

**Project Title:** 

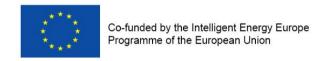
# THE EUROPEAN PLATFORM FOR CITIZEN INVESTMENT IN RENEWABLE ENERGY

Project Acronym:

**CITIZENERGY** 

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#### 1. Summary

This document will describe the plan to expand Citizenergy platform in order to reach expected goals from the Work Package 5 (WP5), Task 5.1.

It is expected that at least 44 additional projects will be registered by the end of this task, achieving a total number of 50 projects registered in the investment platform to this point (at least 6 pilot projects in the pilot project stage and 44 new citizen RES projects in the expansion stage).

This task will be led by UNDP, but is expected that RES promoters, REScoop.eu and CA participate in the platform expansion. In addition, partners outside the consortium such as international organizations, citizen associations, local authorities and other stakeholders will assist in the implementation, promotion and dissemination of this task.

A number of tools to attract new RES promoters and citizen target groups will be used to implement this plan, including an explanatory/motivational video, promotion of RES projects facilitated using the platform, the participation in local/national/EU level events and the strong involvement of the international organizations in the consortium, their members and key opinion leaders.

Citizenergy platform will be part of a new and emerging set of solutions which aim is to finance the renewable energy projects.

#### 2. Overview of crowdfunding platforms

The rationale for support of the renewable energy crowdfunding market stems from four critical findings:

- 1. The business case of crowdfunding has been proved, even if the market is still small;
- 2. Investment in renewable energy is among the least riskier asset classes;
- 3. The traditional financial intermediaries are not willing (or find profitable) to offer individual investors financial products that offer both a return on investment and a social/environmental impact; and
- 4. The technological infrastructure for renewable energy and crowdfunding is now trusted after decades of experimentations and trials.

Today, there are a growing number of crowdfunding platforms based on different business models already in operation (though mostly in startup stage or focus on one country only, but proving to have a steep learning curve). The main lesson learned from this overview is that there are many platforms emerging with different business models (the full list of crowdfunding platforms available today is given below.

# Abundance Generation - 8 abundance

SHORT DESCRIPTION - Abundance is peer-to-peer debt based crowdfunding platform oriented towards social and community renewable energy projects. It is funded in 2009 and based in London, UK. With 16 funded projects and around 15 000 000  $\pm$  invested in projects, Abundance is one of the largest and most successful CF platforms in the renewable energy sector.

HOW IT WORKS - Investors on Abundance can invest through a product called Debenture which is a type of medium to long range debt instrument. Through Debentures, investors can directly invest in open projects or buy Debentures in already funded projects. Minimum investment is £ 5 and process of investment goes through an online account. All funded projects are low carbon energy generation projects dealing with biomass, solar or wind energy. Most projects are oriented to lowering electricity bills for rural and community services; and all projects are located in the UK.

WEBSITE - The website is attractive and user friendly. It provides a lot of details about investing mechanisms, possible risks and projects.



SHORT DESCRIPTION - Bettervest is a German CF platform, for energy-efficiency / renewable energy projects of companies, NGOs and local authorities that let the crowd participate in cost savings with financial returns. Until now, Bettervest supported 34 projects, and all of them were successfully funded.

HOW IT WORKS - The money is collected within the platform on an escrow account until the funding goal has been reached and the project can be realized. Each project must have been analyzed by an indipendent energy efficiency consultant. A defined percentage of the savings is distributed to the crowd until the investment plus a previously agreed upon profit has been paid back. SMEs, NGOs and

local authorities can finance their energy saving projects and reduce their CO2 emissions. After the project is successfully implemented, investors receive capital plus (fixed) interest yearly (annuity method). At the end of the contract period the investor receives the entire investment plus interest. Bettervest is a new concept of sustainable investments with a focus on energy efficiency. Betterwest is open for investment in domestic (German) project and also international projects, from which some of the successfully funded were:

- LED lighting for Karolina School in Szeged, Hungary (46,400€, 92 investors)
- Solar home system for 800 Kenyan families (237.800€, 294 investors)
- Solar drip irrigation farm in Tanzania (75.750€, 141 investors)
- Mobile solar power plants in Mourdiah, Mali (107.700€, 174 investors)

WEBSITE - Solid, it provides sufficient amount of information about projects, project owners and investors but mostly in German.



#### Croenergy

SHORT DESCRIPTION - Croenergy is the first Croatian crowdfunding platform founded in 2015, with the main goal, to promote innovative financing concepts for energy projects on local, regional and national level.

HOW IT WORKS - Currently, Croenergy is offering only donation crowdfunding model with the intention to implement investment crowdfunding models in the future.

