

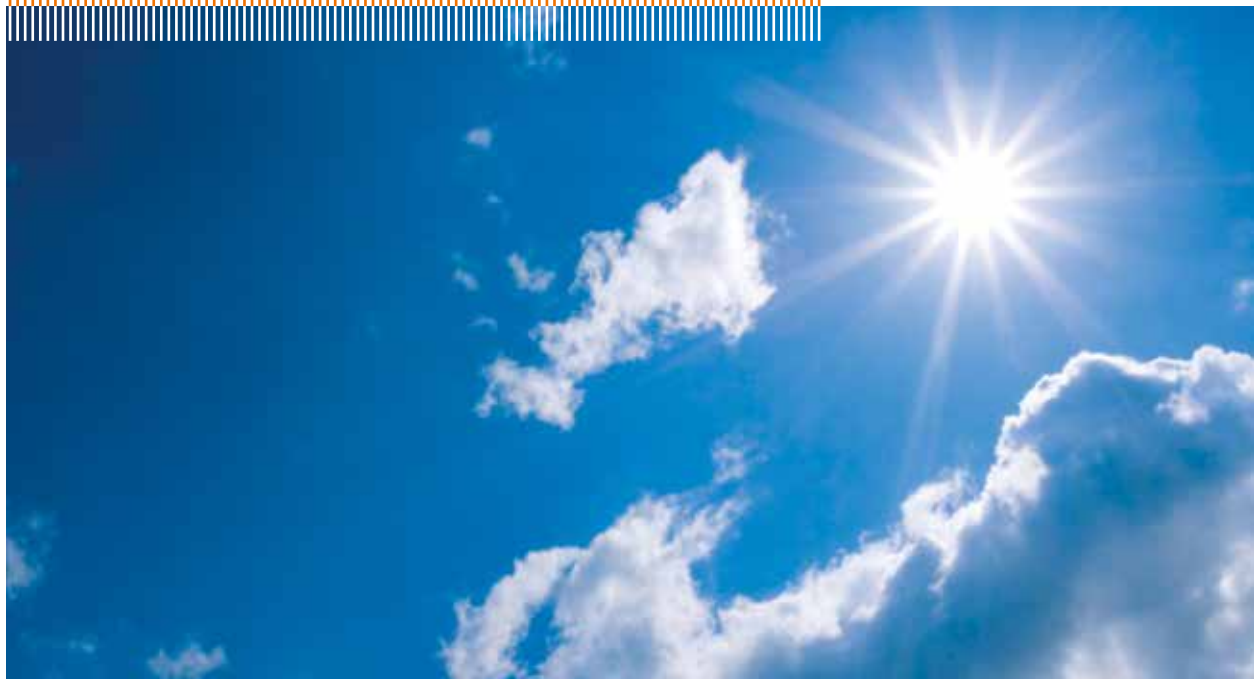


## Climate protection via community power projects



# Content

<b>Introduction and overview</b> .....	4
<b>Citizens as co-producers!</b> .....	6
The most basic form of company: The GbR .....	6
Alternative I for larger projects: The GmbH & Co. KG .....	8
Alternative II for larger projects: The cooperative (eG) .....	10
Table of types of business entity .....	12
<b>Excursus: Financial market regulations</b> .....	13
<b>Citizens as co-financers!</b> .....	14
Bearer bonds – municipal utilities take the initiative .....	14
Silent partnerships – Citizens participate in modernisation! .....	15
Subordinated loans – Citizens as lenders .....	17
Profit participation rights – Project developers woo citizens' capital .....	18
Table of typical investment products .....	19
Savings bonds – Banks and savings banks bear the risk .....	20
<b>Further opportunities for the financial participation of citizens</b> .....	21
Participation of the general public:	
Citizens' shares and municipal wind turbines .....	21
For local residents: Land lease systems, residents' bonus and marketing of electricity .....	23
<b>How municipalities can support community power projects</b> .....	25
<b>References</b> .....	26



## Introduction and overview

Many people wish to contribute to climate protection. The first steps often involve taking buses and trains instead of cars, buying energy-saving domestic appliances or purchasing green electricity. However, when it comes to installing renewable energy systems, the capacities of the individual are quickly exhausted. This might be due to the lack of roof surfaces for the installation of photovoltaic systems or due to insufficient financial means for the construction of a wind turbine. In these cases the pooling of capital, knowledge and time capacities can make the installation of a larger photovoltaic system on rented roofs, or even the erection of a whole wind farm, reality.

In this publication we refer to renewable energy systems which are operated and/or financed jointly by several citizens as 'community power projects'.

### **These community power projects are usually characterized by strong regional roots:**

- The participating citizens all originate from one single region
- The operating company for the energy system is registered in this region
- The energy system itself is constructed in the same region

As a consequence the value added remains in the region: municipalities benefit in the form of higher tax yields and local companies in the form of additional contracts.

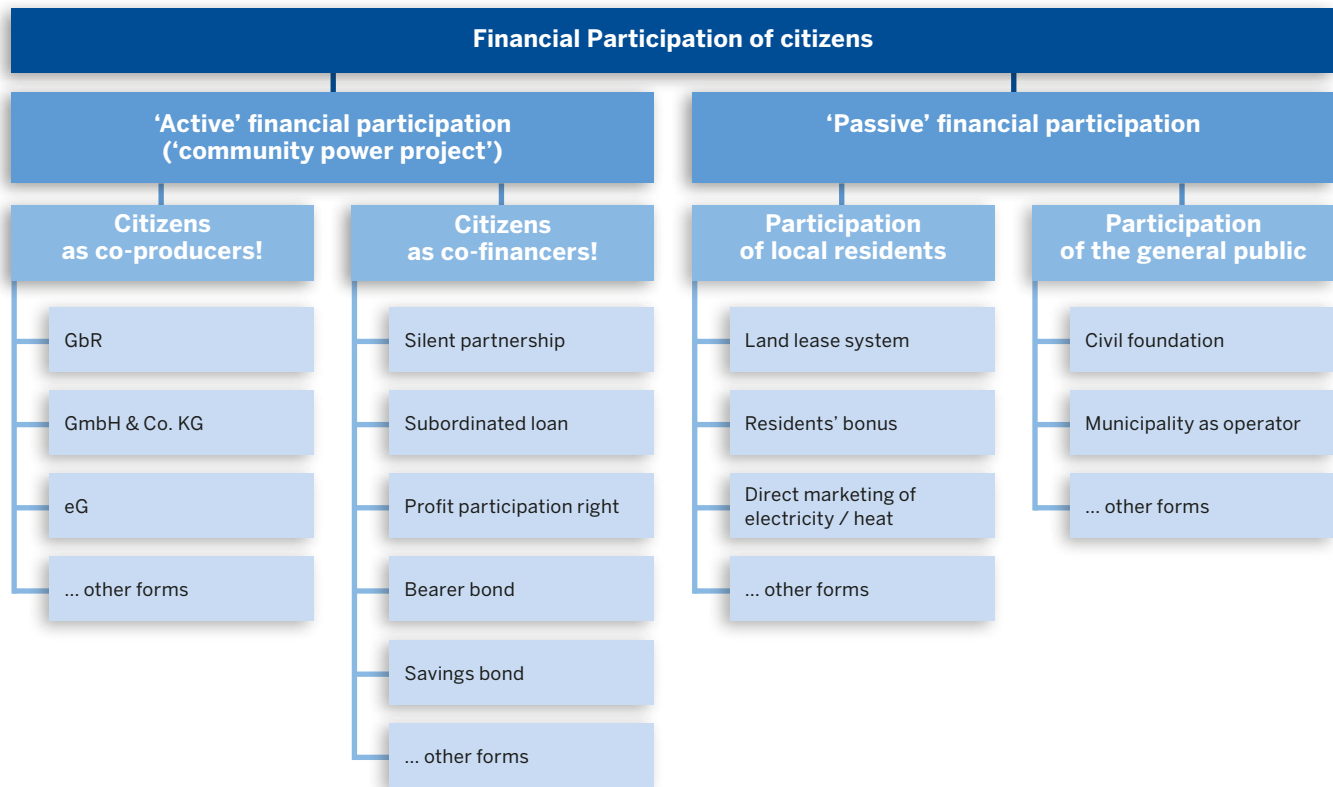
### **This brochure ...**

... illustrates the diversity of community power projects. The various approaches are examined on the basis of specific examples of projects from North Rhine-Westphalia (NRW). They are representative of numerous other projects either already successfully completed or planned, and are intended to act as examples for, and to encourage, imitation.

Rather than concentrating on specific types of energy or on technical details of energy systems, this brochure describes general parameters for the operating companies and for the forms of investment in community power projects. The initial steps of the formation of a business idea – including the definition of corporate aims, the search for partners and the profitability analysis – cannot be examined in detail in this publication.

