

**Assessing The Quality of Participation Processes in Energy Transition Projects:  
Cases Studies of Two Municipalities in Chile**

by

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## **Abstract**

The Paris Agreement calls for a stop to the increase of the global temperature by the commitment of states, among other things, to change their energy sources from fossil fuels to renewable energies. Over that transition, the participation processes of citizens in policies from local to central governments have become a way to include what stakeholders and the general public have to say. However, it is necessary to consider that many public agencies are proposing these processes without the actual purpose of listening to citizens but, instead, as an instrument to legitimize their decisions and overcome their lack of support as authorities. Therefore, it is necessary to assess if those in positions of power are developing the processes in a fair, open, and democratic way. For that, a framework for evaluating participation processes in energy transition policies is useful for governments and citizens to know the quality of these processes. In this work, an assessment was conducted based on the framework developed by Stober et al. (2021), which includes the dimensions of the rationales of participation, involvement of the participants, and the participation levels. The methodology was a document analysis and a set of semi-structured interviews applied to citizens and company representatives. The cases were two solar power projects of two municipalities in Chile. Results revealed that in both cases the quality of the participation processes was of an intermediate level, determined by the lack of influence of participants, constrained by law and the underlying politico-institutional context.

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## Abbreviations and Acronyms

DIA	Declaración de Impacto Ambiental (Environmental Impact Declaration)
EIA	Estudio de Impacto Ambiental (Environmental Impact Study)
MWp	Megawatt peak
NGO	Non-governmental Organization
PSEM	Planta Solar El Milagro
PSP	Parque Solar Parral
SEA	Servicio de Evaluación Ambiental (Environmental Evaluation Service)
SEIA	Sistema de Evaluación de Impacto Ambiental (System of Environmental Impact Assessment)
SEREMI	Secretaría Regional Ministerial (Regional Ministerial Secretariat)

## 1. Introduction

Energy transition refers to the transformation of countries' energy sources at a local, national, and international level, from fossil fuels to renewable energies (Edomah et al., 2020). That is, a progressive shift from highly contaminating energy processes to sources of energy that provide a cleaner and safer way with minimum climatic negative effects, considering that the consequences of fossil fuels are not only the rise of Earth's temperatures and sea levels, but also health problems for humans (Kotcher et al., 2019). This transition is not strictly a technical change, since it is an observable social phenomenon as well, with changes and variations in knowledge, motivations, societal norms and values, and other contextual factors that are transformed and get embedded in society (Finley-Brook & Holloman, 2016; Edomah et al., 2020; Steg et al., 2018).

With the energy transition, it must be considered how it impacts citizens' lives. The set of policies that governments apply raise justice issues, specially concerning the distribution of benefits and burdens when projects are designed and implemented, as well as the inclusion of communities and stakeholders in participation processes. The relation between justice and energy, in a broader sense, refers to the equitable distribution of benefits and burdens of production and consumption, representation, fair treatment and respect by the authorities towards citizens (Knudsen et al., 2015; Jenkins et al., 2016). So, in some cases, the energy transition policies can create new environmental inequalities, injustices, vulnerabilities, and worsen the social risk of individuals (Sovacool et al., 2019).

Participation processes are particularly important for justice not only because citizens' involvement and their influence in decision-making are democratic attributes, but also because they strengthen legitimacy, project acceptability, perceptions of fairness, and the overall community's satisfaction with the process and the authorities (Bauwens & Devine-Wright, 2018; Ernst, 2019; Liu et al., 2020; Michels & Graaf, 2010; Mundaca et al., 2018; Roberson et al., 1999; Stober et al., 2021). Additionally, the legitimacy provided by a fair process is a possible remedy to gain the trust of citizens, strengthening the relations between the public and private world (Halvorsen et al., 2003; Wahlund & Palm, 2022). Furthermore, citizen's involvement improves decisions, contributes new information, ideas, and analysis, and addresses environmental concerns (Beierle & Konisky, as cited in Mouter et al., 2021; Butler & Demski, 2013; Perovic, 2008; Soeiro & Dias, 2020). However, if authorities do not execute the participation process genuinely seeking a participatory inclusion, they risk perpetuating or create injustices and lack of legitimacy, instrumentalize their citizens and even cause anger, distrust, opposition and being counterproductive (Innes & Booher, 2004; Serrao-Neuman

et al., 2018). Hence, the relevance for energy transition participation processes is because participants have the potential to effectively influence the decision-making, guarantee viability, enhance justice and facilitate the adoption of new energy sources by including all stakeholders and their values and interests, while the exclusion of key actors or an improper involvement can have negative consequences for communities, individuals and the projects (Innes & Booher, 2004; Perlaviciute et al., 2018; Serrao-Neuman et al., 2018; Schweizer & Bovet, 2016).

There can be variation among participation processes, from mere formality to actually giving the chance to participants to contribute to the policy by empowering them, including participation through the right of citizens to vote for specific policies, deliberation where citizens are heard and can interact directly with government officials, community ownership and control over their resources, among others (Kalkbrenner & Roosen, 2016; MacArthur, 2016; Stober et al., 2021; Webler, 2001). Nonetheless, the problem is that sometimes governments organize these processes as a mere formality, intending to give the sense to participants that their attendance means something to the policy and can affect it when, in reality, they have no possibility of being heard or provide any valuable insight into the project (Arnstein, 1969; Stober et al., 2021; Webler, 2001). By doing so, those governments or public agencies may instrumentalize the participation process by presenting the inclusion of citizens or organizations to legitimate themselves (Arnstein, 1969; Stober et al., 2021; Webler, 2001). This has implications for justice as well, because depending on the participation process method and application, procedures may result in inequalities and affect the outcomes (Arnstein, 1969; Stober et al., 2021; Webler, 2001).

Therefore, it is important to assess the depth and inclusiveness of participation processes so that governments can be aware and can learn how to improve justice, effectiveness, efficacy, and resource allocation for future applications. There are different ways of evaluating participation processes, depending on distinctive characteristics such as the inclusion of stakeholders and general public, the power those actors possess and the position they have in the process, and these features can be assessed as effective, or low to high quality (Arnstein, 1969; Carr et al., 2012; Petts, 2001; Rowe & Frewer, 2004; Stober et al., 2021; Webler, 2001; Yanni et al., 2017). The consequences of not having a participation process conducted accordingly are that it can create opposition led by frustration that hinders the procedures employed by authorities, would put at risk energy transition projects, and could harm the intention of governments to deliver public policies efficiently and fairly (Knudsen et al., 2015; Lennon et al., 2019; Serrao-Neuman et al., 2018).



In relation with what was mentioned in the last paragraphs, Chile has been an interesting case over the last years, experiencing a transformation of its energy sources into renewable energy. Despite having some barriers that hamper the energy production, the country has showed an increase, mainly in the production of solar energy, wind power and green hydrogen, where there still is a significant growth potential (Acosta et al., 2022). While the country is shifting its energy mix, during the development of the policies and projects different participation processes have been conducted. However, the quality of these processes is unclear because there is limited information on the participation processes beyond environmental impact reports written by Chilean public agencies that only describe these processes. What is possible to know is that in Chile the citizens participation and influence is dependent on decisions made by authorities such as SEA—which is the Environmental Evaluation Service part of the Ministry of Environment—, the mayor and the city council, and, additionally, municipalities lack infrastructure, preparation and participants have no binding attributions (Ley 19.300, 2024; Lostarnau et al. 2011; Montecinos & Contreras, 2021). Furthermore, the energy transition participation approach in the country, according to Flores-Fernández (2020), has the characteristic of being technocratic and non-deliberative, where citizens are only considered for formal participation processes seeking legitimization for decisions that were already taken.

The case of “Parque Eólico Chiloé” illustrates the situation in Chile. The local population, including indigenous communities, questioned the participation process by claiming that several issues were not considered by the authorities and that the state with this and other projects has exploited their natural and cultural patrimony while affecting their economic space (Astorga et al., 2017). Despite that, the project was approved by authorities but later the permission to build was revoked because of an appeal presented by the communities and organizations (Astorga et al., 2017; Garrido et al., 2015). This dynamic was extended through different environmental procedures and legal disputes via reclamations done by different organizations and communities (Astorga et al., 2017). After twelve years of the socioenvironmental conflict, in 2023 the project was approved by authorities to begin construction. However, a member of an NGO that opposes the project declared that they will continue with their intentions of stopping this project that harms the territory (Cooperativa.cl, 2023).

Although there is information from a general point of view of participation processes in Chile, the gap knowledge over the quality of individual participation processes does not allow authorities to be aware of what is wrong about the process and/or their actions, as a consequence, they do not know what it is necessary to improve these procedures. This lack of information gives a hint about an absence of any interest to provide modifications to the processes to ameliorate the weak spots in terms of quality and effectiveness. The issue with that is that not recognizing the areas of improvement of

the participation processes can lead to the perpetuation of ineffective processes and public engagement. (Daugbjerg, 1998; Irvin & Stanbury, 2004).

Because of the arguments given from this case, the goal of this project is to analyse and assess the participation processes of energy transition policies in two municipalities of Chile. The reason is to establish whether the positive outcomes the country has exhibited regarding renewable energy growth in its energy mix relates to the quality of the participation processes and what are the elements that defines that quality. In that way, in the context of insufficient data on these processes, it is a form for determining if Chile is managing to create processes that are fair and can provide further justice, legitimacy, transparency and improved decision-making to these policies. Consequently, the following question is formulated: What determines the quality of participation processes in the context of Chilean energy transition policymaking?

Moreover, the importance of assessing participation processes can be for literature and research as well. Since there is no consensus and clarity on general procedures to measure the quality of participation processes, the assessments depend on the focus on the research and the stage of the process, and considering that these kinds of procedures are valuable particularly for local governments as a way of enhancing legitimacy, justice and strengthen democracy, the contribution to the literature can be significant for future assessment of other participation processes (Arnstein, 1969; Chess & Purcell, 1999; Petts, 2001; Rowe & Frewer, 2004; Stober et al, 2021; Webler et al., 2001).

## **2. Literature Review**

### **2.1. Energy and Procedural Justice**

There is a connection between public participation and energy transition, as it was briefly mentioned. When discussing the participation of citizens in policies that affects them in relation to energy, it is important to consider that there is the idea of justice that relies on it. Energy justice is a normative perspective that refers to the “equitable distribution of benefits and burdens of energy production and consumption, as well as fair treatment of and communication with people in energy decision-making” (Knudsen et al., 2015, p. 301). In the same manner, Jenkins et al. (2016), explain energy justice as the allocation of the hazards, costs, externalities, benefits, and access to the energy system throughout society. Furthermore, they also include the assurance that due process and representation are respected by authorities in energy decision-making (Jenkins et al., 2016). Lastly, the authors, differently than

Knudsen et al. (2015) do, consider not only a fair treatment implicitly, but also recognition by having special consideration for the marginalized or vulnerable population of society (Jenkins et al., 2016).

Finley-Brook and Holloman (2016), similarly from the aforementioned authors, indicate that energy justice contains three different kinds of justice; distributive justice, which requires the proper allocation of benefits, costs and externalities, procedural justice, that is related to the access of the public to the decision-making power, and, recognition justice, is respect for people because of who they are, their values and interests. Specifically, procedural justice, according to said author, it is about self-governance, inclusion, and interactive participation as well (Finley-Brook & Holloman, 2016). That means that citizen's involvement in the participation processes is not about the mere fact of being present, but about being able to have the attributions to potentially influence the decision-making process.

