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Original research article

Co-creation, control or compliance? How Dutch community engagement professionals view their work

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ABSTRACT

Most literature on community engagement (CE) focuses on why and how local communities respond to energy projects or technologies. There has been very limited attention to project developers and the way they shape CE in the literature. We address this gap by focusing on the work of professionals active within or for energy companies, who are responsible for engaging communities in the development of energy projects: so-called 'community engagement professionals' (CEPs). Using Q methodology, we explore how CEPs see their role as front-line workers operating on the boundary between their own organization and the local community.

Our analysis results in three perspectives of their own work amongst CEPs. Perspective 1 views CE as co-creation and their position as one of an intermediary between their organization and the community. Perspective 2 sees CE as an inherent part of project management, using it to remain in control of the process. Perspective 3 is all about project development, with CE as something that must be done as part of compliance with laws and regulations.

We show that CEPs have heterogeneous perspectives on community engagement. We discuss differences between these perspectives: 1) mode of engagement; 2) the position of the CEP between their organization and the community; 3) how conflict is viewed and dealt with; 4) the extent to which CEPs see themselves as responsible for the representation of communities; and 5) interaction with internal stakeholders. We end by discussing the implications of this study for project developers and the governance of energy infrastructures.

1. Introduction

Transformation of the energy system presents a wide variety of actors across different sites and scales with numerous challenges spanning technical, legal, policy, and social dimensions [1–5]. Among these are social conflicts over the planning and development of energy infrastructure, such as wind, solar, geothermal, and transmission lines [6–11]. Such planning conflicts typically concern not only the technology itself (such as its risks or its fit in the landscape), but also the procedures and processes of decision-making [12].

Local opposition to energy technology is a widely studied phenomenon. There is a plethora of research on community acceptance, typically investigating the positions and viewpoints of opposing publics [13]. The idea that their responses can be considered purely as NIMBY ('not in my backyard') reactions [14] has been criticized for being too simplistic and ineffective in dealing with public responses [15–17]. Misconceptions of this kind may even leave local stakeholders feeling powerless and disillusioned by formal processes of engagement [18] and so amplify public opposition [19].

In policy and planning theory, participation by the local community is typically considered to be critical to energy technology planning. This has led to criticism of, for instance, the way decision-making procedures have traditionally been dominated by top-down approaches [20] known as the 'decide-announce-defend' (DAD) model [21]. In this paper we use the term community engagement (CE) to denote all activities by project developers intended to involve people living close to a (planned) energy project in decision-making or planning. The project developers in this case can be companies, governments, public-private networks, or energy cooperatives. Community engagement refers to "activities implemented by firms [in our case project developers] to work collaboratively with and through groups of people to address issues affecting the social well-being of those people" (Gawcett et al., 1995; Scantlebury 2003 in [22, p 298]).

Obviously, how public engagement takes shape and plays out in real energy planning processes depends on the interactions between project developers, or those 'inviting' communities to participate, and the

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invited (as well as non-invited) communities or individuals. CE is a dynamic process of sociopolitical interactions between publics on the one hand and project developers (e.g. energy companies and/or governments) on the other (following [20]).

Although the literature is rich in studies investigating public responses or engagement in planning processes, a good understanding of how project developers' motivations, beliefs, and strategies shape CE remains lacking. Such understanding is necessary, however, in order to arrive at a comprehensive and holistic understanding of CE. It requires the uncovering of internal organizational and institutional dynamics [23], as well as project developers' rationales and beliefs, since such factors drive interactions with publics [24]. There has been only very limited attention to project developers in the literature on CE (some exceptions, most in relation to onshore wind, are [7,19,24–26]), and it is this gap that we intend to address with this paper.

Our focus is on the work of the professionals responsible for organizing participation related to energy projects on behalf of a project developer. We refer to these individuals as 'community engagement professionals' (CEPs). They are concerned with the way projects are embedded in a specific living or natural environment and the participation of local communities in those projects. For instance, they organize local information meetings, bring local stakeholders together, build relationships with landowners, and set up funds for community resources. Since CEPs play a pivotal role in community engagement, empirical investigation of how they view their practice can contribute to a more comprehensive understanding of dynamics of CE.

The research question we address in this paper is: *How do community engagement professionals view community engagement in energy projects, and how do they view their own role therein?*

Empirically, our study focuses on the Netherlands. In recent years there have been renewed attempts there to organize CE in more open and deliberative ways. In our fieldwork we have encountered energy companies that are experimenting with engagement processes for projects where it has not even yet been decided what technology will be used or where the project will be located. In addition, a number of municipalities are developing participatory processes to engage citizens in developing energy landscapes or scenarios for transitioning to CO_2-neutral energy provision, linking energy to other social issues and concerns (e.g. safety, poverty). There is a growing group of professionals working on CE in the planning and development of new energy projects, and a strong network of CEPs who have organized themselves into a community of practice (called 'Learning Platform Energy & Surroundings'[1]). This new participatory surge is driven partly by the fierce opposition that numerous energy projects have faced in recent years, combined with the need to speed up efforts to transition to a more renewable energy system.

The Netherlands is a relatively small and densely populated country; space for new infrastructural developments is scarce. The government has set a national target to reduce CO_2 emissions by 49% in 2030, as compared to 1990, and 95% in 2050. Over the past year, more than 100 organizations have taken part in negotiations resulting in a National Climate Agreement, which describes the measures that need to be taken in different sectors and domains to achieve the targets for 2030. Such negotiation processes, involving governments, industries, interest groups, and civil society are typical of Dutch decision-making (an approach often referred to as 'polder culture'). The energy transition is a heavily debated topic, with increasing coverage in the media. The implementation of mitigating measures has proven difficult in recent years, with social conflict and opposition to technologies such as onshore wind and carbon capture and storage being key examples. It is against this backdrop that public and private actors are seeking to find feasible and societally supported alternatives for the production and transport of electricity and heat. These include for instance solar, onshore and offshore wind, biogas, and geothermal energy,[2] as well as storage and flexibility technologies such as hydrogen, batteries, and power-to gas.

The structure of this paper is as follows. Section 2 provides theoretical foundations for community engagement in order to further articulate the scope of analysis and to elaborate conceptualization of CEPs. Section 3 substantiates and describes the research method. Q methodology is then applied to identify CEPs' perspectives on their work. Analysis of the results produces three broad perspectives, which are described in Section 4. This is followed by a discussion and comparison of those perspectives in Section 5. We conclude with the implications of our findings for project developers and energy governance in Section 6.

2. Community engagement professionals as front-line workers

2.1. Community engagement

Community engagement research is undertaken in several different disciplines, ranging from business ethics and strategic management to public policy and planning (see [22] for a review). Our understanding of CE is embedded in policy and planning literature, where it is typically understood as interactions between project actors (companies, governments, and cooperatives initiating energy projects) and local publics [27–30]. Engagement takes place between multiple actors and in multiple directions [31]. It includes invited as well as self-organized [32] or bottom-up participation [30]. In this study we narrow down our focus to one subset of engagement: how project developers engage with local communities. CE is aimed at individual residents and community groups, where a community can be seen as "a set of citizens drawn together by geography, interaction, or identity and may consist of individual citizens or of groups of citizens organized to represent their shared interests" (Lee and Newby, 1983, Crane et al., 2004 in [22, p 297]). The notion of 'community' is understood and defined in different ways (e.g. [33]). We adopt a broad and general understanding of the term, whereby it may refer to either community an actor, a scale, a place, a network, a process, or an identity [33], so as to allow for the analysis of different understandings of community among CEPs. Since the object of this study is invited engagement from the perspective of project developers, this means that the perspectives on CE discussed here mostly concern the engagement of communities of the affected rather than communities of interest [34].