The focus of this brochure is on those community power projects which allow citizens to participate financially in an 'active' way. Therefore, the first chapter 'Citizens as co-producers!' concentrates on community power projects in the narrower sense. Here, citizens set up an operating company for a renewable energy system and become its co-owners. They thus acquire rights of co-determination or of control. In such cases it is really true to say that citizens are co-producers!





When citizens become co-producers they enjoy a share of the project's profits directly, but also accept entrepreneurial risks. In companies which only operate renewable energy systems, the risk of loss is lower than in other sectors, thanks to the legally regulated feed-in tariff. Careful planning and risk minimisation by means of insurance policies and the assignment of expert technicians and operators are nonetheless vital.

The choice of the type of business entity for a community power project in the narrower sense influences the amount of administrative effort both in the foundation process as well as throughout the whole life span of the energy system. The type of business entity also determines the scope of the participants' rights of consultation and their liability. Changing the type of business entity at a later stage is time-consuming and cost-intensive. Therefore, it should be considered carefully from the very beginning.

The concepts examined in the second chapter 'Citizens as co-financers!' are characterised by the fact that citizens co-finance energy projects under the guidance and leadership of another company. In contrast to the projects of the first chapter citizens generally do not participate in company management and are frequently also not co-owners. Depending on the form of participation, citizens either provide funds directly to the operating

company of the energy system or a financial institution acts as an intermediary. Here, the main purpose of the community is to act as financier. Hence: 'Citizens as co-financers!'

The next chapter of this brochure describes other 'passive' opportunities for the financial participation of citizens. It includes examples of how people located in the vicinity of renewable energy projects can benefit from them even without being actively involved in the operating or financing of the projects. Such opportunities have up to now mostly been realised in the context of wind energy projects, but in principle they can be applied to other technologies as well.

The information contained in this brochure may not be construed as legal advice, but gives only a brief overview. Fiscal aspects are not examined at all. Detailed individual advice on tax and legal matters should under all circumstances always be obtained before an operating company is established or any opportunity for citizens' financial participation is initiated. Furthermore, the projects described in this brochure usually based their business cases on the legally regulated feed-in tariff in Germany. This regulation by the Renewable Energy Sources Act (EEG) is subject to frequent changes. Therefore, new community power projects should always take into account the latest legislation.

## Citizens as co-producers!

### The most basic form of company: The GbR

The quickest, simplest and most cost-effective solution for the realisation of a community power project is the foundation of a civil-law partnership (Gesellschaft bürgerlichen Rechts - GbR). This extremely popular type of business entity for community solar projects can, in theory, be created by two people over the kitchen table. There is, strictly speaking, not even any need for written articles of association. A written agreement does, however, give the company a solid foundation. It settles in advance potentially difficult situations, such as the withdrawal or death of one of the partners.

In principle, all partners represent the GbR jointly and the signatures of all partners are always required for the conclusion of contracts. For practical purposes, however, management of the company is frequently assigned to individual partners by means of a power of attorney. The GbR, as the owner of the energy systems, receives the payment of the feed-in tariff for the generated electricity. In the case of carefully planned projects, a surplus should remain after deducing ongoing costs for insurance, maintenance, reserves, etc. This surplus is distributed proportionally to the GbR's partners, a procedure which can be regulated in more detail in the articles of association.

The greatest drawback of a GbR is the fact that the partners bear full liability with their private assets. For this reason, great attention should be devoted to risk

limitation during the preparatory work for such a project: for example by means of appropriate insurance policies and the assignment of experienced installation technicians. Ultimately, interested citizens can only weigh up all the risks and opportunities before becoming a partner in a GbR. For this purpose the provision of detailed information on the GbR is indispensable. During the lifetime of the GbR, all partners may inspect the company's books at any time, and thus obtain information on the progress of the business. Furthermore, financial market regulations might apply to this form of financial participation (see excursus on p. 13).

Some community solar projects have combined a GbR with the foundation of a registered association (eingetragener Verein – e.V.), in order to further minimise liability risks. The GbR then continues to be the owner of the photovoltaic system and the recipient of the feed-in tariff. The association is entrusted with the construction and operation of the photovoltaic system, as the GbR's service-provider. In the service agreement the association accepts the accompanying liability.

The benefits of the GbR, with its simple, low-cost structure, are of particular interest for smaller community power projects with an investment amount of a few hundred thousand euros. However, the risks discussed above should still be carefully assessed against these advantages.



### Bioenergy village Altenmellrich – a community-based renewable local-heating system

The concept for the bioenergy village of Altenmellrich has dual foundations: On the one hand, a combined heat and power (CHP) plant unit was constructed by a local biogas producer for the cogeneration of electricity and heat from biogas. The electricity produced by this plant is fed into the local utility company's grid. And on the other hand citizens founded the Nahwärmenetz Altenmellrich GbR for the installation of a local-heating system which distributes the heat from the CHP unit. Sixty-one households have been connected to the heating system up to now. They receive a guaranteed all-in heat supply on the basis of regional biomass. Altenmellrich is officially entitled to call itself a 'bioenergy village', since biomass accounts for more than 50 per cent of local energy demand.

#### Profile

- Type of business entity: GbR
- Number of participating citizens: 61 in the GbR
- Project: Local-heating system (CHP plant unit implemented by Gröblinghoff Biogas GmbH & Co. KG)
- Investment amount: 700 000 euros (for the local-heating system, funding from KfW bank: 363 600 euros)
- Equity ratio: 2.7%
- Form of participation: shares in GbR each worth 300 euros
- Project contact:  
Georg Dicke, Chairman of Nahwärmenetz Altenmellrich GbR  
Plattenweg 5a  
59609 Anröchte  
Phone: +49 (0)2947 5754  
GDicke@gmx.de  
www.altenmellrich.de and www.wege-zum-bioener-giedorf.de
- Anröchte municipality contact:  
Alfons Strümpfer, Head of Buildings Department  
Hauptstrasse 74  
59609 Anröchte  
Phone: +49 (0)2947 888-600  
Fax: +49 (0)2947 888-8600  
a.struemper@anroechte.de

### BürgerSolar Recklinghausen – Good coordination within the municipal administration

Recklinghausen's first community solar project was constructed in 2009 on the roofs of the city's central depot. Two further community solar projects of similar size were completed on municipal roofs between 2010 and 2011. The roughly 200 000 kWh of electricity generated annually by these systems are sufficient to supply nearly sixty three-person households. This initiative was the result of the so-called 'Local Agenda21' group. Three GbR with 70 to 80 participants each provided the investment sums and leased the roofs from the city. The investors also include four mayors of Recklinghausen. The systems are operated by the association SolaRE e.V. A beneficial factor in this project was the role of the city's energy officer as a central contact person within the municipality, who coordinated internal administrative procedures.

#### Profile

- Type of business entity: GbR and registered association (e.V)
- Number of participating citizens: 3 GbRs, with 70 to 80 participants each
- Project: 3 photovoltaic systems of 75 to 79 kWp
- Investment amount: 220 000 to 260 000 euros
- Equity ratio: 100%
- Form of participation: shares in GbR from 500 euros, average investment 3 300 euros
- Project contact:  
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45665 Recklinghausen  
Phone: +49 (0)2361 491194  
moellerstorm@web.de  
www.sola-re.de
- City of Recklinghausen contact:  
Volker Remmler, Building Management Department  
Rathausplatz 3-4,  
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volker.remmler@recklinghausen.de

## Alternative I for larger projects: The GmbH & Co. KG

Larger photovoltaic, wind-power and biomass projects can also be implemented in the form of community power projects. However, as the investment amount increases – and at the latest in the millions range – the projects often become more complex: entrepreneurial risks increase and a full-time management is necessary. This demands a type of business entity which limits the liability of the participants, on the one hand, and facilitates the involvement of numerous investors, on the other. Unlike the GbR, the GmbH & Co. KG, a combined form of the limited partnership (Kommanditgesellschaft - KG) and the limited liability company (Gesellschaft mit beschränkter Haftung - GmbH), meets these requirements.

A KG is made up of two types of shareholders: the general partners bear personal liability and are responsible for the management, similar to the partners of a GbR. The limited partners, on the other hand, are liable only up to the amount of their capital contribution, and are not involved in the management of the company. As limited partners many citizens can therefore provide capital without liability worries with respect to their private assets. In a GmbH & Co. KG, a GmbH takes over the role of the KG general partner. This combination makes it possible for all participants to bear only limited liability, since the liability of the GmbH shareholders is again

limited to their capital contribution. The shareholders of the GmbH are usually the initiators of the community power project who want to play an active role in the management of the company.

