

# Community Wind under the Auctions Model: A Critical Appraisal



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## ABSTRACT

As part of a 2.5-year study, the World Wind Energy Association (WWEA) and the Association for Renewable Energy of the German State North Rhine-Westphalia (LEE NRW) assessed the impact on the community wind sector of switching from fixed feed-in tariffs to auctions, with a particular focus on the German state of NRW. This study included a thorough analysis of the framework conditions, along with a series of interviews conducted with the affected community wind actors.

In the first year of auctions (2017) the inadequacy of the community energy definition in the EEG became clear, but in that year the auction prices also fell sharply. After restricting the corresponding privileges for community energy in 2018, the share of community energy decreased significantly, and in 2019 actually fell to zero. Yet at the same time, the prices awarded through the auctions rose significantly, and had already risen above the level of the old EEG feed-in tariff (FIT) by the end of 2018.

In 2019, the market for new installations collapsed completely, because now only projects that have been successful in an auction are eligible – until the end of 2018, most installed projects were still benefiting from the old fixed FIT. At the same time, participation in the auction rounds has dropped dramatically, to less than one third of the planned expansion volume.

From early on, community wind actors have held a very negative assessment of the auction system. They clearly prefer a return to the old FIT system that was open to everyone. In particular, these community energy actors are still very critical of the additional risk and the increasing complexity of the auctions model.

In the meantime, the NRW state government has been perceived very negatively, which is mainly related to the planning law-related deterioration in the state. The new state planning rules became effective only in July 2019, but prior anticipation had already led to high levels of uncertainty and dissatisfaction.

Thus, from our perspective today, the German Federal Government has missed all three of the goals associated with the introduction of auctions. The set expansion corridor has not been achieved, nor have the auctions improved cost-efficiency, and the diversity of actors has declined greatly since the beginning of 2017, which calls into question the acceptance of the energy transformation as a whole.

At the same time, significant obstacles in the field of obtaining permission, particularly from the areas of air traffic control, military airspace use and species protection, are preventing further expansion of wind energy throughout Germany. New planning restrictions at the state level, including in North Rhine-Westphalia, with its new flat-rate distance requirement of 1,500 meters to residential areas and forest exclusion, will further slow the development of on-shore wind energy in the coming years.

Given the dramatic nature of the situation, quick and clear countermeasures are urgently required. The following recommendations result from this study:

1. A clear commitment to the full transition to renewable energy with wind energy as a cornerstone and as a fundamental part of an effective climate change mitigation strategy.
2. In accordance with the principle of subsidiarity, a clear recognition of the importance of community energy and its many advantages, as well as a commitment to the creation of framework conditions conducive to the further development of community energy.
3. Including the prioritization of renewable energies in a national climate protection law or in constitutional law at state and federal level.
4. Creation of a non-discriminatory remuneration system beyond auctions, throughout Europe, in accordance with the decisions by the European Court of Justice.
5. Prompt and rapid reduction of bureaucratic barriers and hurdles under planning laws, such as general minimum distances.
6. Strengthening local energy schemes and promoting local and regional approaches to sector coupling.
7. Promotion and further development of prosumer models, as determined at the European level.
8. Promoting cooperation among regional, national and cross-border community energy actors.

## ABBREVIATIONS

AEE	Agency for Renewable Energies (Germany)
BEG	Community Energy Enterprise
BImSchG	Bundes-Immissionsschutzgesetz/Federal Immission Control Act
BNetzA	Bundesnetzagentur/Federal Network Agency
BWE	German Wind Energy Association
EA.NRW	EnergieAgentur.NRW/Energy Agency NRW
EE	Erneuerbare Energien
EEG	Erneuerbare-Energien-Gesetz – German Renewable Energy Sources Act
FA Wind	Fachagentur Windenergie an Land/Onshore Wind Agency
kWh	Kilowatt hour
IRENA	International Renewable Energy Agency
LEE NRW	Association for Renewable Energy of North Rhine-Westphalia
LEP	Landesentwicklungsplan / Regional development plan
MW	Megawatt
NRW	North Rhine-Westphalia
WEA	Wind turbine generator
WWEA	World Wind Energy Association

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# 1. INTRODUCTION

Community energy has been a major success factor and driving force behind the German energy transition (“Energiewende”), involving hundreds of thousands of dedicated citizens and communities across the country.

Although the term Energiewende was already coined in the 1980s, in practice implementation was initially only realized by individual pioneers, by citizens who worked on sustainable energy solutions on site. This was long before politicians recognized the opportunities in such an energy transition, then supporting it first through the Electricity Feed-in Act, and later through the significantly more impactful Renewable Energy Sources Act (EEG).

Community energy has been a cornerstone of the energy transition to date, with 42% of all German renewable energy system ownership being in the hands of citizens and farmers (WWEA 2019). But for some time now the energy transition has stalled, and the few renewable energy projects that are now being implemented are carried out by fewer and fewer players. Many community energy enterprises (CEE) are now facing major problems due to fundamentally changed general conditions, and many are wrestling with alternative business models in an attempt to further develop the energy transition locally.

Given the significance of community energy as a driving force for the growth of renewable energies, the World Wind Energy Association (WWEA) and the Association for Renewable Energy of North-Rhine Westphalia (LEE NRW) have been analysing the potential and opportunities for participation of community wind energy in Germany, with a focus on North Rhine-Westphalia, in a 2.5-year long-term study. This research refers specifically to the transition from the guaranteed feed-in tariff (FIT) of the original EEG to the auction model, which came into effect at the beginning of 2017 following amendments to the EEG. With these amendments, the German legislator explicitly sought to pursue the following goals:

1. Compliance with the approved expansion corridors (2’800 MW per year in the years 2017-2019, 2’900 MW from 2020 onwards)
2. Improved cost efficiency
3. Preservation of the diversity of actors

Within the framework of the WWEA / LEE NRW project, the study analysed the effects of this paradigmatic shift with regard to participation opportunities, actual successes, and restrictions for community wind actors. In addition, the study examined the significance of planning law, including

state regulations, in relation to their impact on the implementation of community wind projects. A previous study, „Headwind and Tailwind for Community Power“ (WWEA 2016), showed how community energy actors were already expressing serious concerns in the run-up to the decision on the introduction of auctions. Accordingly, a key objective of this research project was to determine the extent to which subsequent developments showed these fears to have been well founded. In addition, an evaluation and systematisation was undertaken of alternative business models and market access for community energy. The entire analysis and evaluation took place on the basis of a thorough literature and document review. An integral part of the study was a survey undertaken among community wind actors in NRW. In total, more than 50 experts participated in the three rounds of interviews in the years 2017 to 2019.

The background to this approach is the assumption that the actual situation of community energy can only be captured in a synthesis of a comprehensive legal and planning law analysis on the one hand, and the individual market assessment of the community wind actors on the other hand. At the same time, in view of the size and importance of the state of North Rhine-Westphalia, a degree of transferability of the results to Germany and internationally is assumed, so that general conclusions can be drawn regarding the relationship between the success of community energy and the respective political framework conditions.

In addition to the expert survey and the general analysis, three international community wind symposia took place in November 2017, September 2018 and June 2019. Each of the symposia was attended by around 100 experts from some 20 countries. The main goal of these events was to discuss the research results with a national and international audience, and to improve networking among the community energy actors. The symposia in 2018 and 2019 each concluded with a declaration summarizing the main points of discussion and conclusions supported by numerous German and international community energy organizations (WWEA 2019 and Annex).

On the basis of the expert survey and extended analysis, a study was published at the beginning of 2018, titled „Community Wind in North Rhine-Westphalia“ (WWEA 2018), and another in the spring of 2019, „Community Wind in the second year of tenders: A lot of shadow, little light“ (WWEA 2019 – only available in German), which provide essential information on the status of auctions at the time and their impact on community energy.

