COLLABORATIVE GOVERNANCE CASE DATABASE

Purpose of database

This database provides a collective repository for collaborative governance case studies from around the world. The mission of the repository is to foster rich but systematic medium and large-N analysis of the conditions, processes, and outcomes of collaborative governance. Researchers who contribute a case to the database may use the entire dataset for their own research purposes. Moreover, contributed cases will be cited by other researchers in their analyses.

Key definitions and scope conditions

- *All types of collaborative governance cases from all policy domains are welcome*: Cases may involve only government entities, only non-government entities, or a mix of the two. Cases may represent successes or failures or something in between.
- *Definition of collaboration:* When two or more actors aim to constructively manage their differences in order to produce joint solutions to common challenges.
- *Definition of governance:* The arrangements and processes through which interdependent but operationally autonomous actors aim to formulate and achieve common goals through collective decision making.
- *Definition of collaborative governance:* A collective decision-making process based on more or less institutionalized interactions between two or more actors that aims to establish common ground for joint problem solving and value creation.
- *Definition of a case:* A set of actors collaborating on a shared issue over a specified time period within a given geographical space. The database allows contributors to chart the evolution of a collaboration over time. However, if the set of actors, the focal issue, or the geographical scope change drastically, the data may also be entered as separate but related cases.

Instructions to contributors

The survey consists of eight thematic sections, each starting with a series of closed questions and ending with an open text question that allows you to add your qualitative insights. Please provide as much information as you feel confident in providing on the basis of your knowledge of the case.. You can select 'Don't Know' if you do not have the answer. A confidence measure at the end of each section asks you to make a self-assessment of your level of confidence in the validity and reliability of the data you have entered. The survey takes about four hours to complete one case.

Before your survey is accepted into the database, a peer researcher will review your case description to make sure it is clear and consistent. You will also be asked to check at least one case submitted by a fellow contributor. Please contact the database editors at s.c.douglas@uu.nl to discuss any queries you may have about the database and about potential case contributions.

Content of survey

1. General case information

1. Please provide a unique name for the case you are describing.

Iena citizen energy cooperative

2. Please provide your name, institutional affiliation, and email address.

Case author(s)	Blanchet, thomas
Institution / University	nexus institute
Email address first author	blanchet@nexusinstitut.de

3. Please specify the start and termination date of this collaboration.

Start of collaboration		End of collaboration	
February	2012	Select	Ongoing

4. Please specify the period of the collaboration covered by your research data. Note: This is not about when you collected the data, but what period your data covers.

Start of period observed		End of period observed	
Select	2008	August	2016

5. Please specify the type of data collection methods you used.

Methods	Used
Documents	✔
Interviews	✔
Observations Social	✔
network data	
Surveys	
Other, namely:	

6. Please provide up to three weblinks to published reports, articles, or books that document this case (e.g. a peer-reviewed article or an evaluation report).

Blanchet, T., & Herzberg, C. (2019). Les enjeux démocratiques de la transition énergétique territoriale: enquête sur la coopérative énergétique citoyenne de Iéna. Lien social et Politiques, (82), 139-157.

Saxer, Olivia, Sylvie Lacassagne, Laura Guérin et Stéphane Dupas, 2016. Transition énergétique: les nouveaux dialogues villes-acteurs du

7. At which jurisdictional level did the collaboration occur? Choose more than one if necessary.

Level of collaboration	Start of period observed	Middle of period observed	End of period observed
Local	✔	✔	✔
Regional			
National			
International (across borders)			
Supranational (UN, EU, etc.)			
Multi-level (collaboration between levels)			

8. In which country or region was the case situated? Pick more than one if necessary

Europe		germany		Select

2. Main case characteristics

9. What was the policy domain of the case? Choose more than one if required.

☐ Agriculture	☒ Environment & Climate	☐ Social/Employment Policy
☐ Culture/Leisure	☒ Infrastructure & Planning	☐ Technology & Transport
☐ Economy & Trade	☐ Public Health	☐ Other, namely …….
☐ Education	☐ Security & Public Safety	

10. To what extent was the collaboration driven by any of the following ambitions? (1 = not at all an ambition, 5 = this was the core ambition)

