest rate (debt)	7%	%
Project Duration	10 yrs-loan final term	distributed Yearly?

Performance

Production	217 570	kWh/year
Tariff	0,2700	€/kWh
Revenue	58 403	€/year

Why should an investor support the project?	Good track record of Enerdeal, high return because of Walloon certificate regulation and site, own equity share too low, ownership structure to be further investigated
--	---

1.3 Pilot Pitch - Lumo

1.3.1 Abaux Photovoltaic Project

Project

Project Name	Abaux	PV
Promoter	Sergies	SAEML
Location	Poitou Charentes	France
Development Stage	Operation	

Technical

Installed Power	250 kWp
Total Cost	430 k€
Remuneration Type	FIT

Funding

Crowdfunded	80 000 €	Debt
Estimated Interest rate (debt)	3,1043	%
Project Duration	15 years	distributed Yearly?

Performance

Production	280 000	kWh/year
Tariff	0,2099	€/kWh
Revenue	60 000	€/year

**Why should an investor
support the project?**

Help RE accelerate in Europe



1.3.2 Ferme Photovoltaic Project

Project

Project Name	Ferme	PV
Promoter	Sergies	SAEML
Location	Poitou Charentes	France
Development Stage	Operation	

Technical

Installed Power	250 kWp
Total Cost	440 k€
Remuneration Type	FIT

Funding

Crowdfunded	90 000 €	Debt
Estimated Interest rate (debt)	3,1043	%
Project Duration	15 years	distributed Yearly?

Performance

Production	270 000	kWh/year
Tariff	0,1969	€/kWh
Revenue	55 000	€/year

Why should an investor support the project?	Help RE accelerate in Europe
--	------------------------------



1.4 Pilot Pitch - De Windvogel

1.4.1 Zuidenwind Eolic Project

De Windvogel has been asked to develop a wind turbine in cooperation with a local cooperative. The negotiations have finished and the financial returns and due diligence are being done. The total investment will be approximately 3.1 mil euro, off which 30% equity will be guaranteed by three different REScoops, including De Windvogel. To build the wind turbine and the exploitation a limited company will be set up, owned and governed by board members of the three cooperatives. The following actions need to be undertaken before the start of the build 1. financing: the consortium needs about 2.1 mil debt finance of the banks or Citizenenergy platform. 2. Wind turbine negotiations: the official price of the wind turbine still needs to be negotiated because due to delays the initial invoice has past. 3. the negotiations with the people living around the wind park needs to be concluded. Even though the permit is given, non-official agreements between the local co-op and the people around the wind park states they will receive a sum of money to develop sustainability in their neighborhood.

Project

Project Name	Zuidenwind	Eolic
Promoter	De Windvogel	0
Location	Limburg	Neederlands
Development Stage	Planning	

Technical

Installed Power	2.6 MW
Total Cost	3 180 463 €
Remuneration Type	FIPremium

Funding

Crowdfunded	Still to be determined	0
Estimated Interest rate (debt)	3%	%
Project Duration	0	distributed Yearly?

Performance

Production	4.905 MWh	kWh/year
Tariff	0,0400	€/kWh
Revenue	196 200	€/year
Planning of actions		Date
Decision of De Windvogel board		13/nov
Decision of the members of the local co-op for the investment		29/nov
Negotiations with the windturbine supplier		15/dez
Financial close bank		15/jan
Start building windturbine		1/abr

1.5 Pilot Pitch - Boa Energia

Project

Project Name	Escolas Solares	Roof-top Solar PV
Promoter	Boa Energia	Lda (LLC)
Location	Telheiras	Portugal
Development Stage	Planning	