## 2. DEVELOPMENT OF THE WIND MARKET IN GERMANY AND NRW 2017-2019

Wie bereits dargelegt, verläuft die Entwicklung der BÜRThis chapter outlines the development of the wind market in Germany and North Rhine-Westphalia over the entire project period. As already noted, the development of community energy in Germany has taken place in parallel to the larger wind market development. On the basis of the original EEG and its statutory feed-in tariffs, new onshore wind energy installations in Germany reached a new record in 2017, with 1,792 new wind turbines (WTG) installed, with a capacity of 5,334 MW (Deutsche Windguard 2018). With these additions, wind energy overtook the electricity production of the three primary energy sources: nuclear energy, natural gas and hard coal. The record wind energy share of 20.4% in power generation, reached in 2018, is also entirely attributable to the original feed-in tariff (Fraunhofer ISE 13.3.2019). The record level of new installations in 2017 was largely based on proactive behaviour of investors to secure the old FIT before the impending switch to auctions.

In parallel with the new record federal level, NRW also achieved a new installation record in 2017, and at the end of 2017 some 3,630 wind turbines were in operation in the state, with a total installed capacity of 5,449 MW (Deutsche WindGuard 2017). Another 116 plants were added by the end of 2018, representing an additional capacity of 2,402 MW, again reflecting an imperative among investors to develop them prior to the introduction of auctions.

Yet these 2018 figures reflect a wind market that was already declining significantly in anticipated response

to the impending auctions model. The gross additions, at 2,402 MW, were well below what had been expected by industry experts. The projects completed in 2018 had been permitted in 2016 under the “old” FIT regime (BWE 29.1.2019). By the first half of 2019 it was clear that the German wind market had in fact collapsed, with only 287 MW of onshore wind capacity built – the lowest value of any year in this century. If we subtract the old WTGs dismantled in this period, the net addition was actually a mere 231 MW. In six federal states, not a single new plant was installed, and in North Rhine-Westphalia, the 43 MW of additional installations was only a fraction of the previous year (Deutsche WindGuard 2019). Since the beginning of 2019, only the projects that won with their auction bid are eligible to receive a remuneration. Accordingly, this result clearly illustrates the very negative impact of the auctions on the entire German wind market.

At the same time, there are significant obstacles in obtaining permissions that are preventing the further expansion of wind energy throughout Germany. For example, an industry survey conducted by FA Wind in July 2019 reveals that more than 1,000 prospective wind turbines (representing 4,800 MW) are currently not approved due to their direct influence on air traffic control, and another 900 turbines (3,600 MW) due to conflicts with military airspace. Another 300 plants (1,200 MW) nationwide are subject to legal actions, with „species protection“ being the most common issue (FA Wind 2019c). In addition to these barriers related to permitting processes, a number of German states (including North Rhine-Westphalia) have set up new planning restrictions, such as flat-rate distance rules or extensive forest use bans, which will additionally and severely slow down wind energy expansion in the coming years.

## 3. COMMUNITY ENERGY AS DRIVER OF THE ENERGY TRANSFORMATION

The overall circumstance of the energy transition is quite well reflected in the situation of community energy. There are good reasons to suppose that ultimately, the successful implementation of the energy transformation as a whole will depend on the successful integration of community energy. Community energy initiatives are responsible for numerous social, economic and technical innovations within the energy revolution. Overall, community energy has great potential in transforming a carbon-based energy system into a truly sustainable energy system based on decentralized renewable energies.

This is the case precisely because community energy contributes substantially to decentralized, that is to say local, value creation. Added value, the right to participate, and opportunities for participation in turn create the social acceptance that is so urgently needed for the shift towards renewables, since they bring with it practical advantages for local citizens. In addition, through this local added value, such as can be found in North Rhine-Westphalia, community energy makes an important contribution to coping with structural change, especially in the context of the phase out of coal power and coal mines.

### 3.1 What is community energy?

In order to be clear about its subject matter, this study followed a stringent, internationally recognized definition of “community energy.” A few years ago, representatives

from all continents within the WWEA Community Energy Working Group agreed on three distinct criteria that define community energy: voting rights, capital shares, and profit distribution. The constituents are thus the majority economic participation of community actors, the voting sovereignty, which must lie with the citizens locally, and the value added, which must remain to a large extent in the region. Along with WWEA, the Community Energy Working Group of the Coalition for Action at IRENA also subscribes to this definition (IRENA 2018).

These criteria were repeatedly evaluated in the course of this project's citizen energy symposia, and found high approval among the participating experts and practitioners. Voting limits per shareholder were also discussed as a possible further criterion, but this is difficult to abstract on the international level, and has therefore not been included in the WWEA definition so far.

The WWEA criteria by themselves do not constitute a directly legally implementable definition, but they do reflect what practitioners see as the essential elements of community energy, which then have to be interpreted and concretized according to the respective local conditions. So far, there are only a few countries that have adopted a legally valid definition. In Germany, a legal definition of community energy was not necessary in the past, because the feed-in tariff model did not disadvantage any of the participating actors, but gave equal access to all market participants. Before the switch to auctions was implemented, experts surveyed in a previous study (WWEA 2016) emphasized that the guaranteed feed-in tariffs, low bureaucratic requirements, and a wind energy-friendly planning policy in the federal states were the main basis for extensive expansion of wind energy projects in the hands of citizens. The upcoming auctions were regarded with great concern at the time, as the CEE actors assumed that many of the above mentioned factors would be lost as a result of the changeover.

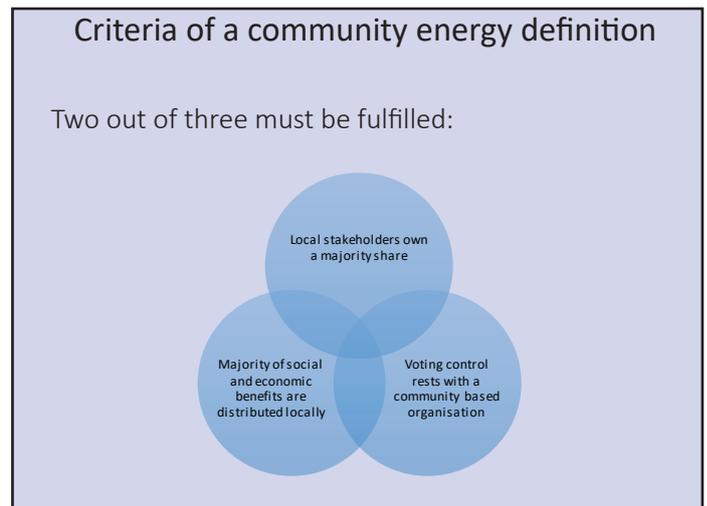


Image 1

### 3.2 Community Energy definition in the EEG

As a result of the switch to the auction system, the situation in Germany has changed fundamentally. In order to take account of the massive public concern, legislators decided to include special privileges for community energy in the Renewable Energy Act EEG, which accordingly required drafting a legal definition. This definition of a community energy actor, which remains valid, includes in particular:

- At least ten natural persons as voting shareholders
- At least 51% of the voting rights belong to natural persons resident in the project district
- No shareholder holds more than 10% of the voting rights.

However, as discussed below, this definition was inadequate to capture genuine community energy and has allowed widespread abuse of the associated privileges (see also WWEA 2018). The main reason is that the definition refers only to voting rights instead of shares, and so it neglects to consider who actually contributes the capital of the EEG „community energy“ companies.

## 4. THE TRANSITION TOWARDS AUCTIONS: THREE PHASES

The study was divided into three phases according to the course of the observation period, which corresponds to three calendar years:

- Year 2017: auctions take place for the first time; „community energy“ dominates; prices are moving down significantly
- Year 2018: stricter tendering conditions for community energy; substantial increase in awarded prices
- Year 2019: first year exclusive to tendering; collapse of the wind market with a further high surcharge level; community energy is marginalized

## 4.1 Year 2017 – Phase 1: “Community Energy” is dominating the auctions, prices go down

The introduction of the auction model in 2017, together with imprecise assigned privileges, confirmed the concerns expressed in the previous year. The previously balanced market conditions became heavily distorted in favor of financially strong players, as the smaller CEEs could not afford to bear the risks associated with participating in auctions. Indeed, due to the unfortunate EEG definition of community energy, companies that had submitted their projects under the label of community energy won a large number of bids in the first auction round. In the first auction round in 2017, the aggregate allotment for community projects was 96.1%; it was 94.6% in the second round, and 99.3% in the third round (see Table 1 in Chapter 5; detailed analysis can be found in WWEA 2018).