ABOUT PROJECTS - Croenergy currently has one active project, an energy independent kindergarten in Pregrada, Croatia.

WEBSITE - Platform design and content are simple and basic. If Croenergy wants to offer investment crowdfunding in the future, the platform will need to be remodeled so it could provide more information for investors and project owners. Also, if platform plans to attract foreign investors, English version of the website would be recommended.



SHORT DESCRIPTION - Econeers is a German online platform enabling crowdfunding for green projects in renewable energies like small solar and wind, cogeneration as well as energy efficiency projects. The platform has 7 successfully funded projects with a total of 4.3 million EUR invested. Econeers has also tried to fund international projects.

How it works - Similar to the other German platforms, users who own German bank accounts can be potential investors. Through the Econeers private crowd-investors have the chance to participate in the energy transition with smaller amounts from 250 to 10.000 euros. Therefore the project operators offer fixed interest rates for each investor. After the project implementation, the investor receives investment plus interest as fixed annual rate (annuity method).

PROJECTS - Until now, Econeers supported 10 projects, from which 7 of them were successfully funded. Most successful projects, with the largest number of investors and biggest interest rate were oriented to energy efficiency. Beside of that project, 1 CHP, 3 solar power plants and one ecopark were successfully funded.

WEBSITE - Design of the website is not very attractive, but it contains all important information about the platform and its projects. Similar to the other German platforms, there is no English version of the website.

## Gen Community - Gen Community

SHORT DESCRIPTION - Gen Community its cooperatively owned initiative located in UK. Gen Community offers the opportunity to invest in community shares in renewable energy co-ops.

HOW IT WORKS - They organize all the projects themselves, rather than being platform for other projects. Alongside to other projects their also focus on large projects aimed at bigger investors; these projects are usually in the £1-2million range and the minimum investment is £500. Technically they are not crowdfunding platform but they organize sustainable projects offering social and fair financial returns which benefit community and environment. As today they had one project with aim to raise £1 million.

WEBSITE: The co-operative enterprise hub



SHORT DESCRIPTION - Goteo is a platform for civic crowdfunding and collaboration on citizen initiatives and energy, social, cultural, technological and educational projects. Goteo is also a non-profit foundation (with consequent tax advantages for donors) behind the platform, and a multidisciplinary team developing tools and services for co-creation and collective funding. . Everything about the platform and the projects it hosts point to common goods, shared resources, and collaborative effort. Its focus on communal work and rewards is unique amongst its competitors, and when it comes to copy left licensing they stand alone in practicing what they preach.

HOW IT WORKS - Projects can operate or be effective in Spain or anywhere else in the world. So far they have successfully funded more than 460 projects. Platform fee is 8%. Right now it's the only crowdfunding software that is itself Free Software, allowing everyone to inspect how it works and run their own copy.

WEBSITE - Goteo is also the only such site to my knowledge that's built with public money. Funded by Spain's Department for Education, Culture and Sport, Barcelona's City Council, and The University of Andalucia, Goteo exists to host projects which "contribute to the common good, free knowledge, and open code". Nearly all the convenient features that you'd expect from more established platforms are included, together with a pleasant functional interface.

## Green Crowd - GREEN GROWN

SHORT DESCRIPTION - Netherlands-based Greencrowd is founded to accelerate the realization of sustainable energy projects. Investors in Greencrowd projects will realize an environmental impact as well as a financial profit. Greencrowd thoroughly evaluates the risks involved in the project and assures there are guarantees (e.g. insurances, real estate as collateral) to mitigate the potential losses. Platform has a 100% success rate in funding RES projects, with 21 funded projects worth 1.8 million €. It is organized as a foundation and has no financial profit. Unlike the most of the CF platform, anyone 18 years or older can apply to participate in Green Crowd as a financier with no restrictions.

HOW IT WORKS - Green Crowd is a lending based CF platform. If the project is successfully funded and none of the investors choose to exercise their right of withdrawal, the project owner receives that money. After the project is successfully implemented, investors receive investment plus interest as a fixed amount of money (annuity method). At the end of the contract period investor will receive entire investment plus interest.

ABOUT PROJECTS - Most of the projects are domestic (Dutch) and connected to RES energy generation (biggest share are solar energy projects). Green Crowd has 2 successfully funded international projects, one in the Czech Republic, and one in New Zealand. This shows that Green Crowd is capable and strong enough to support international projects. The project in New Zealand successfully funded in only 34 months and 6.5% interest.

WEBSITE - The website has a lot of information about the platform, CF in general and projects. The website and all additional documents are in Dutch.