An essential element of procedural justice is fairness in the processes, which basically is when citizens are respected, represented, considered, and equally treated by authorities (Knudsen et al., 2015). Moreover, perceived fairness is the point of view of the participants in the participation processes. According to Mundaca et al. (2018), when a procedure is perceived as fair and transparent, there is an increase in the perception of legitimacy of the outcomes in the participation process. In the same way, Liu et al. (2020) indicate that public participation can enhance the acceptability of a policy if the participants can influence major aspects of the process, and the overall procedure is perceived as fair. Furthermore, Roberson et al. (1999) studied the relationship between perceived participation and satisfaction, and the results showed that the former can have an effect on the latter by how fair was their experience in the decision-making process. In addition, the public input utilized by public authorities can increase the perception of a fair government, which, at the same time, gives the perception of fairness to citizens, having a positive impact in those who are uncertain about public agencies (Herian et al., 2012).

We can observe that the idea of justice is interconnected with participation, because if the public perceive that procedures are not fair, they are less likely to accept and comply with the decisions of authorities (Bouman et al., 2020; Mundaca et al., 2018). Therefore, in normative terms, it is expected from governments and public agencies that the participation processes they develop are fair for citizens in terms of openness, equality, consideration, and voice (Knudsen et al., 2015).

## **2.2. Public Participation Assessment**

The last section explains why it is essential to study participation from a justice perspective. This section reflects on how to assess the quality of participation processes. The given relevance in literature of the assessment of participatory processes is fairly new. Because of that, there are diverse views surrounding the topic on how to evaluate and what can be considered as effective or high quality. Furthermore, many authors have discussed from a normative perspective what should include a participatory process to be “good”. Since we are talking about the involvement of different parties in a public process, it is significant for the discussion to establish how it is supposed to be, how the individuals or groups should participate, in what part of the process, what value do they bring to the process and why public agencies decide to do participatory processes.

For many years the assessment of participation processes has been a challenging subject, with many different perspectives converging, that highlights the complexity of defining and measuring the quality and effectiveness of the processes. Rosener (as cited in Rowe & Frewer, 2004) established four inherent problems with assessment; the concept of participation is complex and value laden, there is not a general criterion to measure the success or failure of an exercise, there is no agreement on evaluation methods and that there are few reliable measurement tools. So, it is very difficult for researchers to agree in a universal definition, thus, it depends on the viewpoint of what the evaluator gives relevance to and how he or she would measure that. To be able to work on an assessment they would need to provide a definition of what effectiveness is and operationalize it (Rowe & Frewer, 2000; 2004).

Chess and Purcell (1999) align with Rowe and Frewer (2004) regarding that a framework and its dimensions depend on the purpose or the point of view of the evaluator. For them, there can be two focal points in which researchers can define a participatory as success (Chess and Purcell, 1999). The first kind of research are those that evaluate the participatory process in itself as a possible success, and the second is when they evaluate the outcomes of the process as a success. Similarly, Carr et al. (2012), who argue from the perspective of water resource management, classify evaluation methods into three groups, adding an intermediate one in relation to Chess and Purcell (1999): the assessment of the quality of the participation process, an intermediary evaluation that focus mostly on nontangible outcomes (e.g. agreements or institutional changes) and the assessment of resource management outcomes by achievements that were made.

There are authors that put deliberation as a central component in the evaluation of public participation processes. Abelson et al. (2003) presents this topic with the identification of two principles, fairness and competence, which are goals that establish what requires a good public participation process

(Renn, Webler, as cited in Abelson et al., 2003). The authors explain that there are four key elements of a deliberative process: representation, structure of the process, information used and the outcomes of the process. With respect to the two principles, by fairness they refer to an equally distributed opportunities to participate with meaning in all aspects of the process (Abelson et al., 2003). On competence, they mean that participants are provided with tools such as knowledge and understanding of the actual process with access to information and learning how interpret that (Abelson et al., 2003). So, by focusing on deliberation on a process while determining equal opportunities, purposeful participation and the competence of the participants with knowledge and resources, it is possible to evaluate a participation process. Nonetheless, as Rowe and Frewer (2000; 2004) do, Abelson et al. (2003) establish that “the empirical studies reviewed (...) suggest that some methods are preferable to others depending on the goals of participation” (p. 248).

Both Petts (2001) and Webler et al. (2001) feature as well deliberation, representativeness and fairness in the process as a significant aspect of an evaluation, and for Webler et al. (2001) access to information is an essential aspect too, as for Abelson et al. (2003). However, on one hand, in a more specific manner than Abelson et al. (2003), Petts (2001) points out that an assessment should also take into account information and knowledge access, the engagement of within-group dissent, expert challenge, claims testing, making a difference to participants, the promotion of consensus, making a difference to decisions and transparency/openness (Petts, 2001). On the other hand, for Webler et al. (2001) a framework should consider that the process must be legitimate, promote the search for common values, promote democratic principles, promote equality of power among the participants and their viewpoints and that the process should encourage responsible leadership.

A relevant framework from the literature was introduced by Arnstein (1969), who was one of the first to study and propose a way to assess the quality of participation's processes. The author came up with a metaphorical ladder that possesses eight different levels of participation and the degree in which the citizens are involved, with three categorizations among these levels: citizen power, tokenism, and non-participation. The degree varies on how much power do the people have during the process, from total manipulation where the public have no influence over the decision-making process, to citizen's control, where citizens have total control on the decisions being made, from the beginning of the process until the implementation of the policies. Therefore, he focuses on how authorities delegate or not their power to the citizens, by for example making them believe by giving them a false sense they are contributing to the process, or perhaps, deeply caring about their opinion and letting them guide the whole course of action.

Arnstein (1969) does not talk about fairness and competence as Abelson et al. (2003) and Webler et al. (2001) do, meaning that he did not consider that among there could be an imbalance of power, something even more important in the present days with the inclusion of different set of diverse actors such as non-profit organizations and companies. Nevertheless, some could interpret from this author's that it is obvious that equal power (when he established citizens control as the highest level) over the process and competence (as the only way to give control to citizens) are characteristics to take into account when analysing the margin of influence citizens may have (Arnstein, 1969). Furthermore, Arnstein (1969) did point out about the provision of knowledge and education to deliver a capable performance from the participants, which in the case of Webler (2001) and Abelson et al. (2003) are mentioned from the perspective of access and not instruction.

Yani et al. (2017) utilized the Arnstein's (1969) framework to assess the quality of participation in local governments in Indonesia. However, instead they defined their own dimensions to operationalize and measure the participation levels. The components the authors include are access (involvement on the process), control (power or control over the decision-making), awareness (understanding of the citizens of their position) and benefit (estimation of the role of the community as having or not an impact) (Yani et al., 2017). This classification can show different degrees that are associated with a quantitative and quality methods. For instance, part of their results evidence high degree in access and low in awareness, which signifies that the participation of citizens is considered as tokenism, meaning that people can argue and propose the program, but the final decisions are determined by the government, thus, their participation is a mere formality.

Stober et al. (2021) develop their own assessment framework for participation processes focusing on the process itself, based on three dimensions: rationales for participation; inclusiveness and participation level. The first is about what is the main reason for citizens to participate, and in a similar manner as Arnstein (1969), is to find out if the participants are used to legitimize the process without truly having the opportunity to modify the course of action of the policies or their outcome. Inclusiveness means that stakeholders and the general public were part of the process, if were they or not actors that were excluded and if they participated through the entire process. The third dimension, the participation level, similarly to Arnstein (1969), and Webler et al. (2001) when they mention equal power among participants and making a difference to decisions, refer to how much power and consideration over the opinions in the process of decision-making the stakeholders and general public had. Stober et al. (2021) do not consider Petts et al. (2001) and Abelson et al. (2003) perspectives on deliberation as consensus seeking, and they only focus on the participation and the openness of it something that really defines the quality of participation. Although when defining their dimensions,

they do not point out the expert challenge like Petts et al. (2003) do, they make their assessment by interviewing different set of experts that were part of the processes. The problem is, with both considerations, that general public or even stakeholders could have something to say or contribute without the necessity of having in-depth knowledge on the issue.

In sum, as we can observe, all authors mentioned have a normative and democratic perspective of what should be considered an appropriate way to assess a participation process. The difference already established is that some may focus on the process itself, while others on the outcomes. For this case, because some policies can take years or even decades for the outcomes to become visible, the proper path to proceed was to concentrate on the process of participation and the dimensions that those assessments include. Moreover, an evaluation of a public participation process ideally intends to include a diversity of stakeholders and general public with the purpose of having the right to change the course of action of the policy they are part of. Therefore, it is pertinent to establish that the framework should be about the process and what was the objective of it, with the rules that were defined beforehand and, evidently, with the corresponding features of being open due to, perhaps, democratic deficiencies, justice, and legitimacy issues.

*Table 1: Evaluation criteria approach by author*

<b>Authors</b>	<b>Evaluation criteria approach</b>
Abelson et al. (2003)	Fairness (equal participation opportunities), consensus seeking, deliberation, and competence (provision of necessary tools and information to participants).
Arnstein (1969)	Three categories for eight levels of participation from least power to most in the participation process: nonparticipation (manipulation and therapy), tokenism (informing, consultation and placation), and citizen control (partnership, delegation, citizen control).
Carr et al. (2012)	Evaluation methods are classified into three groups: quality of the participation process, intermediary evaluation focus on non-tangible outcomes and assessment of resource management outcomes based on achievements.
Chess and Purcell (1999)	Assessment divided into process success and outcome success. Frameworks depend on evaluator's perspective and purpose.
Petts (2001)	Evaluation should consider representativeness, fairness, deliberation, within-group dissent, expert challenge, claims testis, consensus-seeking, impact of participants on decisions and transparency/openness.
Rowe and Frewer (2000; 2004)	Recognize the lack of universal criteria, the difficulty of agreeing with methods and indicates that it should be established a common definition of effectiveness.
Stober et al. (2021)	Evaluation based on three categories with their own dimensions: rationales for participation (legalistic, normative, instrumental and substantive), inclusiveness (narrow or broad) and participations levels (information, consultation, involvement, collaboration and empowerment).
Webler et al. (2001)	Assessment should consider legitimacy, the promotion of common values, democratic values (fairness and equality), power balance among participants and responsible leadership.

Yani et al. (2017)

Same categories as Arnstein (1969) but different dimensions: access (involvement), control (power on decision-making), awareness (citizens about their position), and benefit (impact of the community).

### 3. Conceptual Framework

This section explores Stober et al. (2021) framework, through which the participation processes of this research were assessed, since it was concluded that it was the most appropriate and complete framework of the ones studied on the quality of participation processes for this context. It applies here because we are seeking to assess the quality of the process and not the outcomes of it and, additionally, it has a clearer categorization of the dimensions and procedures to measure them. Stober et al. (2021) framework also considers a key aspect related to justice which is fairness during the process, focusing on the level of power and influence that stakeholders may have and the equality and collaboration among them.