A closer look, however, shows that these projects were practically all initiated by larger developers, which did not meet the community energy criteria agreed by the community energy actors, described above. It is also noticeable that in many cases the bidding project companies only entered the commercial register shortly before the end of the submission deadline of the auction round, and in some cases even after that. In addition most were still at the very beginning of the approval process, which was facilitated by the use of the special rules for community energy according to which all investors fulfilling the legal community wind definition could claim some important privileges:

1. An extended implementation period of four instead of two years,
2. Permissions in accordance with the Federal Immission Control Act (BImSchG) did not have to be submitted when the bid was submitted,
3. Only half of the required financial security had to be provided with the bid, and
4. In the case of a successful participation, the price of the highest bid still awarded was allocated as a price for these projects (standard price procedure).

Despite or perhaps even because of these special regulations, the diversity of actors was reduced considerably under the new conditions. Only a few companies were successful, with the company UKA alone involved in sixty „community projects“ with a total volume of more than 1,000 megawatts (MW). This corresponded to more than one third of all approved projects in 2017.

In addition, a large regional imbalance was apparent from the beginning. The southern federal states, particularly, in which, after the abolition of atomic energy, there is a great need to switch on wind energy in the grid, won almost zero bids in the 2017 auction rounds.

Bavaria, the largest federal state in terms of area, had only four projects awarded; in Baden-Württemberg not a single bid was successful (WWEA 2018). Such an uneven distribution of electricity generation will ultimately lead to rising costs of the energy transition, since it leads to an additional demand for electricity transport capacities. A targeted expansion of renewable energies, combined with a high degree of system stability, can best be achieved by expanding wind energy generation as widely as possible.

In the state of North Rhine-Westphalia in 2017, development was similar to that seen at the federal level. Essentially five major project developers were behind the project bids in the area of community energy. Only two approved projects went to CEEs with a strong local connection (in the sense of the WWEA definition). Also, just as at the federal level, an unequal regional distribution could be observed. The administrative districts of Münster, Detmold and Arnsberg, which are located in the North of North Rhine-Westphalia, together won 25 bids, while the most densely populated districts of North Rhine-Westphalia, Cologne and Düsseldorf had only one project awarded (WWEA 2018). At the same time, the price level achieved in 2017 was far below what many experts in Germany had considered feasible.

Based on this evaluation of the experiences with the auctions made in 2017, WWEA and LEE NRW formulated several recommendations to the Federal Government and the NRW state government in early 2018:

1. The need for a clear commitment to the goals of the energy transition, the associated expansion of wind energy, and the preservation of the diversity of actors.
2. The introduction of a de minimis regulation in conformity with European law according to which up to three wind turbines are exempted from participating in tenders and continue to receive a guaranteed statutory feed-in tariff.
3. If, instead of the de minimis rule, the government wishes to continue to support community energy through a simplified framework, the definition of community energy should follow the criteria used in this study.
4. A significant increase in the auction volume is required in order to enable the many community wind projects that are far advanced in the project planning to be realized and to prevent „stranded investment“.
5. To promote approaches that include a holistic approach to renewable energy, electromobility, energy efficiency and climate adaptation.

## 4.2 Year 2018 – Phase 2: Stricter tender conditions for community energy, significant price increase

Following on the experience of 2017, however, the legislature not only did not follow the recommendations set out here, but on the contrary, almost completely suspended the exemptions for community energy. As a result, since the beginning of 2018, CEEs can only participate in the auctions once their project has been fully approved under the Federal Immission Control Act. CEEs are now also bound to the standard project implementation period of 30 months. By contrast, CEE projects are still awarded based on the standard price procedure (implementation of the project based on the maximum successful price bid in the auction). Although these restrictions on the special rules for CEEs were initially intended to apply only to the first two rounds of 2018, the German parliament later extended these to 1 June 2020.

By switching to the auctions model, the German Government had been aiming for improvements in the area of compliance with the expansion corridors, the preservation of the diversity of actors and, in particular, cost efficiency. However the expansion corridors were only partially exploited in 2018 due to the lack of planning reliability. Approvals under the Federal Immission Control Act proved to be a particularly large hurdle, especially for community energy projects. This also means that awarded projects, with a total volume of 2,500 MW, are at risk of not being implemented (BWE 30.04.2019). The uncertainties, the burgeoning bureaucracy and the removal of the community energy privileges had a negative effect on the preservation of the variety of actors. The proportion of projects submitted as community energy projects declined sharply in 2018; it was only 6.5% in the August auction, and slightly better, at 16.0%, in the October round (see Table 1).

Through the course of 2018, therefore, the question arose more and more frequently among CEEs as to whether the remaining privilege of the guaranteed maximum price of the auction round would justify the extra effort required to fulfill the legal definition as a “community energy” project – an effort that might not be worthwhile in the absence of significant competitive pressure. And low competitive pressure clearly marked the bidding rounds of the year 2018. Only the first auction of the year, in February, was oversubscribed, and not by a large margin. In the subsequent auctions in 2018, virtually all the eligible bids were awarded contracts (Table 1). At the same time, due to the low competitive pressure, the main economic argument for the introduction of the tendering model was dropped, and the awarded prices rose steadily in the course of the year.

The targeted cost reduction actually turned to an

increase in costs. While the average additional value for a so-called reference location in November 2017 was still 3.82 ct/kWh, it increased from 4.73 ct/kWh to 6.26 ct/kWh between February and October 2018 (Bundesnetzagentur 2019). Since most of the projects, even in NRW, are rarely in a statistically average location with 100% of the wind yield, the reference yield model must be taken into account, since the actual tariffs per kWh are sometimes considerably higher depending on the wind yield. For the auctions in February and May, for example, for a 70% location this was 6.81 ct/kWh, and 8.10 ct/kWh, respectively (own calculations, based on data: Bundesnetzagentur 2019, see Figure 2). In the course of 2018, this level was already well above the remuneration that would have been granted under the pre-2017 EEG feed-in tariffs. Thus it is evident that the goal of cost reduction was clearly missed.

The low competitive pressure that characterized the 2018 tender rounds can be attributed to the fact that many projects were undergoing a re-approval process, based on the experiences of the first auction rounds. That is, the participating companies hoped to be able to obtain better prices following the re-approval process. Also, the evaluation of the auctions showed that from January to August 2018 only 1,081 MW had received a permit according to the Federal Immission Control Act (BWE 11.10.2018).

In addition to the recommendations formulated in the 2017 report (see Chapter 4.1.), WWEA and LEE NRW called on the federal and state legislators, on the basis of the findings of the year 2018 (WWEA 2019):

- to increase political support for community energy and, above all, to reduce planning restrictions;
- generally, to send confidence-building signals in favour of renewable energy and in favour of wind energy;
- to consider, for community energy in particular, a return to the old remuneration system, as the European Court of Justice has declared admissible.

## 4.3 Year 2019 – Phase 3: Collapse of the wind market, auction price hike, community energy is marginalized

Thus, while the year 2018 was determined by a sharp decline in the share of community energy and, at the same time, significantly rising prices, the collapse of the German wind market really became clear in the first half of 2019. The first three auction rounds were dramatically undersubscribed; of the 2000 MW tendered, only 1002 MW were awarded, or only 50% of the tendered capacity. In fact, all those bidders who avoided making any formal mistakes can expect to be awarded a contract. While the settled auction price level remained high at 6.1 ct/kWh, or 6.2 ct/kWh for community energy, the formal share of community energy fell to 4.2% in the May auction. In

August, not a single bid made use of the community energy privileges (Table 1).

At the same time, in the first half of 2019 there was a dramatic slump in the new installations, which for the first time ever took place only on the basis of auctions won in the previous two years: there was a gross increase of just 86 WTGs with a total of 287 MW, with the net addition only 231 MW (Deutsche WindGuard 2019).