SHORT DESCRIPTION - Kiva is a non-profit organization with a mission to make social and economic impact through projects by providing affordable access to capital to those in need. Essentially, Kiva is a lending based CF platform, but with the accent on empowering people around the world, and not for bringing money to investors.

HOW IT WORKS - Kiva works with a range of organizations to find borrowers and administer the loans. These organizations are called Field Partners (FP). There are no restrictions to the potential borrowers, anyone with an internet connection can make a loan, with a minimum of 25\$. With lenders money, Kiva provides FPs with capital at 0% interest, and after that FPs disburses loans to borrowers. After the implementation of the project, FPs collect repayments from borrowers, with interest only to cover operating costs; and send it further to lenders. Kiva does not charge interest to FPs nor provides interest to lenders. Through this social lending mechanism, Kiva aggregates a large number of small amounts of crowdfunded loans to borrowers.

ABOUT PROJECTS - Kiva has more than 4.000 successfully funded projects and more than 800 million \$ in loans! Kiva covers a broad range of project niches, from agriculture, clothing, construction, education, food and housing to retail, transportation and services sector. Mostly it is oriented to funding small projects, from few hundred to a few thousands of dollars, but the number of loans and borrowers shows that Kiva has potential to support larger project.

WEBSITE - Kiva's website is one of the most appealing among the considered websites. A large number of inspiring pictures and stories makes this platform very attractive and can attract lenders from all around the world, and not just from the +homeland. On the other side, the website also contains all necessary technical data and information for lenders and borrowers.



#### LeihDeinerUmweltGeld -

SHORT DESCRIPTION - LeihDeinerUmweltGeld is one of the largest German RES CF platforms, founded in 2013. LeihDeinerUmweltGeld focuses on environmentally related projects and offers citizens the possibility of an investment with the highest transparency, social value and attractive interest rates.

HOW IT WORKS - LeihDeinerUmweltGeld is a lending based CF platform where potential investors can invest their money through Environmental Credits. The investment procedure is similar to the procedure on other lending based platforms: Investors invest their money in one or more of open projects, and if the project is successfully funded, theproject owner receives the collected money. After the implementation of the project, the investor receives investment plus interest as a fixed amount of money yearly (annuity method). At the end of the contract period the investor will received the entire investment plus interest. Currently, a German bank account is required, but the platformintends to change this in the near future and go international.

ABOUT PROJECTS - LeihDeinerUmweltGeld has 21 successfully funded projects: Solar energy- 8, wind energy- 6, biomass- 5, biogas -1, mixed energy (solar + biomass) -1; with around 4.3 million EUR issued in loans. This platform is the most successful among considered platforms regarding biofuel projects.

WEBSITE - The website provides very detailed information about projects, perhaps the most detailed among the considered platforms. Besides that, the website gives only rudimental information for project owners and investors. The investment and loan process could be described better. Also, the website could be more attractive. The website is only in German.



#### **Solar Schools -**

SHORT DESCRIPTION - The Solar Schools project is putting providing solar energy to schools all over the country. Schools set a fundraising target for their very own solar roof, and then public and companies can contribute financially. Solar Schools is run by "10:10", a charity that brings people together to help tackle climate change.

HOW IT WORKS - Solar Schools provides schools with a tried and tested package of resources, training and support. They get a small team of volunteers together and get to work - dreaming up fun events and ideas to get everyone involved. To make sure they can support all kinds of schools, big and small, they offer two different funding models: a) Solar Schools Classic where schools raise £8-15k, on their own solar panels outright and get 100% of the income from day one; b) Solar Schools Community where schools raise £5k+ and invest in a larger solar roof through a Community Energy Cooperative.

ABOUT PROJECTS - Through this kind of crowdfunding, Solar Schools funded almost 80 schools in the UK, and almost (%?) projects were successful. Targeted amounts are from 8000£ to 40 000£. The website is very appealing and it provides a lot of the project pictures and information about platform and partners. With a lot of children pictures, pictures of their art works and school pictures, potential investors can have a great look to the project they intend to invest.

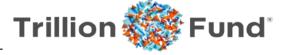


SHORT DESCRIPTION - SunFunder is crowdfunding platform with focus on solar energy business around the world. In the core of SunFunder model is partnership with solar businesses around the world. SunFunder conducts due diligence on each solar partner and works with them to post project on the platform.

HOW IT WORKS - Each project has a funding goal and people can invest as little as \$25. Once a project is fully funded, SunFunder facilitates low-cost financing to the solar partner to fund the implementation of the project. During the financing term, as the solar partner receives payments from their customers, usually the people who directly benefit from the solar, the partner make repayments to SunFunder. SunFunder then repays investors and they earn back their investment and earn so called ImpactPoints. 100 Impact Points represents \$1 but Impact Points can't be converted into money. Repayment and ImpactPoints can then be used to reinvest in more projects. They stated warning about risks.