Technical

Installed Power	140 kWp
Total Cost	185 449 €
Remuneration Type	PPA

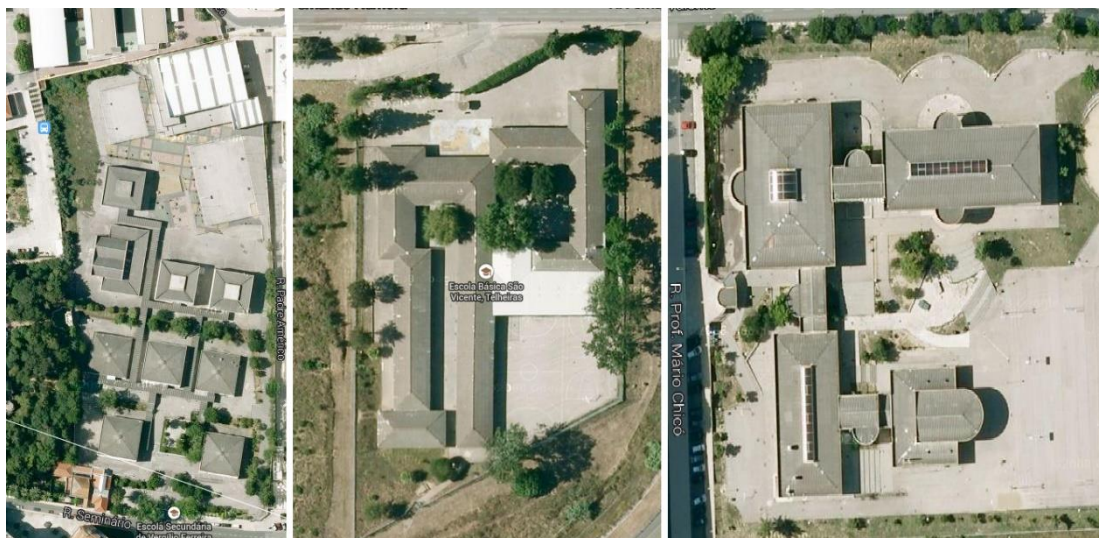
Funding

Crowdfunded	185 449 €	Debt
Estimated Interest rate (debt)	7%	%
Project Duration	15	distributed Yearly?

Performance

Production	268 251	kWh/year
Tariff	0,0803	€/kWh
Revenue	21 544	€/year

Why should an investor support the project?	Help incentivate RES and their margin in global electricity production, the project has a social side being implemented in 3 schools giving an example to future generations
--	--



1.6 Pilot Pitch - Som Energia

Project

Project Name	Viure de l'Aire del Cel	Eolic
Promoter	SOM ENERGIA	Cooperative
Location	Pujalt (Alt Anoia)	Catalonia/Spain
Development Stage	Planning	

Technical

Installed Power	2700 kW
Total Cost	3 000 000 €
Remuneration Type	PPA

Funding

Crowdfunded	1 000 000 €	Participative Bonds
Estimated Interest rate (debt)	4% (IRR)	%
Project Financial Duration	13 years	distributed Yearly?

Performance

Production	7 237 000	kWh/year
Tariff	0,045-0,05	€/kWh
Revenue	325 665	€/year

Why should an investor support the project?	Return on kWh. Secure and stable energy prize
--	---

1.7 Pilot Pitch – Abundance Generation

Oakapple Berwickshire PLC is the issuing company looking to raise up to £3.1m to install solar panels on social housing owned by Berwickshire Housing Association. The shareholders of the issuing company, and the companies doing the installation and O&M for the project are Oakapple Renewable Energy and Edison Energy

Project

Project Name	Oakapple Berwickshire	Solar PV
Promoter	Abundance	Limited company
Location	UK	Scotland, UK
Development Stage	Construction pending funding received from Debenture offer	

Technical

Installed Power	Up to 2,595 kWp
Total Cost	Up to £3.1m
Remuneration Type	FiT

Funding

Crowdfunded	£3.1 million	Debt
Estimated Interest rate (debt)	7.5% IRR	%
Project Duration	0	distributed every 6 months

Performance

Production	2,500,000 kWh	kWh/year
Tariff	0,0000	€/kWh
Revenue	350 000	€/year

Why should an investor support the project?	Promotes renewable energy, two established renewable energy developers, funds the installation of solar panels on social housing and helps cut their electricity bills.
--	---



2 Minimum requirements

Information

Even though in most cases the minimum necessary information to pitch the idea was available, the filling of the template was not made consistently by the RES Promoters. This happens for different reasons such as the different legal formats, nomenclature doubts, non-available information especially for early stage projects or inadequation of the template to the specific case.

These incompatibilities should be analyzed in retrospective with the help from feedback of the RES promoters of pilot projects, in order to avoid further difficulties with the information filling.

It is important to keep in mind that when the platform goes Live there will be a real minimum information requirement to submit the project for crowdfunding, and that some of the pilot projects submitted by the RES promoters would not fill the minimum needs.

It is therefore necessary that the RES Promoters of the pilot projects fill the missing information of their respective Projects, this must be done before the kickoff of the platform.

3 Common Template evaluation

Although the review from user experience and enhancement of the Citizenenergy platform are part of task 4.4 and 4.5 of the current WP. We can already make some conclusions and share the experience regarding one of the first steps of any submitted project submitted, the required information and the promoter experience connected to the filling of that information.

Seeing that the common template is extense, and that some information asked is not applied to every project, the mandatory information for submission and validation of the Project should be properly identified to avoid incomplete and inconsistent project pitching.

Contradictory or unclear information should be avoided for it might confuse or demotivate citizen users. On the other side clear and concise details will help to create credibility.

All these aspects have been taken in to consideration and the common template has been updated accordingly.

4 Conclusions

The main objective for the kickoff of the Citizenenergy project was to successfully go live with at least six projects from consortium members. We are in a great path to achieve this objective, furthermore we were able to keep the premiss of having six projects from different European countries.

All of the promoters involved have previous experience in the development of RES projects for citizen or community investment, this experience comes as a trust incentive for these first projects and an assurance to decrease its risk

The chosen projects involve wind and solar energy, avoiding a single type of technology, but still privileging more common and predictable projects types, providing safer and more validated business models.