The year-on-year trend that began in 2018, with a small number of approved projects not participating in the auctions, continued during the first round of the 2019 auctions. Pprojects totaling 499 MW participated,

although a total of 1,840 MW would have been eligible (AEE 15.02.2019).

Accordingly, the poor situation of the wind industry and of community wind cannot be explained by under-compensation, nor by a lack of suitable land for wind energy use. Rather, the problems lie in the shortcomings of the auction model and the lack of planning security for the wind industry, in particular due to a complicated and increasingly restrictive planning law in many states – including in North Rhine-Westphalia.

## 5. SUMMARY: ALL GOALS MISSED

All in all, it can be said that not one of the three goals issued stated by the Federal Government has been achieved in the nearly three years since the FIT was terminated. The auctions regime has not led to compliance with the expansion corridors, improved cost-efficiency, or preserved the variety of actors participating in wind energy development.

### 5.1 Compliance with the installation targets

Table 1 gives an overview of all auction rounds held between the beginning of 2017 and August 2019. It shows very clearly the significant decline in the bid volumes, from 2,137 MW and 2,972 MW in the first and second auction

rounds (May and August 2017) to less than one tenth of that in the ninth round in May 2019.

A total of 6,122 MW have been awarded in ten rounds so far; this represents some 81.5% of the total tendered volume of 7,510 MW. However, particularly with regard to the high number of projects awarded in 2017 under the community energy label, the actual implementation is very uncertain, especially in view of the lack of a BImSchG approval and very low prices. Thus the actual implementation rate may be less than two-thirds.

With the number and volume of projects awarded so far, it is already certain that the installation targets aimed at by the Federal Government will be far undercut. The development of actual installation figures for 2019, presented in Chapter 2, further substantiates this expectation.

Onshore wind power auctions in Germany 2017-2019											
	May-19	Aug-17	Nov-17	Feb-18	18-May	Aug-18	Oct-19	Feb-19	19-May	Aug-19	Total/∅
Auction volume (MW)	800	1000	1000	700	670	670	670	700	650	650	7510
Submitted volume (MW)	2137	2927	2591	989	604	709	388	499	295	239	11378
Awarded volume (MW)	807	1013	1000	709	604	666	363	476	276	208	6122
Awarded volume for CEEs (MW)	776	958	993	155	113	43	58	92	12	0	3201
Share of CEEs (%)	96,1	94,6	99,3	21,9	18,8	6,5	16,0	19,3	4,2	0,0	52,3
Average awarded price (ct/kWh)	5.71	4.28	3.82	4.73	5.73	6.16	6.26	6.11	6.13	6.20	5.44
Lowest price (ct/kWh)	4.20	3.50	2.20	3.80	4.30	4.00	5.00	5.24	5.40	6.19	4.18
Highest price awarded (ct/kWh)	5.78	4.29	3.82	5.28	6.28	6.30	6.30	6.20	6.20	6.20	5.61

Table 1, Source: Bundesnetzagentur, FA Wind

## 5.2 Cost efficiency

In terms of cost-effectiveness, too, the results of the bidding rounds do not paint a positive picture. Indeed even in 2017, while the awarded prices were fairly moderate, they reached levels that many experts regarded as too low to provide a sound financial basis for development, given the equipment available on the market. However, this was mainly due to the fact that project developers had based their calculations and bids on future turbine technologies and anticipated leaps in efficiency, which made sense, given the extended implementation deadline for community energy projects – up to four and a half years (instead of the regular two and a half years).

With the elimination of most of the community energy privileges, including the introduction of a generally binding implementation period of a maximum of two and a half years after the auction, the price levels awarded increased steadily, reaching values in excess of the statutory tariffs of the old EEG. This only becomes apparent, however, when the theoretical auction prices are converted into actual rates in accordance with the reference yield model, as shown in Figure 2. In the latest three rounds of 2019, a site with 70% of the average wind yield would receive remuneration of 8.0 ct / kWh over a period of 20 years. In the last three rounds of 2018 the figure was even higher, at 8.1 ct / kWh. By contrast, the highest statutory feed-in tariff for plants commissioned at the beginning of 2018 under the old EEG was 7.49 ct / kWh, and only 6.97 ct / kWh for plants installed between October and the end of 2018.

In addition, the implementation and administration of the auctions still entail considerable costs, above all with the Federal Network Agency, but these are not quantifiable

in the context of this study.

## 5.3 Preservation of Diversity of Actors

Under the 2017 FIT rounds, the proportion of projects using the community energy privileges was in the range of 95% to 99%; this level dropped drastically to less than 20% in early 2018, and actually reached zero in the August 2019 round (Table 1). The original impression of the dominance of community energy has thus reversed, and there can be no talk of successfully preserving a diversity of actors.

The concentration of awarded projects on a few, especially northern, federal states is also detrimental to the variety of actors in terms of geography. After nine rounds of tendering, a corresponding evaluation revealed a strong geographic bias: the five leading states of Brandenburg, Lower Saxony, North Rhine-Westphalia, Mecklenburg-Vorpommern and Schleswig-Holstein could account for 72.9% of the aggregate capacity, while Bavaria, Baden-Württemberg, Württemberg, Saxony, the Saarland and Bremen together secured only 7.6% of the total allocated capacity (FA Wind 2019b).

North Rhine-Westphalia received a total of 14.7% of the surcharges in 2017 and 2018, while representing 9.5% of Germany's area and 21.6% of its population. Beyond this, the results of the auctions in NRW have two main results:

- On the one hand, as on the federal level, regional disparities exist, and the awarded projects are centered in only a few districts in NRW. Of the 193 wind turbines contracted in 2017 and 2018, 100 were allocated to the rural districts of Hochsauerlandkreis, Paderborn, Minden-Lübbecke and Borken (40, 21, 20 and 19 wind

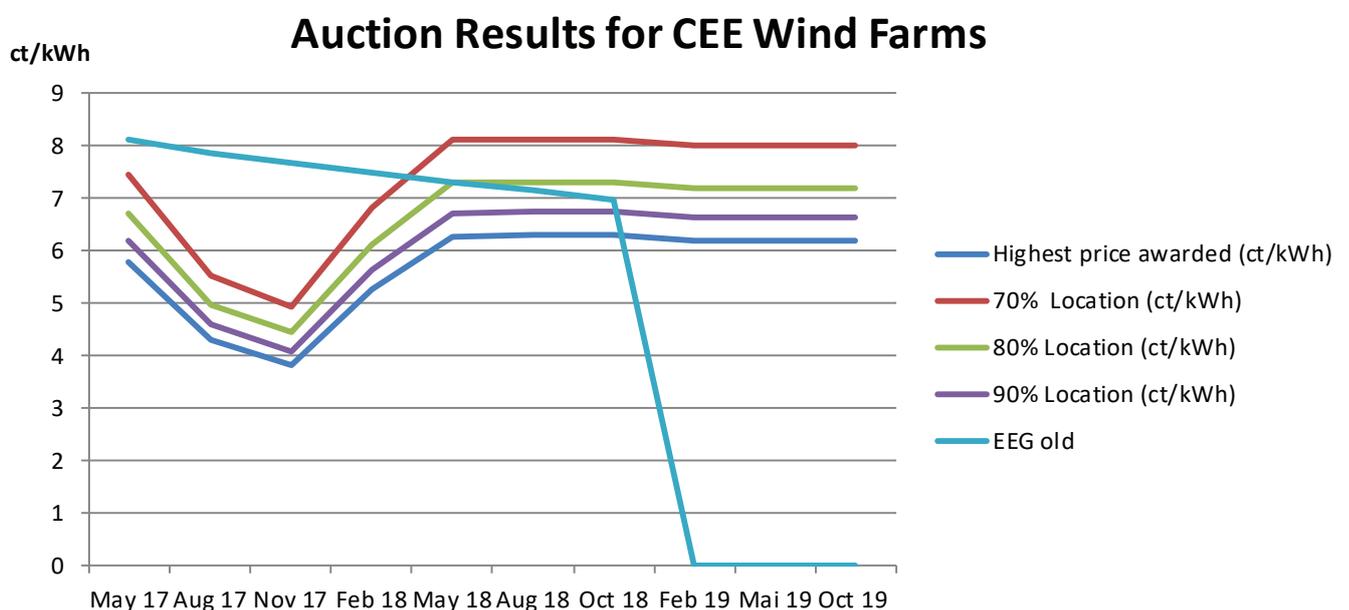


Image 2: Maximum additional values

turbines) (FA Wind 2019).