PROJECTS - Thus far, SunFunder has fully funded projects in total amount of about \$ 8.5 M and one project is in funding process. There is description of each project, investment counter, how many people donated money, location of project, repayment schedule, repayment term, interest rate and impact points. All currencies are accepted, and SunFunder also posted link to currency conversion rates.

WEBSITE: Very attractive website, on the bottom of the page there are pictures of contributors



#### Trillion Fund -

SHORT DESCRIPTION - Trillion Fund is a British CF platform and is the most successful platform for the renewable energy sector. Due to the fact that recent changes in UK government policy have rocked investor confidence and made the landscape for future renewable energy projects very uncertain, Trillion Fund waits to see the future development in order to be able to offer any new renewable energy loans for the foreseeable future.

HOW IT WORKS - Trillion Fund offered a wide range of investment crowdfunding mechanisms such as Bonds, Community Share, Debenture, Equity, Fund and Loan. Currently, they offer only donation based crowdfunding, and have no open project.

ABOUT PROJECTS - Trillion fund successfully funded 19 projects which were oriented to several different RES technologies: Biomass (1 project), Hydro (1 project), Mixed energy (7 projects), Solar (6 projects), Wind (4 projects). Through those projects, Trillion fund managed to collect more than 65 million £. Almost all projects were located in the UK.

Only one project was international, loan based CF project for The Converging World, a UK charity which invests in renewable energy in India. This was also one of the less successful projects, only quarter of the initial targeted amount was collected (50 00 £ out of 200 000£).

WEBSITE - The website is attractive, with a lot of information about projects. Besides that, because previously mentioned decision that Trillion Fund is not offering investment based CF, currently there is no information about investment mechanisms.



SHORT DESCRIPTION - Trine is a Swedish equity based crowdfunding platform that supports solar projects around the world (might be expanded with other technologies in the future). Through closing the gap between private capital in developing countries and local solar partners in emerging markets, Trine tries to provide access to electricity to the people that do not have it. Besides positive social and climate impact, Trine, as an investing CF platform, provides an opportunity for potential investors to earn money.

HOW IT WORKS - Investors can invest their money in one or more project provided by Trine. The minimum is 25\$ and the maximum possible to invest is 100% of the project costs (or whatever is left until it's fully funded). The investment process can be divided in several steps. Investor is given shares in the public company TRINE Finance AB in equivalent to invested amount. After a project is successfully funded, the money invested is transferred as a loan with interest to Trine's local solar partner. If the project is not successfully funded, the investor gets all of invested money back. The solar partner gets paid from the costumers and pays amortization of their loan back to Trine, with interest. After the project period is due, and the loan has been fully repaid, TRINE buys back investor's shares in TRINE Finance AB (initial investment plus the rate of the return).

ABOUT PROJECTS - Trine has three successfully funded solar projects, two in Kenya and one in Uganda.

WEBSITE - Trine's website is one of the most appealing, with very nice projects pictures and descriptions. Quality of website is also excellent; it contains all necessary investment and project information for investors and project owners.

### AY de Windcentrale

#### Windcentrale -

SHORT DESCRIPTION - Windcentrale is a Dutch crowdfunding platform that was founded in 2010. with the aim to accelerate the transition to sustainable energy in the Netherlands.

This platform, one of the largest and most successful RES CF platforms, is offering the opportunity to become co-owner of a windmill.

Windcentrale has very ambitious plan: at least 1 in 20 households in the Netherlands allow to generate their own energy through wind sharing.

#### **HOW IT WORKS -**

- Windcentrale splits windmill in thousands of pieces
- Potential investors can buy one or more wind shares
- A wind share delivers an average of 500kWh annually
- Investor gets the power generated by wind shares
- That power is automatically deducted from a energy bill

ABOUT PROJECTS - Windcentrale has 9 windmills which are all located in the Netherlands.

WEBSITE - The design of the website is ok, but it could be more attractive.

There is not enough information about past and current projects. It would be good if potential investors could see how past project are performing in real time.

The biggest disadvantage is that English version of the website does not exist.