However, the research conducted by Stober et al. (2021) included as subjects only experts of the participation processes excluding stakeholders and the general public. Thus, it did not consider the point of view of these actors that can be essential for the processes, and who might have a different experience from the activities carried out. It is necessary to consider that experts can be less critical over projects that may not affect them, and for that reason it is key to consider the population that can suffer from the outcomes or benefit from them.

Furthermore, a part of the framework developed by Stober et al. (2021) gives attention and importance to techniques and technology used in the process. They asked their research participants for information regarding “innovative, non-ordinary practice as compared to the national context regarding the design of the participatory planning process, the tools used (...) and technologies applied for public participation” (Stober et al., 2021, p. 4). For the framework that will be utilized in this work, it will not be taken into account techniques and technology. The latter, according to Chess and Purcell (1999) do not determine process or outcome success, because it does not depend on innovative features regarding technology, but instead on how the process itself was planned and executed. Nevertheless, they argue that techniques are not decisive per se, but they can improve the quality of the participation process by mixing different methods that can allow greater range of inclusion of participants (Chess & Purcell, 1999). For that reason, techniques, such as information sharing or a deliberation process, are assumed to be part of the dimension of the participation levels



because once asked about these to the participants it will be possible to know the kind of technique taking part in the process.

The framework establishes how low or high is the policy's quality, and considers three levels: rationale for participation, inclusiveness, and participation levels (Stober et al., 2021). The authors explicate that rationales refers to what motivations do public agencies have to organize participation. Inclusiveness has to do with who participates and what stages of the policy or project, where stakeholders and members of the public are considered as beneficial for the process (Stober et al., 2021). Finally, Stober et al. (2021) indicate that participation level relates to the amount of power the participants have during the participation process.

In the dimensions of rationales for participation, the legalistic rationale participation processes are set up only to meet formal and legal requirements, with no restrictive efforts to enhance the results of a policy (Stober et al., 2021). Stober et al. (2021) explain that in the case of the normative rationale, the public is capable enough of being involved in decision-making that concerns them, and the participation process is open and fair. Instrumental rationale refers to the fact that effective participation improves legitimacy of decisions and points towards enhancing outcomes; values are to be integrate into the decisions; and policy objectives are not open for discussion (Stober et al., 2021). The last rationale for participation Stober et al., (2021) indicate is substantive, related to a higher quality of participation, and it is where judgements of non-experts are as valid and reasonable, or even more, than the ones the experts offer. They also see problems and solutions that those experts might bypass, improving the quality of decisions. Here policy goals can be modified (Stober et al., 2021).

The variable inclusiveness of stakeholders and general public includes two dimensions; narrow and broad (Stober et al., 2021). Both dimensions relate to the involvement of participants from the perspective of range and diversity with consideration of the potential number of individuals and organisations that may partake in the process and for how long they participated compared to the complete duration of the process. According to Reed et al. (2017), Conrad et al. (2011), Eiter and Vik (as cited in Stober et al., 2021), a broader range of different stakeholders and the general public is beneficial to participation processes, ideally those who are affected or can be affected by the decision-making process. Similarly, the logic applies to the time of involvement, where if the decisions may affect them, their participation should be for a span close to the entire process to ensure they are not excluded from fundamental phases of it.

The levels of participation have five dimensions, and are essentially based on power, trust, and social learning (Stober et al., 2021). The lowest level of this dimension in Stober et al. (2021) framework is information, where the objective is to give the public and stakeholders reliable information to guide them into understanding the issues, opportunities, and alternative solutions. For instance, it can be done through official websites. The subsequent low participation level participation level is consultation, when, for example, via meetings, organizers acquire feedback from stakeholders and the general public on analysis, alternatives, and decisions (Stober et al., 2021). The medium level of participation according to Stober et al. (2021) is involvement, where during the decision-making process, authorities work directly and continually with the stakeholders and general public, enabling comprehension and pondering of their input, for instance, through workshops. After this participation level, there is collaboration. It refers to when the general public and stakeholders—and not necessarily the inclusion of authorities since they can also work independently—collaborate and cooperate in each stage of decision-making, from the formation of alternatives to the identification of preferred solutions (Stober et al., 2021). An example of this is advisory committees. Finally, the last and highest participation level in Stober et al. (2021) framework is empowerment. This level consists of the general public and stakeholders having the final decision-making power, for instance, via citizen juries (Stober et al., 2021).

*Table 2: Variables and dimensions of the framework*

<b>Variables</b>	<b>Dimensions</b>
(a) Rationales for participation	Legalistic Normative Instrumental Substantive
(b) Inclusiveness of stakeholders and general public	Narrow Broad
(c) Participation levels	Information Consultation Involvement Collaboration Empowerment

Based on Stober et al. (2021) framework.

The aforementioned three variables are interrelated, establishing by their relation the quality of the participation process, in the following way (see Table 3): first, when a participation process has a legalistic or normative rationale, a narrow or broad inclusiveness and a low level of participation (information or consultation), it is assessed as low-quality. Second, when the process has an instrumental rationale, a narrow or broad inclusiveness and a low level of participation (involvement), it is considered as an intermediate quality policy. Third, a participation process is defined as high-quality when it has an instrumental or substantive rationale, a narrow or broad inclusiveness and a medium level of participation (involvement). Lastly, when the rationale is substantive, the inclusiveness is broad and there is a high level of participation (collaboration or empowerment), the process is of the highest quality.

*Table 3: Quality of a participation process according to the dimensions*

<b>Rationale for participation</b>	<b>Inclusiveness</b>	<b>Participation level</b>	<b>Participation level category</b>	<b>Quality</b>
Legalistic or Normative	Narrow or Broad	Information and/or Consultation	Low	Low
Instrumental	Narrow or Broad	Information and/or Consultation	Low	Intermediate
Instrumental or Substantive	Narrow or Broad	Involvement and/or Collaboration	Medium	High
Substantive	Broad	Empowerment	High	Highest

Based on Stober et al. (2021) interrelationships of the dimensions.

## **4. Methods**

### **4.1. Research Design**

To address the research question “What determines the quality of participation processes in the context of Chilean energy transition policymaking?” a theoretical thematic analysis with qualitative approach was taken place (Braun & Clarke, 2013). The research was a combination of case analysis and application of semi-structured interviews through the lenses of a specific framework that helped to define and understand the quality of the energy transition participation processes.

### **4.2. Case Selection**

The significance of selecting specific cases in the research will contribute to answer the established research question. Before that, it is appropriate to provide a contextualization of the cases. The political-administrative division of Chile consists of 16 regions, composed by 54 provinces that are subdivided into 346 communes (*comunas*) in total, which are ruled by local governments called

municipalities. Because of a deep unitary centralized state structure, municipalities are considered to have limited autonomy (Dazarola, 2019). Chilean law regarding their functions establish that their objective is to “satisfy the needs of the local community and assure their participation in the economic, social, and cultural progress of the respective communes” (Ley 18.695, 2024). As the law defines it, together with Ley 19.300 (2024), Article 18 (modified by Ley 20.417), municipalities have to consider the participation of their population, which is the case for general public participation processes that includes energy transition policies specifically in the Ley 21.455 (2022), that indicates the reason for citizen’s participation process when an environmental impact assessment is conducted by the SEA through the SEIA.

The cases selected for this research are two solar energy projects, each from a different municipality, province and region. Both are part of the centre area of the country, far away from the massive renewable energy projects located in the north, mainly around the Atacama Desert. During the last years the over-supply of northern regions had an excess of energy that cannot be transmitted in its totality because of lack of infrastructure to move the energy, so some of it gets lost (Badal, 2024). For that reason, many projects have been moving to the centre and south zones, even though the radiation and energy production potential is less in comparison to the north. Thus, new projects have appeared in a territory with higher population density due to a less extreme environment. These projects, even though the majority are of a smaller scale, they usually are located closer to human settlements. So, it is possible to speculate an importance of participation and attention from the communities.

Since the recent projects have moved towards the centre and south, there were more options to select in the centre zone of Chile for the 2023, same year selected for both cases to have comparable institutional context and a recent date in order to ensure that participants could recall details about their participation. Besides that, there were a few publicly available participation documents of energy projects, so options were limited when searching for cases.

The focus was specifically on two solar energy projects within the same area of the country because beyond territorial, project size, and local government differences, the cases have similar conditions on climate, in the construction process, and in a centralized political institutional background. Therefore, it was to make it more evident for the research analysis the possibility of inner disparities from a societal, political and institutional point of view rather than focusing on the technology applied. The fact that two cases were selected was due to constraints regarding time, resources and the need for in-depth analysis. By having these cases it was possible to have a more detailed and rigorous assessment, considering the difficulty of contacting participants.

It is possible to generalize to a certain extent with two cases because in Chile, as it was mentioned before it is a centralized state with laws that applies to every region equally. By having two cases with similar socio-political conditions, it would be possible to provide insight into what factors can determine the quality with a comparison of procedures that follow the same and extract what define the differences.

The cases that were assessed and analysed are shown in Table 4:

*Table 4: Cases by location and population*

<b>Project</b>	<b>Region</b>	<b>Province</b>	<b>Municipality</b>	<b>Population (2017)</b>
Planta Solar El Milagro	VI Región (L. G. B. O'Higgins)	Cachapoal	Doñihue	20.887
Parque Solar Parral	VII Región (Maule)	Linares	Parral	41.637

Note: as shown in Table 4, municipal data was sourced from Biblioteca del Congreso Nacional de Chile (2024)

Planta Solar El Milagro (PSEM) consists of the construction of a photovoltaic solar central of 6 MW AC (SEA, 2023). It has approximately 10.080 monocrystalline silicon panels, which also include the construction of a 15 KV power line, which will be connected to the supplier “El Milagro” to provide energy to the National Electrical System (SEA, 2023). The project will be developed in an area of 10,5 hectares, while the power line will have an extension of 0.29 km (SEA, 2023). It will operate for 30 years, having the option of an extension depending on the technological improvements over the next years that can change the panels and the market conditions (SEA, 2023).

The Parque Solar Parral (PSP) involves the construction and operation of a photovoltaic plant, with 340.632 of bifacial monocrystalline silicon panels with 590Wp each and an energy peak power of 201 MW for the whole project (SEA, 2023). It also includes the construction of a 15.9 km power line to transport the energy to an existent station (SEA, 2023). The solar park will be located between the communes of Retiro and Parral and the used surface will be of 450.6 hectares between the panels and the power line.

It is valuable to consider that in 2024, after the participation processes of these cases, there was a modification in Article 88 of the Decree 40 (Ministerio de Medio Ambiente, 2024). This decree adds apart to the radio diffusion and a mandatory publication of the main characteristics of the project in the Dario Oficial or local newspaper, a new mandatory condition for developer companies, which is to instal one or more informative billboard, depending on the size of the project (Ministerio de Medio Ambiente, 2024). They will have to be located where the project will happen, and it has to be visible

and legible for the community. The billboards must remain through the entire evaluation of the project or activity.

### **4.3. Data Generation**

#### **4.3.1. Project Documentation**

To answer the research question two method approaches were used. The first was a document analysis in each of the municipalities by exploring the reports available about the process. That information provided a general idea of how the process was organised, which are the actors that were included and what were the activities during the process. It also provided the official viewpoint of the public authorities—the SEA—of the entire process since they are responsible for writing the documents, which later gave a contrast point between the first and the second method.