Project developers may have different reasons for engaging with communities. Fiorino [35] distinguishes three rationales for participation, which may be translated into three types of motivation for project developers to engage with citizens or communities as part of the planning process. First, there is an instrumental rationale based on the idea that CE can increase the social acceptability of planned projects and the legitimacy of decision-making. Second, a substantive rationale based on the idea that engagement is a means to arrive at better policy plans that incorporate local knowledge or concerns. And third, a normative rationale referring to the empowerment of local communities and the idea that engagement is not a means but a democratic goal in itself.

Project developers may also adopt different modes of engagement. Typically, these are thought to lie along a continuum from one-way-only to full two-way information flows, or from communication to consultation to co-production [13,30]. Frequently cited in this respect is Arnstein's ladder of participation [36], which not only suggests that there are different modes but also incorporates a normative judgment about them (i.e. the higher up the ladder, the better). Yet it may very well be that there are circumstances in which modes 'higher up the

[1] In Dutch *Lerend Platform Energie & Omgeving*, www.platformleo.nl.

[2] There is no hydro-energy in the Netherlands, nor are there any plans to develop this technology.

ladder' do not work, e.g. because of legal restrictions. Reed et al. [30] have developed a more neutral typology of engagement, based on two dimensions: top-down or bottom-up and mode (communication, consultation, deliberation, coproduction), with all (2 × 4) combinations of these possible. Based on a literature review of CE in predominantly business-oriented academic literature (business ethics, organization and management journals), Bowen et al. [22] reformulate the top-down engagement modes as engagement strategies of firms. They frame the one-way communication modes as transactional strategies, which involve communication to "reduce the transaction cost of, for example, a planning approval process, or help to gain access to critical resources." ([22, p. 304]). The co-production mode of participation is framed as a transformational strategy, which involves – for instance – joint management of projects or communities that take leadership in decision-making. Between transactional and transformational strategies are transitional strategies, which are characterized by "two-way communication, consultation and collaboration" (p. 306).

In addition to the academic literature, we can also observe this emphasis on participation in energy policy discourses [32,37–39]. There now seems to be a widely shared understanding that participation is a crucial element in the planning of energy technology and that it may have to be organized differently than before. Such observations suggest that engagement practices may be moving beyond concepts such as NIMBY and DAD, making it interesting empirically to dive deeper into CEPs' understandings of community engagement.

2.2. The role of community engagement professionals (CEPs)

The role of CEPs is critical for community engagement. After all, these are the people responsible for setting up interactions between publics and project developers, and they are generally also engaged in those interactions themselves. CEPs can be seen as so-called 'front-line workers' [40]: individuals tasked with the translation and implementation of organizational policy 'on the ground' [40], in this case with a focus on CE. Front-line workers are intermediaries at the intersection of their own organization and local communities. They are considered pivotal in collaborative processes, as the "effectiveness and success of inter-organizational ventures rests equally with the people involved in the process and their ability to apply collaborative skills and mind-sets to the resolution or amelioration of complex problems" [41, p. 106]. The front-line worker concept also allows us to further specify the research question. To wit: we are interested in how, and to what extent, CEPs view community engagement as a boundary-spanning activity [42] with them as the individuals operating on the boundary between their organization (the project developer) and local communities.

Local communities can consist of different actor groups, e.g. residents (organized or otherwise), local governments, and NGOs. In practice, which actors are seen as relevant stakeholders depends on how a CEP defines and constructs certain groups, organizations, or people as 'stakeholders'. Especially when it comes to local 'publics', CEPs face an intangible phenomenon, namely a "differentiated, fluid, but politically meaningful category of civic discourse" [14, p. 931] or a "heterogeneous conceptual category" of groups and individuals [43, p. 23]. In other words, it is very hard – if not impossible – to identify 'the public' empirically. At best, CEPs can empirically construct, or model [46], a public, e.g. through stakeholder analysis, surveys, or interviews. The engagement practices of CEPs should thus be viewed as "part of broader assemblages in which publics… are 'made' or 'performed' (e.g. [44–46, p. 617]). Walker and Cass [47] have shown how the identities and roles connected to these perceived publics are part of socio-technical configurations, implying that publics are co-constructed with the technical and institutional development of energy projects.

3. Method

3.1. Q methodology

Q methodology was developed by William Stephenson in the 1930s as a way of studying people's subjectivity; in other words, their 'subjective viewpoints' [48], p. 2162, 49]. In the field of energy research and social science, Q methodology has been used in studies focusing on energy-related topics such as the planning of renewable energy technologies and policies [50–59]. It has also been used in the public participation and engagement literature to explore participant perspectives [51,60]. Q methodology *"inverts* the R methodological tradition by employing persons as its variables and tests traits or other items as its sample or population (of cases)" [61, p. 22]. It takes a holistic approach, asking research participants to rank statements in the context of all those presented as opposed to ranking isolated statements as surveys do [62]. Combining statistical analysis and qualitative interview data then allows researchers to uncover shared perspectives and relationships between themes, thus understanding 'the whole' [61]. Q methodology is therefore suited for empirical research focusing on "exploration, discovery and attempts to properly *understand* its subject matter" (McGuire, 1997; Stephenson, 1953 in [61, p. 176]). As there is scarce theoretical and empirical understanding of the types of perspectives that CEPs take on their work, Q methodology is well-suited to answering our exploratory research question. Below we describe what each step entails and how we approached it in this study.

3.2. Concourse definition and selection of Q sample

A concourse is the "full range of discussions and discourses on the particular issue under study" [75, p. 582], reflecting "ordinary conversation, commentary and discourse of everyday life" (76, p. 94]). It consists of statements on the researched topic that are relevant to the first person-perspective; a concourse "is to a Q set what population is to person sample (or P set)" [61, p. 34]. From the concourse, the Q sample is selected; this is a subset of statements representative of the wider concourse [61].

In this study, the concourse pertains to CEPs' views of the practice of community engagement and of their own role therein, operating on the boundaries between their own organization and local communities. As this is a little-researched topic, we decided to capture the concourse by conducting qualitative open interviews with practitioners. We thus followed an unstructured approach to constructing the concourse, rather than developing a structured or theory-based one [61]. We interviewed twelve CEPs plus two other professionals working in different capacities in the energy sector, in which they collaborate closely with CEPs. These subjects were selected because we expected them to put forward different types and ideas about community engagement and the role of CEPs within it. The interviewees were a diverse group of people, all with several years of experience working in a variety of fields, including engineering, project development, research, and government policy, and covering different energy technologies and related infrastructure, such as wind, gas, and transmission lines. Statements were then extracted from these qualitative interviews. Further statements were garnered from observations of meetings attended by the first author as part of case studies on CE within Dutch energy projects. This resulted in a set of over 170 statements in all.

The 170 statements were categorized inductively, resulting in the following themes: 1) community engagement in general; 2) the role and position of CE within one's own organization; 3) characteristics of community engagement professionals; 4) interaction with local stakeholders, including residents and municipalities 5) participation by the local community in decision-making on energy projects; 6) communication; and 7) other. The original set of 170 statements was then reduced to a Q sample of 57, which still covered all seven themes above, by means of an iterative process. That was as follows. First,

redundant statements were eliminated and similar ones merged into unique statements [61, p34]. The Q sample was then discussed by the research team members and subsequently piloted with three scholars working on energy and community engagement. Based on the pilot, we decided to add a small number of statements based literature and representing a more conservative perspective on CE, as we found that this was not sufficiently reflected in the existing sample.

This process resulted in a Q sample balanced in both content and formulation, providing participants with equal opportunities to agree or disagree with statements [63]. The final Q sample consisted of 57 statements (see Appendix B). In addition to conducting the pilot, we also checked the comprehensiveness of the Q sample during the actual interviews by asking participants if they felt any specific topics were missing. Most, however, found the Q sample to be representative of the ideas and opinions currently existing CE in energy projects. Some did want to add a statement, but in most cases this in fact resulted in them elaborating on a theme already included or rephrasing one of the existing statements in order to emphasize their own point of view.