#### LIST OF AVAILABLE CROWDFUNDING PLATFORMS FOR RENEWABLE ENERGY

Platform name	Website	Type of projects	Number of projects	Amount raised
Abundance	https://www.abundanceinvestment.com/	Community RES projects (Solar, wind, biomass)	16 funded projects, 1 open project	Over 14 000 000 £
Bettervest	https://www.bettervest.com/	RES and energy efficiency projects	34 funded projects	Over 2 500 000 €
buzzbnk	http://buzzbnk.org/	Mostly social enterprises and charities; few RES and environmental	136 funded projects	Over 1 000 000 £
Central Union	http://www.central-union.com/	Central Union is a small platform, without any noticeable success in funding RES projects.		
CircleUp	https://circleup.com/	CircleUp's platform is not funding RES projects.		
Cleanreach	http://cleanreach.com/	Cleanreach platform is focused on ocean energy.		
Collective Sun	https://www.collectivesun.com/	Collective Sun is US platform oriented only on US projects and US investors.		
Conda	https://www.conda.eu/en/	Conda is investing CF platform not oriented on RES projects).		
Coopernico	http://www.coopernico.org/	Coopernico is a Portuguese crowdfunding platform, oriented on small, mostly solar projects.		
Croenergy	http://croenergy.eu/	Energy efficiency and RES	1 open project; 1 pending project	50 000 kn
crowdcube	https://www.crowdcube.com/	Crowdcube is not funding RES projects.		
crowdfunder	https://www.crowdfunder.com/	Crowdfunder is not funding RES projects.		
Divvy Green	http://divvygreen.com/	Divvy Green is a platform that operates only in the USA.		
Duurzaam Investeren	https://www.duurzaaminvesteren.nl/	All projects and Website and all documents are also in Dutch.		
Ecoligo	http://www.ecoligo.com/	Ecoligo is a startup platform without any successful project so far.		
Econeers	https://www.econeers.de/	Renewable energy and energy efficiency; focus on hidropower, solar and wind energy	10 completed projects of which 7 were successful	4.3 million € in successfully funded projects
Ecrowd	https://www.ecrowdinvest.com/	Investment offers are open only for Spanish residents		

Enerfip	https://enerfip.fr/	Enerfip is a French crowdfunding platform, focused only on French market.		
Fundable	https://www.fundable.com/	Fundable is not RES oriented crowdfunding platform.		
FundedByMe	https://www.fundedbyme.com/	FundedByMe is not funding RES projects.		
geldvoorelkaar	https://www.geldvoorelkaar.nl/	Geldvoorelkaar is a Dutch crowdfunding platform focused only on Dutch market.		
gofundme	https://www.gofundme.com/	gofundme is not funding RES projects.		
Green Channel	https://www.greenchannel.fr/	Green Channel is a small French platform focused only on French market		
GreenCrowd	https://greencrowd.nl/	Different community RES projects (Solar, wind, biomass,hydro) and infrastructure projects like energy storage	21 funded project, 2 open projects	Over 1 800 000 €
GreenRocket	https://www.greenrocket.com/	GreenRocket is a CF platform without successfully funded projects.		
Greenvesting	https://www.greenvesting.com/	Greenvesting is a good CF platform for solar projects, oriented only on German market.		
greenXmoney	https://www.greenxmoney.com/	GreenXmoney is a German platform focused only on German market,		
Gridshare	http://www.gridshare.com/	Gridshare looks like a startup CF platform without any successfully funded project.		
Kiva	https://www.kiva.org/	Different sectors : green, agriculture, education, small entrepeneurs	Over 4000 projects	Around 800 000 000 \$ in loans
LeihDeinerUmweltGeld	https://www.leihdeinerumweltgeld.de/	German CF platforms, oriented on German market.		
Lendosphere	https://www.lendosphere.com/	French CH platform, oriented only on French market.		
Lumo	https://www.lumo-france.com/	French CH platform, oriented only on French market.		
Microgenius	http://www.microgenius.org.uk/	Microgenius does not support projects that are not in the UK, and only people with a UK bank account can invest.		
MicroVentures	https://microventures.com/	Microventures is not funding RES projects.		
milaap	https://milaap.org/	Milaap is not funding RES projects.		
Mosaic	https://joinmosaic.com/	Mosaic is oriented only on USA market.		
MyMicroInvest	https://www.mymicroinvest.com/en	Mymicroinvest is not funding RES projects.		

one planet crowd	https://www.oneplanetcrowd.com/	Oneplanetcrowd is not funding RES projects.		
Re-Volv Solar Seed Fund	https://re-volv.org/	Re Volv supports only projects from the USA.		
Solar Schools	http://www.solarschools.org.uk/	Solar Schools supports only the UK projects.		
SunFunder	http://sunfunder.com/	SunFunder is platform oriented to investing in solar energy.		
Trillion Fund	https://www.trillionfund.com/	Due to recent changes in government policy, Trillion fund will not be able to offer any new renewable energy loans for the foreseeable future.		
The Sun Excange (South Africa)	http://www.thesunexchange.com/	The Sun Excange is a startup platform, funded through Indiegogo in 2015.		
Trine	https://www.jointrine.com/	Solar projects	3 successfully funded projects; 1 open project	Over 100 000 €
Village Power (USA)	http://www.villagepower.com/	Village Power is oriented only on USA market		
WeShareSolar	http://wesharesolar.com/	WeShareSolar is oriented only on Dutch market.		
Windcentrale	https://www.windcentrale.nl/	Windcentrale is oriented only on Dutch market.		