The documents selected are reports that present a general description of the project consisting of the location, the characteristics, such as the kind of energy developed, the potential production of the energy sources, the duration of the construction process, and the name of the project and the developing company. It includes the date of the resolution acceptance as well by Chilean authorities, the DIA publication, the dates of the broadcasting that announces the participation process, the people contacted for the process, the relevant actors, the topics to discuss, the activities for the process and the location of them, and the attendance list of participants (SEA, 2023).

Some of the limitations weaknesses are that it could have potential biases from the writers, insufficient context for the research and limited accessibility (Creswell, 2013). Therefore, the reason for integrating the document analysis with the semi-structured interviews as a complement because it corroborates the data of the interviews, provides a more comprehensive context and presents insights that may not be possible to get with solely the interviews (Bowen, 2009).

#### **4.3.2. Interviews**

The case analysis of official documents worked as a complement to the second method which is semi-structured interviews. It consisted of preestablished questions, which followed an interview guide or questionnaire, but allowing flexibility and openness from the interviewer and interviewee, making it more dynamic and in depth, since both of the parties can add information and questions outside of the predefined structure (Adams, 2015; Wilson, 2013). One of the reasons for carrying out interviews is the limited number of participants in each of the cases of participation processes and, specifically, semi-structured interviews enable more detailed and highly qualitative insights when compared to

other methods such as surveys (Marshall & Rossman, 2016; Silverman, 2013). The method compensates the lack of participants by providing a set of questions that can be linked to the dimensions and therefore, define the quality of the process. Additionally, it gives also adaptability to the interview itself, where the interaction between the interviewer and interviewee can bring a layer of depth, something that most structured interviews cannot (Bryman, 2016; Creswell, 2013). Accordingly, in this specific study, a semi-structured approach enhanced the position of source of data by enjoying the dynamism of the interview where they felt the receptiveness and fluidity of the conversation providing the option to share more than is already established by the questionnaire.

Nonetheless, semi-structured interviews may have certain limitations. According to Denscombe (as cited in Wilson, 2014), there “can be an “interviewer effect” where the background, the sex, the age, and other demographics influence how much information people are willing to reveal in an interview” (p. 26). Also, the interviewers need training and experience on interviewees to avoid influencing what the participants say during the interview (Wilson, 2014). Similarly, interviewers can unwittingly provide cues that can guide the interviewees into a specific response (Wilson, 2014). Lastly, another limitation is that an excessive amount of flexibility during the interview might complicate the comparison between answers in the research (Wilson, 2014).

Despite these limitations, it is important to recognize that the interviewer always has an effect and cues what the interviewee expresses, since he/she or their team is who designed the questions for this particular context and has to put it into practice. Even though training was not attained, experience was gained during the process. Furthermore, a questionnaire was applied, following each of the questions but allowing flexibility for follow-up inquiries. The interviews were recorded and transcribed to allow accurate data analysis and minimize misinterpretation or loss of information. Afterwards, coding was employed to ensure that responses were systematically categorized as data, which were then triangulated with the document analysis.

The subjects selected to be interviewed were stakeholders, where each of them represented their own interest. The condition to be part of the study was that the individual was involved personally in the participation process, attending at least one of the activities. Among the stakeholders there were people that are part of neighbourhood organizations, so they participated in formal representation of their community. However, in the case of the SEA representatives, they could not participate due to norms that impede to give their own opinions on a project and asked to go through official channels and wait for permission of the organization to be allowed to be part of the research, which determined that it was not possible. Similarly, the municipal workers were reluctant to participate and did not

accept to be interviewed or simply did not respond when asked to be part of the study. The company, in charge of the project, or a third-party company, which was contracted by the developer to deal with the process, are considered a stakeholder as well, so it was important to listen to what they had to say about the participation process they conducted. Finally, there are individuals that participated independently seeking to find out about aspects of the projects that could affect them.

The variables and dimensions of Stober et al. (2021) framework were measured through the analysis of the response of 8 participants, as was pointed out before, to a semi-structured interview done online and in Spanish (see Appendix A and Appendix B). Each person was asked a previously made set of questions, except the ones that the interviewer added in the process (see Appendix A). The interviewees were asked about what they saw as the motivations and goals of the public agencies to organize the participation process (rationales for participation). Moreover, they were inquired if stakeholders and general public (themselves too if it applies) were represented in the process and if they were part of the entire process or only for a period of time that is shorter than the duration of the entire process (inclusiveness of stakeholders and general public). Lastly, they were asked about the participation levels in relationship to in what consisted of their participation, what were the activities involved, if were they part of decision-making, among others (participation levels). Therefore, as it was indicated, the interviews approach added openness and flexibility, where later their answers were analysed and given an association to each of their variable and the dimensions from it.

*Table 5: Interviews*

<b>Planta Solar El Milagro</b>	Interviewee	Interview Mode	Date	Duration
Community	ID 1	Online	18-03-2024	59m 20s
	ID 2	Online	02-04-2024	24m 50s
	ID 3	Online	10-04-2024	29m 49s
Company	ID 4	Online	14-03-2024	39m 18s

<b>Parque Solar Parral</b>	Interviewee	Interview Mode	Date	Duration
Community	ID 5	Online	02-05-2024	33m 52s
	ID 6	Online	23-05-2024	26m 04s
	ID 7	Online	10-08-2024	46m 12s



On Table 9 and Table 10 (see Appendix B) we can observe each of the variables and dimensions, and questions associated to them. The questions are linked to a dimension and their correspondent variable. In some cases, one question applies to more than one dimension because the nature and depth of the question can, at the same time, relate to the rationales of participation and levels of their participation. Each of the dimension's part of a variable are of the ordinal kind, meaning that when interrelating with the other two dimensions, one of a variable each, it results in a category of quality that has a determined order, except for the broad and narrow dimensions.

#### **4.4. Data Analysis Methods**

The data was collected to measure the variables included (1) the rationales for participation, (2) the inclusiveness of stakeholders and general public, and (3) the participation levels (see Table 2). The questions were asked to assess the participation process through the answers given by the interviewees. These questions considered key issues related to the variables such as participation dynamics and time frame, decision-making, information access and power.

The qualitative data that resulted from this, via the response of the subjects, was structured in an Excel spreadsheet according to each variable and their categories, in relation to the questions and the responses of the interviewees. The questions were presented in rows, whereas the interviewees were in the columns. Each cell between the question and the interviewee represented the data extracted from the response given by participants that provided valuable information to the question. This method is a deductive coding approach, which refers when the coding is done with a pre-existing framework that guides the process, in the case of this research was based on Stober et al. (2021). As Elliot (2018) indicates, coding is “essentially indexing or mapping data, to provide an overview of disparate data that allows the researcher to make sense of them in relation to their research questions” (p. 2851). Thus, by coding the data provided by the interviews, it was possible to give a sense to the answers by categorizing them in an organized manner so that it could facilitate the analysis among diverse answers to similar questions, favouring even more the process with the pre-established framework.

Excel was utilized for data analysis and not qualitative data analysis software because working with the Stober et al. (2021) framework was straightforward to apply. It offered a logical structure approach, simple to employ the codes and categorization. Additionally, because of the framework and

the scale of the dataset, the data was manageable. Moreover, familiarity with Excel and a needed accelerated pace permitted to efficiently handle the coding, all while maintaining rigor and transparency.

Each of the questions had a direct link to a dimension (see Appendix B), however, responses provided in a semi-structured interview, as it was mentioned before, can be open, so what could have been answered for one question could have given insights on a different dimension that intended in the first place. Then, after the data from the responses was categorized accordingly to their dimension, there was an evaluation that considers all the interviewees of a project and their answers in relation to a specific dimension, and with that, a further conclusion came up in a way that it was possible to decide if the response in form of data could effectively be considered to be sufficient for the classification of the existence of the dimension. For instance, if all the interviewees of a project mentioned that the general public did not have the final decision-making power, it was obvious to establish that empowerment could not be a high dimension for the participation levels of the project.

Finally, as previously indicated, the findings, based on Stober et al. (2021), enabled to draw conclusions on the variables; rationale, inclusiveness, and participation levels, which interrelate with each other and allowed to define the quality level of the participation process. On Table 3 it is possible to observe the interrelationships between quality levels.

#### **4.5. Ethical Issues**

For the process of data collection, there were some ethical issues that arose. Since the methodology of this proposal considered interviews with different stakeholders and the general public, there was sensitive information that had to be provided, which could have had negative consequences for the participants. Because of that, measures were taken. For their safety and to have this process done as transparently as possible with the interviewees, consent was asked from them over the use of the information they provided. In addition, it was offered to keep them as anonymous sources and keep the information they shared confidential. Moreover, the interviewees were able to withdraw during their participation in the interview or the permission given to use their data. The proposal for the interview was applied for ethical approval through the proper channels of the university.

#### **4.6. Method Reflection: Trustworthiness of the operationalization**

This qualitative research has an interpretative approach, focusing on the process, trustworthiness, consistency, and authenticity (Creswell & Poth, 2018; Lincoln & Guba, 1985; Shenton, 2004). It

means that the obtention of results is regular, stable, and consistent over time and they can be applied or generalized to other contexts, accepting a margin of variability (Leung, 2015; Lincoln and Guba, 1985; Shenton, 2004). The reason is because of the nature of the process in which the data is extracted, referring to the interaction between the interviewer and interviewee, where the former does not only have pre-defined questions but also improvised ones resulting in different new questions for each of the participants.

The process of the methodology, the consistency, and the authenticity are all part of trustworthiness, which, at the same time, is established by four different elements; credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985; Shenton, 2004). Credibility refers to when the researcher is looking to ensure that the study is measuring what it intended, meaning if there is congruency between findings and reality (Shenton, 2004). Transferability seeks to ensure that the findings are applicable in other contexts always by providing enough background description for future research, keeping in mind the possible differences and variations of the phenomenon over time (Shenton, 2004). Dependability focuses on the thoroughness of the methods and their effectiveness (Shenton, 2004). Therefore, is related to consistency and transparency, because it looks to open up the process of the study to the readers by exposing the researcher's biases and steps in the documentation of the data collection, analysis, assessment, and findings (Shenton, 2004). Thus, other researchers can follow the same path and verify those findings. Confirmability aims to guarantee that the findings are as objective as possible, based and shaped by the data, and not by the researcher's biases while acknowledging possible researcher influence in the analysis (Shenton, 2004).

Concerning trustworthiness and its four elements, Creswell and Poth (2018) present different validation strategies for the research, where four of them apply to this case. First, is *generating a rich, thick description*. The authors refer to this as when there is a detailed and comprehensive description of the research, the readers decide for themselves if the results are applicable, or transferable, to other scenarios because of shared features (Creswell & Poth, 2018). Secondly, is *having a peer review or debriefing of the data and research process* (Creswell & Poth, 2018). It entails looking for an external expert with knowledge and familiarity with the research or the phenomenon that is being studied. The third one is *corroborating evidence through triangulation of multiple data sources* (Creswell & Poth, 2018). This strategy consists of using different sources, methods, investigators, and/or theories by triangulation to clarify and validate the data extracted from the research. Lastly, is *clarifying researcher bias or engaging in reflexivity* (Creswell & Poth, 2018). The researcher discloses and comments on "past experiences, biases, prejudices, and orientations that have likely shaped the interpretation and approach to the study" (Creswell & Poth, 2018, p. 444).