As an extra positive outcome we are glad to see that more than the six minimum projects are being developed, with some promoters pitching already 2 different projects. This can be taken as a sign of the especially dynamic characteristics of the uprising movement for citizen investment in RES.

There are projects in planning phase and also projects that have recently started operating. Although the platform aims to fully support the launch of RES in all its phases, already operating projects provide a more predictable investment for citizens whilst also helping the growth of RES throughout Europe. On the promoter side, it gives RES promoters the chance to rearrange and lower their investment costs. Seeing that traditional markets normally provide shorter term loans, at higher interest rates, which are not as adequate to the technology payback period and might even discourage the venture. This funding therefore grants an opportunity for promoters to refinance and extend the investment payback period, at a more suitable interest rate.

5 Annex – Greencrowding

5.1 Arval Photovoltaic Project

5.1.1 Executive Summary

Project name	Arval
Promoter's name	Celtis
Promoter's legal format	SPRL
Project type (production technology)	PV
Location	Brussels, Belgium
Installed capacity	117
Total cost	181 922,00 €
Type of participation sought (debt, equity, donation, etc.)	Debt
Estimated entry into service	July 2013
Expected turnover (annual - year 1) in €	99450
Expected return on investment(%, IRR)	5% interest on loan, 5 yrs, final term
Why should an investor support the project?	Return high due to regulatory benefits in Belgium, equity > 80% hence low risk, quick repayment, very experienced installer

5.1.2 Project Details

Project name	Arval
Type of renewable energy	Solar
Type of technology	PV
Installed capacity (in kWp)	117
City	Brussels
Region	Brussels
Country	Belgium
Total cost	181 922,00 €
Estimated production (Year 1)/ in kWh	99 450
Type of remuneration (FIT, FIPremium, PPA, etc)	Certificates
Energy supervising authority	BRUGEL
State of Due Dilligence	
Project prospect (upload if available)	

5.1.3 Promoter Details

Name	Soltis SA	Celtis
Address	Boulevard Général Wahis, 16/G 1030 Schaerbeek Belgium	Avenue de Tervueren, 412 1150 Woluwe-Saint-Pierre Belgium
VAT number	BE897785181	BE 0534.971.727
Year of creation	2008	2013
Tyearly turnover (last available year)	2013:EUR 197210, 2012: EUR696469	not available
Legal representatives	Philippe Rochez	Michel Jonlet, Philippe Rochez
Country	Belgium	Belgium
Website	http://www.soltis.be/fr/	
Social media		
Telephone	00322 779 97 12	00322 779 97 12
Fax		
Legal form/entity	SA (Public Limited Company)	SPRL (limited company)
Assets/Capital	2013: EUR 1109463. http://www.soltis.be/files/uploaded/	

	documents/Comptes%20annuels%202013.pdf	
Current installed capacity (in kWp)		
Installed capacity per technology		
Number of plants in operation	>30 PV projects	Installer is Soltis
Organization description	PV installer, Heat pump installer	
Current funding sources and percentage	-	
Assets		
Equity	83,50	
Debt	16	
Reserve		

5.1.4 Management Details

	name	e-mail	telephone
CEO	Christophe Jonley	-	
CFO	Philippe Rochez	-	
CTO		-	
Information/press officer		-	
Investor relations			
External auditor			

5.1.5 Technical Details

Equipment 1 maker	Solar module
Equipment 1 model	468 Yingli YL 250 P29-b
Equipment 2 maker	Inverters
Equipment 2 model	PowerOne Aurora Trio (3 x 27.6 and 1 x 20.0)

5.1.6 Financial Details

<i>Nature of capital sought</i>	
<i>Equity</i>	
<i>Debt</i>	x
<i>Bank guarantees</i>	
<i>Donation</i>	
<i>In kind (knowledge, working hours)</i>	
<i>Amount sought</i>	
<i>in €</i>	30 000,00 €
<i>in £</i>	
<i>in ... (fill in)</i>	
<i>Potential exit strategy for investors</i>	
<i>stock</i>	
<i>debt reimbursement</i>	x
<i>starting date</i>	

<i>Estimated yearly dividends (equity)</i>	
<i>Estimated nterest rate (debt)</i>	5% 5 yrs-loan final term
<i>Interest payment period</i>	

<i>... €/kWh</i>	0,31
<i>... €/year</i>	30 812,00 €

5.1.7 Operational Details

<i>Development stage</i>	
<i>Planning / Construction / Operation</i>	Operation
<i>Date authorized</i>	July 2013
<i>Permits (upload)</i>	
<i>Technical information</i>	Sibelga documentation
<i>Date of entry into construction</i>	
<i>Date of entry into service</i>	