3.3. Selection of participants

Participant sampling (i.e. selecting the P set) in Q methodology is purposive. This study seeks to uncover extant perspectives in respect of a particular topic but does not consider how representative any such perspective is [51,52]. General rules of thumb concerning adequate P-set size suggest fewer participants than statements and saturation, meaning that no new perspectives emerge during the interviews [61].

The selection criterion in this study was that participants are responsible for local CE in energy projects. This led to the selection of persons with job titles such as community engagement manager, public relations, stakeholder or project manager. We used three different methods to identify them. We started with a selection of diverse CEPs from our own network ($N = 21$): people we knew through other research projects. At the end of each Q interview we employed the snowball-sampling technique by asking participants if they knew a CEP or an organization with different or opposite attitudes towards community engagement. These were then invited as well ($N = 20$). We also conducted an online search, using Google, to identify potential participants working on solar projects ($N = 2$).[3]

Thirty-seven out of the 43 people invited were willing to participate in the Q interview. In the few cases in which invitations were declined, respondents stated that they had no time to participate ($N = 2$) or were not interested ($N = 2$). Two invitees did not respond to invitations. The total P set consisted of 37 CEPs working independently (for instance, as self-employed consultants) or as employees for private companies, semi-public or public organizations (such as grid operators), or energy cooperatives, focusing on a range of energy technologies and infrastructures in the Netherlands.[4]

3.4. Q interview

The main component of the Q interview is the Q sort. Participants are asked to rank the set of statements on a forced-choice normal distribution ranging from 'agree most' to 'disagree most' [49]. This forces participants to "evaluate statements in relation to other statements rather than individually (as in Likert-scale surveys)" [77, p. 1352]. A 'shallow', rather than 'steep', normal distribution (see Fig. 1) is typically suitable when the P set involves experts, as this allows "greater opportunity to make fine-grained discriminations at the extremes of the distributions" [61, p. 80].[5]

We conducted face-to-face Q interviews between January and April 2018. Interviews generally lasted between 90 and 120 min and took place at locations chosen by participants. Each Q interview followed a protocol consisting of several parts. This included a short introduction to the research project and a number of open questions concerning the participant's job description, the types of energy technologies they are working on, their work experience, and their understanding of CE. This was followed by an introduction to the Q sort. Participants were then presented with the set of statements printed on small numbered paper cards and asked to divide them into three categories (agree, disagree, and neutral) based on the following question: '*Which statements best represent your ideas on the community engagement professional as the link between the organization and the community?*'. This relates directly to the research question presented in the introduction above.

Next, participants were given a forced normal distribution printed on a sheet of paper (A1 size) (Fig. 1). They were asked to return to the statements they had sorted into the three categories and rank each of them by assigning it a place in the normal distribution, starting with the 'agree most' statements, then 'disagree most', and finally the neutral ones.

After the sorting exercise, participants were asked why they had placed particular statements at the extremes of the distribution ($+/-5$ and $+/-4$), if they wanted to discuss other specific statements not at the extremes, and if they wanted to add anything or elaborate on any topics discussed earlier in the interview. The qualitative data from the interviews was recorded and transcribed.

3.5. Q analysis and factor interpretation

The first step in the analysis was the extraction of factors from all the Q sorts, which was done with the help of the dedicated software program PQMethod [64]. This offers Centroid Analysis and Principal Components Analysis as options for factor analysis, and rotation of extracted factors can be performed manually or with Varimax. The analysis resulted in clusters of participants whose Q sorts were alike (i.e. had a high correlation). These clusters were the factors, for which factor arrays were then identified. Factor arrays represent a typical Q sort for each factor and highlight "the defining statements, i.e. the statements with highest and lowest scores and the statements that distinguish one factor from another" [77, p. 1352]. The aim here is to augment the differences between the factors (McKeown 2013 in [65]) via "a procedure of weighted averaging i.e. loading exemplars are given more weight in the averaging process since they better exemplify the factor" [48, p. 2164–5], also known as 'flagging' Q sorts. In the final step, the factor arrays were developed into factor interpretations, i.e. "a careful and holistic inspection of the patterning of items in the factor array"[48, p. 2165]. This was done using: 1) defining statements; 2) distinguishing statements; and 3) qualitative interview data about the statements. The results of these factor interpretations were rich shared viewpoints representing each particular factor [61, p. 181].

Principal Component Analysis was used for factor extraction and Varimax for rotation.[6] An iterative approach, going back and forth between various factor extractions and rotations, was adopted. As criteria for the factor analysis, we used two criteria for the extraction of factors: a minimum of two significant factor loadings and Humphrey's rule [49].[7] Next, we cross-checked these with the qualitative interview data to see if they could be interpreted as meaningful perspectives. This led us to select a three-factor solution, with factor loadings of 0.34 and

[3] Here we used the search terms 'community engagement professional + solar park' in Dutch ('omgevingsmanager + zonnepark').

[4] See Appendix A for an overview of participants.

[5] In this case, the vertical position has no meaning.

[6] Both of these approaches are accepted and standard procedures within the field of Q methodology [61].

[7] According to Humphrey's rule, "a factor is significant if the cross-product of its two highest loadings (ignoring the sign) exceeds twice the standard error" [49].

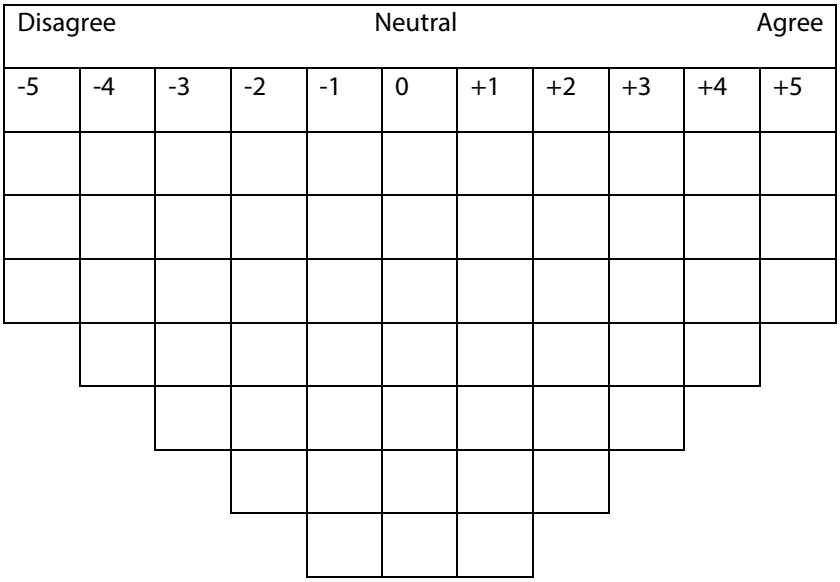

Fig. 1. Q sort distribution.

higher accepted as statistically significant at the $p < 0.01$ level.[8] All 37 Q sorts loaded significantly on one (or more) of the three factors: factor 1 had twelve unique loadings, factor 2 had seven and factor 3 had four (see Appendix C). Q sorts with unique factor loadings of 0.60 and higher [66] were flagged manually, as these are the Q sorts closest resembling the factor. Factor 1 had nine sorts, factor 2 had six and factor 3 had two (see Appendix C). Each factor was then translated into a perspective using the defining and distinguishing statements for that factor and quotes from the interviews with those participants with a flagged sort for that factor. In addition, other (less saliently ranked) items were checked to see if they confirmed or challenged this interpretation [61]. Finally, for each perspective a title was formulated that captured its essence.