- On the other hand, it is noteworthy that the bids that were successful in the bidding process can essentially be attributed to four companies that have already been active in NRW for a long time. These few North Rhine-Westphalian companies are joined by a few farmers and small engineering firms (EA.NRW 2018).

In NRW and nationwide, generally the small, new cooperatives and CEEs are no longer participating with new projects, or are not even being founded, since for them the market risks are too high. Nationwide there has been a dramatic decline in the number of newly founded energy cooperatives, from a peak of 167 start-ups in 2011, to just

14 in 2018 (DGRV 2019).

Relevant experts also confirmed the reasons given in this study at a symposium in 2019. The critical mass of different regional project sponsors, who are at the same time also pursuing smaller projects with lower investments on their own initiative, is therefore declining, which will have a negative impact on the sector's expansion in the medium to long term.

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## 6. PLANNING LAW

In addition to the problems caused by the auction system, the study also identified changed planning law requirements, especially at the state level, as a further major regressive barrier to new wind power installations. Of note is the so called 10h regulation in Bavaria, according to which wind turbines must have a minimum distance of 10 times their height to residential buildings in areas with development plans. With current wind turbine heights often reaching 200 meters, this means a minimum distance to the next residential area of 2,000 meters. As a consequence of this, wind power expansion in Bavaria has practically come to a standstill. In Schleswig-Holstein, the state government even imposed a moratorium, so that with the exception of developers who are willing to undertake a complicated exemption procedure, the further expansion of wind power can be ruled out until the creation of the new regional plan in 2020.

In North Rhine-Westphalia, too, the state government has created a great deal of uncertainty with its changes in the State Development Plan (LEP), which in principle should include a flat minimum distance of 1,500 meters to residential areas and a widespread ban on wind turbines in forests. Permitting for wind energy in commercial forests is not strictly speaking impossible, but it has become immensely more difficult. However, since municipalities must provide sufficient space for wind turbines in accordance with federal law, the risk of incorrect planning, lawsuits or legal disputes also increases. According to LEE NRW's forecasts in North Rhine-Westphalia, more than 80% of wind energy potential in the state will be excluded in the future due to the general minimum distances and the extensive ban on the use of commercial forests for

wind energy. The results of a potential analysis by the state government, which has sought to investigate the effects of the area restrictions and to measure the remaining area, are still pending.

In the present study, it was possible to show that the intended changes to the LEP led to considerable uncertainty and confusion among planners and municipalities. While some municipalities impose planning moratoria for fear of lawsuits, others proactively intervene in the proposed applications in order to not be ignored in the planning process. These inconsistencies are difficult to convey to citizens who are not fully knowledgeable. In addition, the proposed LEP could be the basis for a large number of legal actions, as investors may be denied building rights only in the case of higher-ranking interests such as species protection or air traffic control, but not because of a flat-rate distance regulation. Instead of installing new wind turbines, the NRW Ministry of Economic Affairs plans in the future to replace older turbines with more powerful wind turbines, what is called „repowering“ – regardless of the fact that for the repowering of old plants, new permits under the Federal Immission Control Act still need to be obtained.

The LEP regulations also appear contradictory against the background that the NRW state government recently adopted. This entails an energy strategy in which the stated goal is to almost double the wind energy capacity in the country, from today's 5,800 MW to 10,500 MW by 2030. This target does not accord with the limitations of the LEP in the least, since the necessary planning process of the municipalities – including substantial allocation of land with the new specifications of the LEP – is hardly possible.

## 7. RESULTS OF THE SURVEY

The survey of key actors in the field of community wind energy gives a dramatic picture of the developments outlined here. In total, more than 50 community energy experts and practitioners from North Rhine-Westphalia were interviewed by means of an online questionnaire in each of the three years of the study, and in personal interviews in 2017 and 2018. A strong majority of the community energy experts assessed the switch to the auction system negatively – together with increasing problems related to permission processes, this policy shift has been identified as the main cause of the wind energy crisis in Germany.

### 7.1 General assessment of auctions

At the end of the observation period in the first half of 2019, 45.5% of respondents assessed the changeover to auctions as somewhat negative, and 27.3% as very negative. When asked about the key hurdles for community wind players in the auction process, 100% cited concerns about the general risk of not winning the bid, while 89% saw the increasing complexity of the process as negative or very negative. This shows that after the auctions were launched, the fears expressed in advance appeared to hold true: in 2015, 95% of respondents considered increasing complexity and 90% saw the additional risk of a failed bid as negative or very negative (WWEA 2016).

The fear of penalties and withdrawal of the awarded contract also played a role, but the negativity was not perceived as widely as with the previous factors. In 2019,

44% of respondents assessed this as negative or very negative, compared with 70% in 2016.

In the survey it became also clear that those projects that are planned at all, are all 3-4 MW or larger. Small projects are no longer lucrative since the implementation in the tendering system.

In the overall review of the auctions it must also be said that the actual situation of the industry is worse than the official figures indicate at first glance. The number of visible permits is deceptive, because all of the approved projects are listed. However, a considerable portion of those permits are either in a reassignment procedure or delayed in a legal case, and thus cannot be implemented.

Meanwhile, 72.7% of the CEEs surveyed now see themselves in increased competition with project developers, while only 18.2% expect more cooperation between CEE and project developers.

### 7.2 About the community energy definition

Concerning the community energy definition in the EEG, the expressed opinions remain very divided, although in summary they are equally negative. In 2016, 36% of respondents considered the definition appropriate, while 24% saw it as too broad and 40% understood it too narrow. This mixed picture remained through to 2019. However, in 2019 only 9.1% of respondents considered the definition to be appropriate, while 36.4% of those polled tended towards too broad, and a similar number of respondents saw it as too narrow. In addition, 18.2% of respondents now say that they find the definition completely inappropriate.

### How do community wind players evaluate the conversion auctions?

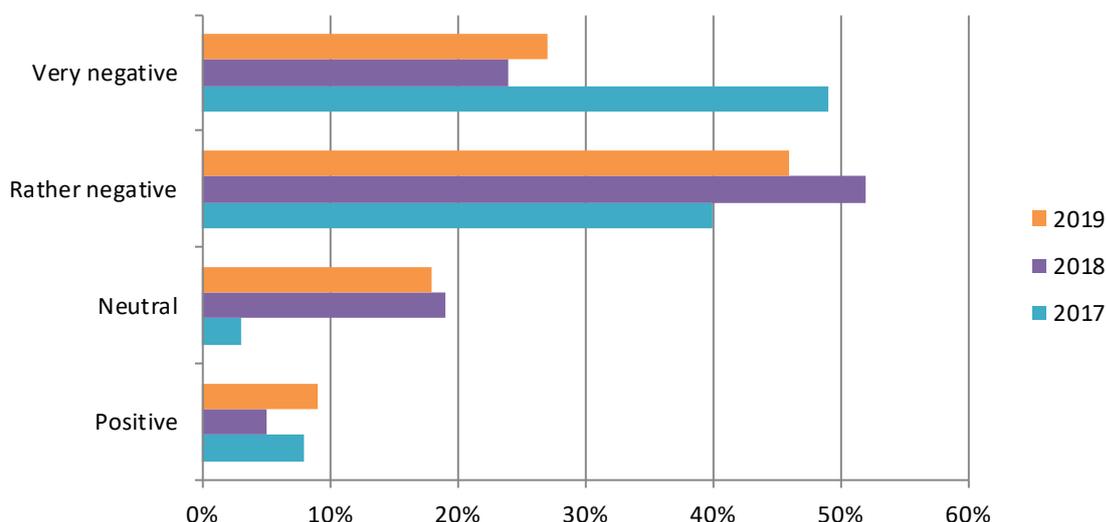


Image 3

### 7.3 Permission restrictions

In addition to the tendering model, the surveyed CEE stakeholders also hold negative perceptions of the other aspects related to the permitting process. Only 22.2% of the actors see no negative influence, while the rest see a weak to very negative influence and understand these permitting issues as genuine obstacles.