Ambitions of collaboration	Start of period observed					Middle of period observed					End of period observed					Don't know
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
Develop a plan or policy for a shared problem or societal issue	☐	☐	☐	☐	●	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐
Develop a regulatory framework for a policy domain or industry	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Create innovative solutions in existing policies, programs, practices	☐	☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐
Increase efficiency by lowering costs or boosting benefits	●	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Increase effectiveness by increasing impact of interventions	☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐
Increase legitimacy and support among different constituents	☐	☐	●	☐	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐
Organize crisis and emergency planning, response and/or recovery	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Create holding environment to contain conflict among stakeholders	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Other, namely:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

11. To what extent did the collaboration aim to include any of the following forms of collaborative governance? (1 = not at all an aim, 5 = this was the core aim)

Purpose of collaboration	Start of period observed					Middle of period observed					End of period observed					Don't know
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
Co-initiation: Jointly identify required policies, services, or regulation	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Co-develop: Jointly create and arrange policies, services, or regulation	☐	☐	☐	☐	●	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐
Co-production: Implement policies, deliver services, or provide regulation	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐
Co-assessment: Jointly monitor and evaluate impact of policies, services, or regulation	☐	●	☐	☐	☐	☐	☐	●	☐	☐	☐	☐	☐	●	☐	☐

12. **How confident do you feel the answers you provided to the questions in this section are valid, reliable, and rooted in data and observation?**

Mostly confident

13. **Please describe in max. 600 words the (a) societal challenges and organizational issues the collaboration sought to address, (b) the stated ambitions and desired outputs and outcomes, (c) how these challenges, issues and ambitions evolved during the period observed.**

a) The collaboration shought to adress the issue of the transition to renewable energie through the democratisation of the local energy grid. At the end of March 2011, the Jena Citizens' Energy Cooperative (BürgerEnergie Jena eG) was created. Supported by the political majority (Christian Democrats, Social Democrats and the Green Party) in the city council, the cooperative acquired a 2% share of the municipal energy company in February 2012 and paved the way for an innovative model of democratic participation in the energy sector. The take over of the shares of the municipal utility was made possible through a change within the shareholder structure of the utility. Originally, the municipal council planed to keep part of the shares originally held by E.On and bought back by Thüga for the new cooperative. However, Thüga insisted in the negotiations on acquiring the totality of E.On's shares, i.e. 20% of the municipal company, and obliged the city to transfer some shares from its own portfolio to the cooperative.

b) The official aim was to 'promote a decentralised, affordable, environmentally and climate-friendly energy supply based on 100% renewable energy sources '. As a shareholder of the municipal utility, the representatives of the citizen cooperatives could then attempt to influence the local energy policy toward more renewable energy sources and more energy efficiency measures. The cooperative model would enable citizens citizens to exercise control over the policy of the municipal company, and to obtain financial participation.

c) In the start of the period observed, the idea of setting up a cooperative was initiated by three key players in the city's environmental policies (the then head of the finance department and former chairman of the Green Party in the city council; the former director of the municipal energy company; and the current Green deputy mayor for the environment and urban planning). In the context of the 2009 municipal elections, the initiators of the cooperative embarked on an important negotiation process with the different political parties in order to include the project in the political programme. In October 2010, an agreement was voted in the city council, allowing the cooperative to take over up to 10% of the municipal company

In the second period of observation, the Jena citizens' energy cooperative was officially established. The initiators strated negociations with the members of the city council in order to obtain shares of the municipale utility. After several months of negotiation, the municipal council finally voted in February 2012 to sell 2% of its shares to the cooperative. In parallel to the political negotiations, the members of the cooperative made use of the various local media and started to organise "citizen energy meetings" to discuss energy issues, inform citizens about the cooperative's activities and recruit new members. Finally, all the shares of the cooperative were sold in just over two years.

In the end of the period observed, while contributing to creation of areas of debate between citizens and experts on local energy policies, the cooperative struggled to meet its objectives of supporting democratially the local energy transition. On the one hand, the possibility of supporting energy transition by investing in local renewable energy projects was hampered by

3. Starting conditions

14. To what extent did the configuration of actors that made up the core of the collaborative process have a pre-history of mutual engagement? (1 = Very little history, 5 = Very extensive history)

Score					Don't know
1	2	3	4	5	
☐	☐	☐	☐	☉	☐

15. To what extent was there trust between core participants at the start of the collaboration? (1 = Very low trust 5 = Very high trust)

Score					Don't know
1	2	3	4	5	
☐	☐	☐	☉	☐	☐

16. How was the collaboration first initiated? Please select one option.

Self-initiated by participants

17. To what extent did the participants have more or less equal levels of resources, (e.g. knowledge, influence, skills) to bring to the collaborative process? (1 = Highly unequal, 5 = Highly equal)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☐	☉	☐	☐	☐	☐	☉	☐	☐	☐	☐	☉	☐