4. Three perspectives of community engagement professionals

Three perspectives of community engagement professionals are presented below. Their descriptions include relevant statements and their rankings, illustrated by quotes from respondents in *italics*. The numbers in each narrative below refer to the statements (see accompanying tables), (Tables 1–4).

4.1. Perspective 1 – community engagement as co-creation and the community engagement professional as intermediary

Perspective 1 has twelve participants loading significantly. CEPs in this group work in a range of energy technologies: onshore wind ($N = 7$), geothermal ($N = 2$), solar ($N = 2$), heat networks ($N = 3$), high-voltage power lines ($N = 4$), and natural-gas infrastructure ($N = 1$). They are employees of public and semi-public organizations ($N = 6$), of a cooperative ($N = 1$), and of private companies ($N = 5$).

In this perspective, project development is about *co-creation* and the exploration of possibilities together with local communities. Community engagement is a way to *facilitate meaningful participation* by local residents (40). This starts with truly knowing and understanding residents' interests and concerns related to project plans (30; 53; 46). These CEPs have *a proactive attitude* towards opposing perspectives, as they believe that early encounters with proponents as well as opponents will benefit all stakeholders (32; 43; 56). They operate 'between the lines' separating their own organization, local residents, stakeholders, and public administrators; as intermediaries, they see their role as representing and communicating underrepresented community interests and values to their own organization (15; 18; 45). And also as *managing internal stakeholders*. This is perceived as effortful, since they have to advocate – and sometimes even fight – for CE as part of (technical) project management (37; 4; 16).

Quotes from Q interviews:

> "*A lot of people say 'You go ahead and go play outside,' but in practice it comes down to spending half your time inside the organization in order to get everyone on board. And that leads to a lot of tension. Often, clients are more worried that 'Yes, you are organizing opposition' and the community perceives you as 'Yes, you're only here because of the project'. That is the field of tension you find yourself in.*"

> "*The point, quite simply, is that you give them a role in the first place. And when you involve them early on, they have more influence and you produce better plans because you are also utilizing their knowledge.*"

4.2. Perspective 2 – community engagement as project management: "everything under control"

Perspective 2 has seven participants loading significantly. CEPs in this group work in a range of energy technologies: onshore wind ($N = 2$), geothermal ($N = 1$), solar ($N = 3$), biomass ($N = 1$), and natural gas production ($N = 2$). They are employees of private companies ($N = 6$) and a cooperative ($N = 1$).

Project development is the main goal in this perspective. But as well as technical aspects, these CEPs keep a close eye on social, political, and administrative aspects of energy projects (44). Community engagement is seen as an integral part of *project management*, since ensuring a fair distribution of local benefits and burdens is important (14). There is *close collaboration with other departments* within their own organization (17; 37). CE is custom work, so these CEPs act based on organizational policy as well as their own gut feeling (21; 41). Mapping local interests, thus *knowing the community* and what could potentially frustrate a project, is a way to keep everything under control and increase the chances that a project is actually developed (9; 26; 30; 54). Ideally, opposition is prevented, but it is not shied away from (1; 8; 46). In this perspective, municipalities represent local interests and so are important stakeholders (11; 49). CE is based on *professional relationships with communities*, with clear rules of engagement (7; 25).

[8] Calculated as 2.58 *standard error (SE); SE = 1/√(number of statements). See [75].

Table 1
Overview of defining statements (agree = +5/+4; disagree = −5/−4) and distinguishing statements for Perspective 1. An asterisk (*) indicates significance for distinguishing statements at $p < 0.01$.

Agree (+5)	15: It is my job to make sure values from the community are taken into consideration in internal decision-making.*
	30: You have to put yourself in the shoes of your counterparty and realize why people take a certain position.
	56: You want to encounter proponents as well as opponents as early as possible in the process, so you need to wake up sleeping dogs.*
Agree (+4)	10: It is necessary that community engagement be represented throughout the organization, including at the strategic, tactical, and operational levels.
	11: It is necessary to cooperate with local municipalities for the development of energy projects.
	18: I operate between the lines separating my own organization, local residents, stakeholders, and public administrators: it is my job to be the link between them.*
	43: Community engagement might cost a lot, but opposition is more expensive.
Disagree (−5)	32: You should only start active communication once there is a concrete project plan.
	40: Community engagement is a tool to pacify conflicts between certain groups of residents, so that decision-making can take a faster course.
	45: Community engagement professionals are actually communication officers.
Disagree (−4)	2: As a community engagement professional, you are a plaything of the authority in charge of decision-making.
	3: As a community engagement professional, you are not in a position to communicate the necessity of the energy transition in a credible way.*
	25: Informal interaction with local residents contributes to building relationships, but is at odds with the corporate identity an organization wants to convey.
	46: Residents often just need to vent their frustrations; it is not always about addressing their concerns in a concrete way.
Other distinguishing statements (with rank in parenthesis)	4: As a community engagement professional, you need to make sure that other departments within the organization are on board with you (+3).*
	37: Community engagement requires an change of internal organizational culture (+2).*
	16: I need to keep my colleagues focused when it comes to implementing community engagement, because some of them have a strong drive to develop projects (+2).*
	14: Ensuring a fair distribution of local benefits and burdens is something I consider part of my job (0).*
	23: In practice you need to experiment with solutions, but there is not enough room for that within the organization (0).*
	8: It is pointless to defend yourself when opponents make claims about the impact of a project on a specific living environment (0).*
	5: As a community engagement professional, you are often stuck between existing laws and regulations on the one hand and objections expressed by local residents on the other (−1).*
	48: Plenary meetings provide opponents with too prominent a platform to scream from (−1).*
	50: Strategic community engagement management is just a buzzword (−2).*
	57: There are plenty of opportunities for local residents to have a say within formal decision-making procedures (−3).*
	53: When residents get carried away by emotions, there is no way back; you therefore need to prevent projects ending up embroiled in an emotional atmosphere (−3).*

Quotes from Q interviews:

"If people from the technical department want something but I think 'No, that's not going to happen – you can't do it that way', or 'This will trigger opposition', or 'This will cause hindrance for people', then I'm the one who speaks to them about it. Because the organization I work for is quite sensitive to concerns coming from the local community."

"In the end, there are maybe three reasons that recur every time, so it's pretty predictable: it's almost not necessary that we go out into the neighborhood to find out what [concerns residents] will bring up."

4.3. Perspective 3 – project development: no community engagement beyond legal requirements

Perspective 3 has four participants loading significantly. CEPs in this group work only in onshore wind. They are employees of private companies ($N = 2$) and self-employed entrepreneurs ($N = 2$).

In this perspective, *technical project development* is the main goal. CEPs with this perspective see no responsibility for community participation beyond the legal requirements. Internal stakeholders are not an issue for these small organizations, as all eyes are on a *shared goal* (6; 17; 23; 37). With development being the focus, engaging with local municipalities takes priority over engaging with local communities (11; 36): there is a time and place for local residents, and that is *within formal participation* procedures (38; 57), e.g. as part of a licensing process. *Community engagement is about following the law* and CEPs are not in a legitimate position to represent local interests within project planning (3; 12; 14; 35; 47; 51). However, they do feel they are often stuck between existing laws and regulations on the one hand and objections expressed by local residents on the other (5). Conflict and opposition are accepted as 'facts of life', but not something to actively engage with. These CEPs feel that attempts to do so are not perceived as genuine due to their own business interests (8); they even question whether CE is worth spending resources on (9; 43).

Quotes from Q interviews:

"[It] *is the process of political decision-making. It's fine to oppose something, but not at untimely moments. Nowadays, whenever societal pressure emerges, people listen. But that just means chasing the delusions of the day. This is not the way we should make decisions. But it is the current standard*."

"*The amount of money spent on community engagement is huge, but does it help? No. I often hear that 'Participation is bribery or blackmail.' It is the hype of the moment. Big developers started doing it to keep residents calm, not to let them actually participate*."