From the point of view of the limited partners, returns are achieved with a limited capital outlay via dividends. However, they still bear the risk of losing the capital contributed. Therefore, it is again vital to weigh up the risks and opportunities at an early stage and obtain detailed information. As limited partners, citizens are entitled to inspect the accounts, and thus obtain information on the progress of the business. Furthermore, financial market regulations might apply to this form of financial participation (see excursus on p. 13).

The major advantage of the GmbH & Co. KG lies in the limited liability for the shareholders. This advantage must be set against a significantly higher effort for the foundation of the company as well as for the ongoing administration. This type of business entity is, therefore, suitable only for larger projects. In addition, it fits especially well when two groups of citizens with different motives – namely entrepreneurially active managers and capital investors – are to be included.





### **Rothaarwind GmbH & Co. KG – Successful backing of the municipality Hilchenbach**

This community wind farm is situated near Hilchenbach, close to the Rothaarsteig Hiking Trail, in a wooded district. It consists of five 2 MW Enercon wind turbines, each with a hub height of 138 m. During its long planning phase, the project received positive support from the city of Hilchenbach, which also has a stake in the operating company. The planning phase for the community wind farm extended over six years, among other things because of the location in a landscape conservation area and of the proximity to the Rothaarsteig. Enercon installed towers with a hub height of 138m for the first time anywhere in Germany in 2008. Each wind turbine supplies around 4.5 million kWh of electricity annually, which is equivalent to the annual consumption of more than 1 000 four-person households.

#### **Profile**

- Type of business entity: GmbH & Co. KG
- Number of participating citizens: 87 (plus the city of Hilchenbach)
- Project: 5 wind turbines, total output 10 MW
- Investment amount: 15.5 million euros
- Equity: 2.8 million euros
- Form of participation: limited partners' shares from 3 000 euros, average investment: 31 704 euros
- Project contact:  
Günter Pulte, CEO of RothaarWind GmbH & Co. KG  
In der Trift 41  
57399 Kirchhundem  
Phone: +49 (0)2764 7678  
info@rothaarwind.de  
www.rothaarwind.de
- City of Hilchenbach contact:  
Michael Kleber, Building Department  
Markt 13  
57271 Hilchenbach  
Phone: +49 (0)2733 288-141  
Fax: +49 (0)2733 288-144  
m.kleber@hilchenbach.de

### **Bioenergie Steinfurt GmbH & Co. KG – Cooperation of suppliers and investors**

Seven farmers, an engineer, the local Raiffeisen Cooperative Wholesale Society and the local agricultural association drew up the basic concept for a communal biogas plant in 2001. Positive experience with the Hollich wind farm (see p. 23) encouraged further forty-six farmers to become involved as limited partners and as suppliers of the substrates. They were joined by twenty-eight other Steinfurt citizens as limited partners. A technical innovation in 2005 was Germany's first-ever biogas pipeline, which conveys the biogas a distance of 4 km from the gas buffer-storage tank to the CHP plant units, where the biogas is combusted. This pipeline since has been extended several times, with the result that a number of schools, two retirement homes, the county hall, an open-air swimming pool, a boarding school and a health centre are now heated using this thermal energy. Also, a local-heating concept for part of the historic old town district was implemented in 2014.

These extensions were planned and implemented by local company Neue Energie Steinfurt GmbH (N-E-ST), which had been founded by a number of participants on the basis of the positive experience gained from the project.

#### **Profile**

- Type of business entity: GmbH & Co. KG
- Number of participating citizens: 9 persons as GmbH shareholders, approx. 70 as limited partners
- Project: Biogas installation comprising seven CHP plant units with total output of approx. 2 700 kWel
- Investment amount: 3.4 million euros (2005), plus a subsequent further 3.5 million euros
- Equity ratio: approx. 25%
- Form of participation: limited partners' shares of varying amounts, long-term substrate supply agreements with the participating farmers
- Project contact:  
Bioenergie Steinfurt GmbH & Co. KG  
Hollich 79, 48565 Steinfurt  
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info@bioenergie-steinfurt.de,  
www.bioenergie-steinfurt.de



## Alternative II for larger projects: The cooperative (eG)

The registered cooperative (eingetragene Genossenschaft - eG) has become established alongside the GmbH & Co. KG as a type of business entity for larger community power projects. By the end of 2013, Germany had no less than 888 energy cooperatives, with 109 in North Rhine-Westphalia. The energy cooperatives received a boost from the 2006 amendment to the Cooperative Act. The German Cooperative and Raiffeisen Confederation (DGRV) provides a central information platform in the form of its National Office for Energy Cooperatives. The Association of Cooperatives of the Rhineland and Westphalia is the contact for energy cooperatives in NRW.

An eG is an independent legal person and is subject to the Cooperative Act (GenG). It is considered a 'democratic' type of business entity, since every member normally only has one vote at the general assembly, irrespective of the size of his or her capital contribution. As in a GmbH & Co. KG, the liability of all members can be limited in an eG to each member's capital contribution. A further advantage of this type of business entity is the simplified admission of additional members, since there is no requirement for entering the members in a public register. The board is responsible for the eG's management.

The advantages of an eG must be set against a comparatively high administrative effort during its foundation. The company must be audited by an association of

cooperatives to permit entry in the register of cooperatives. Both the business plan and the suitability of its articles of association are examined in detail. This auditing procedure is accompanied by the advisory services of the association of cooperatives. It is probably thanks to this intensive support that the registered cooperative is Germany's most insolvency-proof type of business entity.

For the cooperative members the returns consist of the annual dividend for the members' shares in the cooperative. As in the case of the GmbH & Co. KG, there is, with a limited capital outlay, the risk of capital loss. Here, again, the individual citizen must weigh up the risks and opportunities at an early stage and obtain detailed information. Cooperative members can obtain information on the course of business and monitor the success of the cooperative at the annual general assembly. Furthermore, financial market regulations might apply to this form of financial participation (see excursus on p. 13).

The business entity of a cooperative is thus also suitable only for larger community energy projects and in particular for groups of citizens who set great store by democratic structures and the involvement of large numbers of people.

### **Solargenossenschaft Essen eG – Successful change from GbR to eG**

Solargenossenschaft Essen eG was founded in 2010 after thirty participants had completed a community solar project using the form of a GbR in 2009. One reason for the change of the type of business entity from a GbR to an eG was the limitation of liability to the members' capital contribution. Further reasons included the easier admission of new members and the democratic structures of a cooperative.

New photovoltaic systems have since then been continuously installed on municipal roofs, the ninth being completed in December 2012. The generated electricity is fed into the grid. The installations are refinanced via the feed-in tariff.

Reasons for this success in Essen include the implementation of solar power systems 'on-site' (i.e. the local focus) and good cooperation with the city of Essen, which levies only a low rental per square metre of roof space.

#### **Profile**

- Type of business entity: cooperative (eG)
- Number of participating citizens: 148
- Project: 9 photovoltaic systems up to 2012, total output 247 kWp
- Investment amount: 666 900 euros
- Equity ratio: 88%
- Form of participation: Cooperative shares, each 250 euros, average investment 4 000 euros
- Project contact:  
Solargenossenschaft Essen eG  
Prof. Rolf Schwermer (board member)  
Ahornzweig 4  
45134 Essen  
Phone: +49 (0)201 6154927  
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www.solargenossenschaft-essen.de

### **Bioenergiedorf Wallen eG – Local-heating system with high connection rate**

At the start of 2010 emerged the idea in Meschede's Wallen district (in the region Sauerland) to jointly organise its own heat supply. The aim was to become more independent from rising energy prices. Enthusiasm for this project was so great that the whole process, from the initial idea up to completion, took only around two years. Today Wallen's heating systems runs entirely on a biomass basis and, therefore, Wallen is entitled to call itself a bioenergy village.

A wood-chip heating system and the waste-heat from a CHP plant unit operated on biogas supply the necessary energy, which is distributed in the district via a local-heating network. A cooperative was formed to implement the wood-chip and local-heating system. Practically all village residents have now joined, which translates into a connection rate for the local-heating systems of around 90%. Because the project was realised by means of an eG, the risks – e.g. several warm winters in a row – are distributed across many shoulders.