18. To what extent were there incentives to collaborate for the participants, e.g. financial gain or increased influence? (1 = Very little incentives, 5 = Very strong incentives)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☉	☐	☐	☐	☐	☉	☐	☐	☐	☐	☉	☐	☐

19. To what extent did the participants feel mutually dependent on each other for fulfilling their ambitions? (1 = Very low sense of interdependence, 5 = Very high sense of interdependence)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☉	☐	☐	☐	☐	☉	☐	☐	☐	☐	☉	☐	☐

20. How confident do you feel the answers you provided to the questions in this section are valid, reliable, and rooted in data and observation?

Reasonably confident

21. Please describe in max. 600 words the (a) the prehistory and past interactions of participants, (b) how the collaboration was initiated, (c) the sense of interdependence between participants and the incentives to collaborate, (d) any significant changes over time in the period observed.

a)The three key actors of the city with important responsibilities whithtin the city's environmental administration and policies. They had strong link to the citiy council, municipal administration and the municipal utilities, as part or former part of these different bodies. They could also rely on strong relationships with local citizens initiatives focusing on the energy and climate issues. As a relatively small cities, and due to their functions, the central participants of the project had regular interactions.

b) Within the cooperative, the collaboration was initiated rather informally through the initiators and with the support of several actors engaged in the energy and climate policy issues. Outside the cooperative, the collaboration between the cooperative and the local decision-makers was initiated by the initiators of the cooperative, who bargained with the city council to obtain some shares of the municipal utility.

c) With just 2% of the municipal company's capital and, since 2016, only one seat on the board of director, the cooperative has formally very little influence in the company. Nevertheless, it can assert its interests, argue to try to convince other actors and win allies in the shareholders' assembly and the board of directors, obtain useful information on the strategy of the municipal enterprise, or propose certain points in the agenda of these two decision-making bodies. In addition, there are also semi-formalised forms of interaction, notably in the context of the citizens' energy meetings (Bürger Energietreff) organised by the cooperative about four times a year. These meetings, which are open to the public, allow participants to discuss different energy issues with energy experts, including employees of the municipal company. The incentives to collaborate is based on the willingness to let citizens take part in the local energy transition, both politically (by letting them having a voice on that matter) and financially (by getting back money from their investment in the local energy grid).

d) Over time, more and more citizens were interesting in investing in the grid because of the political and financial aspects. Once the cooperative could not accept any new members anymore and since the general assembly of the cooperative voted for the a full redistribution of the profit to its members, the tension between the socio-ecological goals and the financial profits increased and always more actors criticised the limited capacity of the cooperative to contribute to the democractisation of the local energy sector. The cooperative lost some of its political supports.

4. Institutional design

22. How many (institutional/group) actors were involved in the collaborative process?

Start of period observed	Middle of period observed	End of period observed	Don't know
1-5	1-5	1-5	☐

23. What different types of actors took part in the collaboration. Please select the backgrounds of the different participants.

Background of participants	Start of period observed	Middle of period observed	End of period observed	Don't know
Political organizations / politicians	☑	☑	☑	☐
Public organizations / civil servants	☑	☑	☑	☐
Private, for-profit organizations	☑	☑	☑	☐
Private, non-profit organizations	☐	☐	☐	☐
Citizens / informal citizen groups	☑	☑	☑	☐

24. To what extent were the procedural ground rules for the collaboration clearly explicated by and for the participants? (1 = Very little articulation of ground rules, 5 = Very detailed articulation)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑

25. To what extent were the procedural ground rules observed and applied? (1 = Very rarely applied, 5 = Almost always applied ground rules)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑

26. To what extent was the collaboration inclusive? (1 = Very few of the relevant and affected actors included, 5 = Almost all of the relevant and affected actors included)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	◉	☐	☐	☐	◉	☐	☐	☐	◉	☐	☐	☐	☐

27. To what extent were the decision-making processes in the key collaborative forums transparent? (1 = Rarely clear to participants how decisions were taken, 5 = Almost always clear)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☐	◉	☐	☐	☐	☐	◉	☐	☐	☐	☐	◉	☐

28. How confident do you feel the answers you provided to the questions in this section are valid, reliable, and rooted in data and observation?