4.4. Recap of the three perspectives

At first sight, perspectives 1 and 2 may seem fairly similar as they are quite community-minded, whereas Perspective 3 stands out as very distinctive due to its relatively narrow understanding of the task and need for community engagement in project development. On closer inspection, however, there are also salient differences between perspectives 1 and 2. For example, Perspective 1 devotes a lot of effort to

Table 2
Overview of defining statements (agree = +5/+4; disagree = −5/−4) and distinguishing statements for Perspective 2. An asterisk (*) indicates significance for distinguishing statements at $p < 0.01$.

Agree (+5)	9: Mapping the interests of local residents and other stakeholders creates more space for negotiation and increases chances that a project will be developed. 11: It is necessary to cooperate with local municipalities for the development of energy projects. 30: You have to put yourself in the shoes of your counterparty and realize why people take a certain position.
Agree (+4)	20: I think it is important to show that I am going beyond what existing laws and regulations require. 21: I work on the basis of both organizational policy and my own gut feeling. 44: Community engagement professionals are 'jacks-of-all-trades': they need to have an eye for the technical, social, political, and administrative aspects of energy projects. 49: It is sometimes necessary to help local municipalities behind the scenes, to speed up decision-making.*
Disagree (−5)	17: I sometimes take decisions without informing management up front, because I can foresee that good solutions will be rejected. 26: You can go out into the neighborhood all you want, but you can never really figure out what might make a project more difficult. 46: Residents often just need to vent their frustrations; it is not always about addressing their concerns in a concrete way.
Disagree (−4)	25: Informal interaction with local residents contributes to building relationships, but is at odds with the corporate identity an organization wants to convey. 40: Community engagement is a tool to pacify conflicts between certain groups of residents, so that decision-making can take a faster course. 41: Community engagement needs to be standardized. 54: We often have no idea what the majority of residents think about a particular project, and we also have no good way to find that out.
Other distinguishing statements (with rank in parenthesis)	7: The way you as a community engagement professional interact with residents should not become too personal; you need to keep professional distance (+3).* 14: Ensuring a fair distribution of local benefits and burdens is something I consider part of my job (+3).* 1: Publicly, you should pay as little attention as possible to extreme actions and reactions by opponents because that only causes more unrest (+2).* 35: You need to make sure that residents feel they can have a say in decision-making (+1).* 57: There are plenty of opportunities for local residents to have a say within formal decision-making procedures (0).* 37: Community engagement requires an change of internal organizational culture (−1*) 3: As a community engagement professional, you are not in a position to communicate the necessity of the energy transition in a credible way (−1).* 24: In the Netherlands, community engagement mostly consists of informing people; not a lot is usually done with feedback from the local community (−1).* 52: If you keep speaking to the same opinionated proponents and opponents, you develop tunnel vision (−2).* 5: As a community engagement professional, you are often stuck between existing laws and regulations on the one hand and objections expressed by local residents on the other (−2).* 8: It is pointless defending yourself when opponents make claims about the impact of a project on a specific living environment (−3).*

advocating and accounting for CE among internal organizational stakeholders, whereas Perspective 2 features close collaboration between those stakeholders. Comparing the perspectives raises questions concerning various themes related to modes of engagement, the position of CEPs, attitudes towards conflict, responsibility for CE, and interaction with internal stakeholders. The next section discusses these themes in depth.

5. Discussion of the three perspectives on community engagement practice

This section compares the three perspectives to identify key similarities and differences between them. It also situates them in relation to the community engagement literature.

5.1. Mode of engagement

The three perspectives differ in terms of the mode of engagement they consider appropriate or desirable. Perspective 1 adopts a deliberative, co-productive mode; CEPs with this perspective try to seek partnerships with local communities by engaging them and bringing their views into the project development process. The space for communities to inform the planning and implementation of energy infrastructures is more limited in Perspective 2; here, CEPs create room for community deliberation and consultation in so far as this serves project development. Perspectives 1 and 2 can be seen as illustrations of what Bowen [22] refers to respectively as 'transitional' and 'transactional' strategies. Perspective 1 reflects a transitional strategy [22], since these CEPs try to develop shared goals and benefits within partnerships while going beyond the interest of the project developer alone. Although this perspective aims at deep engagement and co-production, it is not a transformational strategy [22] or partnership [36], as that would involve either joint management of projects or communities that take the lead in decision-making. Perspective 2 reflects a transactional strategy [22], since these CEPs view community engagement as a way to reduce transactional costs by creating goodwill and reducing conflict. The mode of engagement under Perspective 3 can be regarded as the most restricted, being characterized by one-way communication through which citizens are informed (and to a limited extent consulted) about what decisions are made. One-way communication is sometimes understood to reflect a perspective informed by the deficit model [24]. The reason these CEPs prefer engagement as 'communication only', however, is not because they think the community lacks knowledge or information, but because they do not feel they are in a legitimate position to engage communities beyond what is legally required.

5.2. Position of the CEP

Although CEPS in perspectives 1 and 2 alike see their role as frontline workers between their own organizations and local communities, and the boundary between those actors as permeable, they position themselves differently vis-à-vis the community. Perspective 1 CEPs orient themselves most outwardly. They see themselves as boundary-spanner [41,67], straddling the border between their own organizations and the local community and undertaking stakeholder management in two directions: internal and external. Perspective 2 CEPs, on the other

Table 3
Overview of defining statements (agree = +5/+4; disagree = −5/−4) and distinguishing statements for perspective 3. An asterisk (*) indicates significance for distinguishing statements at $p < 0.01$.

Agree (+5)	5: As a community engagement professional, you are often stuck between existing laws and regulations on the one hand and objections expressed by local residents on the other.*
	11: It is necessary to cooperate with local municipalities for the development of energy projects.
	57: There are plenty of opportunities for local residents to have a say within formal decision-making procedures.*
Agree (+4)	3: As a community engagement professional, you are not in a position to communicate the necessity of the energy transition in a credible way.*
	8: It is pointless to defend yourself when opponents make claims about the impact of a project on a specific living environment.*
	47: You need to communicate clearly to residents what influence they can have over decision-making, so as to prevent disappointment.
	51: For a local community, you will always be the person with the bad message, coming along at the wrong time.*
Disagree (−5)	6: The challenge is to bring the internal organization on board for solutions that are beneficial for the community but more costly for the organization.*
	27: It is better not to implement projects by overriding the authority of the provincial or national government; that leads to local public and political opposition.*
	35: You need to make sure that residents feel they can have a say in decision-making.
	37: Community engagement requires an change of internal organizational culture.
Disagree (−4)	12: It is wise to provide opponents with space during public communication activities.*
	17: I sometimes take decisions without informing management up front, because I can foresee that good solutions will be rejected.
	23: In practice you need to experiment with solutions, but there is not enough room for that within the organization.*
Other distinguishing statements (with rank in parenthesis)	22: I am easily swayed by the issues of the day, leaving me with little time to reflect on my own practice (+3).*
	25: Informal interaction with local residents contributes to building relationships, but is at odds with the corporate identity an organization wants to convey (+1).*
	2: As a community engagement professional, you are a plaything of the authority in charge of decision-making (+1).*
	32: You should only start active communication once there is a concrete project plan (0).*
	54: We often have no idea what the majority of residents think about a particular project, and we also have no good way to find that out.
	40: Community engagement is a tool to pacify conflicts between certain groups of residents, so that decision-making can take a faster course (0).*
	46: Residents often just need to vent their frustrations; it is not always about addressing their concerns in a concrete way (−1).*
	43: Community engagement might cost a lot, but opposition is more expensive (−1).*
	38: Project development is about exploring possibilities with the people involved, rather blindly trusting technical aspects of a project (−2).*
	36: I am also successful in my work when the outcome is a well-considered 'We are not going to proceed with our plans after all' (−2).*
	9: Mapping the interests of local residents and other stakeholders creates more space for negotiation and increases that chances that a project will be developed (−3).*
	14: Ensuring a fair distribution of local benefits and burdens is something I consider part of my job (−3).*

Table 4
Summary of each of the perspectives.