5.2 ? Photovoltaic Project

5.2.1 Executive Summary

<i>Project name</i>	
<i>Promoter's name</i>	PVFinvest
<i>Promoter's legal format</i>	S.A.
<i>Project type (production technology)</i>	PV
<i>Location</i>	Walloon Belgium
<i>Installed capacity</i>	250
<i>Total cost</i>	362 500,00 €
<i>Type of participation sought (debt, equity, donation, etc.)</i>	debt
<i>Estimated entry into service</i>	Q1 2015
<i>Expected turnover (annual - year 1) in €</i>	217570
<i>Expected return on investment(%, IRR)</i>	7% interest on 10 yrs loan
<i>Why should an investor support the project?</i>	Good track record of Enerdeal, high return because of Walloon certificate regulation and site, own equity share too low, ownership structure to be further investigated

5.2.2 Project Details

Project name	
Type of renewable energy	Solar
Type of technology	PV
Installed capacity (in kWp)	250
City	
Region	Walloon
Country	Belgium
Total cost	362 500,00 €
Estimated production (Year 1)/ in kWh	217570
Type of remuneration (FIT, FIPremium, PPA, etc)	Certificates
Energy supervising authority	CWaPE
State of Due Dilligence	Ongoing
Project prospect (upload if available)	

5.2.3 Promoter Details

Name	Enerdeal	PVFinvest
Address	Lozenberg, 1 1932 Zaventem Belgium	84A Grand-Route B-1474 Ways Belgium
VAT number	BE 0821.924.550	BE0533.872.855
Year of creation	2010	2013
Yearly turnover	Profit 202: 29,015	
Legal representatives	Francois Neu	Jan van Roy, Michel Hein
Country	Belgium	Belgium
Website	http://www.enerdeal.com/	
Social media		
Telephone		
Fax		
Legal form/entity	SA (Public limited company)	SA (Public limited company)
Assets/Capital		325 000,00 €
Current installed capacity (in kWp)	>15.000 kWp	453kWp
Installed capacity per technology		
Number of plants in operation	>50 projects	2

Organization description	PV installer, financing vehicle	Financing subsidiary for PV projects installed by Enerdeal
Current funding sources and percentage	-	
Asset		
Equity	5,00%	
Debt	95,00%	
Reserve		

5.2.4 Management Details

	name	e-mail	telephone
CEO	Jan van Roy	-	
CFO		-	
CTO		-	
Information/press officer		-	
Investor relations	Gregoire de Pierpont		
External auditor			

5.2.5 Technical Details

Development stage	
Planning / Construction / Operation	Planning
Date authorized	
Permits (upload)	
Technical information	
Date of entry into construction	
Date of entry into service	
Project pictures (upload)	

5.2.6 Financial Details

Nature of capital sought			
Equity		Estimated yearly dividends (equity)	
Debt	x	Estimated interest rate (debt)	7% 10 yrs-loan final term
Bank guarantees		Interest payment period	
Donation			

<i>In kind (knowledge, working hours)</i>	
<i>Amount sought</i>	
<i>in €</i>	54 375 €
<i>in £</i>	
<i>in ... (fill in)</i>	
<i>Potential exit strategy for investors</i>	
<i>stock</i>	
<i>debt reimbursement</i>	x
<i>starting date</i>	

<i>... €/kWh</i>	0,27
<i>... €/year</i>	58 402,50 €

5.2.7 Operational Details

<i>Development stage</i>	
<i>Planning / Construction / Operation</i>	Planning
<i>Date authorized</i>	
<i>Permits (upload)</i>	
<i>Technical information</i>	
<i>Date of entry into construction</i>	
<i>Date of entry into service</i>	
<i>Project pictures (upload)</i>	



6 Annex – Boa Energia

6.1 Escolas Solar Photovoltaic Project

6.1.1 Executive Summary

<i>Project name</i>	Escolas Solar
<i>Promoter's name</i>	Boa Energia
<i>Promoter's legal format</i>	ESCO
<i>Project type (production technology)</i>	PV
<i>Location</i>	Telheiras
<i>Installed capacity</i>	140 kWp
<i>Total cost</i>	186 k€
<i>Type of participation sought (debt, equity, donation, etc.)</i>	Debt
<i>Estimated entry into service</i>	ago/15
<i>Expected turnover (annual - year 1) in €</i>	2000
<i>Expected return on investment(%, IRR)</i>	8,00%
<i>Why should an investor support the project?</i>	

6.1.2 Project Details

<i>Project name</i>	Escolas Solar
<i>Type of renewable energy</i>	PV
<i>Type of technology</i>	Polycritalin

Installed capacity (in kWp)	140 kWp
City	Lisbon
Region	Lisbon
Country	Portugal
Total cost	186 k€
Estimated production (Year 1)/ in kWh	268 251
Type of remuneration (FIT, FIPremium, PPA, etc)	PPA
Energy supervising authority	ERSE
State of Due Dilligence	Planning
Project prospect (upload if available)	?