Mostly confident

29. Please describe in max 600 words (a) the ground rules of the collaboration, (b) the inclusiveness of the collaborative forum(s), (c) the transparency of decision making within the collaborative forum(s), (d) any significant changes in the institutional architecture of collaboration over time

a) The cooperative is composed of three bodies: the management, the board of directors and the general assembly. The latter is the most important body. It normally meets once a year. The assembly brings together all the members of the cooperative, votes on strategic issues and elects the board of directors every four years, which in turn appoints the management. One person of the management board is appointed at the general assembly and on the board of directors of the municipal energy utility. In addition to that, a great majority of the other board members are members of the cooperative, including the management board of the utilitiy.

b) Alongside these boards, where cooperative members interact formally with other stakeholders, there are the citizens' energy meetings (Bürger Energietreff). They are usually attended by around 40 people, with the number fluctuating according to the topics discussed (strategy of the municipal company, energy storage, smart grids, mobility, energy transition and heat networks, etc.).

c) By involving the management of the municipal company, members of the municipal administration or certain employees in these meetings, the members of the cooperative bring the actors of local energy policies directly into contact with the inhabitants of Jena, who can thus discuss the functioning and strategies of the municipal company in an open manner and take note of sometimes unpublished information. In such meetings, local elites debate directly with citizens, to whom they have to justify their actions and decisions.

d) Although the city council refused to sell more shares of the utility to the cooperative, in 2016, it was decided that the cooperative could have a representative at the supervisory board of the municipal utility, although it still owns 2% of the utility (the minimum to get a sit at the board is 5%).

5. Leadership

30. Characterize the locus of leadership roles in the collaborative process

Locus of leadership	Start of period observed	Middle of period observed	End of period observed	Don't know
One lead actor				
A few lead actors	✔	✔		
Shared collective among all actors			✔	

31. What were the backgrounds of those exercising leadership? Choose more than one if necessary.

Background of participants	Start of period observed	Middle of period observed	End of period observed	Don't know
Political organizations / politicians	✔	✔	✔	
Public organizations / civil servants	✔	✔		
Private, for-profit organizations				
Private non-profit organizations				
Citizens / informal citizen groups	✔	✔	✔	

32. To what extent was the leadership effective in convening / bringing together the relevant and affected actors (1 = Highly ineffective, 5 = Highly effective)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☐	●	☐	☐	●	☐	☐	●	☐	☐	☐	☐	☐

33. To what extent was the leadership effective in guarding the focus and integrity of the collaborative process intended in this case? (1 = Highly ineffective, 5 = Highly effective)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☐	●	☐	☐	●	☐	☐	●	☐	☐	☐	☐	☐

34. To what extent was the leadership effective in resolving or mitigating conflicts between actors? (1 = Highly ineffective, 5 = Highly effective)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐

35. To what extent was the leadership effective in creating and realizing concrete opportunities for creative problem-solving resolving? (1 = Highly ineffective, 5 = Highly effective)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑

36. How confident do you feel the answers you provided to the questions in this section are valid, reliable, and rooted in data and observation?

Mostly confident

37. Please describe in max. 600 words the (a) the form and style of leadership within the collaboration, (b) the dynamics and impact of leadership on the collaborative process (c) changes in the leadership dynamics in the period observed.

a) Within the cooperative, the leadership was shared among few central actors that have been initiating the project. They both contribute to make the cooperative politically and socially accepted. Once the cooperative was established, the leadership was more decentralised as the central strategic decision is taken during the general assembly. One central principle of the cooperative is "one person = one vote". This democractic principle enables therefore people to have the same influence on the decision-making process regardless of the amount of shares.

b) This very democratic principle had an important influence on the collaborative process. During first general meeting, where a decision had to be taken on the use of the 4.1% interest to be returned to the members of the cooperative, there were intense discussions between those who wanted part of the profits to be systematically invested in the development of renewable energy projects and those who wanted to receive all the profits. This second option had been proposed by the management, including some founding members, in order to stimulate citizen investment in the cooperative and to attract new members. For others, it was necessary to invest directly in renewable energies in order to respect the initial goal of the cooperative. As previously written, the general assembly finally decided by a clear majority (80%) to return all profits to its members. Trapped by the democratic principle of the cooperative's operation, the management had to face numerous criticisms, particularly from the different parties represented in the municipal council.

c) Switch from a leadership concentrated among few actors in the beginning to a more democratic leadership as the cooperative was established.