Perspective 1 – Community engagement as co-creation and the CEP as intermediary
- Co-creation.
- Facilitate participation.
- Proactive attitude.
- Managing internal stakeholders.
Perspective 2 – Community engagement as project management: "everything under control"
- Project management.
- Close internal collaboration.
- Know the community.
- Professional relationships with communities.
Perspective 3 – Project development: no community participation beyond legal requirements
- Technical project development.
- Shared internal goal.
- Formal participation.
- Legal compliance.

hand, view themselves more as a central part of their organization and traverse the boundaries between it and the external world of the local community only as long as this is in line with the technical and legal aspects of the planned project. This is consistent with the main goal in perspective 2: working towards the implementation of project plans. Whereas we might have expected that CEPs working for energy co-operatives would be most closely working from and with the community and hence found in Perspective 1, in fact we also find one such professional in Perspective 2. When it comes to the perception of boundaries, perspective 3 articulates a sharp boundary between CEPs' own organizations and the communities in which their projects are planned; as far as possible, interactions with those communities are limited to formal decision-making trajectories. It can thus be said that, although CEPs in Perspective 3 are front-line workers technically, they do not necessarily position themselves as such.

5.3. Dealing with local conflict

The three perspectives differ in their views of conflict and opposition. Perspective 1 takes a proactive attitude towards the local community and opponents; indeed, a certain appreciation of opposition can be discerned in the data from our Q interviews. Early engagement with local communities and opponents is perceived as self-evident and good practice, with conflict viewed as potentially useful: in this perspective, conflict can lead to social learning about differences in normative appraisals of the proposed project 32,68]. Perspective 2 accepts local opposition, but would rather prevent it by way of timely engagement. These CEPs feel that they need to take additional steps beyond public participation in formal planning procedures in order to accommodate local input, and to mitigate conflict so as to enhance the chances of project implementation. It thus reflects a conflict-management approach, in which CE is seen as a way to achieve mutual gains [69].Perspective 3 CEPs perceive and accept opposition as an inherent 'part of the game' when it comes to project development, but do not actively engage with it as it is beyond their span of control.

5.4. CEP responsibility for community representation

Whereas perspective 1 and 2 CEPs do not question their own responsibility for taking into account the views of local communities, those in Perspective 3 do not consider that part of their responsibility. In Perspective 1 it is seen as part of the job, and to a fairly great extent, to represent the interests of the local community within project planning. This, in Fiorino's terms [35], is the most normative approach; CE is undertaken because communities should have a say over their own living environments. CEPs in Perspective 1 may even see themselves as playing a role in empowering local communities by giving them a voice within the organization and the opportunity to influence the planned project. No specific mention was made in any of the interviews of a role for CE in the emancipation of existing disadvantaged or minority communities, however, which is what we would expect from an emancipatory approach to CE [70]. Perspective 2 is at first glance similar to 1, but has a stronger focus on project management; these CEPs will at least try to see if they can accommodate the interests of communities in their project plans, with the aim of optimizing payoffs in line with an instrumental or neoliberal approach to participation [70]. Perspective 3 has quite a distinctive view, as they perceive themselves as not being in a legitimate position to actively bring the concerns and values of local communities into project development. They feel that formal planning procedures involve legitimate structures for public participation, which are open to anyone, as opposed to organized participation procedures that usually favor the loudest voices and thereby typically do not represent the interests of the whole community [71]. Perspective 3 thus seems to reject CE as a means for the justification of decisions in project development [72]. As such, it may also be interpreted as a normative perspective: it recognizes the importance of local participation for democratic decision-making, but a proactive role for CEPs and project developers to engage communities does not fit into their rationale about what makes decision-making democratic.

5.5. Interaction with internal stakeholders

One final theme salient to the comparison is interaction with other people and departments within the CEP's own organization. Here, perspectives 2 and 3 are quite similar in that they do not experience friction in those interactions. In Perspective 2, the added value of CE is clear to internal stakeholders and so results in close collaboration with other departments or expert colleagues inside the organization. In Perspective 3, CE is not a prominent issue or a topic of contention with other departments or colleagues: their shared focus is technical project management, with CE just something that has become a mandatory activity over the years. CEPs in both Perspective 2 and Perspective 3 seem to share their vision of CE with the organization they are part of. This is where both differ from Perspective 1, where several CEPs indicate that they spend a large part of their time – in one case even 50 percent of it – managing internal stakeholders, convincing them of the usefulness and necessity of CE, and trying to secure a seat at the project team's table in order to push for higher levels of CE in project development. This relatively extensive effort devoted to managing internal stakeholders resonates with how these CEPs view their own position (5.2), which is as involving both internal and external stakeholder management.

6. Conclusion

The results of our study show that community engagement professionals are heterogeneous in terms of how they see their role in engaging local communities in the context of energy projects. Three perspectives on their practice were identified using Q methodology. Perspective 1 is held by CEPs who view community engagement as co-creation and themselves as intermediaries between their organization and the community. Perspective 2 views CE as an inherent part of project management, and as a way to remain in control of the process. In Perspective 3, CE is something done as part of complying with laws and regulations in project development. Comparison of the three perspectives shows variation in terms of mode of engagement, the position of the CEP, dealing with local conflicts, responsibility for the representation of communities, and interaction with internal stakeholders.

Our findings also show that organizational dynamics can be very influential over CEP practice. Specifically, in Perspective 1 the friction resulting from interaction with internal stakeholders particularly stands out as these CEPs state that they spend a large part of their time dealing with those internal stakeholders. For some, this time is perceived as 'wasted'; they would rather spend it on constructive collaboration with external stakeholders. This study thus helps to open up the 'black box' of project development organizations, which reveals them as collections of individuals rather than homogeneous entities, by showing how CEPs perceive and navigate their organizational dynamics. It also suggests that the alignment of CE with other organizational goals and activities deserves closer empirical and conceptual investigation.

Furthermore, the three perspectives resulting from this study seem to reflect different rationalities on democratic legitimacy in decision-making. Whereas perspectives 1 and 2 see a role for community engagement organized by CEPs working for private organizations, as a way to achieve more inclusive project development, Perspective 3 questions this. CEPs in that group feel that they should not go beyond what is legally required, since representing community interests is not part of their legitimate responsibility. One could argue that this goes against the general trend towards increased forms and levels of CE, and is thus a sign of conservatism within the profession. However, we believe that this perspective can also be interpreted as honest and transparent: the CEPs who participated in this study work for private parties pursuing private goals and private interests, so suggesting that their efforts should also protect and work towards public interests may create unwarranted expectations within local communities.

This study shows that there is awareness among CEPs of the social challenges triggered by strategies such as DAD. Perspectives 1 and 2, in particular, share similarities in terms of their views on the need for and necessity of CE. We also see here a form of interaction, aimed at active engagement with communities, that goes beyond the typical DAD approach; both perspectives are open to facilitating diverse community perspectives in project planning [32], which can contribute to more inclusive planning and decision-making procedures on energy projects. A possible explanation for this might be that community engagement in the Netherlands is gaining more traction in the energy sector; as there is ongoing opposition emerging in local communities, there is also a sense of urgency for realising renewable energy projects. It might also be prompted by – and it certainly coincides with – changes in Dutch national policies concerning energy project planning and development, as well as public participation [73].