6.1.3 Promoter Details

Name	Boa Energia
Address	Praça Duque da Terceira, nº 24; 4º andar, porta 24;
VAT number	PT 510 324 347
Year of creation	2012
Tyearly turnover (last available year)	300 000 €
Legal representatives	Nuno Brito Jorge
Country	Portugal
Website	www.boaenergia.pt
Social media	N.A
Telephone	930 470 051
Fax	930 470 051
Legal form/entity	Limited liability company (Lda)
Assets/Capital	360 000 €
Current installed capacity (in kWp)	212 kWp
Installed capacity per technology	212 kWp Solar
Number of plants in operation	6
Organization description	Energy Services Company
Current funding sources and percentage	
Assets	350 000
Equity	10 000

Debt	
Reserve	

6.1.4 Management Details

	name	e-mail	telephone number
CEO	Nuno Brito Jorge	nunobj@boaenergia.pt	(+351) 930 470 051
CFO	Carmen Estevez	-	(+351) 930 470 051
CTO	Bruno Martins	brunorm@boaenergia.pt	(+351) 930 470 051
Comunication	Henrique Paranhos	henriquebp@boaenergia.pt	(+351) 930 470 051
Investor relations	Ricardo Moura	ricardovm@boaenergia.pt	(+351) 930 470 051
External auditor	DGEG		

6.1.5 Technical Details

Equipment 1 maker	Solar Panel : S-Energy
Equipment 1 model	250
Equipment 2 maker	Inverter: SMA
Equipment 2 model	Tripower 20000 TL-30

6.1.6 Financial Details

Nature of capital sought			
Equity		Estimated yearly dividends (equity)	N.A
Debt	185 449	Estimated Interest rate (debt)	8,0%
Bank guarantees		Project Duration	15
Donation		Interest payment period	Yearly?
In kind (knowledge, working hours)			
Amount sought			
in €	185 449	... €/kWh	0,9200
in £		... €/year	16 452
in ... (fill in)			
Potential exit strategy for investors			
stock	None		

debt reimbursement	
starting date	

6.1.7 Operational Details

Development stage	Planning
Planning / Construction / Operation	
Date authorized	
Permits (upload)	pending
Technical information	
Date of entry into construction	set/15
Date of entry into service	nov/15

7 Annex – Lumo

7.1 Abaux Photovoltaic Project

7.1.1 Executive Summary

Project name	Abaux
Promoter's name	Sergies
Promoter's legal format	SAEML (Société Anonyme d'Economie Mixte Locale)
Project type (production technology)	PV
Location	Poitou Charentes
Installed capacity	250 kWp
Total cost	430 k€
Type of participation sought (debt, equity, donation, etc.)	Debt
Estimated entry into service	ago/14
Expected turnover (annual - year 1) in €	60 000
Expected return on investment(%, IRR)	5,30%
Why should an investor support the project?	Help RE accelerate in Europe

7.1.2 Project Details

Project name	Abaux
---------------------	-------

Type of renewable energy	PV
Type of technology	Polycrystallin
Installed capacity (in kWp)	250
City	La Trimouille
Region	Poitou-Charentes
Country	France
Total cost	430 k€
Estimated production (Year 1)/ in kWh	280 000
Type of remuneration (FIT, FIPremium, PPA, etc)	FIT
Energy supervising authority	EDF
State of Due Diligence	Completed
Project prospect (upload if available)	?

7.1.3 Promoter Details

Name	Sergies
Address	78 avenue Jacques Cœur, 86068 POITIERS CEDEX 9
VAT number	FR68 450 889 225
Year of creation	2001
Tyearly turnover (last available year)	8 600 000 €
Legal representatives	Emmanuel Julien
Country	France
Website	www.sergies.fr
Social media	N.A
Telephone	05 49 44 79 42
Fax	05 49 60 54 30
Legal form/entity	SA with 'Directoire'
Assets/Capital	10 100 010 €
Current installed capacity (in kWp)	55 000
Installed capacity per technology	19 000 PV + 36 000 Wind
Number of plants in operation	135 PV + 3 Wind
Organization description	Conseil de surveillance & Directoire
Current funding sources and percentage	http://www.societe.com/societe/sergies-437598782.html

Assets	70 000 000 €
Equity	18,57%
Debt	78,57%
Reserve	2,86%

7.1.4 Management Details

	name	e-mail	telephone number
CEO	Emmanuel Julien	emmanuel.julien@sergies.fr	05 49 44 79 42
CFO	Pascal Sauzet	pascal.sauzet@soregies.fr	05 49 44 79 42
CTO	Hervé Lecomte	herve.lecomte@sergies.fr	05 49 44 79 42
Information/press officer	Virginie Lorentz	virginie.lorentz@soregies.fr	05 49 44 79 42
Investor relations	N.A		
External auditor	M. Marc DESJARDINS. from SOREGOR AUDIT	http://www.soregor.fr/audit	02 41 57 66 00

7.1.5 Equipment

Equipment 1 maker	Solar Panel : VMH
Equipment 1 model	250-6-60-P
Equipment 2 maker	Inverter: Kaco
Equipment 2 model	Powador