6. Collaborative process

38. To what extent did the participants engage in face-to-face dialogue through holding regular meetings with good attendance? (1 = Very infrequently, 5 = Very frequently)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☐	●	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐

39. To what extent was the collaborative process concentrated in a single forum/arena/group? (1 = Very low concentration; 5 = Very high centralization in a single forum/arena/group)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐

40. To what extent did the participants in the collaborative process invest in joint fact finding? (1 = Very little investment, 5 = Very high investment)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	✔

41. To what extent did the participants in the collaborative process invest in knowledge sharing? (1 = Very little investment, 5 = Very high investments)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐

42. To what extent did the collaborative process focus on the alignment of interests and values among all actors? (1 = Very weak focus, 5 = Very strong focus)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐	☐

43. To what extent did the collaborative process focus on joint problem-solving (e.g. joint problem framing, co-designing solutions)? (1 = Very weak focus, 5 = Very strong focus)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐	☐

44. To what extent did the collaborative process explicitly focus on producing tangible intermediate outputs (quick wins)? (1 = Very weak focus, 5 = Very strong focus)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
●	☐	☐	☐	☐	☐	☐	●	☐	☐	☐	☐	☐	●	☐	☐

45. To what extent did the collaborative process explicitly focus on producing tangible strategic outcomes? (1 = Very weak focus, 5 = Very strong focus)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐

46. How confident do you feel the answers you provided to the questions in this section are valid, reliable, and rooted in data and observation?

Mostly confident

47. Please describe in max. 600 words (a) the collaborative process in terms of how the actors interacted with each other, (b) how they formulated and achieved shared outcomes, (c) how the process changed over the period observed.

a) within the municipal utility boards, very formal interactions among the members. Within the cooperative, more informal interactions between the local elites and citizens. Members of the local elites also belong to the cooperative and meet the other citizens during the general assemblies. Citizens' energy meetings happen in various public locations in the cities, which provide a good atmosphere for informal exchanges.

b) shared outcomes are formally formulated during the board meetings of the utility, in which the cooperative has not a lot of influence.

c) no real change over time has been observed in this matter.

7. Accountability

48. To what extent were explicit joint goals articulated through statements of intent, memoranda, strategic plans, etc.? (1 = Very little explication of goals; 5 = Very highly explicated goals)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	●	☐	☐	☐	☐

49. How were the joint goals operationalized? (1 = Very little operationalization of goals, 5 = Very highly operationalized goals)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐

50. To what extent was there active monitoring of goal attainment? (1 = Very little monitoring of goal achievement, 5 = Very active monitoring of goal achievement)

Start of period observed					Middle of period observed					End of period observed					Don't know
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐

51. To what extent did the participants render account of the collaboration to the following actors? (1 = Very little account-giving, 5 = Very active account-giving)

Actors	Start of period observed					Middle of period observed					End of period observed					Don't know
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
Elected politicians	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐
Oversight bodies (e.g. auditors, courts)	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Civil society organizations	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐
Affected and/or concerned citizens	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐

52. To what extent did the following external actors have influence over collaboration (1 = Very little influence, 5 = Very large influence)

Actors	Start of period observed					Middle of period observed					End of period observed					Don't know
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
Elected politicians	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐
Oversight bodies (e.g. auditors, courts)	☐	☐	●	☐	☐	☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐
Civil society organizations	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐
Affected and/or concerned citizens	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐

53. How confident do you feel the answers you provided to the questions in this section are valid, reliable, and rooted in data and observation?

Mostly confident

54. Please describe in max. 600 words (a) how the goals of the collaboration were formulated and monitored, (b) how participants, elected officials, oversight bodies, and citizens held the collaboration to account, (c) how these dynamics changed over the period observed.

a) the goals of the collaboration were formulated first within the cooperative's mission statement, which aimed to collaborate within the municipal utility in order to contribute to the local energy transition. The input of the cooperative was expected to be brought into the utility formally through the boards.

b) The collaboration between the cooperative and the municipal utilities is monitored at different levels. First, the behavior and action of the cooperative coud be controlled within the utility via the board of directors and the general assembly of the utility. The cooperative is represented within both boards, where it interacts/deliberates with the other shareholders of the utility, among other the city council. Indirectly the action of the cooperative is also discussed and controlled at the city council, where the local representatives deliberate about the role of the cooperative. As elected representatives, they have to see if the cooperative follows the general interest of the inhabitants and take public stances on it. Second, the cooperative and its role within the utility is accountable to its members, who are part of jena's inhabitants, including stakeholders such as local representatives, employees of the utility and members of the board of directors of the utility.

c) Because it was found out that the cooperative did invest a lot for the local energy transition and reversed high return on investments to its members, more and more local representatives blocked the growth of the cooperative within the municipal utility by impeding it to get more shares. Some local politicians publicly criticised the cooperative for not working in line with the interest of the city. Despite that, the cooperative did not obtain more shares and at least a sit on t eh board of directors leading to reinforce its weight within the utility's governance.