As our respondents represent only a subgroup of all those working in CE in the Netherlands, we do not claim that the three perspectives found represent the sector as a whole. Nevertheless, our findings do provide insights into a group of respondents from a diverse mix of organizations (with respect to size, type, and technology), most of which are also active in a community of practice (LEO)[9] with 37 member organizations from the Dutch energy sector. However, they say nothing about CEPs' actual *practice* during real-world projects. We are therefore unable to make any claims related to willingness to act and actual actions based on the perspectives we have identified, or to say whether, for example, CEPs show signs of 'deliberative speak' in practice [74]. That said, on a daily basis the participating CEPs do find themselves in a position where they are interacting with local communities and many other types of stakeholder, which does at least give some credibility to

[9] www.platformleo.nl

the actionability of these perspectives.

One final point that requires further investigation is the relationship between community engagement and the organizational types of the project developers concerned. This study included CEPs working for organizations with different aims (for example, development for investment or long-term exploitation), of different sizes (large and small) and types (national and international corporations, energy cooperatives), and developing different technologies. With these differences come different perspectives on CE (and its related responsibilities) within the organization and within project development, and from that different perspectives on the needs and resources it requires. Perspective 3, for example, was espoused mainly by CEPs in the wind sector; based on the data from this study, however, we cannot say if that is because it particularly reflects the norms, practices, or culture prevalent in this sector. More research is thus needed into sectoral and organizational types, structures, and culture, and into what they mean for CE and CEPs.

7. Implications for the governance of energy infrastructures

This study raises several questions with respect to the governance of energy infrastructures. Participants often find themselves, as private actors, in a position that resembles that of a public administrator assigned to represent public values through their work. Is that legitimate? Answering this question requires normative reflection, from practitioners as well as researchers. Who, ultimately, should be responsible for community engagement? What should be its goals? Can and should we expect private actors to further, or even champion, democratic goals? This study shows that more remains to be said about private actors dealing with public values. Such public-private tension also raises practical questions. For example, what does a CEP need as a private actor working in the public domain? Respondents state that they often try to collaborate closely with municipalities as part of formal licensing trajectories, and also perceive them as stakeholders knowing and representing the interests of local residents (as the three perspectives show; see Appendix B, statement 11). Clear municipal guidelines on how to engage with the interests and values of local communities is something CEPs would certainly benefit from, as that would ease some of the friction that comes from being a representative of a private company dealing with public values and interests.

8. Implications for project developers

So-called 'front-line work' suggests a paradox: the more CEPs interact with and try to accommodate local communities (as in Perspective 1), the greater they seem to distance themselves from the goals and practices of their own organizations. This seems to lead to a lot of effort on the part of these CEPs going into internal organizational alignment and resolving internal friction, which may actually stand in the way of achieving their CE goals. Perspective 2 also involves engagement with the community and the exchange of information, but is less ambitious than Perspective 1 with respect to co-creation and the extent of influence. However, it may well be that, because of the closer alignment of Perspective 2 CEPs with their own organizations, in practice this leads to a greater uptake of local knowledge and better organizational learning by comparison with Perspective 1.

The participants in this study indicated that taking part in the Q interviews helped them to reflect on their own practice and to communicate about CE within their organization. Something similar happened with two workshops at which we presented our preliminary findings to a CEP community of practice. Here, they were used to identify and discuss tensions and challenges in community engagement with eighteen CEPs. As mentioned above, Perspective 1 CEPs spend a lot of time on internal alignment and communication, which actually makes it harder to achieve their CE goals. Especially given that, in a number of such cases, organizations have made community engagement part of their official policy, CEP time and resources could be better spent if their organizations were to 'walk the talk' by actually putting that policy into practice. Academic research can help to generate more internal support for CEPs, and thereby stimulate an organizational learning process.

Advancing our understanding of community engagement requires that we dive more deeply into the processes of sociopolitical interaction between project developers and publics. And into the organizational and institutional dynamics of project developers and, in general, of the sectors in which they are active. As we have outlined above, there is still a lot to learn. With this paper, we hope that we have made a meaningful contribution to the academic debate on community engagement, opening up new avenues for further empirical and conceptual analysis.

Declaration of Competing Interest

None.

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This study has been approved in advance by the Human Research Ethics Committee of Delft University of Technology, the Netherlands. The application is filed under ID number 229. For more information, please visit https://hrec.tudelft.nl/.

Appendix A. Overview participants Q interviews

Overview of participants in the Q study. All 37 participants loaded significantly on one or two factors. Asterisks (*) indicate participants flagged for factor arrays (see 3.5).

Information is provided on the job description of participating CEPs. *Community engagement* refers exclusively to activities related to engaging with local communities. *Stakeholder engagement* refers to interaction, communication, and negotiations with the diverse set of stakeholders involved in project development, such as local communities and businesses, municipalities, provincial authorities, including local communities. *Project management* refers to work involving coordination between technical aspects of project development and stakeholder/community engagement. CEPs working in *project development* focus primarily on technical project development, often including licensing and stakeholder/community engagement. *Licensing* refers to activities involving licensing and permit procedures, in such domains as the environment, safety, and spatial planning. *Public affairs* encompasses communications and public relations for the organization, beyond the project level.

Respondent	Technology	Job description	Organization type	Factor
1	Heat network	Project management, community engagement	Semi-public	1*
2	Wind, solar	Community engagement	Self-employed	1*
3	Wind, geothermal	Community engagement	Private (consultancy)	1*
4	Wind	Community engagement	Private (consultancy)	1, 2
5	Wind	Project development, stakeholder engagement	Semi-public	1*
6	Natural gas	Stakeholder engagement	Public	1
7	Natural gas	Stakeholder engagement	Public	1, 2
8	Wind	Project development, stakeholder engagement	Cooperative	1*
9	High-voltage transmission lines	Community engagement	Public	1*
10	High-voltage transmission lines	Community engagement	Public	1, 2
11	Geothermal	Community engagement	Private (consultancy)	1*
12	Wind	Project development, stakeholder engagement	Private	1, 2
13	Natural gas	Licensing, stakeholder engagement	Private	2*
14	Wind, high-voltage transmission lines	Stakeholder engagement	Self-employed	1*
15	Energy grid	Project management, stakeholder engagement	Semi-public	1
16	Energy grid	Project management, stakeholder engagement	Semi-public	1, 2
17	Natural gas	Community engagement, licensing	Semi-public	1, 2
18	Wind	Community engagement	Private	1
19	Wind	Community engagement	Private	1, 2
20	Wind, solar	Stakeholder engagement, public affairs	Private	2*
21	Solar, bio, geothermal	Stakeholder engagement, public affairs	Private	1, 2
22	Solar, bio	Project development, stakeholder engagement	Private	2*
23	Energy grid	Project development, stakeholder engagement	Semi-public	1, 2
24	High-voltage transmission lines	Project management, stakeholder engagement	Public	1, 2
25	High-voltage transmission lines	Project management, stakeholder engagement	Public	1*
26	Wind	Project development, community engagement	Private	2, 3
27	Wind, solar	Project development, stakeholder engagement	Cooperative	1, 2
28	Natural gas	Project development	Private	2*
29	Geothermal energy	Community engagement, licensing	Private	2*
30	Wind, solar, bio	Project development, including stakeholder	Cooperative	2*
31	Wind	Project development	Self-employed	3*
32	Wind	Project development	Self-employed	3*
33	Wind	Project development	Self-employed	2, 3
34	Solar	Project development, stakeholder engagement	Private	2
35	Wind	Project management, stakeholder engagement	Private	3
36	Wind	Project management, stakeholder engagement	Private	3
37	Solar	Project development, stakeholder engagement	Private	1, 2

Appendix B. Overview of statements

Factor Q-sort values for statements, sorted by consensus versus disagreement (variance across factor Z-scores).