In order to comply with these strategies, a case analysis was performed to observe the quality of the participation process through the documents available to the party. By this, it was possible to triangulate the research with the interviews that were conducted, since the interviews gave different perspectives of diverse individuals that helped to develop a more complete analysis, assessment, and description. Moreover, for a thorough description, apart from the consideration of documents, it was utilized information as well available online that gave a depiction of the municipalities, including the region, province, the size of the population in each municipality, and the main characteristics of the area of the country in which they are located.

Furthermore, the trustworthiness of this work, and given the case, the questions had to be about the direct involvement in the participation process, which had to be discussed by their observation, attendance, and contribution during that process. This means that before going straight to the interview, a contextualization of the process was given, intendedly unbiased, to the individual as a reminder of what event was being discussed. After that, questions about the process itself were asked, with the dimensions intertwined instead of having each of the questions associated with a dimension. Additionally, for the sake of transparency, by focusing on dependability and confirmability, there was a disclosure of the steps taken in the assessment of this research and an acknowledgment of possible bias, by including a description of the process, the appendixes, and datasets.

The consideration of this methodology had to do with the possibility of evaluating what is intended, taking into account the role of the participants, how deep their participation was, if they were included in the decision-making process, if they were part or not of the entire process, among other things, by sharing their experience of the process in a manner that does not limit them. Finally, the role of the supervisor of the study is who took the role of reviewing, which could give further validation to the research.

Previously it was explained that a deductive coding approach was applied, which had a pre-defined set of codes based on the theoretical framework of Stober et al. (2021) (see Appendix C and Appendix D). Excel was used, where each project was worked on independent spreadsheets. Using this software helped to provide consistency by analysing the data systematically through the codes and applying those coherently via the framework. Because having a single coder faces risks and limitations, regular supervision allowed, as well, to ensure said consistency and diminish any biases, providing further reliability and validation for the application of the coding framework and the results.

It was also pointed out that each of the codes represents a question of the interview, which is associated with one or more dimensions (see Table 9 and Table 10). If a response of an interviewee

expressed more information than the dimension(s) it intended to explain, the data was interpreted and put into the corresponding code/question that applied to. The data within a code was included in the cases that a response to a question was directly being answered, or if the response offered sufficiently useful information, it was applied to a different code/question that intended in the first place.

On the contrary, if the response was not sufficient, meaning that did not have any utility for the meant question or any other one, the data was disregarded. Most of the questions were Yes/No questions, so their consideration for a code was straightforward, but some of them needed to be interpreted if they presented nuances. The codes defined as “Participants” and “Participation duration”, which are not Yes/No questions, were determined based on the dimensions of the variables (Broad/Narrow), as in judging if the stakeholders were represented and if the duration of the participation of the interviewees was during the whole process or parts of it. In addition, the code “Objective of the participation” had the data based on the general objectives of what the participants mentioned and how those apply to the dimensions of the “Rationales for participation”. Moreover, since the consideration for the dimensions needed to be overall and not by individual responses, for each code, there was an interpretation of what is the predominant response by the interviewees. Based on that it was decided if there was agreement or disagreement, to establish if for that dimensions it could be considered if there is concordance. In the cases where there were dissimilarities in the answers, the presence of the dimensions was defined as weak or absent. Each of the interpretations and considerations utilized the official documents as a way of complementing the data.

## 5. Results

### 5.1. Planta Solar El Milagro

*Table 6: Assessment results of Planta Solar El Milagro*

<b>Variables</b>	<b>Dimensions</b>	<b>Results</b>
(a) Rationales for participation	Legalistic	Red
	Normative	Red
	Instrumental	Green
	Substantive	Red
(b) Inclusiveness of stakeholders and general public	Narrow	Green
	Broad	Red
(c) Participation levels	Information	Red
	Consultation	Green
	Involvement	Red

	Collaboration	
	Empowerment	

The information available is a general description of the project and the participation process, that indicates the kind of activity that occurred, which in this case are called, “Readiness meeting and Citizen Dialogue” and “Workshop”. However, there are available on the institutional website of SEA the observations that the citizens made, which are comments or suggestions on what they thought about the project, what they proposed and what changes they would like to make to it. So, we can observe from the report that their participation is not limited to attend the process, but also to establish their point of view through the online observations. Although this information exists, the only way to find out really on the details of how the participation process went is by interacting with those who were present, which is what this study did by conducting the interviews. It is worth noting that the report does not describe the dynamic of the participation process, so there is no information about how they were, how things developed and concluded, meaning that it is not possible to know what the discussions were and if there were any problems or major issues.

### 5.1.1. Rationales for Participation in the PSEM Project

Firstly, individually the interviewees respondents had a general agreement on the possibility of improving the policy outcomes in relation to the goals of the project, saying that certain changes could have been applied by the consideration of the formal observations the participants made, either online through SEA website or in the participation process itself (ID 1, ID 2, ID 3 & ID 4). Therefore, it is pertinent to say that the project did not have **legalistic** rationale for participation because the process was not only made to meet legal requirements, but also to consider the participants suggestions.

Even though the company considered what people had to say, the community agreed that the process was open but not fair, because the broadcasting of the participation process, a legal requirement done by the municipality, was scarce and for a brief period of time, not enough to reach a greater amount of people to find out about the participation process (ID 1, ID 2 & ID 3). That resulted in low attendance of the neighbours, that forced the company to proceed with a second diffusion and participation process, not by obligation but done by the company’s voluntary actions. Moreover, all the interviewees answered the same when it came to an active role in decision-making, which was a negative response (ID 1, ID2, ID 3 & ID 4). Three of them added that it is not in the citizen’s jurisdiction, since their formal observations are not binding (ID 1, ID 2 & ID 4), so it depends on the SEA to consider if they are applicable and worth to enforce the company to make the changes. The

company's interviewee mentioned that citizens can appeal and stop the project (ID 4), but by the information given by the community, it seems that they do not have that kind of knowledge, nor they have the intention to do so. Because participants had a very limited part in the decision-making process throughout the project, and the notice was not fair for the community due to the limited reach, the rationale for participation cannot be considered as **normative**.

There is an agreement between three of the interviewees that the objective of the participation was mainly informative (ID 1, ID 2 & ID 4), where the authorities of the project answered to people's questions, and they gave the chance to make their observations formally to be considered by the SEA. Nonetheless, the interviewees of the general public expressed the possibility of other possible objectives. One of the participants said that the process is for the company to take measures on the citizen's observations to ameliorate possible opposition to the project (ID 1). Similarly, another interviewee considered that the objective is to convince the project or "sell" it in relation to the benefits that could come with it, such as the creation of jobs for the city (ID 2). Furthermore, the perspective of another participant was that the process was "*just to comply with the checklist of having the citizen's participation*" and that the company purposely involved the community in a non-effective manner, basing that conjecture from the "*low energy*" they put on the project's broadcast announcement to the community (ID 3). On other drivers for the company to conduct the participation process, the participants gave comparable answers to the questions about the objectives. There were responses that indicated the absence of other drivers that could lead to the process, because it is a legal obligation for the company (ID 1), however, it was mentioned that the company sought to avoid opposition to the project (ID 1), to have evidence that the process was done and that they were looking for a better image (ID 2).

Despite the fact that values were not implemented into the decisions and the participants did not have a good impression about how the process operated, the rationale for participation can be evidenced from the fact that the company was seeking for enhanced legitimacy and the improvements of the results by informing, presenting the benefits of the project such as the jobs, the inclusion of the observations and the objective of avoid or diminish possible opposition to the project. Thus, **instrumental** can be considered as a rationale for participation in this project.

When discussing the ability of interviewees of providing feedback on the project that could led to modifications in the policy goals, there were different answers, nevertheless, three of the participants judged that it was possible (ID 1, ID 3 & ID 4). As it was mentioned before, through the formal observations, which are not binding, citizens can change some of the project's objectives, but depend

on SEA intake on the matter. Thus, this recommendation can end up in the public agency requesting the company to modify specific things, if they find they are worth changing. In the case of the question “¿were those policy goals open for discussion?” the answers were divided, were the company representative said that it was indeed possible (ID 4), but two of the interviewees of the community argue that it was not (ID 1 & ID 3), because, as one of the interviewees pointed out, the company was not in disposition of listening to them when discussing certain things of the project (ID 3). On the equality of the process, it seems that it was existent when it came to citizens, however, the company’s interviewee claimed that there were more influential people than others (ID 4). Additionally, the process was laid out in a hierarchical manner, meaning that the company presented their project and had the authority on what to do, except if SEA, which is a governmental authority, demands changes that the company must comply. So, common participants had to listen and made their observations hoping that could influence aspects of the project. Despite this, there was agreement between three of the interviewees, while one of them did not gave a sufficient response, that the process was collaborative (ID 2, ID 3 & ID 4).

Specifically on the information provided, the company representative indicated that the presentation consisted of the DIA (Declaration of Environmental Impact), which explains what the project is about and the potential impact (ID 4). But when participants were asked if they trusted this information, two of them overall did not (ID 1 & ID 2), stating, for instance, that it was not properly delivered and was confusing by convenience (ID 1). Furthermore, an interviewee established that the company operated on the “*limits of the law*”, seeking the minimum when it came to the participation process (ID 2). Another participant trusted the information because it was not convenient for the company to actually share it, yet, for the interviewee, it was excessively technical, so people with no formation on the topics would have problems with understanding aspects of the project (ID 3), something that can be related to the participant that mentioned the creation of confusion by convenience. By taking into account the last two paragraphs, it is possible to determine that the **substantive rationale** was very weak, consequently, it must be disregarded.

### **5.1.2. Inclusiveness of Stakeholders and General Public in the PSEM Project**

All interviewees gave the same response when they were asked about who the participants of the projects were, indicating the municipality, SEA, the local community, and the company (ID 1, ID 2, ID 3 & ID 4). One of them also mentioned the participation of the Environmental SEREMI (ID 3), which is the regional representative of the ministry. So, all potential stakeholders were present in the process. It has to be pointed out that for the community, the participation is voluntary.



When discussing the duration of their participation, the participants of the citizens said that they were present in one of the assemblies. The company's interviewee explained that they were in two of the assemblies (ID 4), because the low attendance in the first process made them decide to organize a second one that could receive more people by broadcasting a promotion of second assembly. Although the citizens only went to one and the company had two, it did not make sense for the interviewees of the community to attend again because the second participation process had the same purpose and information shared. These processes are mandatory for the company to go through, like the one they did at the beginning, to develop their project and is not established at the start of the project but on a later phase. Even though the law only requires it to be that way, because of the fact that the general public is not an active participant in the preparatory phases, it must be defined that inclusiveness in this project is **narrow**.

### 5.1.3. Participation Levels in the PSEM Project

In a shared question for different variables, it was already pointed out that interviewees either they did not trust the information delivered by the company (ID 1 & ID 2), or that they found it too technical to be comprehensible to people with no formation on the subject (ID 3). This information about the project did not provide them enough clarity to understand the problems, opportunities, and alternative solutions (Stober et al., 2021). Therefore, this **information dimension** in the participation levels is weak.