8. Outputs and outcomes of collaboration

55. To what extent did the collaboration produce the following outputs or outcomes? (1 = Very low, 5 = Very high). Note: This question mirrors the ambitions formulated in question 10.

Produced outputs and outcomes	Start of period observed					Middle of period observed					End of period observed					Don't know
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
Develop a plan or policy for a shared problem or societal issue	☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐	☐
Develop a regulatory framework for a policy domain or industry	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Create innovative solutions in existing policies, programs, practices	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐
Increase efficiency by lowering costs or boosting benefits	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Increase effectiveness by increasing impact of interventions	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐
Increase legitimacy and support among different constituents	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐
Organize crisis and emergency planning, response and/or recovery	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Create holding environment to contain conflict among stakeholders	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Other, namely: Raise Awarenness of the population toward energy	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐

56. To what extent did the collaboration use any of the following forms of collaborative governance? (1 = Very low extent, 5 = Very high extent) NB: This question mirrors question 11.

Realized collaboration	Start of period observed					Middle of period observed					End of period observed					Don't know
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
Co-initiation: Jointly identify required policies, services, or regulations	☐	☐	☐	●	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐
Co-develop: Jointly create and arrange policies, services, or regulation	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Co-production: Implement policies, deliver services, or provide regulations	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐
Co-assessment: Jointly monitor and evaluate impact of policies, services, or regulations	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐

57. To what extent did the collaboration produce innovations, such as novel solutions, systems, and processes? (1 = Very little innovation, 5 = Very highly innovative).

Type of innovation	Start of period observed					Middle of period observed					End of period observed					Don't know
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
Develop <u>novel</u> products or services for clients and partners	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Develop <u>novel</u> production processes for producing products or services	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐
<u>Novel</u> ways of coordinating between roles and/or services of participants	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐

58. To what extent did the collaboration create outcomes beyond its stated aims? (1 = Very little outcomes going beyond stated aims, 5 = Very high degree of outcomes beyond stated aims)

Type of innovation	Start of period observed					Middle of period observed					End of period observed					Don't know
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
Built support and legitimacy for investing in future collaborations	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐
Built joint operational capacity for solving future problems and challenges	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐
Created positive unintended societal consequences	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐	●	☐	☐
Created negative unintended societal consequences	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	☐	●	☐	☐

59. To what extent did the collaboration achieve support among the different constituents of the collaboration? (1 = Very little support, 5 = Very extensive support)

Constituents	Start of period observed					Middle of period observed					End of period observed					Don't know
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
Participants in the collaboration	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	●	☐	☐	☐
Elected politicians	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	●	☐	☐	☐	☐
Oversight bodies (e.g. auditors, courts)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑
Civil society organizations	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐
Affected and/or concerned citizens	☐	●	☐	☐	☐	☐	☐	☐	●	☐	☐	☐	☐	●	☐	☐

60. How confident do you feel the answers you provided to the questions in this section are valid, reliable, and rooted in data and observation?

Mostly confident

61. Please describe in max. 600 words (a) the output of the collaboration in terms of results produced by the collaborative governance process, (b) the outcomes in terms of the impact on problem solving, goal achievement and legitimacy, taking into account any unintended consequences, (c) the changes to collective outputs and social outcomes over time.

Political participation in the planning and strategy of the municipal enterprise still seems to be, at least formally, relatively limited. Even with a seat on the board of the enterprise, the cooperative still does not have a majority. Therefore, it does not really have the power to co-manage the municipal enterprise and can at best try to enrich the debates within these bodies by bringing a new perspective. The financial participation, which is supposed to contribute to a democratisation of the local economy by allowing citizens to become owners of the company, has been widely criticised by various actors who perceive this decision as a form of privatisation to the detriment of the general interest. Finally, the cooperative project has contributed to the strengthening of deliberative participation: it has favoured communication between citizens and the various experts by opening up arenas of debate on local energy policies to citizens (through citizens' meetings outside the cooperative and with general assemblies inside the cooperative). However, it was also in the latter forum that a downward revision of the renewable energy investment ambitions was debated and voted, thus contributing to blocking the development of the project and weakening its potential for economic participation.