#### **Profile**

- Type of business entity: cooperative (eG)
- Number of participating citizens: approx. 450
- Project: Local-heating system for 107 households, incl. heat-distribution centre using wood chips and the waste-heat from a biogas CHP plant unit as energy sources
- Investment amount: 1.8 million euros
- Equity ratio: approx. 18%
- Form of participation: Cooperative shares starting from 2 500 euros
- Project contact:  
Mechthild Giesmann  
Unterm Hessenberg 3  
59872 Meschede-Wallen  
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info@bioenergiedorf-wallen.de  
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## Table of types of business entity

Type of business entity	GbR	GmbH & Co. KG	eG
<b>Initial time and effort</b>	Very low: not less than two persons; informal agreement sufficient; no entry in any register	High: not less than two shareholders; memoranda of association necessary for GmbH and GmbH & Co. KG, the GmbH memorandum must be certified by a notary; entry in the register of companies for GmbH and GmbH & Co. KG	High: not less than three members; auditing of business plan and articles of association by the association of cooperatives; no certification of the articles of association by a notary required; entry in the register of cooperatives
<b>Administrative effort</b>	Low: no obligation to publish annual reports; however, profit/loss statement necessary for distribution of surplus to the shareholders	High: obligation to publish annual reports for GmbH and GmbH & Co. KG; auditing and disclosure of annual reports mandatory, with concessions for small and medium-sized corporations	High: Auditing by association of cooperatives; auditing and disclosure of annual reports mandatory, with concessions for small and medium-sized cooperatives
<b>Entry and exit</b>	Difficult: the civil-law partnership is, in principle, dissolved if partners enter or exit; provisions to the contrary are possible in the articles of association; repayment of partner's capital contribution is also to be specified in the articles of association	Difficult for GmbH shareholders: termination not possible, share can be sold and inherited; repayment of shares to be specified in the memorandum of association, right to maintenance of capital  Medium for KG limited partners: termination or transfer possible; repayment to be specified in the memorandum of association; changes must be noted in the register of companies	Easy: Entry of members by agreement of the cooperative, exit possible without agreement; termination of shares in the cooperative possible upon adherence to a termination period, right to repayment of shares; no entry of members in the register of cooperatives
<b>Shareholders' liability</b>	Unlimited: all shareholders bear joint and several liability with their private assets	Limited: The GmbH shareholders' and KG limited partners' liability is restricted to their respective capital contributions	Limited: Limitation of members' liability to their shares in the cooperative can be specified in the articles of association
<b>Consultation rights</b>	High: all GbR partners represent and manage the company jointly, but provisions to the contrary are possible; inspection of the accounts possible for all shareholders at any time	High for GmbH shareholders: Company is managed and represented by the GmbH shareholders, commissioning of external third-parties for management possible  Low for KG limited partners: Rights of control and information, such as inspection of accounts and papers	Medium: Members elect the supervisory board and, in some cases, the executive board; cooperative is managed by the executive board; cooperative members have rights of petition, speaking, voting and obtaining information at the general assembly (normally one vote per member, irrespective of number of shares in the cooperative)
<b>Minimum capital</b>	No minimum contribution	GmbH nominal capital: 25 000 euros, no minimum contribution for limited partners	No fixed starting capital, no minimum amount for shares in the cooperative, not less than one share per member

## EXKURSUS: Financial market regulations

Germany has adopted various regulations for the financial market to ensure consumer protection. These also apply to some of the forms of participation in community power projects described in this brochure. Hence, the most important legal requirements are referenced here.

### Securities and investment prospectuses

Investors must be provided with extensive and reliable information about the investment product in question and its issuer. Therefore, securities and other investment products may not be offered for public sale without a prospectus. This prospectus must be approved by the Federal Financial Supervisory Authority (BaFin - Bundesanstalt für Finanzdienstleistungsaufsicht) and published prior to the public offer of the investment product. This applies to shares in a GbR, GmbH and GmbH & Co. KG, to profit participation rights, silent partnerships and since 2015 also to subordinate loans and similar products. Exemptions are made e.g. when the total amount of the securities or investment products on offer does not exceed the amount of 200 000 or 100 000 euros respectively, or when the offer is addressed to a limited group of persons only. In addition, cooperative shares and subordinate loans offered by a cooperative to its members are excluded.

The preparation and publication of a prospectus can entail costs of tens of thousands of euros and it is highly advisable to make use of legal advice with this respect.

### Capital Investment Code (KAGB – Kapitalanlagegesetzbuch)

The KAGB is the result of the translation of the EU's 'Alternative Investment Fund Managers Directive (AIFMD)' into German law. All issuers of investment products which fall under the KAGB have to meet extensive administrative demands. These demands are generally considered to be not attainable by the average community power project. Fortunately for community power projects, issuers are exempt from the KAGB if the majority of their business operations take place outside the financial markets. Cooperatives are considered to operate outside the financial markets in general as long as they adhere to the cooperative act. The latter is verified by the associations of cooperatives.

### Unlicensed banking transactions

The German Banking Act (KWG – Kreditwesengesetz) prescribes a banking licence for receiving customer deposits or granting loans. Therefore, non-banks as issuers of investment products must take care to avoid unlicensed banking transactions, in particular when issuing subordinate loans, silent partnerships or profit participation rights. This risk can be avoided by equipping the investment products with certain criteria: subordinate loans need to include a postponement of priority in favour of all other creditors, silent partnerships or profit participation rights need to include a loss participation clause.

**For further information see [www.bafin.de/en](http://www.bafin.de/en)**



## Citizens as co-financers!

### Bearer bonds – municipal utilities take the initiative

The issue of bearer bonds is an interesting way of enabling financial participation by citizens or customers. In this case, a municipal utility, for example, commits to repaying the subscribers of the bonds the subscription amount plus the agreed interest at the end of the term. The subscribers have no rights of consultation in the management or rights of information, as in the case of the shareholders of a company. The agreed payments of interest assure predictable returns. The risks and opportunities must nonetheless be carefully assessed: payments depend on the continued existence of the municipal utility or of the issuing company respectively.

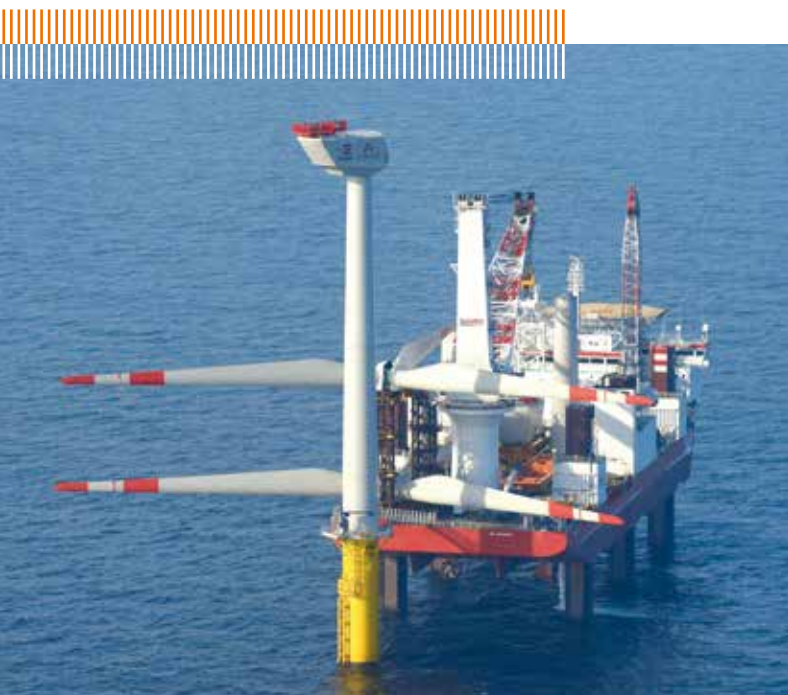
Bearer bonds provide freedom of manoeuvre concerning their term, rates of interest, repayment stages and periods of notice for termination. The bearer-bond certificate should be kept secure since it constitutes the basis for the right to repayment of the subscribed amount. Furthermore, financial market regulations might apply to this form of financial participation (see excursus on p. 13).

#### hertenfonds ,energie+' – Roaring sales again for the third issue

In September 2013 the municipal utility in Herten ('Hertener Stadtwerke') issued for no less than the third time its 'hertenfonds', by means of which customers can take a stake in investments in renewable energy in the form of bearer bonds. The total volume was 10 million euros, of which 8.8 million euros were taken up by the holders of the expiring first hertenfonds of 2002 by way of right of first refusal. The remaining 1.2 million were sold out within a week.

#### Profile

- Issuing company: Hertener Stadtwerke GmbH
- Number of participating citizens: 685 Hertener Stadtwerke customers, as investors
- Project: Participation in the Borkum-West offshore wind farm, investments in heat and power cogeneration and in photovoltaic installations
- Total subscription amount: 10 million euros
- Form of participation: Bearer bonds from 1 000 euros up to 20 000 euros, average subscribed amount approx. 14 000 euros, rate of interest 4.25%, term 10 years
- Project contact:  
Sabine Trotzke, Management Assistant  
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45699 Herten  
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## Silent partnerships – Citizens participate in modernisation!