On the question about the ability of the general public to provide feedback with alternatives solutions, mentioned above, the interviewees had a general positive response because there was a chance to discuss aspects of the project (ID 1, ID 3 & ID 4), although they depended on the discretion of SEA. Since the company can use the feedback provided, **consultation** is relatively strong as a participation level.

When the role of the participants was previously discussed, interviewees agreed that they did not have an active role in the decision-making process (ID 1, ID 2, ID 3 & ID 4), due to the lack of binding attributions given by the current law (ID 1, ID 3 & ID 4). Their participation can only be considered as suggestions, that as it was indicated, will be subject to governmental decisions that could result in enforcing them onto the company. Moreover, the company, during the design of the project, did not work with the general public other than when they had to conduct the participation process, which, for them, is an obligatory activity that the organization must go through. For that reason, **involvement**, as a participation level, is weak.

In the participation process, for some of the interviewees there was equality among the participants (ID 2 & ID 3) but from the company’s perspective there were participants more dominants than other (ID 4). However, they all had the same capacity to participate, ask questions and contribute to the discussion. Furthermore, most considered that there was collaboration between the participants (ID 2, ID 3 & ID 4), nevertheless, from the description that interviewees gave of the process’s dynamic, it is clear that authority was established, and that the collaboration of participants was only existent in the process itself, and not during the design of the project that came beforehand nor the final product of the design of the project. Thus, the influence of participants of the general public had a lot of limitations. To the participation level, that provides enough information to determine that **collaboration**, regardless of being a feature in the citizens relationship interactions, is weak because of the hierarchical structure of the decision-making process.

The participants were inquired on who had the final decision-making power. All of them unanimously gave the same response: SEA (ID 1, ID 2, ID 3 & ID 4). Two of them added as well that other environmental government agencies may have jurisdiction (ID 1 & ID 4). So, when it comes to determine if the formal observations are admissible to modify aspects of the project, SEA is the main authority, and the agency can enforce the citizens suggestions on the company. If they consider that it is not pertinent, the company will just continue with the process. As one of the interviewees explained, because the person had knowledge about these procedures, was that if the project affects other areas of society beyond the environment, like health or transit together with streets development, other agencies or ministries can also revise the report on the project and declare their conformity or provide their own observations (ID 1). After that, SEA take those and present them to the company which has to give an answer on how they will proceed to deal with it. Hence, the final decision-making power does not reside in the citizens, but in the SEA and other governmental organizations whose jurisdiction is touched by the reach of the project, leaving clarity that **empowerment** cannot be consider as a participation level due to the lack of influence that the general public can have.

**5.2. Parque Solar Parral**

*Table 7: Assessment results of Parque Solar Parral*

Variables	Dimensions	Results
(a) Rationales for participation	Legalistic	Red
	Normative	Red
	Instrumental	Green
	Substantive	Red
	Narrow	Green

(b) Inclusiveness of stakeholders and general public	Broad	
(c) Participation levels	Information	
	Consultation	
	Involvement	
	Collaboration	
	Empowerment	

In the same way as Project 1 report, the SEA for Project 2 provides information in essential aspects of the project and a general description of it. The information available is the participants and the activities showed by date, that were conducted by the company, which include “Meeting with leader (local leader of the neighbourhood) and professional in charge of the Municipality. Door to door”, “Preparation Workshop and Citizen’s Training” and “Citizen’s dialogue with the Company”. Additionally, there are included the number of virtual and on-site formal observations that were presented by citizens, but not what they actually are, so to get access to them it must be through the institutional website of SEA. In this document there no reference to the dynamic of the process, including possible debates, and no outcomes mentioned.

### 5.2.1. Rationales for Participation in the PSP Project

Three participants responded positively to the question on the possibility of improving the policy outcome in relation to the goals (ID 5, ID 7 & ID 8), in the sense that an amelioration can happen through the formal observations, not structurally, but on superficial aspects of the project. One of the interviewees indicated that did not know if there was going to be an improvement of it or if there was already, however, the person mentioned that the participation got better in relation to a participation process they had of a previous project (ID 6). Furthermore, for another interviewee, the company considered people’s concerns and had the will to “*solve some issues*” (ID 5). For that reason, the rationale for participation of this project cannot be established as **legalistic** because it is not merely informative and includes citizens observations.

All the participants that were part of the study agreed that the process was open and fair (ID 5, ID 6, ID 7 & ID 8), because, as one of the interviewees said, all parts were included (ID 5). Yet, the same individual questioned that the company did not consider the participation of the community from the conception and design of the project, which is something that the law does not require (ID 5), similar remark of another interviewee that suggested participants should be involved since the design of the project (ID 7). Moreover, the company representative stated that in fact the process was open and fair,

but there are limitations of the law that narrows how much can be done (ID 8). For instance, the public announcement of the participation process that is done via radio and online, depends on the municipality and does not demand much anticipation to the actual beginning of the process.

Furthermore, when asked about if they had an active role in the decision-making process, one of them said no (ID 5), two of them agreed that they could only make suggestions (ID 6 & ID 8) and the other interviewee related participation to the fact that they ask questions and receive answers (ID 7). As the company representative indicated, it depends on SEA what observations would be considered, to later enforce specific modifications to the developer (ID 8). For example, an interviewee pointed out that they only had a say on where the electric line would go through if they were directly affected by it, meaning people that had the towers in their property or really close to it (ID 5). Despite this, all participants felt that the company considered what they had to say (ID 5, ID 6, ID 7 & ID 8). Although participants felt to some extent that the process was open and fair, there were limitations in their involvement during the process together with legal restrictions and a constrained role in the participation of decision-making. For those reasons, the participation in this project cannot be established to have a **normative rationale**.

When participants were inquired about what was the objective of the participation process all of them answered that it was informative (ID 5, ID 6, ID 7 & ID 8). Two of them indicated that was to also explain the benefits that the project may bring to the community and the country (ID 5 & ID 8), because of further development on renewable energy and the energy transition objectives, providing low environmental impact. Specifically, the company representative stated that, apart from the benefits, the process is to know the general public's concerns as well, the risks, and improve the relations with the community (ID 8). In addition, an interviewee explained too that the process is to announce the viability of the project, considering, as the person said, that the project was already designed without informing the citizens until that point (ID 5).

The participants were also asked if they think that the company had other drivers to conduct the process. From the company's perspective, there were no other incentives other than to inform and build up relations with the community (ID 8), considering that the developer hired a third-party company specialized in relations with local organizations and citizens for the process to go with the less obstacles as possible and avoid the rise of potential opposition. The same was the case for a member of the community, that pointed out that the company was interested in neighbours participating of the process (ID 7). The other participants responded that the process was, perhaps, to convince the neighbours about the project (ID 5) and to build a positive image (ID 6), which in a way concurs with

the company representative response. However, one of the interviewees explained that, beside work on the reputation, the company did it only to comply with legal requirements (ID 5).

Even though it is not possible to establish if there was an effective participation, the inclusion from the developer of a community relations company to facilitate the process with the community intended to bring legitimacy, acceptability, and credibility to the process by informing the public and explaining the benefits. In this case, the process was more about complying with legal requirements, informing and mitigating possible opposition. Nonetheless values were not implemented into the decisions, the process was oriented towards the improvements of the outcomes and legitimacy, without discussing openly about the policy goals. These points align with the **instrumental rationale** for participation.

To the question on the ability to provide feedback by giving alternative solutions that could lead to changes in the project goals the respondents from the community gave a negative response, while another responded in an inconclusive manner (ID 7). For them, as it was pointed out above, their contribution to the project only had the potential to modify certain minor aspects (ID 5 & ID 6). As one of the interviewees also said previously, the designed was prior to the meeting and almost completely shut from the general public's influence (ID 5). That means that the objectives were not in question and only superficial details were open to be changed, like the electric line.

For the same reason that the public answered negatively to the question, the company representative said that there was indeed the chance to give feedback to change the goals of the project, sharing the example of the electric line (ID 8). Nevertheless, it is clear that the perspective of the citizens shows more the reality of the situation than the one provided by the company because the goals of the project were never in question, only small features were, which the electric line represents. Is the same for the case on a question that touch upon the same subject, that asks if the policy goals were open for discussion. So, if feedback was not possible to change policy goals, neither were the policy goals open to be modifiable, as the response from the interviewees were (ID 5 & ID 6).

For all the participants, the process seemed equal and collaborative, were everybody was represented, and they all had the capacity to participate (ID 5, ID 6, ID 7 & ID 8). However, as one of them indicated, the authority role was exerted by the Ministry of Environment (ID 6). This implies that the dynamic of power between the participants that came from the community bore less power than the governmental body and the company. The study subjects were asked as well about the trust they have on the information provided by the company, which they agreed that it was trustworthy (ID 5, ID 6 & ID 7). This information, as the company's interviewee explained, was the "*description of the*

*project, including the location electric line, the main affectations and how to deal with them, and the voluntary environmental commitments”* (ID 8). Although there is trust in the information provided, which helps to have a transparent interaction between authorities and the general public, and contributes to a general understanding, the **substantive dimension** as a rationale for participation is clearly weak, since the possibility of improving the quality of decisions and changing the policy goals was very limited (Stober et al., 2021).

### **5.2.2. Inclusiveness of Stakeholders and General Public in the PSP Project**

Interviewees were clear about the inclusion of some of the stakeholders, like SEA, the community, represented neighbourhood organizations and individual neighbours from the area, two companies, which were the developer and the communitarian relation one—although not everyone identified the third-party company— (ID 5, ID 6 & ID 8), and the SEREMI, specified by one of the participants (ID 8). On the inclusion of the municipality, one of the interviewees was sure about their participation (ID 5), another said that was present in some of the meetings (ID 7), while the others either did not know if the local government was present (ID 6) or were certain that it was not (ID 8), leaving a contradiction between responses. However, with the support of SEA’s report of the project, it is possible to determine by reading the attendance sheet that at least one person from the municipality was part of the meeting, so the participants that did not know about the presence of the local government or were sure about their absence were clearly not aware, probably because the municipality did not have protagonist role in these processes other than support the company and central government authorities.

On the subject of the duration of the participation, three of the interviewees were part of one or two meetings and/or assemblies (ID 5, ID 6 & ID 8), while another one indicated that participated of five meetings, that include some informal between the community and the company (ID 7). Moreover, an individual stated that, assessing it in a positive manner, the company made informal visits throughout the neighbourhood affected by the project, to get to know them and explain the situation and impacts of the project (ID 6). Other participant acknowledged those meetings but did not participate of them because of the distance of their residence (ID 5). Hence, the involvement of the interviewees is through the informal visits done voluntarily by the company or the participation process required by law. The problem is that in preparatory phases, that means the steps in which the company has the intention to develop the project and needs of several official approvals and studies from the ministries, did not include the general public, which is not mandatory. Regardless of what the law demands, and

the fact the company did informal voluntary visits to the community, the inclusiveness for this project is **narrow** because of the late inclusion of citizens.