7.1.6 Financial Details

Nature of capital sought				
Equity		70000	Estimated yearly dividends (equity)	N.A
	Debt	280000	Estimated interest rate (debt)	3,1043
Bank guarantees			Interest payment period	15 years
Donation				
In kind (knowledge, working hours)				
Amount sought				
	in €	80000	... €/kWh	0,2099
	in £		... €/year	60 000

<i>in ... (fill in)</i>	
Potential exit strategy for investors	
stock	None
debt reimbursement	
starting date	

7.1.7 Operational Details

Development stage	Built
Planning / Construction / Operation	
Date authorized	ago/14
Permits (upload)	
Technical information	
Date of entry into construction	jun/14
Date of entry into service	ago/14

7.2 Ferme Photovoltaic Project

7.2.1 Executive Summary

Project name	Ferme
Promoter's name	Sergies
Promoter's legal format	SAEML (Société Anonyme d'Economie Mixte Locale)
Project type (production technology)	PV
Location	Poitou Charentes
Installed capacity	250 kWp
Total cost	440 k€
Type of participation sought (debt, equity, donation, etc.)	Debt
Estimated entry into service	nov/14
Expected turnover (annual - year 1) in €	55 000
Expected return on investment(%, IRR)	4,60%
Why should an investor support the project?	Help RE accelerate in Europe

7.2.2 Project Details

Project name	Ferme
Type of renewable energy	PV
Type of technology	Polycritalin
Installed capacity (in kWp)	250
City	Dienné
Region	Poitou-Charentes
Country	France
Total cost	440 k€
Estimated production (Year 1)/ in kWh	270 000
Type of remuneration (FIT, FIPremium, PPA, etc)	FIT
Energy supervising authority	EDF
State of Due Dilligence	Should be procucing by end of November
Project prospect (upload if available)	?

7.2.3 Promoter Details

Name	Sergies
Address	78 avenue Jacques Cœur, 86068 POITIERS CEDEX 9
VAT number	FR68 450 889 225
Year of creation	2001
Tyearly turnover (last available year)	8 600 000 €
Legal representatives	Emmanuel Julien
Country	France
Website	www.sergies.fr
Social media	N.A
Telephone	05 49 44 79 42
Fax	05 49 60 54 30
Legal form/entity	SA with 'Directoire'
Assets/Capital	10 100 010 €
Current installed capacity (in kWp)	55 000
Installed capacity per technology	19 000 PV + 36 000 Wind
Number of plants in operation	135 PV + 3 Wind
Organization description	Conseil de surveillance & Directoire

Current funding sources and percentage	-
Assets	70000000
Equity	19%
Debt	78,57%
Reserve	2,86%

7.2.4 Management Details

	name	e-mail	telephone number
CEO	Emmanuel Julien	emmanuel.julien@sergies.fr	05 49 44 79 42
CFO	Pascal Sauzet	pascal.sauzet@soregies.fr	05 49 44 79 42
CTO	Hervé Lecomte	herve.lecomte@sergies.fr	05 49 44 79 42
Information/press officer	Virginie Lorentz	virginie.lorentz@soregies.fr	05 49 44 79 42
Investor relations	N.A		
External auditor	M. Marc DESJARDINS. from SOREGOR AUDIT	http://www.soregor.fr/audit	02 41 57 66 00

7.2.5 Technical Details

Equipment 1 maker	Solar Panel : VMH
Equipment 1 model	250-6-60-P
Equipment 2 maker	Inverter: Kaco
Equipment 2 model	Powador

7.2.6 Financial Details

Nature of capital sought			
Equity	70000	Estimated yearly dividends (equity)	N.A
Debt	280000	Estimated interest rate (debt)	3,1043
Bank guarantees		Interest payment period	15 years
Donation			
In kind (knowledge, working hours)			
Amount sought			
in €	90000	... €/kWh	0,1969

<i>in £</i>		<i>... €/year</i>	55 000
<i>in ... (fill in)</i>			
Potential exit strategy for investors			
<i>stock</i>	None		
<i>debt reimbursement</i>			
<i>starting date</i>			

7.2.7 Operational Details

Development stage	Built
Planning / Construction / Operation	
Date authorized	nov/14
Permits (upload)	
Technical information	
Date of entry into construction	set/14
Date of entry into service	nov/14

8 Annex – Som Energia

8.1 Viure de l'Aire del Cel Eolic Project

8.1.1 Executive Summary

Project name	Viure de l'Aire del Cel
Promoter's name	SOM ENERGIA
Promoter's legal format	Cooperative
Project type (production technology)	Eolic
Location	Pujalt (Alt Anoia)
Installed capacity	2700 kW
Total cost	3 000 000,00
Type of participation sought (debt, equity, donation, etc.)	Participative Bonds (Títulos Participativos)
Estimated entry into service	June 2015
Expected turnover (annual - year 1) in €	325 665,00
Expected return on investment(%, IRR)	1-2%
Why should an investor support the project?	Return on kWh. Secure and stable energy prize