Number	Statement	Factor 1	Factor 2	Factor 3
19	I take the space I need to find solutions that fit the situation.	3	3	3
11	It is necessary to cooperate with local municipalities for the development of energy projects.	4	5	5
33	You need to give retired residents a role in the decision-making process, otherwise they become a risk factor.	−1	−2	−2
30	You have to put yourself in the shoes of your counterparty and realize why people take a certain position.	5	5	3
42	Community engagement is risk management: it is about increasing the predictability of residents' behavior.	0	0	0
26	You can go out into the neighborhood all you want, but you can never really figure out what might make a project more difficult.	−3	−5	−3
44	Community engagement professionals are 'jacks-of-all-trades': they need to have an eye for the technical, social, political, and administrative aspects of energy projects.	2	4	2
41	Community engagement needs to be standardized.	−2	−4	−2
31	You have to ask yourself continuously if agreements with residents concerning compensation are ethically responsible.	−1	1	2
10	It is necessary that community engagement be represented throughout the organization, including at the strategic, tactical, and operational levels.	4	2	2
55	Opposition is a good thing: then you know who you need to talk to.	0	−1	−2
29	You need to keep in touch with the media to prevent them from feeding public opposition.	−1	0	−2
17	I sometimes take decisions without informing management up front, because I can foresee that good solutions will be rejected.	−2	−5	−4
28	It is not possible to make tight plans for community engagement: you rush from one complex situation to the next, and they involve many different parties.	−1	−1	2
18	I operate between the lines separating my own organization, local residents, stakeholders, and public administrators: it is my job to be the link between them.	4*	1	1
47	You need to communicate clearly to residents what influence they can have over decision-making, so as to prevent disappointment.	3	1	4
34	You need to prevent people from forming the wrong image based on information from Google and social media by actively supplying information from an objective source.	1	2	−1
21	I work on the basis of both organizational policy and my own gut feeling.	1	4	1
46	Residents often just need to vent their frustrations; it is not always about addressing their concerns in a concrete way.	−4	−5	−1*
15	It is my job to make sure values from the community are taken into consideration in internal decision-making.	5*	3	1
39	Community engagement does not yet have an equal role within project management.	1	−2	−2
54	We often have no idea what the majority of residents think about a particular project, and we also have no good way to find that out.	−3	−4	0*
20	I think it is important to show that I am going beyond what existing laws and regulations require.	0	4	3
23	In practice you need to experiment with solutions, but there is not enough room for that within the organization.	0	−3	−4
45	Community engagement professionals are actually communication officers.	−5	0	−2

13	It takes time to build good relationships with local residents; you cannot rush these kinds of processes.	3	1	−1
24	In the Netherlands, community engagement mostly consists of informing people; not a lot is usually done with feedback from the local community.	2	−1*	1
40	Community engagement is a tool to pacify conflicts between certain groups of residents, so that decision-making can take a faster course.	−5	−4	0*
32	You should only start active communication once there is a concrete project plan.	−5	−3	0*
50	Strategic community engagement management** is just a buzzword.	−2	−1	2
38	Project development is about exploring possibilities with the people involved, rather blindly trusting technical aspects of a project.	2	2	−2*
48	Plenary meetings provide opponents with too prominent a platform to scream from.	−1	1	2
36	I am also successful in my work when the outcome is a well-considered 'We are not going to proceed with our plans after all.'	2	2	−2*
52	If you keep speaking to the same opinionated proponents and opponents, you develop tunnel vision.	1	−2*	3
56	You want to encounter proponents as well as opponents as early as possible in the process, so you need to wake up sleeping dogs.	5*	0	0
2	As a community engagement professional, you are a plaything of the authority in charge of decision-making.	−4	−3	1*
1	Publicly, you should pay as little attention as possible to extreme actions and reactions by opponents because that only causes more unrest.	−2	2*	−1
49	It is sometimes necessary to help local municipalities behind the scenes, to speed up decision-making.	0	4*	−1
43	Community engagement might cost a lot, but opposition is more expensive.	4	2	−1*
22	I am easily swayed by the issues of the day, leaving me with little time to reflect on my own practice.	−1	−2	3*
6	The challenge is to bring the internal organization on board for solutions that are beneficial for the community but more costly for the organization.	1	−1	−5*
35	You need to make sure that residents feel they can have a say in decision-making.	−2	1*	−5
4	As a community engagement professional, you need to make sure that other departments within the organization are on board with you.	3*	0	−3
16	I need to keep my colleagues focused when it comes to implementing community engagement, because some of them have a strong drive to develop projects.	2*	−2	−3
12	It is wise to provide opponents with space during public communication activities.	1	1	−4*
25	Informal interaction with local residents contributes to building relationships, but is at odds with the corporate identity an organization wants to convey.	−4	−4	1*
7	The way you as a community engagement professional interact with residents should not become too personal; you need to keep professional distance.	−2	3*	0
27	It is better not to implement projects by overriding the authority of the provincial or national government; that leads to local public and political opposition.	1	0	−5*
53	When residents get carried away by emotions, there is no way back; you therefore need to prevent projects ending up embroiled in an emotional atmosphere.	−3*	3	1
14	Ensuring a fair distribution of local benefits and burdens is something I consider part of my job.	0*	3*	−3*
8	It is pointless to defend yourself when opponents make claims about the impact of a project on a specific living environment.	0*	−3*	4*
9	Mapping the interests of local residents and other stakeholders creates more space for negotiation and increases that chances that a project will be developed.	3	5	−3*
37	Community engagement requires an change of internal organizational culture.	2*	−1*	−5*
51	For a local community, you will always be the person with the bad message, coming along at the wrong time.	−3	−3	4*
57	There are plenty of opportunities for local residents to have a say within formal decision-making procedures.	−3*	0*	5*
3	As a community engagement professional, you are not in a position to communicate the necessity of the energy transition in a credible way.	−4*	−1*	4*
5	As a community engagement professional, you are often stuck between existing laws and regulations on the one hand and objections expressed by local residents on the other.	−1*	−2*	5*

**A particular approach to community engagement in the Netherlands

Appendix C. Factor matrix, with an X indicating a defining sort loading

Q sort	Factor 1	Factor 2	Factor 3
1	0.6876X	0.3323	0.0578
2	0.7702X	0.1439	−0.1774
3	0.8139X	0.1501	0.0120
4	0.5113	0.5587	0.1650
5	0.6743X	0.0808	0.0506
6	0.5821	0.1630	0.3357
7	0.5105	0.5570	0.1376
8	0.6651X	0.2888	−0.3129
9	0.8057X	0.1955	−0.2441
10	0.7530	0.3514	−0.0619
11	0.7646X	0.1526	0.1832
12	0.6059	0.4118	0.1406
13	0.2073	0.6920X	0.3043
14	0.7935X	0.0121	0.1957
15	0.5121	0.2817	0.0057
16	0.6634	0.3553	−0.0022
17	0.5477	0.3682	0.1351
18	0.5082	0.2081	0.2702
19	0.5080	0.2818	0.3691
20	0.3332	0.7110X	0.0060
21	0.5814	0.3789	0.1881
22	0.3370	0.7695X	0.2325
23	0.6640	0.3907	−0.0247
24	0.6573	0.4410	0.1831
25	0.7938X	0.2219	0.0698
26	0.0830	0.4802	0.3986
27	0.4725	0.4087	−0.0598
28	0.3043	0.6694X	−0.0148
29	0.1546	0.6613X	−0.1104

30	0.2122	0.7041X	0.0367
31	−0.2406	0.0583	0.6783X
32	0.1571	−0.1195	0.6497X
33	−0.2403	0.4609	0.4428
34	0.3218	0.5381	0.0360
35	0.0317	0.0479	0.5019
36	0.2468	0.1968	0.4792
37	0.6648	0.3787	0.0827
% explained variance	30	17	7

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