### 5.2.3. Participation Levels in the PSP Project

It was pointed out previously that the participants trusted an accessible information, and they were able to comprehend it properly in a way that did not hinder their involvement in the process. Therefore, **information** can be considered as a participation level to the process of this project.

When analysing the substantive dimension as a rationale for participation, it was indicated that interviewees were asked about the ability they had to provide feedback on the project. The answer from part of the community participants was negative (ID 5 & ID 6), because of the limited influence they could have on decision-making and on the provision of alternative solutions to problems that may affect them or their environment. The participants interpreted, as also the law states, that only minor changes can be made to the project, and for that they rely on the disposition of governmental bodies (ID 5, ID 6 & ID 7). However, it is possible to affirm that the stakeholders and general public did in fact give feedback through the observation in the process or via the official website of SEA. So, since participants can offer their analysis, alternatives and can question decisions, even though the influence is limited, and it is not possible to question the goals of the policy and the project, **consultation** can be established as a level of participation on this project.

The participants explicated that the role in the decision-making process was not active, as it possible observed in the previous discussed paragraph (ID 5, ID 6, ID 7 & ID 8). Interviewees were clear that the company only took suggestions from them in the form of formal observations (ID 6 & ID 8) and answer to the questions (ID 7), that expected to be taken into account by SEA, as the law establishes. The electric line, an example that has been repetitively indicated, is the main suggestion that the company was open to consider. Despite this, participants felt they were listened, and the company considered what they had to say about the project (ID 5, ID 6 & ID 7). Nonetheless, as a participation level, **involvement** of stakeholders and general public is weak because of the participants narrow contribution to all aspects of the project.

Participants stated that the process, as it was said above, was equal and collaborative, because all parties were involved in the process and were able to participate (ID 5, ID 6, ID 7 & ID 8). Nevertheless, it also indicated that there was a clear hierarchical structure with the Ministry of Environment on the top, then the company, and below the community with a lesser amount of power that resulted in an impossibility to be part of every aspect of the decision-making process and

restricted capacity to influence, which makes it a collaboration with limitations (Stober et al., 2021). Consequently, it can be established that **collaboration** as a weak participation level.

The interviewees were inquired as well about who had the final decision-making power among the stakeholders. One of the participants answered that did not know (ID 5), putting in evidence that it is not clear or obvious to everyone who has the authority in this situation. Nevertheless, the other responses established the company as the one that bears that kind of power (ID 6, ID 7 & ID 8) depending on what they are demanded to do by SEA, as one of the interviewees pointed out (ID 8). Same individual indicated that the company could model their project so that it complies with everything they require to do by governmental authorities (ID 8). Hence, the final decision-making power it is not in the hands of the public, and for that reason, **empowerment** can be disregarded as a participation level for this project.

## 6. Discussion

### 6.1. Case Specific Findings

The results showed that both projects had an instrumental rationale for participation, a narrow inclusiveness and a consultation participation level. Based on Table 3 and the Stober et al. (2021) framework, that results in a low participation level category and an intermediate quality of the participation processes, as presented in Table 8.

*Table 8: Results of the assessment of both cases*

Project	Rationale for participation	Inclusiveness	Participation level	Participation level category	Quality
PSEM	Instrumental	Narrow	Consultation	Low	Intermediate
PSP	Instrumental	Narrow	Consultation	Low	Intermediate

Based on Table 3.

In PSEM, the assessment indicated that it was possible for the general public to change certain parts of the project through formal observations in the participation process or online but were not binding and are subject to SEA. It revealed as well that the participation process was mainly informative, and had the intention to ameliorate the opposition, convince participants of the project, comply with the legal requirements, and search for legitimacy by presenting the benefits. Although the process was essentially informative, trust towards the company in what they presented had divided results among



interviewees, where the information was interpreted as confusing, not properly delivered and too technical to be properly understood.

All possible affected stakeholders were represented in the participation process, however, the first call up for people to participate of the PSEM process failed to meet the expectations on the number of participants, which forced the company to make a voluntary second call and process to gather more attendees. The reason provided by the interviewees was that the broadcasting notice was brief, did not have enough time to people to find out about the process and/or radio diffusion was not an appropriate channel to do so.

Results in PSP showed that improvement of the project from citizen's feedback was possible, not structurally, but solely in superficial aspects depending on SEA considerations on the observations. So, there was a limitation in the reach of people's insights and, additionally, the participation process was conducted when the project was already designed and in later stages. The company acted accordingly with the law, however, from the participants perspective, the company did consider what they had to say about the project.

As stated by the interviewees, the information provided by the developer of the PSP project facilitated the comprehension of the project, where they were explained the benefits for the community and the country, while presenting the risks. The participation process had the objective of, apart from observing and informing, to build a better image for the company and convince the community of the project, so the process was also oriented towards the improvements of outcomes and legitimacy. Moreover, the narrow contribution that participants could had, sustains with the case that the SEA and potentially other governmental agencies had the final decision-making power and not the general public.

## **6.2. Comparative Analysis**

Overall, both projects had similar characteristics in the process, because of the fact that they mostly followed the same procedures established by the participation Chilean laws, where municipalities have to look for satisfaction of their citizens by assuring their inclusion, specifically in energy transition participation processes, and the Ministry of Energy through SEA provides the institutional settings for these procedures (Ley 18.695, 2024; Ley 19.300, 2024; Ley 21.455, 2022). The variations observed are essentially defined by voluntary decisions of the developer companies of the projects and their approach towards the participation process.

For instance, on one hand, for PSEM participants the broadcast of the notice over radio announcing the process was too short for people find out, which ended up being unfair as they indicated, even though it was the amount of time that the law requires. This forced the company, maybe in an attempt to gain legitimacy and avoid opposition, to summon voluntarily a second assembly. On the other hand, PSP had the same time of broadcasting but voluntarily the company decided to visit the community informally before the process officially started to present themselves, the project and listen to citizens of their opinions. That decision made the participants not consider the timing of the broadcast a problem, since they found out with more anticipation than participants of PSEM and provided them with a first positive impression of the company. In addition, the PSP developer, perhaps because it was a project of larger scale than PSEM, contracted a third-party company to build up relations with the community, to give them closeness and a more trustful dynamic between the parties.

Furthermore, the dynamic of the participation process presented in both cases a clear hierarchical structure, where the power was bore by the SEA. The Ministry of Environment's public agency had the authority and discretion to define which observation is pertinent to enforce into the company's project. Therefore, the general public was powerless to the government's authorities and the company.

### **6.3. Thematic Insights**

The issue about the timing of the broadcast exposes more of a problem with law itself than with the company involved in PSEM project. Although, by law, the company has the right to choose an alternative to proceed with another media other than radio with approval of authorities, there are no incentives for taking that option and the notice falls short in how much reach and anticipation there is for the call up for citizens to attend the process. Additionally, there was a clear difference in the power structure between participants and the company with the SEA. These two issues, broadcasting timing and the limited influence that participants can have over the project, represent an institutional problem. It is clear that authorities are not providing enough tools and opportunities to individuals or communities to have a say in a matter that may have consequences in their everyday lives. Thus, power is centralized and restricted, exposing a deliberate decision of lawmakers in the executive and legislative branch to avoid further influence of the general public and stakeholders over projects. The few exceptions where citizens can exert more power is with a strong opposition through informal protests against decisions or presenting appeals into the justice system, nonetheless, that is a strategy that can stall a project and does not solve the deeper problem of power inequality and injustice.

Moreover, the design of the project in relation to the participation process is something applicable to both projects on this research and all DIA projects in Chile. That means that projects follow a path

from its conception where a company decides to create and develop an energy project privately and later has to comply with all the requirements of the law by permission of the corresponding authorities. After that, when they are already in the final phases of the official environmental study, and the state and local governments are involved, participation of all stakeholders becomes mandatory if citizens demand a process through a formal request (Lostarnau et al., 2011). So, it is in later stages of the entire bureaucratic procedures that the developer and the municipality must deliver a participatory process with the attendance of SEA. When everything is set up, the organizations involved open up the process to listen and consider the participants of the general public's observations, that, as was pointed out several times, are not binding and are subject mainly to SEA judgements. Therefore, SEA determines what is applicable and worth applying for further enforcement over the company, where in response its decisions must be clarified and justified to the public in a satisfactory manner, a clarification that is open to interpretation (Ley 19.300, 2024). As Lostarnau et al. (2011) indicates about the importance on when the participation occurs, "thus, community participation can be more useful and effective and lead to high quality and durable decisions when it happens at an early stage (Reed, 2008; Egaña, 1999)" (p. 2472), which it is not the case for participation processes in energy projects in Chile.

#### **6.4. Theoretical Implications**

These findings contribute to establish Stober et al. (2021) framework as a valid tool evaluate a participation process. It enabled showing when participation is being genuine or when it becomes instrumentalized, by focusing not on the technique of the participation process but in the potential influence of citizens to make modifications over the solar energy projects and the differences in power between the stakeholders involved in the process. Additionally, Stober et al. (2021) framework elucidates the intentions of the participation process, by allowing to stress the extent of participants contributions and the openness of developers to make changes to the project. Furthermore, the framework provided an understanding as well of participation as a nuanced concept where it can be measured in a way that results on quality that defines participation in different levels. However, to assess it is fundamental to distinguish that the participation process is not the entirety of a project. For example, if the general public and stakeholders participated of the only two meetings in the project at the end stages, technically that means that they were included in the participation process but excluded from other stages of the project.

The results reveal insights into the quality of participation processes in energy transition projects in Chile. Through the Stober et al. (2021) framework, the study shows that, in both cases, the

participation process is of intermediate quality, as previously indicated. National laws determine the quality of participation processes by constraining companies' actions and limiting the power of participants. Developers have no incentives nor attributions to empower participants voluntarily in the projects. They act following procedures to gain formal authorization and approval and seek to minimize resistance to the project. This is exacerbated by a centralized decision-making structure, where the attributions and jurisdiction rely mainly on SEA and the Ministry of Energy. Consequently, Stober et al. (2021) framework demonstrates the level of the engagement of participants and that the institutional structure is a determinant on the quality of the participation processes.

On the same grounds, voluntary decisions by the companies, such as having an approach of improvement of community relationship or engaging in negotiations with them for benefits, are insufficient to improve the quality of participation processes because of the bureaucratic limitations that come with Chilean norms that indicate that participants have no binding attributions. Those standards decided by national legislators over the years are decisive in the quality of the processes. Thus, this suggests that the difference between the dynamics observed in the participation processes of PSEM and PSP would indicate broader trends in other municipalities across Chile.

Furthermore, these findings have implications for the concept of justice. With Stober et al. (2021) framework it was possible to recognize that the power granted to participants in the processes raise concerns about fairness because of their limited potential influence over the decision-making process. Although all citizens are openly considered for participation processes, the broadcasting notice, as was indicated from some interviewees, lacked fairness by not reaching a greater audience, establishing an inequality to access information. Similarly, highly technical language created a barrier to comprehend information, establishing a disadvantage for participants in relation to companies and public agencies, that difficulties an effective participation. Also, when participation happens in later stages of the project, it restricts the inclusion and access of the public to essential decisions that could affect them. Thus, in these Chilean municipalities, participants were part of an interactive process and were respected and represented. Still, it is not possible to define a consideration of their suggestions and an equality of treatment if the authorities hold the power to ignore their observations, showing a lack of fairness and justice issues.