#### 3. Overview of renewable energy cooperatives (REScoops)

REScoop is short for renewable energy cooperative, and generally stands for citizen's initiatives gathered around renewable energy project. REScoops do not necessarily have the legal statute of a cooperative, but rather distinguish themselves by the way they do business. They typically respect seven principles defined by the International Cooperative Alliance:

- 1. Voluntary and Open Membership
- 2. Democratic Member Control
- 3. Economic Participation through Direct Ownership
- 4. Autonomy and Independence
- 5. Education, Training and Information
- 6. Cooperation among Cooperatives
- 7. Concern for Community

After joining a cooperative, members can buy shares and become co-owner of local RES projects, or can buy the electricity at a fair price. In addition, Members can actively participate in the cooperative: they can decide in what and where the REScoop should invest, and are consulted when setting the energy price. REScoops business models vary significantly in order to adapt to different projects and national legal frameworks.

There are more than 2,400 European REScoops, but most of them are located in Western Europe, with only few in Central and Eastern Europe due to unfavorable support mechanisms for renewables, and because the word "cooperative" is still easily associated with communism. The most popular European REScoop countries are Germany, Denmark and Austria.

REScoop.eu is the European federation for groups and cooperatives of citizens for renewable energy and energy efficiency. It is a growing network of 1,240 REScoops and 300,000 European citizens.

REScoops have massive potential to facilitate citizen's investment and engagement in RES projects, as demonstrated by members of the REScoop.eu, whose members have jointly invested 2 billion euro in production installations for renewable energy. These installations have a production capacity of 1 GW. The combined annual turnover of its members is around 950 million euro, and they provide sustainable jobs for more than 1,100 European citizens.



REScoops in Europe (source: www.rescoop.eu)

#### **REScoops in Europe**

REScoops and REScoop federations are of the key importance for success of the Citizenergy platform. It is important that Citizenergy is presented to as many REScoops in Europe and used to help them to finance their projects.

In order to analyze the REScoops potential for development of new RES projects, list of major European REScoops is made.

#### 1. Ecopower

Ecopower is a renewable energy cooperative with nearly 50.000 members who jointly own 17 large wind turbines, 322 solar installations, 3 small-scale hydropower installations, 1 cogeneration installation and a wood pellet factory. Together these installations produce 55 million kWh per year. Ecopower supplies the energy to their members at a reasonable price. Ecopower also educates members about renewable energy, energy efficiency and the cooperative business model.

#### 2. Middelgrunden Vindmøllelaug

Middelgrunden was the first offshore wind cooperative in Denmark. In 1997, about 8,600 local citizens jointly invested in a 10.2 MW offshore wind farm in front of Copenhagen. The project is one of the most photographed wind farms in the world.

#### 3. Enercoop

Launched by ecological and ethical business organizations in 2005, Enercoop has become the largest French cooperative green energy supplier. Their mission is to decentralize energy production and to promote a citizen-led energy transition. The members of the REScoop are producers, consumers and other related partners of green electricity. Enercoop supports the start-up of local REScoops and has become a network of 10 regional cooperatives who actively develop renewable energy projects and

who promote rational energy use. Enercoop has an annual turnover of 20 million euro and employs over 80 staff members. Last year they supplied 100 GWh to their 23.000 customers but their ambition is to have at least 150.000 customers by 2020.

#### 4. Deutscher Genossenschafts- und Raiffeisenverband (DGRV)

The National Office for Energy Cooperatives represents the interests of 850 German energy cooperatives and their 150.000 members. The primary mission is to lend a voice to the interest of energy cooperatives in national and international policy debates. The National Office also plays a key role in Berlin as a source of information for national policy makers as well as for public authorities, associations and the wider public. In collaboration with regional cooperative associations, the National Office supports energy cooperatives in their endeavors to continue developing their business. Energy cooperatives are paving the way for a grassroots energy transition and the positive effects that it will have on local authorities and the regional economy.