### 7.4 Importance of new business fields

As already suggested by the document analysis in the study, the complexity of the tender process has encouraged many actors to look into the idea of becoming active in business areas other than wind energy. This was being considered by some 36% of the interviewed stakeholders, while another 27% had not yet decided on it. A clear development can be observed over time. In the first survey in 2017, shortly after the launch of the auction model, 80% of respondents said that they could not imagine being

active in other business areas.

The business segments that were rated most interesting were the self-supply of renewable energies, regenerative heat supply, and electric mobility. Regarding self-supply, 60% of respondents said they were already active in this area, while 40% considered it to be potentially of interest. This was followed closely by the energy efficiency market segment, in which 50% of the respondents are already active and the other 50% described the market segment as being of interest.

Comparing the data from 2017 and 2019, it is notable that the CEE players are now increasingly turning to alternative business areas, due to the difficult conditions on the wind market. The strongest growth is in the area of electromobility: While in 2017 only 22% of respondents said they would be active in the segment, by 2019 that portion had reached 60%. In the area of self-supply, the increase from 25% to 60% is somewhat lower, but still substantial, as the level of activity is more than twice as high as two years earlier.

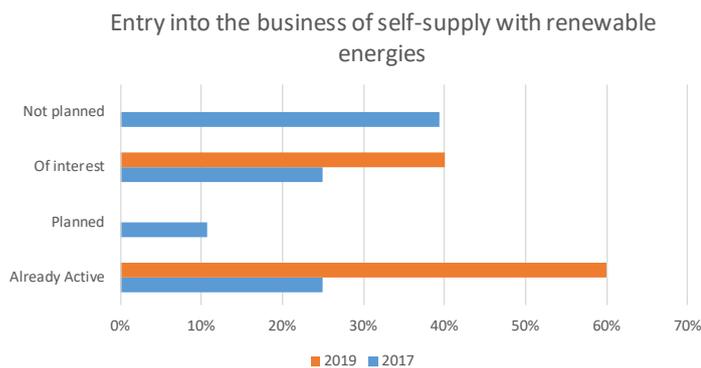


Image 4

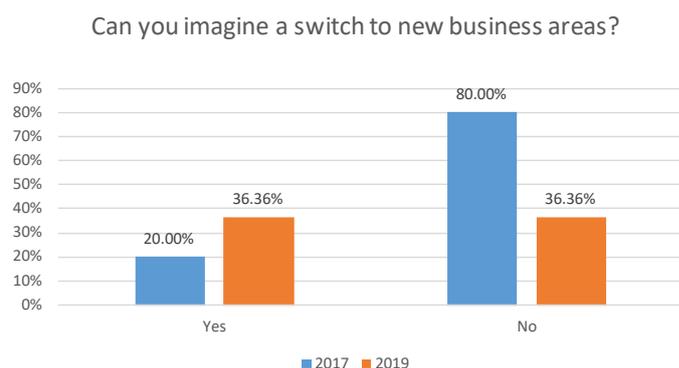


Image 5

### 7.5 Assessment of NRW state policies

The consequence of the permitting-related deterioration in North Rhine-Westphalia described above is a massive dissatisfaction among wind energy stakeholders with the state government. In 2018 and 2019, the community wind experts were asked for an assessment of the state government – in 2018, in relation to the state’s wind energy policy, and in 2019 to energy policy in general. Since the two topics are very closely related to each other, the two survey results can be compared directly.

While in the year 2018 5% of the respondents were satisfied, at least 40% expressed dissatisfaction and 50% were very dissatisfied with the wind energy policy in NRW. Only one year later, 91% of the respondents were very dissatisfied with the energy policy of the state government,

while a further 9% of the respondents were dissatisfied; none gave a positive or neutral assessment.

Here, too, the development of opinion over time must be considered. In a previous survey in 2017, 47.8% stated they were satisfied with the support offered by the state of North Rhine-Westphalia; at that time only 4.6%, and 14.3%, respectively, were very dissatisfied or dissatisfied with the state development plan and the guidelines on wind energy in forests.

In contrast to this development, however, it is worth mentioning that in 2019, 54% of the respondents rated the support from the district administration and the municipality as very positive or positive, which shows that the mood toward public actors and authorities is by no means consistently negative.

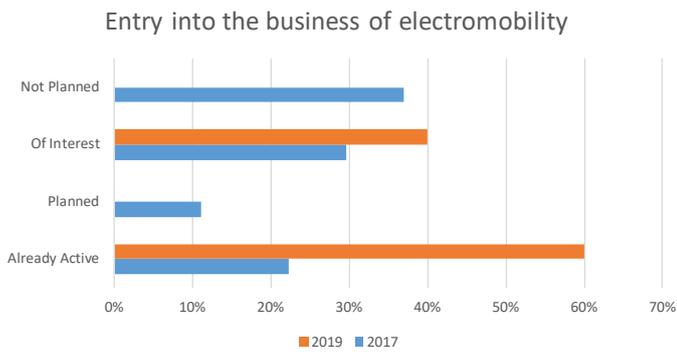


Image 6

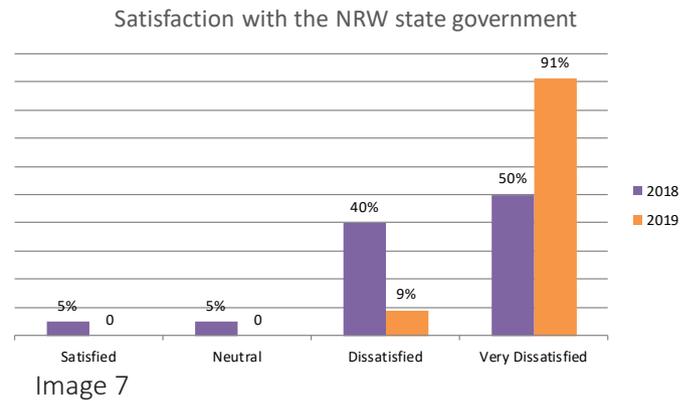


Image 7

## 8. INTERNATIONAL COMMUNITY WIND SYMPOSIUM & COMMUNITY POWER FORUM

Another instrument used to verify the results of the research and to capture the sector's sentiment was the annual international symposia. The symposia held in 2015, 2017 and 2018 have been described in some previous publications (WWEA 2016, WWEA 2018, WWEA 2019).

At the fourth International Community Wind Symposium & Community Power Forum in May 2019, the preliminary results of this research project were presented and initial conclusions were drawn. Participants at the symposium again showed an almost unanimous rejection of the current auctions model. The discussion brought out a range of proposals, from reforming the tendering system to returning to the previous EEG, as well as the establishment of a new market model outside the EEG remuneration system. Representatives of small CEEs especially emphasized that under the prevailing conditions it would be virtually impossible to launch new community energy enterprises such as cooperatives. There was a very broad consensus about the urgent need to remove the current bureaucratic obstacles to CEE activities.

The current problems around the acceptance of wind energy on land were another point of discussion. It was stated that acceptance is usually lower where wind turbines are built for the first time, as there are many biases against wind energy. A new campaign for acceptance involving the entire wind industry was proposed, especially given that the expansion of decentralized renewable energies could make major parts of the planned network extension obsolete. At the same time, it was repeatedly stated that federal as well as state policies should give renewable energies much more support and thus increase public acceptance.