The main challenge in climate protection is not only the supply of electricity and heat from renewable resources, but also energy conservation. The energy-efficient modernisation of buildings plays a particularly important role in the latter. Citizens who own their own home contribute to climate protection, and also save energy and costs, by modernising their property. When buildings are jointly owned by a number of citizens, the modernisation project becomes a joint task and, in this sense, thus a 'community energy savings project'. Opportunities for citizens to participate financially in the energy-efficient modernisation of municipal buildings, however, remain extremely rare. In NRW this idea has been tested in a pilot project at four locations where energy-saving modifications to school buildings were combined with the installation of photovoltaic systems. Citizens were able to co-finance the contractor performing the work by taking an atypical silent partnership. This pilot project was highly complex and required much initial time and effort, with the result that implementation by a group of citizens alone would have been difficult. The initiative of a municipal utility or an energy savings company may be useful in such cases.

The term 'silent partnership' arises from the fact that the capital contribution of the silent partner is not apparent to outsiders. There are only few legal requirements for this form of participation, and so there is a lot of creative freedom for the configuration. A silent partner is generally not involved in management, and has fewer rights of control than a KG limited partner in a GmbH & Co. KG (see section on the GmbH & Co. KG). He or she also bears liability only up to the amount of the capital contributed. Profit participation is specified in the contractual agreement. The term 'atypical silent partnership' is used where the silent partner participates not only in profit and loss but also in changes in the company's assets. The risk of capital loss must again be assessed by interested citizens, and should be reflected in the returns from the silent partnership.

From a corporate viewpoint, the inclusion of silent partners enlarges the capital base of the company without extending management rights to additional persons. Financial market regulations might apply to this form of financial participation (see excursus on p. 13).

### Solar&Spar Contract – Piloting ‘community energy savings projects’

The Wuppertal Institute for Climate, Environment and Energy took up an idea from the Ö-quadrat engineering consultancy of Freiburg by combining energy-performance contracting with the installation of photovoltaic systems and financial participation of citizens. The ‘Solar&Spar’ concept has been implemented at four NRW schools in a pilot project funded by the state government. Per pupil, 50 W of solar electricity-generating capacity was to be installed and 50 W of lighting performance saved, thus achieving an overall reduction of conventional power generation per pupil of 100 W.

For this purpose, a separate GmbH & Co. KG was founded for each of the four schools. This company then entered into a contract with the municipality as the building owner. In this contract it undertakes to implement energy-saving modifications on the respective school building. The GmbH & Co. KG receives, by way of reciprocity, a portion of the energy-costs saved (so-called ‘energy-performance contracting’). In addition, the roof of the school building was leased for the installation of a photovoltaic system.

The school benefits during the term of the contract from the roof-leasing income and from a portion of the energy-costs saved. At the end of the term of the contract the ownership of the energy-saving modifications is transferred to the municipality, which then benefits from the entirety of the reduced energy costs. And, not least of all, the pupils enjoy an improved interior climate and a more pleasant learning atmosphere.

Solar&Spar differs from customary contracting projects not only in the additional installation of a photovoltaic system, but also in the financial participation of the local community. The term ‘community energy savings project’ is therefore used. The additional initial time and effort can be set against the enhanced acceptance of the project and the positive effect on the image of the municipality. In addition the citizens identify with the local school. One gratifying result to date is that the surplus generated in these pilot projects has actually exceeded the calculations and is disbursed proportionally amongst the silent partners, schools and municipalities.

#### Profile

- Type of business entity: GmbH & Co. KG
- Project: Energy-saving modifications and photovoltaic systems on four school buildings
- Investment amount: more than 3 million euros for all four projects
- Equity ratio: approx. 70%
- Form of participation: Atypical silent partnership from 2 500 euros (from 500 euros for persons associated with the schools); returns forecast: a good 5% per annum
- Project contact:  
Dr. Kurt Berlo, CEO, Solar&SparContract GmbH  
c/o Wuppertal Institute for Climate, Environment and Energy GmbH  
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42103 Wuppertal  
Phone: +49 (0)202 2492-174  
kurt.berlo@wupperinst.org  
www.wupperinst.org/solarundspar





## Subordinated loans – Citizens as lenders

A further opportunity for citizens to financially contribute to climate protection is to grant subordinated loans to companies. Such loans are frequently offered to customers by municipal utilities. The German Banking Act (KWG – Kreditwesengesetz) prescribes a banking licence for granting loans in general, but subordinated loans are an exception. This is because subordinate loans include a postponement of priority in favour of all other creditors: in the case of insolvency, all other creditors receive their claims before the subordinated loan is repaid. In addition, repayment of subordinate loans is only possible if this does not cause the company's insolvency. There is, therefore, a greater risk for lenders to lose their capital, and this is usually balanced by more attractive rates of interest. The term 'profit-sharing subordinated loan' is used where its rate of interest is largely dependent on the success of the issuing company and/or of the project. The loan agreement can be very lean, a few pages suffice. However, financial market regulations might apply to this form of financial participation (see excursus on p. 13).

### Crowdfunding

Subordinated loans are also a popular form of investment on so-called 'crowdfunding platforms'. These serve the purpose of attracting investment capital via the internet. Crowdfunding companies have recently begun to be founded specifically for investments in renewable energy or in energy-efficiency projects. Up to now only a good handful of them exist in the German-speaking world, with a correspondingly limited number of completed projects. Subscription via such a platform is generally extremely easy for investors. For project initiators, on the other hand, this way of searching for investors involves very little effort. It still remains to be seen whether crowdfunding offers will become firmly established on the market and whether they will be able to meet many community power projects' desire for regional roots.

### MEGA Monheimer Elektrizitäts- und Gasversorgung GmbH – Customers finance photovoltaic systems

Between 2010 and 2012, the Monheimer Elektrizitäts- und Gasversorgung GmbH (MEGA) utility completed five community solar projects at Monheim on the Rhine. MEGA customers were able to participate financially in these investments in the form of subordinated loans. Particular attention was devoted to the comprehensible and concise wording of the loan agreements. A total of around 365 customers took part in this campaign, investing a total of just under 650 000 euros, covering 100 per cent of investment costs. The systems were installed on MEGA and City of Monheim roofs. One main reason for the financial involvement of the community, in addition to the procurement of capital, was the increase of customer loyalty.

### Profile

- Issuing company: MEGA Monheimer Elektrizitäts- und Gasversorgung GmbH
- Number of participating citizens: approx. 365
- Project: 5 photovoltaic systems, total output 312 kWp
- Total subscription amount: 646 000 euros
- Form of participation: subordinated loans between 500 and 2 000 euros, average loan amount: 1 760 euros, fixed interest rate of 5%, term 10 years
- Project contact:  
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Rheinpromenade 3a  
40789 Monheim am Rhein  
Phone: +49 (0)2173 9520-331  
Werner.Geser@mega-monheim.de  
www.mega-monheim.de

## Profit participation rights – Project developers woo citizens' capital

Profit participation rights are contracts, where investors commit themselves to make capital available to the issuer. In reciprocation, the investors usually receive a fixed rate of interest; profit and loss sharing is frequently also agreed. The term 'profit-participation certificate' is used if the profit participation rights are confirmed by means of a security.

There are no legal requirements concerning the precise arrangement of profit participation rights and they can be issued by any type of business entity. Depending on the particular arrangement, profit participation rights are either similar to equity or to debt capital. They are never stakes in a company, however, for which reason rights of consultation are excluded.

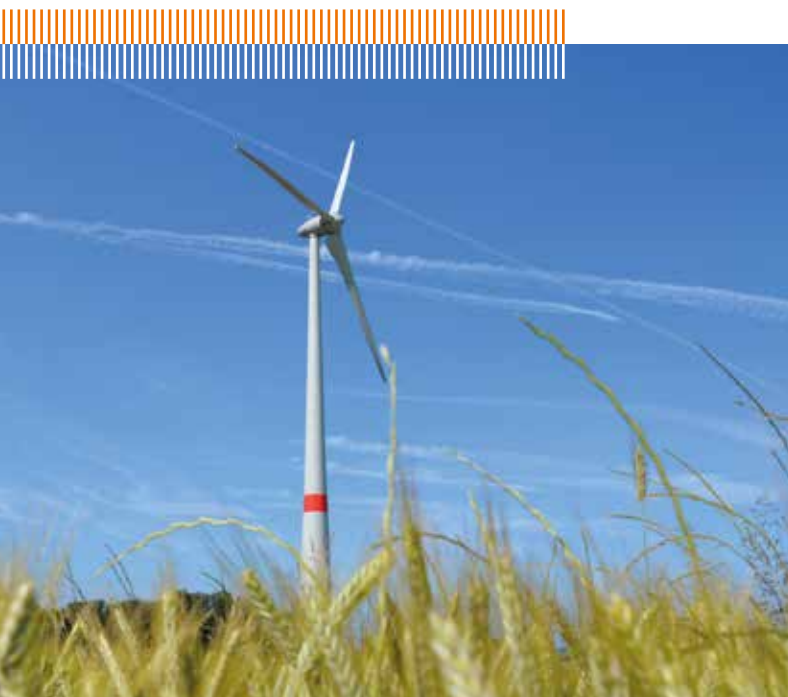
As in the case of subordinated loans (see above), in the case of insolvency the holders of profit participation rights receive their money only after all other creditors. Hence, also in this case, the total loss of capital is possible. For this reason, the risks should be carefully analysed before any investment is made. Again, financial market regulations might apply to this form of financial participation (see excursus on p. 13).