#### 5. Sifnos Island Cooperative

Sifnos is a Greek island where local citizens took the initiative to set up a local REScoop. Sifnos is not interconnected to the electricity grid of the mainland, making it exclusively dependent on fossil fuels. The mission of Sifnos Island Cooperative is to become self-sufficient through the implementation and use of local renewable energy sources. Today the cooperative is convincing islanders to make Sifnos a sustainable island where the local citizens jointly own the production installations. They are now setting up a comprehensive strategic plan to turn their idea into reality.

#### 6. Green Energy Cooperative (ZEZ)

Green Energy Cooperative (ZEZ) is a Croatian cooperative that deals with the planning of and investment in renewable energy and energy efficiency projects. The cooperative was founded to initiate actions for sustainability in the local community and is now looking into the opportunity of becoming a local energy supplier. ZEZ sets up a fruitful collaboration with citizens, companies, institutions and other stakeholders whose primary interest is to incorporate social responsibility and sustainable development within their local communities. ZEZ is closely involvement with the set-up of the first ethical bank in Croatia and participates in a platform for good economy. The latter is putting energy production and consumption directly into service of other economic sectors, thus making these projects more profitable and more sustainable.

#### 7. Coopernico

Coopernico is a solar REScoop in Lisbon that was founded by 16 people who all shared the same passion for renewable energy. Coopernico issues shares and uses these funds to collectively invest in renewable energy projects. Today the REScoop comprises 257 members who jointly invested 328.500 euro. About 93 local families buy renewable energy from the cooperative.

#### 8. De Windvogel (consortium member)

De Windvogel is a renewable energy cooperative with 3,300 members who jointly own six wind turbines in the Netherlands. Together these projects produce 7,600 MWh per year, which is enough to cover the annual energy consumption of 2,500 private houses. The wind energy is sold to the members of the cooperative.

#### 9. SOM Energia (consortium member)

SOM Energia is a Spanish renewable energy cooperative based in Girona. The business model of Somenergia is similar to Ecopower in a way that they issue shares to collectively invest in renewable

energy projects. The energy that results from the project is then sold to their members. Today SOM Energia has over 20.000 members and about 25.000 customers.

#### 10. Elabora Confcooperative

Back in 1900, most production facilities and distribution grids were installed in highly populated areas, leaving remote and thus less profitable areas without proper access to electricity. As a reaction, local citizens took matter into their own hands and set up a local REScoop. Especially in the Italian Alps, we found a high density of REScoops. Today these REScoops own and run hydropower installations. Some even own and manage a local distribution grid. Elabora provides services and technical advice to Confcooperative, the leading Italian federation of cooperatives. Within Confcooperative it is the association Federconsumo that deals with 77 Italian REScoops. Together these REScoops account for an annual turnover of 120 million euro and a private equity of about 155 million euro.

#### 11. The Co-operative Energy

Created in 2011 by The Midcounties Co-operative, Co-operative Energy supplies electricity and gas to some 250,000 domestic customers across England, Scotland and Wales. Members are rewarded twice a year with a share of profits. From inception, a primary aim of Co-operative Energy has been to facilitate the expansion of community energy generation projects. Supported community energy projects range from co-operatives through to charitable trusts and crowd-sourced debt offerings. Supported technologies include wind, solar PV and hydroelectric.

#### 4. Expansion plan for crowdfunding platforms

The platform expansion plan will include at least 15 more crowd funding platforms at the Citizenergy platform. This task will take into account the requirements defined in WP3 and will include the selected projects and the chronogram for their implementation. Under this task, new platform promoters (or existing ones with new projects) will register for inclusion of their platform projects and their application will be evaluated by the consortium.

In what concerns the expansion model after the action, several options are on top of the table. In order to reach the target of 15 new platforms, set of focused activities will be conducted.

#### Activities

#### Developing Registry

In order to systematically continue to expand the Citizenergy platform with new RES platforms, there is a need to build registry of platforms suitable for cooperation.

All proposed RES platforms willing to register will be described in the common template and in table-like form which will enable comparison and detection of risks.

Template will include, among others: Platform description, type and number of projects, amount raised, investment mechanisms, estimated IRR, fees, regulations, website analysis and others.

#### 2. Evaluating platforms suitable for cooperation

Researched RES platforms will be analyzed and evaluated by the criteria which best fits Citzenergy platform expansion plan. Criteria will include among others:

- more than one project funded,
- platform is currently up and running,
- energy being one of the areas of activity and others.

In what concerns the online tool's future management, it is important to assure that the platform technical and financial sustainability are compatible with its non-profit nature.

#### 3. Contacting platforms

UNDP Croatia has very relevant field knowledge in the introduction in the citizen RES concept and European experience, including IEE projects. Their worldwide trustworthiness UNDP is also using in approaching and contacting interested platforms and thus contributing in building trust in the platform.