However, as there are currently massive problems in the wind sector that cannot be solved in the short-term, many participants at the symposia deliberated on which market

segments and which business models CEEs can profitably and meaningfully enter beyond public power purchase agreements. Such community projects make sense not only in the electricity sector, as these approaches combine participatory possibilities for citizens with environmental benefits. In addition, rural structures can be strengthened in case of successful implementation. In addition to the indisputable importance of legislation supporting a decentralized energy transition, then, the symposia stressed the importance of a social vision and a guiding positive narrative, one that highlights the opportunities and benefits of energy in the hands of citizens.

Much hope was therefore expressed regarding the Clean Energy Package of the European Union, which also contains a new Renewable Energy Directive. In this new legal framework, community energy and the role of the „prosumer“ should be enhanced, for example through protection against discriminatory levies that prevent participation in the energy transition. The right to generate, store, consume and sell renewable energy without disproportionately large burdens is thus intended to benefit all EU citizens. Numerous CEEs are hoping for a better starting position in terms of self-generation and the associated direct marketing following national implementation of the Directive.

Many panelists and participants also expressed hope for greater public support from the ever-growing public protest movement for climate protection, notably through Fridays for Future. The discussions triggered by these regular protests have the potential to spur meaningful legislative decisions, such as a Climate Protection Act, or the inclusion of climate protection or prioritization of renewable energy in constitutional law.

Moreover, and beyond national borders, the possibilities and prospects of international cooperation among community energy actors were also discussed with international representatives. Concrete examples were presented, and participants discussed the conditions that would need to be fulfilled so that cooperation, especially between developing and industrialized countries, can be

fruitful.

The „Bonn Community Power Declaration“, adopted during the 4th symposium in 2019, can be found in the annex.



## 9. CONCLUSIONS AND RECOMMENDATIONS

The wind energy industry and community energy especially are in a deep, politically induced crisis. There is an urgent need for confidence-building measures for climate protection, for renewable energy and for wind energy – as happened in the aftermath of the Fukushima nuclear disaster. The public discussion surrounding the urgency of effective measures against climate change offers a hitherto unprecedented opportunity, in which the importance of renewable energies and also of community energy has not yet been adequately addressed.

Building on the recommendations already made in the previous study, WWEA and LEE NRW recommend the following measures:

1. A clear commitment to the full transition to renewable energy with wind energy as a cornerstone and as a fundamental part of an effective climate change mitigation strategy.
2. In accordance with the principle of subsidiarity, a clear recognition of the importance of community energy and its many advantages, as well as a commitment to the creation of framework conditions conducive to the further development of community energy.
3. Including the prioritization of renewable energies in a national climate protection law or in constitutional law at state and federal level.
4. Creation of a non-discriminatory remuneration system beyond auctions, throughout Europe, in accordance with the decisions by the European Court of Justice.
5. Prompt and rapid reduction of bureaucratic barriers and hurdles under planning laws, such as general minimum distances.
6. Strengthening local energy schemes and promoting local and regional approaches to sectoral coupling.
7. Promotion and further development of prosumer models as determined at the European level.
8. Promoting cooperation among community energy actors, regional, national and cross-border.

## LITERATURE

AEE (Agentur für Erneuerbare Energien) (15.2.2019): Mangelnde Teilnahme an Ausschreibungen zeigt hohe Verunsicherung der Branche, online abrufbar unter: <https://unendlich-viel-energie.de/erneuerbare-energie/wind/onshore/mangelndeteilnahme-an-ausschreibungen-zeigt-hohe-verunsicherung-der-branche> (11.7.2019).

Bundesnetzagentur (2019): Beendete Ausschreibungen Windenergieanlagen an Land, online abrufbar unter: [https://www.bundesnetzagentur.de/DE/Sachgebiete/ElektrizitaetundGas/Unternehmen\\_Institutionen/Ausschreibungen/Wind\\_Onshore/BeendeteAusschreibungen/BeendeteAusschreibungen\\_node.html](https://www.bundesnetzagentur.de/DE/Sachgebiete/ElektrizitaetundGas/Unternehmen_Institutionen/Ausschreibungen/Wind_Onshore/BeendeteAusschreibungen/BeendeteAusschreibungen_node.html) (11.7.2019).

BWE (Bundesverband WindEnergie) (11.10.2018): Genehmigungsstau blockiert Energiewende, online abrufbar unter: <https://www.wind-energie.de/presse/pressemitteilungen/detail/genehmigungsstau-blockiert-energiewende/> (11.7.2019).

BWE (Bundesverband WindEnergie) (29.1.2019): Ausbautzahlen für das Gesamtjahr 2018 in Deutschland: Windenergie an Land – Zubau bricht stark ein, Mittel- und Langfristperspektive muss jetzt gesetzlich fixiert werden, online abrufbar unter: <https://www.wind-energie.de/presse/pressemitteilungen/detail/ausbautzahlen-fuer-das-gesamtjahr-2018-in-deutschland-windenergie-an-land-zubau-bricht-stark-ein-m/> (11.7.2019).

BWE (Bundesverband WindEnergie) (30.4.2019): Quartalszahlen für Windenergiezubau an Land bedrohlich – Politische Entscheidungen dringend erforderlich, online abrufbar unter: <https://www.wind-energie.de/presse/pressemitteilungen/detail/quartalszahlen-fuer-windenergiezubau-an-land-bedrohlich-politische-entscheidungen-dringend-erforder/> (11.07.2019).

Deutsche WindGuard GmbH (2017): Status des Windenergieausbaus an Land in Deutschland, online abrufbar unter: [https://www.wind-energie.de/fileadmin/redaktion/dokumente/publikationen-oeffentlich/themen/06-zahlen-und-fakten/20180125\\_factsheet\\_status\\_windenergieausbau\\_an\\_land\\_2017.pdf](https://www.wind-energie.de/fileadmin/redaktion/dokumente/publikationen-oeffentlich/themen/06-zahlen-und-fakten/20180125_factsheet_status_windenergieausbau_an_land_2017.pdf) (11.7.2019).

Deutsche WindGuard GmbH (2018): Status des Windenergieausbaus an Land in Deutschland 1. Halbjahr 2018, online abrufbar unter: [https://www.windguard.de/veroeffentlichungen.html?file=files/cto\\_layout/img/unternehmen/veroeffentlichungen/2018/Status%20des%20Offshore%20Windenergieausbaus%20in%20Deutschland%2C%201.%20Halbjahr%202018.pdf](https://www.windguard.de/veroeffentlichungen.html?file=files/cto_layout/img/unternehmen/veroeffentlichungen/2018/Status%20des%20Offshore%20Windenergieausbaus%20in%20Deutschland%2C%201.%20Halbjahr%202018.pdf) (11.7.2019).

Deutsche WindGuard GmbH (2019): Status des Windenergieausbaus an Land in Deutschland 1. Halbjahr 2019, online abrufbar unter: [https://www.wind-energie.de/fileadmin/redaktion/dokumente/publikationen-oeffentlich/themen/06-zahlen-und-fakten/20190725\\_Factsheet\\_Status\\_des\\_Windenergieausbaus\\_an\\_Land\\_-\\_Halbjahr\\_2019.pdf](https://www.wind-energie.de/fileadmin/redaktion/dokumente/publikationen-oeffentlich/themen/06-zahlen-und-fakten/20190725_Factsheet_Status_des_Windenergieausbaus_an_Land_-_Halbjahr_2019.pdf) (7.8.2019).

DGRV (Deutscher Genossenschafts- und Raiffeisenverband): Energiegenossenschaften 2018. Umfrageergebnisse, online abrufbar unter: [https://www.genossenschaften.de/sites/default/files/20190715\\_DGRV\\_Umfrage\\_Energiegenossenschaften\\_2019\\_0.pdf](https://www.genossenschaften.de/sites/default/files/20190715_DGRV_Umfrage_Energiegenossenschaften_2019_0.pdf)

EA.NRW (EnergieAgentur.NRW) (2017): Bürgerenergie Atlas, online abrufbar unter: <https://www.energieagentur.nrw/tool/buergerenergie/liste.php?> (11.7.2019).