### SL Bürgerenergie Gladbeck GmbH & Co. KG – Energy mix through community capital

SL Bürgerenergie Gladbeck GmbH & Co. KG was specifically founded by its parent company, SL NaturEnergie, to enable financial participation of citizens. It has installed thirty photovoltaic systems and a wind turbine in the Ruhr city of Gladbeck since 2011. The citizens, primarily Gladbeck residents, were able to make investments through profit participation rights. The experience of the affiliated SL Windenergie company was available, as a general contractor, for project implementation. The offer to citizens was augmented in 2013 by a subordinated loan, which could be subscribed to via a crowdfunding internet platform.

#### Profile

- Issuing company: SL Bürgerenergie Gladbeck GmbH & Co. KG
- Number of participating citizens: almost 200
- Project: 30 photovoltaic systems, total output approx. 1 700 kWp, and a wind turbine (2.3 MW)
- Total subscription amount: 1 386 000 euros (approx. 18% of total investment)
- Form of participation: Profit participation rights, minimum investment 2 000 euros, maximum 10 000 euros, average investment just under 6 500 euros, interest rate 5%, term 25 years, extension possible
- Project contact:  
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## Table of typical investment products

	Bearer bonds	Profit participation rights	Subordinated loans	Silent partnerships
<b>Description</b>	<ul style="list-style-type: none"> <li>Belong to the category of securities</li> <li>Freedom of choice concerning term, rate of interest, repayment stages, possibilities for termination</li> <li>Classical instrument of corporate funding, but also suitable for municipalities</li> </ul>	<ul style="list-style-type: none"> <li>Can be confirmed by means of a security ('profit-sharing certificates')</li> <li>Great freedom of choice concerning term, rate of interest, repayment stages</li> <li>More similar to either a stake in a company or a loan, depending on the specific arrangements</li> <li>Remarks on unlicensed banking transactions should be noted (see page 13)</li> </ul>	<ul style="list-style-type: none"> <li>Special forms of loan with postponement of priority in favour of all other creditors</li> <li>Individually worded loan agreements possible, few legal requirements</li> <li>Remarks on unlicensed banking transactions should be noted (see page 13)</li> </ul>	<ul style="list-style-type: none"> <li>Contractual agreement between silent partner and company</li> <li>Individually worded agreements possible, few legal requirements</li> <li>Not perceptible to outsiders</li> <li>The term 'atypical' silent partnership is used if silent partners also participate in changes to the company's assets</li> <li>Remarks on unlicensed banking transactions should be noted (see page 13)</li> </ul>
<b>From the viewpoint of the issuing company:</b>				
<b>Initial time and effort</b>	High complexity for initiation and ongoing administration, external investment companies are frequently co-opted		Depends on the number of agreements made; specialised lawyers should be consulted for drafting of the agreements	
<b>Prospectus mandatory?</b>	A securities prospectus must be drafted (see page 13)		An investment prospectus must be drafted (see page 13)	
<b>Recognition in the balance sheet</b>	Recognised as debt capital (liability)	Normally recognised as debt capital (liability), recognition as equity possible if the following criteria are fulfilled: postponement of priority in favour of other creditors, long-term provision of capital, performance-related remuneration, loss sharing	Recognised as debt capital (liability)	Normally recognised as debt capital, recognition as equity may be possible in case of an 'atypical' silent partnership
<b>From the viewpoint of the subscribing citizen:</b>				
<b>Subscription and repayment</b>	<ul style="list-style-type: none"> <li>Subscription either directly to the company or via a financial institution</li> <li>Licensing for stock exchange trading possible, generally not the case for community power projects</li> <li>A fixed term with no possibility of premature termination is generally agreed, bearer bonds are transferable, however</li> <li>The respective bearer of the bearer-bond certificate has the right to repayment</li> </ul>	<ul style="list-style-type: none"> <li>Subscription either directly to the company or via a financial institution</li> <li>Licensing for stock exchange trading possible, generally not the case for community power projects</li> <li>A fixed term with no possibility of premature termination is generally agreed, profit participation certificates are transferable, however</li> <li>Profit-sharing certificates can be issued in the name of the subscriber or construed as bearer instruments, in which case the respective bearer has the right of repayment</li> </ul>	<ul style="list-style-type: none"> <li>The loan agreement is made directly between the company and the citizen</li> <li>Term, facilities for termination, etc. can be drafted individually</li> <li>Annual repayment instalments</li> </ul>	<ul style="list-style-type: none"> <li>Contractual agreement is made directly between the company and the silent partner</li> <li>Term and possibility of termination can be individually worded</li> </ul>
<b>Returns</b>	A fixed rate of interest is generally agreed, permitting predictable cash flows for the subscriber	Fixed rate of interest possible, profit/loss-sharing is frequently also agreed	<ul style="list-style-type: none"> <li>A fixed rate of interest is agreed for normal subordinated loans</li> <li>Profit-sharing subordinated loans are characterised by a profit-dependent rate of interest</li> </ul>	Profit-sharing mandatory, loss-sharing also common
<b>Liability and risk</b>	<ul style="list-style-type: none"> <li>No personal liability</li> <li>Payment of interest and repayment of the capital depend on the continued existence of the company; there is a risk of total capital loss</li> </ul>			

## Savings bonds – Banks and savings banks bear the risk

The following form of financial participation provides a way in which citizens can be involved financially in renewable energy projects without exposing themselves to any entrepreneurial risks.

Many banks now offer investment products which consider environmental and/or climate-protection aspects. Not only institutions such as the GLS Bank, the Triodos Bank and the Umweltbank, whose business concept is based entirely on this factor, but also savings banks (Sparkassen) and cooperative banks are increasingly combining their products with ecological and regional elements. A savings bond thus becomes a 'KlimaGut-Brief', or 'good climate certificate'. The bank which offers this savings bond does not itself invest savers' money in renewable energy projects, but instead grants loans to its customers for their financing. In addition, the bank promises to finance energy projects – often in the local area – up to the total amount of savings bonds subscribed. The precise identity of the energy projects, however, is usually not disclosed to the subscribers of the savings bonds. There is thus a regional link, but only an indirect relationship between the money invested in the savings bonds and the energy systems themselves. In return, the savers obtain the security of a standard bank product, which is covered by the German deposit guarantee scheme. The saver also benefits from a reliable return on his or her savings thanks to the fixed rate of interest.

The indirect connection of a savings bond with the renewable energy systems can become more tangible if the bank cooperates with the local municipal utility. For example, a special savings bond can be issued, which is available exclusively to the customers of the municipal utility. The bank or savings bank then forwards the savers' money, via a loan, to the municipal utility, which uses it to construct a specific energy system. In this case these energy systems are usually known to the subscribers of the savings bonds. Even though the savers still do not lend their money directly to the municipal utility, they can now identify more easily with 'their' energy project.

From the viewpoint of the municipal utility, the cooperation with a bank allows it to offer an attractive investment opportunity to their customers without the need to consider financial market regulations, as in the case of bearer bonds (see p. 14). However, as the management of this

investment product lies with the bank, the utility does not achieve an increase in direct customer contact. Another fact is that such a cooperation project can be implemented considerably more quickly, thanks to the fact that it is being handled by a bank.

### The 'Klimaschutz-Brief' of Sparkasse Lemgo and Stadtwerke Bad Salzuflen

This savings bond offer by the Sparkasse Lemgo savings bank was restricted to the customers of the municipal utility Stadtwerke Bad Salzuflen. The utility then installed photovoltaic systems to the value of the total amounts invested. The search for suitable roofs proved, at the start of the project, to be more difficult than first anticipated. Many roofs had to be eliminated in particular because of the building statics. For the roof surfaces, which could be made available in the end, the City of Bad Salzuflen receives a low rental.

Up to now, the municipal roofs have been leased only to the municipal utility for the purpose of community solar projects.

Apart from printed flyers no expensive publicity for the project was necessary, since demand was so high that the targeted subscription amount was achieved within a few weeks.