8.1.2 Project Details

Project name	Viure de l'Aire del Cel
Type of renewable energy	Eolic
Type of technology	Eolic
Installed capacity (in kWp)	2700 kW
City	Pujalt /Alta Anoia)
Region	Anoia
Country	Catalonia/Spain
Total cost	3 000 000,00
Estimated production (Year 1)/ in kWh	7 237 000,00
Type of remuneration (FIT, FIPremium, PPA, etc)	A kind of PPA
Energy supervising authority	CNMC (http://www.cnmc.es/es-es/energ%C3%ADa/sobreenerg%C3%ADa.aspx)
State of Due Dilligence	no
Project prospect (upload if available)	no

8.1.3 Promoter Details

Name	Som Energia
Address	Parc Científic i Tecnològic de la UDG. Edifici Giroemprèn. C/Pic de Peguera, 11 (Ala A, despatx A.2.08) 17003 Girona
VAT number	ESF55091367
Year of creation	2010
Tyearly turnover (last available year)	3,5 M€
Legal representatives	Gijsbert Huijink
Country	Spain
Website	www.somenergia.coop
Social media	https://es-la.facebook.com/somenergia
Telephone	972183386
Fax	no
Legal form/entity	cooperative
Assets/Capital	1 681 000,00
Current installed capacity (in kWp)	1231,87
Installed capacity per technology	731,87

Number of plants in operation	9
Organization description	REScoop
Current funding sources and percentage	-
Assets	
Equity	2M€
Debt	1,5M€
Reserve	

8.1.4 Management Details

	name	e-mail	telephone number
CEO	Gijsbert Huijink	gijsbert.huijink@somenergia.coop	972183386
CFO	Gijsbert Huijink/Carles Barberà	carles.barbera@somenergia.coop	972183386
CTO	Nuri Palmada/Marc Rosello	nuri.palmada@somenergia.coop ; marc.rosello@somenergia.coop	972183386
Information/press officer	Marc Rosello	marc.rosello@somenergia.coop	
Investor relations	??		
External auditor	In our case, is a group of 3 members representing associates	ferran@mosses.cat	

8.1.5 Technical Details

Equipment 1 maker	
Equipment 1 model	
Equipment 2 maker	
Equipment 2 model	

8.1.6 Financial Details

<i>Nature of capital sought</i>			
<i>Equity</i>		<i>Estimated yearly dividends (equity)</i>	N.A
<i>Debt</i>	1 000 000	<i>Estimated nterest rate (debt)</i>	3,1043
<i>Bank guarantees</i>		<i>Interest payment period</i>	15 years
<i>Donation</i>			
<i>In kind (knowledge, working hours)</i>			
<i>Amount sought</i>			
<i>in €</i>	1 000 000	<i>... €/kWh</i>	0,045-0,05
<i>in £</i>		<i>... €/year</i>	325 665
<i>in ... (fill in)</i>			
<i>Potential exit strategy for investors</i>			
<i>stock</i>	None		
<i>debt reimbursement</i>			
<i>starting date</i>			

8.1.7 Operational Details

<i>Development stage</i>	Planning
<i>Planning / Construction / Operation</i>	
<i>Date authorized</i>	
<i>Permits (upload)</i>	All permits approved
<i>Technical information</i>	
<i>Date of entry into construction</i>	September 2015
<i>Date of entry into service</i>	



9 Annex – Windvogel

9.1 Zuidenwind Eolic Project

9.1.1 Executive Summary

Project name	Zuidenwind
Promoter's name	
Promoter's legal format	
Project type (production technology)	Eolic
Location	Limburg
Installed capacity	2.6 MW
Total cost	3 180 463 €
Type of participation sought (debt, equity, donation, etc.)	
Estimated entry into service	
Expected turnover (annual - year 1) in €	
Expected return on investment(%, IRR)	
Why should an investor support the project?	

9.1.2 Project Details

Project name	Zuidenwind
---------------------	-------------------

Type of renewable energy	Windenergy
Type of technology	Windturbine
Installed capacity (in kWp)	2.6 MW
City	
Region	Limburg
Country	
Total cost	3 180 463 €
Estimated production (Year 1)/ in kWh	4.905 MWh
Type of remuneration (FIT, FIPremium, PPA, etc)	FIPremium
Energy supervising authority	
State of Due Dilligence	Internal-done- up for decision of the board
Project prospect (upload if available)	

9.1.3 Promoter Details

Name	De Windvogel
Address	
VAT number	
Year of creation	
Tyearly turnover (last available year)	
Legal representatives	
Country	
Website	-
Social media	
Telephone	
Fax	
Legal form/entity	
Assets/Capital	
Current installed capacity (in kWp)	
Installed capacity per technology	
Number of plants in operation	
Organization description	
Current funding sources and percentage	-
Assets	