FA Wind (Fachagentur Windenergie an Land) (2017a): 1. Ausschreibung für Windenergieanlagen an Land (Juni 2017), online abrufbar unter: [https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA\\_Wind\\_Analyse\\_1\\_Ausschreibung\\_Wind\\_an\\_Land\\_2017.pdf](https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA_Wind_Analyse_1_Ausschreibung_Wind_an_Land_2017.pdf) (11.7.2019).

FA Wind (2017b): 2. Ausschreibung für Windenergieanlagen an Land (September 2017), online abrufbar unter: [https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA\\_Wind\\_Analyse\\_2\\_Ausschreibung\\_Wind\\_an\\_Land\\_2017.pdf](https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA_Wind_Analyse_2_Ausschreibung_Wind_an_Land_2017.pdf) (11.7.2019).

FA Wind (2017c): 3. Ausschreibung für Windenergieanlagen an Land (Dezember 2017), online abrufbar unter: [https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA\\_Wind\\_Analyse\\_3\\_Ausschreibung\\_Wind\\_an\\_Land\\_2017.pdf](https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA_Wind_Analyse_3_Ausschreibung_Wind_an_Land_2017.pdf) (11.7.2019).

FA Wind (2018): 6. Ausschreibung für Windenergieanlagen an Land (September 2018), online abrufbar unter: [https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA\\_Wind\\_Analyse\\_6\\_Ausschreibung\\_Wind\\_an\\_Land\\_2018.pdf](https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA_Wind_Analyse_6_Ausschreibung_Wind_an_Land_2018.pdf)

[www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA\\_Wind\\_Analyse\\_6\\_Ausschreibung\\_Wind\\_an\\_Land.pdf](http://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA_Wind_Analyse_6_Ausschreibung_Wind_an_Land.pdf) (11.7.2019).

FA Wind (2019a): Ausbausituation der Windenergie an Land im Jahr 2018, online abrufbar unter: [https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA\\_Wind\\_Zubauanalyse\\_Wind-an-Land\\_2018.pdf](https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/FA_Wind_Zubauanalyse_Wind-an-Land_2018.pdf) (11.7.2019).

FA Wind (2019b): 9. Ausschreibung für Windenergieanlagen an Land (Mai 2019), online abrufbar unter: [https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/Analysen/FA\\_Wind\\_Analyse\\_9\\_Ausschreibung\\_Wind\\_an\\_Land.pdf](https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/Analysen/FA_Wind_Analyse_9_Ausschreibung_Wind_an_Land.pdf) (7.8.2019).

FA Wind (2019c): Hemmnisse beim Ausbau der Windenergie in Deutschland. Ergebnisse einer Branchenumfrage zu Klagen gegen Windenergieanlagen sowie zu Genehmigungshemmnissen durch Drehfunkfeuer und militärische Belange der Luftraumnutzung (Juli 2019), online abrufbar unter: [https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/Analysen/FA\\_Wind\\_Analyse\\_9\\_Ausschreibung\\_Wind\\_an\\_Land.pdf](https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/Analysen/FA_Wind_Analyse_9_Ausschreibung_Wind_an_Land.pdf) (26.8.2019).

Fraunhofer ISE (13.3.2019): Energy Charts - Nettostromerzeugung in Deutschland in 2018, online abrufbar unter: [https://www.energy-charts.de/energy\\_pie\\_de.htm?year=2018](https://www.energy-charts.de/energy_pie_de.htm?year=2018) (2.4.2019).

IRENA Coalition for Action (2018): Community Energy. Broadening the Ownership of Renewable Energy, online abrufbar unter: [https://irena.org/-/media/Files/IRENA/Agency/Articles/2018/Jan/Coalition-for-Action\\_Community-Energy\\_2018.pdf](https://irena.org/-/media/Files/IRENA/Agency/Articles/2018/Jan/Coalition-for-Action_Community-Energy_2018.pdf)

Landtag NRW (17.4.2019): Zukunft von Windkraftanlagen – Wie plant die Landesregierung?, Antwort der Landesregierung auf die Kleine Anfrage 2172 vom 15. März 2019 des Abgeordneten Andreas Keith, AfD, Drucksache 17/5497, online abrufbar unter: <https://www.landtag.nrw.de/portal/WWW/dokumentenarchiv/Dokument/MMD17-5857.pdf> (11.7.2019).

LEE NRW (o.D.): Reden und Handeln der NRW-Landesregierung passen nicht zusammen, online abrufbar unter: <https://www.lee-nrw.de/reden-und-handeln-der-nrw-landesregierung-passen-nicht-zusammen/> (11.7.2019).

WWEA (World Wind Energy Association) (2016): Rücken- und Gegenwind für die Bürgerenergie. Bürgerwind-Perspektiven aus Nordrhein-Westfalen und der Welt. WWEA Policy Paper Series (PP-01-16), online abrufbar unter: [https://www.wwindea.org/download/community\\_power/Burgerenergie\\_NRW.pdf](https://www.wwindea.org/download/community_power/Burgerenergie_NRW.pdf)

WWEA (2018): Bürgerwind in Nordrhein-Westfalen. Bürgerwind-Perspektiven aus NRW und der Welt. WWEA Policy Paper Series (PP-01-18), online abrufbar unter: [https://www.wwindea.org/wp-content/uploads/2018/02/CP\\_Study\\_English\\_reduced.pdf](https://www.wwindea.org/wp-content/uploads/2018/02/CP_Study_English_reduced.pdf)

WWEA (2019): Bürgerwind im zweiten Jahr der Ausschreibungen: Viel Schatten, wenig Licht. WWEA Policy Paper Series (PP-01-19), online abrufbar unter: <https://wwindea.org/blog/2019/05/27/new-study-proves-community-power-is-increasingly-being-marginalised/#>

## ANNEX

### Bonn Community Power Declaration

We, the participants of the 4th International Community Wind Symposium & Community Power Forum, have gathered in Bonn on 28 & 29 May under the theme “Shaping the Energy Transition – Strength through Alliances”.

Building on the predecessor events and in particular on the Fukushima Community Power Declaration, the Community Power for All! resolution and the Bamako Community Power Declaration, we underline the urgency of a rapid switch to a renewable energy future, based on a fair and equal distribution of wealth and prosperity.

Every day, we understand more the urging pressure to act on climate change and to counter the growing disparity amongst people around the world. A 100% renewable energy supply and community power are the primary answers to these two challenges.

At the same time, we notice with growing concern that there are increasing barriers against the rapid growth of renewable energy globally, e.g. through the introduction of auctions in the renewable power sector which represents an insurmountable hurdle, together with additional barriers in form of restrictive permission rules and manifold other forms of discrimination and exclusion from fair market access.

In spite of the growing difficulties, we notice an encouraging growth of the renewable energy and community power movement around the world, we highly appreciate that community power has become a topic on national and international agenda and we welcome the growing international community power networking and international solidarity of the community power community.

In light of the urgency of the situation, we call on decision makers on all levels of society:

- to prioritise renewable energy and community power as cornerstones of a sustainable world
- to recognise the utilisation of renewable energy in all its forms, including for self-consumption, as a basic human right
- accordingly, to remove all barriers against the utilisation of renewable energy and against community ownership models, in particular counterproductive policies such as auctions
- to enable communities around the world to play an active role and to work together
- to amend basic legislation and include the basic right to use renewable energy and the priority for renewable energy in the overarching legal frameworks, including climate change legislation and constitutional law

Bonn, 29 May 2019

- World Wind Energy Association
- Landesverband Erneuerbare Energien LEE NRW
- Bündnis BürgerEnergie
- Global100RE
- International Geothermal Association
- ICLEI
- Institute for Sustainable Energy Policies ISEP Japan
- Rescoop
- BBWind Projektberatungsgesellschaft
- Bergische BürgerEnergie Genossenschaft
- Danish Small Wind Energy Association
- DIEM25
- Energiegenossenschaft Starckenburg
- EnergiE zum Leben, auch in Wuppertal-Nord
- EW-Nord
- FridaysForFuture Dithmarschen
- Nordic Folkecenter for Renewable Energy
- Solarverein Goldene Meile



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