#### Profile

- Issuing company: Sparkasse Lemgo
- Number of participating citizens: approx. 65 investors
- Project: 4 photovoltaic systems, total output 240 kWp
- Total subscription amount: 500 000 euros
- Form of participation: Savings bonds starting from 1 000 euros up to 10 000 euros, average investment: 7 700 euros, fixed rate of interest 3.0% (3.5% for green electricity customers), term 5 years
- Project contact:  
Volker Stammer, CEO, Stadtwerke Bad Salzuflen GmbH  
Uferstrasse 36 – 44  
32108 Bad Salzuflen  
Phone: +49 (0)5222 808-0  
info@stwbs.de
- City of Bad Salzuflen contact:  
Beate Brinckmann, Property and Municipal Services  
Dept  
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b.brinckmann@bad-salzuflen.de

## Further opportunities for the financial participation of citizens

### Participation of the general public:

### Citizens' shares and municipal wind turbines

With the help of two examples the following section examines models which enable an entire local community to participate in the economic success of a renewable energy project.

#### **The Schleiden community wind farm – The municipality as powerful partner for land owners**

Work on the construction of a community wind farm consisting of six installations, each of 3 MW output, started in Schleiden in the hilly Eifel district in early 2014. The town's aim from the very start of planning was to achieve the most cooperative and conflict-free completion possible for the good of all. Therefore, it was proposed at an early stage that all site owners within the planned wind-power concentration zone form an association of owners. The municipality then concluded a contract with this association, in which the municipality was commissioned to search for a suitable operator for the wind farm. The contract also specified the allocation of the annual lease revenues.

The lease revenue is first retained by the municipality, and is then distributed on defined criteria. Not less than 120 000 euros are apportioned annually to the general public. Of this, 75% goes to the town of Schleiden and 25% to the six neighbouring towns. These funds are reserved for specific purposes: in the surrounding villages, the money must be invested for the general good (village development, village beautification). Schleiden must use the money to subsidise the volunteer workers, club-level sport, the town library and culture - sectors which might otherwise be hit by budget cuts, in view of the municipality's financial situation. The remaining revenue from rentals is distributed among all the site owners in the wind-power concentration zone, using a procedure similar to that applied at the Hollich wind farm (see below).

In this example it was crucial that the town council was able to convince all site owners of the benefits of joint action at an early stage. Also, the council was prepared to provide active and energetic support for the development of the community wind farm.

#### **Profile**

- Type of business entity: GmbH & Co. KG
- Project: 6 wind turbines, total output 18 MW (under construction)
- Investment total: 30 million euros
- Form of participation: A fixed share of rental revenue goes to six neighbouring villages and to the town of Schleiden for the good of the general public; in addition, investment opportunities for the local citizens are planned
- Project contact:  
KEVER PBB mbH  
Eckhard Klinkhammer  
eckhard.klinkhammer@ene-strom.de
- City of Schleiden contact:  
Andreas Glodowski, Urban Development  
Blankenheimer Strasse 2-4  
53937 Schleiden  
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Andreas.Glodowski@schleiden.de





### Saerbeck – a municipally owned wind turbine

Just how far-reaching the commitment of even a small municipality to community power can be is illustrated by Saerbeck, in the County of Steinfurt. The starting point here was a municipal climate concept which envisaged a target of converting all energy supplies to renewable energy sources and renewable raw materials by 2030. Within this, one of three lead projects was the bioenergy park on the periphery of the municipality, constructed on the site of a former ammunition depot. The site was purchased by the municipality and leased to the operating companies of the energy-systems. Seven wind turbines, each of 3 MW output, have now been constructed here, in addition to a community solar park of more than 6 MWp output and two biogas plants.

One of the wind turbines is owned by the Saerbeck municipality. A low-interest municipal loan of 1.5 million euros was taken out with the NRW.Bank by the municipality to provide the necessary equity. This loan was then passed on to a municipality-owned enterprise, which itself then forwarded the funds to its specially founded subsidiary, SaerWind GmbH & Co. KG. Loan capital was obtained from the local savings bank. It will still be a number of years until the income from the wind turbines actually directly relieves the burden on the municipal budget. Up to now all revenue has been used for repayment of the loans, in order to eliminate the debt financing as quickly as possible. Cautious estimates predict that this will take around fourteen years, and so this is a genuine investment in the future.

The remaining six wind turbines were financed by various regional players. All seven wind turbine owners have jointly founded an operating company, which receives all revenue and divides it by seven, in order to balance out the risks of income loss and of differing location qualities.

Saerbeck has already received many distinctions, including the 2013 German Sustainability Award, for its commitment to sustainable, citizen-oriented energy supplies.

### Profile

- Type of business entity: GmbH & Co. KG (municipal subsidiary)
- Project: 1 wind turbine, output 3.2 MW
- Investment amount: approx. 5 million euros
- Form of participation: Profits from the wind turbine benefit all citizens via the municipal budget
- Municipality of Saerbeck contact:  
Wilfried Roos, Mayor  
Ferrières-Str. 11  
48369 Saerbeck  
Phone: +49 (0)2574 89203  
wilfried.roos@saerbeck.de  
www.klimakommune-saerbeck.de

## For local residents: Land lease systems, residents' bonus and marketing of electricity

In conclusion, two examples illustrate in this section how residents in the immediate vicinity of renewable energy systems can benefit from these investments.

### **Bürgerwindpar Hollich GmbH & Co. KG – Acceptance thanks to local residents' participation**

In 2000, ideas for the independent operation of a wind farm were coming to a head within the Burgsteinfurt local agricultural association. Since then, the community wind farm at Hollich, near Steinfurt, in the Münsterland, has now grown to nineteen wind turbines and generates almost twice as much power as all Steinfurt's households together consume per year. A further substantial expansion of the wind farm by 16 new turbines is due to be completed in 2016.

The aim from the beginning was that as many people as possible should benefit from this project, in order to strengthen solidarity within the community and eliminate any causes of envy or resentment.

The lease payments in Hollich are therefore distributed according to a so-called 'land lease system': the lease does not only go to the owners of the wind turbine sites, but also to all property owners in the wind priority area. For this purpose, all lease payments are pooled. For this pool the site owners receive a higher percentage than the less affected property owners. This arrangement was sealed contractually with all owners before the ultimate decision concerning the sites of the turbines was made. Simultaneously, the owners agreed not to submit any competing building applications.

Great importance was also attached to the involvement of all local residents. All were encouraged, on the one hand, to participate financially in the GmbH & Co. KG as limited partners. In case of inadequate financial means, the company even pre-financed the residents' shares. On the other hand, the residents receive a regular bonus payment totalling 10% of all lease payments, staggered on the basis of the effects of the wind turbines' noise emissions at their places of residence, a special feature of the Hollich project.

### **Profile**

- Type of business entity: GmbH & Co. KG
- Project: 19 wind turbines, total output 29.5 MW (extension under construction)
- Investment amount: 33 million euros
- Form of participation: Land lease system which pools the lease payments for property owners in the entire wind priority area; bonus payment for residents affected by noise emissions
- Project contact:  
Gerhard Göckenjan, CEO, Windpark Hollich GmbH & Co, KG  
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www.windpark-hollich.de
- City of Steinfurt contact:  
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### Asselner Windpark GmbH & Co. KG – Inexpensive wind power for residents

The Asseln wind farm in the city of Lichtenau features a total of sixty-two wind turbines, of which eighteen are owned by local citizens. These eighteen machines are operated by the Asselner Windkraft GmbH & Co. KG (AWK). The limited partners are fifty-three citizens of Lichtenau and the surrounding area, who contributed around 2.8 million euros to this project. The eighteen community wind turbines have a total output of 11.4 MW.

For its first fourteen years, AWK was purely an electricity producer. Since 2011 it has also been active as an electricity supplier. During the initial trial phase, power supply was limited to households in Lichtenau's Asseln district. Very soon, however, the supply area was expanded to a radius of 4.5 km around the wind turbine generating the electricity. Six districts can thus now be supplied with wind power from Asseln. Clean Energy Sourcing GmbH (Clens) was chosen as the marketing partner, in order to be able to guarantee supplies even in periods of little or no wind. Thanks to the application of the green-power concession, the tariff for this regional wind power is actually lower than the price of the standard grid supply, and this price is in fact guaranteed into the year 2021. AWK received the German Solar Award in November 2011 for this regional electricity-supply model.

In 2014 the green-power concession expired which makes the direct marketing of electricity from community power projects increasingly more difficult. As a consequence the AWK has ceased to accept new customers for its wind power tariff.

#### Profile

- Type of business entity: GmbH & Co. KG
- Project: 18 wind turbines, total output 11.4 MW
- Investment amount: ca. 11 million euros
- Form of participation: Attractive direct marketing of electricity in the area surrounding the wind turbines
- Project contact:
  - Johannes Lackmann and Johannes Michaelis
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  - Fax: +49 (0)5252 52945
  - strom@windparklichtenau.de
  - www.windpark-lichtenau-asseln.de
- City of Lichtenau contact:
  - Dieter Merschjohann, Mayor
  - Lange Strasse 39
  - 33165 Lichtenau
  - Phone: +49 (0)5295 8930-0
  - www.lichtenau.de



## How municipalities can support community power projects

There are various ways in which municipalities can support the creation of a community power project. A number of starting points are mentioned here.