Equity	
Debt	
Reserve	

9.1.4 Management Details

	name	e-mail	telephone number
CEO	Siward Zomer	siward.zomer@windvogel.nl	
CFO	Arie Wingelaar	arie.wingelaar@windvogel.nl	
CTO	Albert Jansen	albert.jansen@windvogel.nl	
Information/press officer	Inge Verhoef	inge.verhoef@windvogel.nl	
Investor relations	Arie Wingelaar		
External auditor	Harry Wingelaar		

9.1.5 Technical Details

Equipment 1 maker	
Equipment 1 model	Lagerweij L93-2
Equipment 2 maker	
Equipment 2 model	

9.1.6 Financial Details

Nature of capital sought			
Equity	€ 1 000 000	Estimated yearly dividends (equity)	5%
Debt	€ 2 180 463	Estimated interest rate (debt)	3,00%
Bank guarantees		Interest payment period	
Donation	0		
In kind (knowledge, working hours)			
Amount sought			
in €	Still to be determined	... €/kWh	0,04

<i>in £</i>		<i>... €/year</i>	196 200 €
<i>in ... (fill in)</i>		<i>Subsidie income (0,055 €/kWh)</i>	269 775 €
Potential exit strategy for investors			
<i>stock</i>			
<i>debt reimbursement</i>	3%		
<i>starting date</i>	Januari 2015		

9.1.7 Operational Details

Development stage	
Planning / Construction / Operation	Will start as soon as board agrees
Date authorized	
Permits (upload)	Permits acquired
Technical information	
Date of entry into construction	?
Date of entry into service	?

10 Annex – Abundance Generation

10.1.1 Executive Summary

Project name	Oakapple Berwickshire
Promoter's name	Abundance
Promoter's legal format	Limited company
Project type (production technology)	Solar PV
Location	UK
Installed capacity	Up to 2,595 kWp
Total cost	Up to £3.1m
Type of participation sought (debt, equity, donation, etc.)	Debt
Estimated entry into service	jan/00
Expected turnover (annual - year 1) in €	350 000
Expected return on investment(%, IRR)	7,50%

Why should an investor support the project?

Promotes renewable energy, two established renewable energy developers, funds the installation of solar panels on social housing and helps cut their electricity bills.

10.1.2 Project Details

Project name	Oakapple Berwickshire
Type of renewable energy	Solar
Type of technology	Roof-top solar PV
Installed capacity (in kWp)	Up to 2,595
City	N/A - multiple
Region	Berwickshire
Country	Scotland, UK
Total cost	Up to £3.1m
Estimated production (Year 1)/ in kWh	2,500,000 kWh
Type of remuneration (FIT, FIPremium, PPA, etc)	FiT
Energy supervising authority	?
State of Due Dilligence	Complete

10.1.3 Promoter Details

Name	Oakapple Renewable Energy
Address	Oakapple House 1 John Charles Way Leeds LS12 6QA
VAT number	
Year of creation	2010
Tyearly turnover (last available year)	
Legal representatives	Bond Dickinson
Country	UK
Website	http://www.oakapple-energy.co.uk/
Social media	
Telephone	
Fax	
Legal form/entity	Limited company
Assets/Capital	
Current installed capacity (in kWp)	100 000
Installed capacity per technology	100,000 solar PV

Number of plants in operation	
Organization description	Oakapple Renewable Energy, along with Edison Energy are the two developers behind the Oakapple Berwickshire project. They do the installation, O&M and are shareholders of the project company
Current funding sources and percentage	
Assets	
Equity	
Debt	
Reserve	

10.1.4 Management Details

	name	e-mail	telephone number
CEO			
CFO		-	
CTO		-	
Information/press officer		-	
Investor relations		-	
External auditor			

10.1.5 Technical Details

Equipment 1 maker	
Equipment 1 model	
Equipment 2 maker	
Equipment 2 model	

10.1.6 Financial Details

Nature of capital sought			
Equity		Estimated yearly dividends (equity)	
Debt	£3.1 million	Estimated Interest rate (debt)	7.5% IRR
Bank guarantees		Project Duration	
Donation		Interest payment period	every 6 months

<i>In kind (knowledge, working hours)</i>	
<i>Amount sought</i>	
<i>in €</i>	
<i>in £</i>	£3.1 million
<i>in ... (fill in)</i>	
<i>Potential exit strategy for investors</i>	
<i>stock</i>	
<i>debt reimbursement</i>	YES
<i>starting date</i>	09/12/2015

<i>... €/kWh</i>	
<i>... €/year</i>	£350 000

10.1.7 Operational Details

<i>Development stage (Planning / Construction / Operation)</i>	Construction pending funding received from Debenture offer
<i>Date authorized</i>	31/10/2014
<i>Permits (upload)</i>	
<i>Date of entry into construction</i>	Minimum target was raised on 23/12/2015 - contruction to begin in January
<i>Date of entry into service</i>	January/February
<i>Project pictures (upload)</i>	https://www.flickr.com/photos/80630412@N05/sets/72157648154090537/