After evaluation platforms suitable for cooperation were and will be contacted during RES/EE conferences, like the ECN's Eurocrowd Conference, Renewable energy crowdfunding conference in London (<a href="https://www.recrowdfunding.eu/">www.recrowdfunding.eu/</a>). Also important part will be a desk work and contacting work via email, telephone/mobile phone and professional social networks like Linkedin.

#### 4. Timeline of the activities

At least 5 new platforms should be included in the Citizenergy platform by the beginning of July and 10 new ones by the beginning of September 2016.

#### 5. Expansion plan for REScoops

Platform expansion will ensure new REScoop projects, in addition to those included through WP4, and from new countries will be registered on the Citizenergy platform.

It is expected that at least 44 more new projects will be registered by the end of this task, achieving a total number of 50 projects registered in the investment platform to this point (at least 6 pilot projects in the WP4 stage and 44 new REScoop projects in the WP5 stage).

In order to reach the target of 44 new projects registered on the Citizenergy platform, set of focused activities will be conducted.

#### **Activities**

#### 1. Developing Registry of REScoops and projects

In order to systematically continue to expand the Citizenergy platform with new RES projects, there is a need to build registry of projects and REScoops. In WP4, Pilot project Plan (D4.1.) was developed in order to keep track of the proposed projects. This will be expanded and used for registering future proposed projects and REScoops on the platform.

All proposed RES projects and REScoops willing to register their project on the platform will be described in the common template and in table-like form which will enable comparison and detection of risks.

Template will include, among others: Project description, capacity, estimated electricity production, estimated profitability, location, minimum investment, calendar, partners involved, type of crowdfunding/contract model etc.

#### 2. Evaluating proposed RES projects and REScoops

Criteria for evaluating projects:

- 1. Project is open for funding at least 10 more days from the date it was submitted
- 2. Project is open for funding to general population, not just licenced investors
- 3. Project is either RES project or energy efficiency project
- 4. Project has clear and extensive information available online

#### Criteria for evaluating REScoops:

- 1. At least one successfully funded project in the last 24 months.
- 2. REScoop is in operation and has working and updated web page
- 3. Energy or energy efficiency is clearly stated as one of the focus of the REScoop

Each RES project proposed by the individual REScoop will go through due diligence process done by a quality control committee, initially composed of the RES promoters, the WP leader, USC, and EUPPY in order to select new projects.

Only after the consortium (in a monthly executive committee meeting) has approved a proposed project, it will be registered and shown on the platform.

Regardless of the project evaluation made by the quality control committee, each REScoop will be liable for its own projects registered on the platform for complying with legal requirements and all signed contracts.

#### 3. REScoop.eu General Assembly

Important source of new projects is the interaction of Citizenergy project and the REScoop 20-20-20 and CO-POWER IEE projects that share similar end goal - to promote more RES projects and whose impact and effectiveness will be leveraged with Citizenergy platform.

General Assembly of REScoop.eu will be held on May 20 2016 in San Sebastian. The goal for Citizenergy is to present the Citizenergy platform to all REScoops participants in person and to collect as many potential projects for the platform.

In addition, on May 18-19 there is a REScoop PLUS and REScoop MECISE project meetings in San Sebastian. This will be opportunity to share and collect new information on latest development on REScoop field. This is also important for further promotion of Citizenergy platform to target audience.

#### 4. Inclusion of REScoop.eu members

REScoop.eu will be used for communication of Citizenergy platform to REScoop.eu member cooperatives and its members. This is important communication channel as REScoop.eu gathers key stakeholders for Citizenergy platform (cooperatives and its members).

#### 5. Connection with national federations of cooperatives

High interest for the Citizenergy platform was expressed during the 2014 and 2015 by different entities and stakeholders, and the European wide connections have already been established before and during the project implementation.

In order to reach WP5 goals for expanding the Citizenergy platform with new projects, strong connections will be made with national federations of cooperatives and REScoops. This will enable streamlining the process form REScoop project to Citizenergy platform.

Citizenergy platform will make sure it will be visible and easily accessed through websites of national federations of REScoops and other stakeholders.

#### 6. Social networks and media

Citizenergy platform will be present on all relevant social networks and in the media. It is important to reach citizens which didn't yet invest in renewable energy projects in order to expand the pool of potential citizen investors in renewable energy projects.

#### Planned timeframe for inclusion of energy cooperatives on Citizenergy platform:

Q1 2016 - 8

Q2 2016 - 18

Q3 2016 - 30

Q4 2016 - 40

Q1 2017 - 50