Community power projects are often installed on municipal roofs or sites. Municipalities can therefore create the basis for new community solar installations by analysing their buildings and providing roofs.

Groups of citizens frequently need a longer preparatory time than professional commercial investors for the planning of an energy system. A certain exclusivity can therefore be assigned to groups of citizens, in order to ensure that they get their chance when municipal sites or roofs are allocated. If reduced roof rentals are to be granted for a community solar project, municipal-law requirements and, in particular, the NRW Municipal Code must be taken into account. A normal market price must be agreed and any deviations from this basic principle must be justified.

Planning regulations set narrow limits for the preferential treatment of community power projects, i.e. it is not possible to designate sites for wind turbines only on the condition that community projects are constructed. It is conceivable, however, that the municipality enters into sight continuation agreements with the property owners within the wind-power concentration zone. In these agreements the municipality can include requirements for the wind energy projects. Legal advice is absolutely necessary in this case. In addition, the municipality should take steps to promote the initiation of community power projects at an early stage, in order to prevent property owners making preliminary contracts with external project developers.

Providing guidelines for community solar projects, for example, is also useful to reduce the organisational burden on interested groups of citizens. Such guidelines can also be used internally by the municipal administration as a work schedule. However, an excessively long guideline may discourage citizens. Furthermore, the involvement of a large number of authorities and contact persons within the municipal administration, makes life complicated for citizens. Ideally there is only one central contact for community projects, and this person will coordinate all the other procedures within the administration.

The municipal administration is also the right place for providing information on best-practice examples and for furthering good ideas. A positive assessment by the municipality of a community power project conveys trustworthiness. In this context it should be ensured that any prospectus obligations or financial market regulations are met (see excursus on p. 13). Financial participation of citizens can be promoted in meetings with municipal utilities, local banks and financial institutions, and other players.

The chances of success for a financial participation of citizens are higher in an existing participation culture. Vice versa citizens' financial participation may well enhance acceptance of an energy system.

Finally, municipalities can themselves involve citizens financially, both in modernising buildings as well as in constructing energy systems. In individual cases this idea has already been implemented by means of municipal bonds. Such bonds, as were recently issued in the amount of 400 million euros by six NRW cities, are really only worthwhile from an amount of not less than 10 million euros.



## References

[www.energieagentur.nrw/buergerenergie](http://www.energieagentur.nrw/buergerenergie)  
Extensive information on community power projects can be found on EnergyAgency.NRW's website. A collection of examples of community power projects from NRW now extends to more than 150 projects. In addition, EnergyAgency.NRW contacts on the subject of community power, a detailed list of information sources and news on recent developments in this field can be found here.

[www.energiedialog.nrw](http://www.energiedialog.nrw)  
EnergyDialog.NRW is NRW's information and advisory platform for renewable energy sources. It is not only the right contact point in case of conflicts in the implementation of renewable energy projects, it also provides expert information for interested citizens and for operators of community energy projects.

[www.buendnis-buergerenergie.de](http://www.buendnis-buergerenergie.de)  
Bündnis Bürgerenergie (Community Power Alliance) is the association representing the interests of community power players in Germany. Position papers on current questions of energy policy can be found, among other things, on the internet pages.

[www.genossenschaften.de](http://www.genossenschaften.de)

The websites of the DGRV (German Cooperative and Raiffeisen Federation), contain extensive material on setting up a cooperative ('The seven steps to a successful foundation of a cooperative'), a founder's primer specifically for energy cooperatives (Energy cooperatives – Citizens, municipalities and local industry in good company), plus the information services of the National Office for Energy Cooperatives.

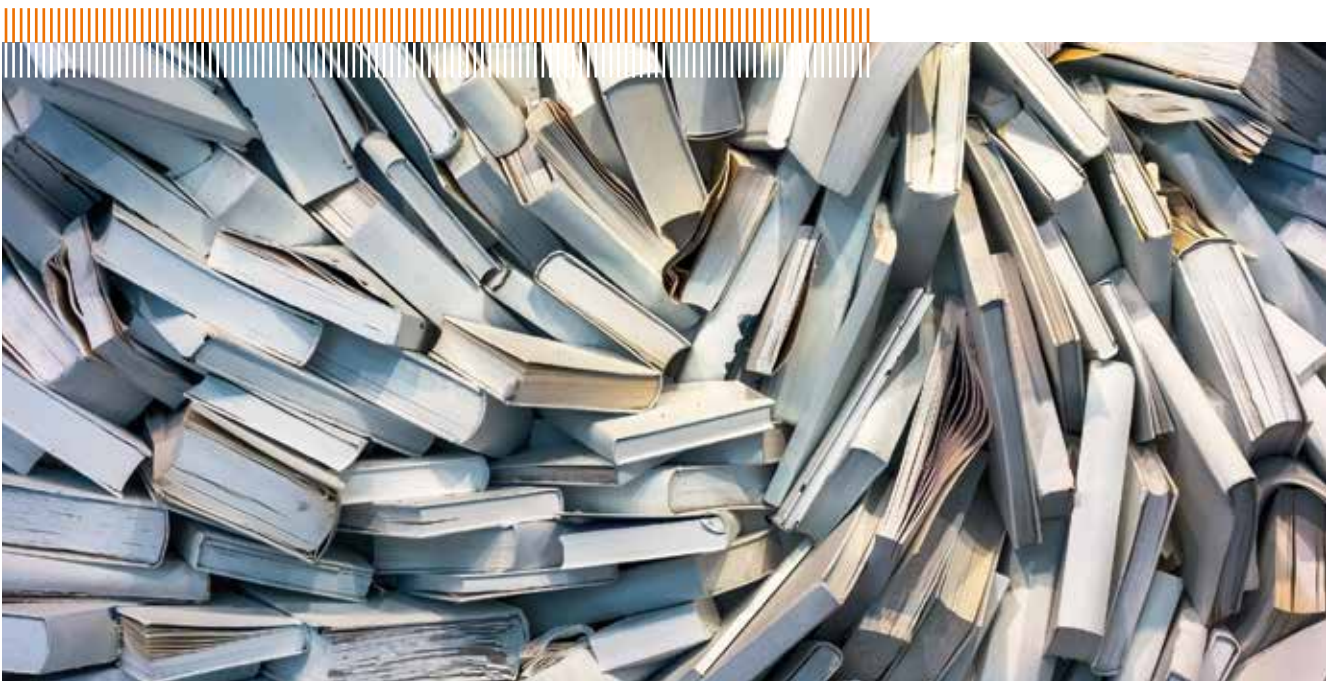
[www.kommunal-erneuerbar.de](http://www.kommunal-erneuerbar.de)  
The web presence of the Renewable Energies Agency provides a large range of information on the topic of renewable energy sources, for municipalities, in particular, and includes a free-of-charge calculator for municipal added value of projects.

[www.bafin.de](http://www.bafin.de)  
The internet site of the Federal Financial Supervisory Authority (BaFin), provides information for consumers on investing money in general, and on prospectus obligations. Existing prospectuses can also be viewed.

[www.dstgb.de](http://www.dstgb.de)  
The internet site of the German Association of Towns and Municipalities (DStGB) includes a sample contract for roof leases with additional explanatory notes - also covering procurement law.

Wöhe, G. / Döring, U.: Einführung in die allgemeine Betriebswirtschaftslehre, München, <sup>25</sup>2013  
A standard reference work on business administration which describes common types of business entity (Chapter 2.C) and forms of financial participation (Chapter 5). This material served in large parts as the basis for the information and remarks in this brochure.

Becker, H.P.: Investition und Finanzierung, Wiesbaden, <sup>6</sup>2014  
A work on the fundamental principles of corporate financial management which provides among other things a description of various financing options (Chapter 3.4). This was the source of the table on page 19 of this brochure.





### Imprint

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### Design

www.designlevel2.de

### Date

06/2016

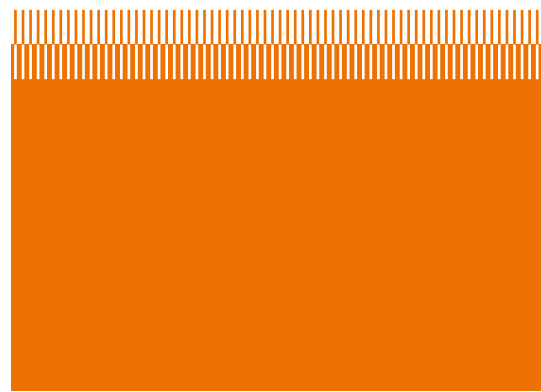
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