The results of this research are consistent with those of Lostarnau et al. (2011), who observed, in a mining case of public participation in Chile that follows the same procedure, evidence of inequality of resources, knowledge, and interest in approving projects (Lostarnau et al., 2011). Moreover, Costa Cordella and Belemmi's (2017) institutional and law analysis establishes undefinitions of laws,

supporting the notion that, in Chile, there are asymmetries of information between the community, administration, and the company. They suggest, as well, that there can be distrust for institutions due to the ignorance of the importance of the collaboration of the citizenry to make environmental decisions. Aguilar-Støen and Hirsch (2015) describe that Environmental Impact Assessment frameworks, as seen in countries like Chile, give the responsibility to companies to facilitate the participation of the affected communities. It creates tension between the company and the community because the former must respect citizens' right to participate while managing a participation process with invested interests in the outcomes.

### **6.5. Practical Implications**

The importance of the results relies on contributing to the lack of assessment of participation processes of energy transition policies in Chile. It provides a glimpse of the characteristics of these kinds of projects in the country, how interactions are between actors, the procedures, and why they are of intermediate quality. Knowing the quality of these participation processes gives a general idea of the procedures' strong and weak features. Therefore, it offers evidence for policymakers that can suggest modifications of what to improve to have higher quality participation processes and provide further justice and legitimacy.

Specifically, findings related to the institutional problem of citizens' lack of power suggest that for the improvement of the quality of participation processes, it must be conferred to participants competencies and attributions that allow them to provide input in a binding manner to influence the outcomes, considering that projects can affect them. To achieve this, lawmakers must modify the existing norm structure of participation, balancing the power between citizens, companies, and public institutions. An approach would be for the observations of the citizens to be openly discussed and to come to agreements between them and the companies with the public authorities as mediators, where all the parts would need to compromise to move on with the project.

Another crucial step is to educate the public on participation processes and energy transition by giving them the tools to understand the intricate system of public institutions, their attributions in the process, and learn about energy externalities. As some interviewees commented, the language during the participation process was highly technical and hard to understand, so the simplification of language, while at the same time providing them with instruction and information, can level the field for a fairer process. These tools could positively impact processes by attracting more people to participate.

It needs to be improved the broadcasting notice of the participation process as well, where the radio is not the only mandatory source for the announcement. This could include mailing a pamphlet to the neighbours with the upcoming activities, social media publication on the process by the municipality, the SEA, and the company, and a direct call to the leaders of the communities' organizations. In this way, a diversity of platforms would be tackled where every citizen surrounding the area of the project can find out about the participation process.

The modification of the billboard law could have implications for future participation processes. Since the radio is a form of communication and information that has some limitations (even though they can choose an alternative voluntarily), as was possible to observed from this research, the billboards may have a greater reach because it will be visible for the community that lives in the area. That attention could make them aware and interested in the participation process, incentivizing the community to participate. Nonetheless, the impact and limitation of the Decree 40 yet remains to be seen.

An interviewee also highlighted the importance of participation in the design or initial phase of a project, because when citizens get presented the project in their community, at that moment they have a low capacity to influence, feeling left out and powerless with the perception that the only intention of authorities is that they “justify decisions already made” (De la Maza, as cited in Lostarnau et al., 2011). Hence, if power is balanced between the actors, that would translate into the citizens influencing the whole process and not only the participation phase.

Furthermore, it is questionable that only DIA and not EIA need the citizens to apply for a participation process to be opened, where the main difference is how they are categorized by the SEA according to the scale of the project and the fact that EIA, because of the size of the projects the participation processes are mandatory. The impact on a community, even if the scale of the project is as small as DIA, still could affect their everyday life and livelihood. Thus, the outcome of a project as minimal as could be, should be enough to involve the general public. There can be no justice for citizens if they are being bypassed by establishing legal requirements that need the action of a group of people for the participation processes to be conducted and waiting for them to find out by their means of a project in their territory, even more, when there is the risk of not being informed because of the limited reach of the means of communication.

## **6.6. Broader Limitations and Implications**

This research encountered several limitations. The sample size was small in each of the projects. It was overlooked that the access to the participants was restricted. The disposition of individuals to be interviewed was predominantly negative, even though they would be anonymized. Because of that, one case selected previously had to be desisted, due to a shortage of contact information, unwillingness, or lack of response to messages and calls. The same applied to both cases analysed in this study, where contacting potential interviewees after getting their information was difficult because of their reluctance and distrust over a foreign number or email, as an interviewee pointed out. That barrier and the distance contributed to the limited amount of people open to give an interview, so the fact that there was a low response rate represented a challenge.

Similarly, local and central government officials could not participate because of norms prohibiting their involvement in ongoing projects. After some of them were contacted, they solicited me to apply for an interview through Ley del Lobby, which is a platform that regulates private and public relations to avoid corruption and conflicts of interest. The interview applications with the correspondent authorities were declined. That resulted in a problem of representation in the research, where the only participants were the general public, including members of the communities and the companies.

On one hand, the document analysis provided only general information of the project related to technical aspects, but none related to the quality of the participation process. On the other hand, the theoretical framework applied, based on Stober et al. (2021), was a useful tool for the assessment conducted. It allowed us to focus the research on the process and not the outcomes of the projects, which is what it was intended to do. The three dimensions of the framework—rationales for participation, inclusiveness, and participation level—provided a guiding structure to establish the interview questions and a simple but strong form to organize, categorize, and compare the data. However, the fact a set of questions were designed for the interview aligned with the framework because there are no standardized questions, could represent a potential bias as well, limiting the objectivity of the results. However, the feedback from an expert helped mitigate this problem. Altogether, Stober et al. (2021) framework proved more advantageous than the alternatives, providing flexibility and insights for this research.

## **7. Conclusion**

The objective of this study was to determine the quality of the energy transition participation processes in Chile to observe if the country, given its increasing growth in renewable energy, has

managed to conduct fair processes that provide justice, legitimacy, and improved decision-making. To attain that goal, a theoretical thematic analysis with a qualitative approach was carried out, utilizing the methods of document scrutiny of official documents and the evaluation of semi-structured interviews, through the Stober et al. (2021) framework, to eight participants of two participation processes in different municipalities.

With the analysis of the framework's dimensions of the rationales for participation, inclusiveness, and the level of participation, results of the study showed that the quality of both participation processes was of intermediate quality. In PSEM, the rationale for participation was consistent with the instrumental dimension because the company intended to legitimise itself and improve the results by presenting the potential benefits of the project, considering the citizens' observations waiting for SEA's input, and preventing any form of resistance. Inclusiveness was considered narrow mainly because the participation of the general public and stakeholders was in later phases of the whole project. The participation level was established as consultation since participants were able to offer feedback while depending on the discretion of SEA.

In the case of the PSP project, a third-party company was involved, contracted by the developer to facilitate relations with the community and contribute to legitimacy, acceptability, and credibility. Policy goals were out of the consideration of the developers during the process, and because of that, it was defined as an instrumental rationale for participation. The dimension of inclusiveness was considered narrow due to the exclusion of citizens in the initial phases of the project. The participation level was established as consultation because citizens could provide analysis and alternatives with limited influence.

As a general overview, the organisation of the participation processes proves to be guided by companies' quest of seeking acceptance by participants, making available the process without actually providing power to them other than suggesting points of improvement that would need to be revised by the public authorities, and that is only possible to include at the end of the environmental impact assessment procedures. That determines the intermediate quality of the processes, structured into Chile's legal framework. Power and citizens' possibility of influence in energy transition projects that could affect them is inhibited, not considered from the initial elaboration of the project, but only in later phases, and they do decisions are. Thus, because of established rules, the companies had no incentives to follow voluntary actions, and they played their role of following the public institutions' requirements by complying with a mandatory process where their main incentives were to seek formal authorization to continue and develop their project with fewer obstacles as possible. This represents



an underlying institutional problem, where lawmakers deliberately provided this limited amount of power to the general public and stakeholders.

Since Chile is a centralized country where municipalities are under the same legal structure, the study provides a representative finding for the rest of the country's communes. Hence, it is possible to assume that there would be more similarities than differences among participation processes over the territory. However, to have a clearer overview and determine if there is a tendency in the quality of participation processes in the country, future research can be conducted, with more resources, time, and larger and more diverse samples that include representation of all stakeholders and other regions of Chile. This strategy could give further trustworthiness to the study by combining methods with quantitative approaches, such as surveys, that can complement the qualitative findings.

Overall, this research contributes to the gap in the quality of participation processes in Chile. The country lacks policies and project evaluations on the matter, where their main focus has been general critiques over aspects of participation laws and procedures, but not case-by-case assessments. The assessment and comparison of several cases could offer knowledge and insights to the public authorities that are useful to improve participation processes' fairness and quality, so this research lays the foundation as a first step for doing that. Lastly, the study provides an application of the Stober et al. (2021) framework, where the literature has shown a lack of agreement on general criteria, therefore it can serve as an example for the application of participation processes evaluations from a specific viewpoint.

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## **9. Appendix**

### **Appendix A**

#### **Appendix A.1.: Questionnaires (English)**

##### **Questionnaire 1: Interview questions for the general public**



1. Who were the participants in the process?
2. For how long did you participate in the participation process
3. In your view, what was the objective of the participation process?
4. Can you think of other drivers of the company (or public agency) for conducting the process?
5. In your view, was the process open and fair?
  - a) If yes, why do you think so?
6. Did the participants (or did you) have an active role in the decision-making process?
7. *Meaning if they considered what they (or you) had to say?*
8. a) Were you and other participants able to provide feedback on the project by giving alternative solutions in a way that could lead to changes in the policy goals?
  - b) Were those policy goals open for discussion?
9. a) Did you observe equality between the participants in the process?
  - b) And was there collaboration between them?
10. Do you trust the information that was provided to you?
11. Who had the final decision-making power?
12. Do you think that from your participation it was possible to improve the policy outcomes in relation to the goals?

#### **Questionnaire 2: Interview for the authorities and the representatives of the company**

1. Who were the participants in the process?
2. For how long were the participants part of the process?
3. What was the objective of the participation process?
4. Were there other drivers of the company for conducting the process?
5. In your view, was the process open and fair? And if that is the case, why do you think that?
  - a) If yes, why do you think so?
6. Did the participants (or did you) had an active role in the decision-making process?
7. *Meaning if they were considered what they had to say?*
8. (a) Were the participants (general public) able to provide feedback on the project by giving alternative solutions in a way that could lead to changes in the policy goals?
  - (b) Were those policy goals open for discussion?
9. (a) Did you observe equality between the participants in the process?
  - (b) And was there collaboration between them?
10. What kind of information was provided to the public?
11. Who had the final decision-making power?
12. Did the participants (general public) have the possibility to improve the policy outcomes in relation to the goals?

#### **Appendix A.2.: Questionnaires (Spanish)**

##### **Cuestionario 1: Preguntas de la entrevista para el público general**

1. ¿Quiénes fueron los participantes del proceso?
2. ¿Por cuánto participó en el proceso de participación?
3. Desde su punto de vista, ¿cuál fue el objetivo del proceso?
4. ¿Se le ocurren otra cosa que haya impulsado a la empresa (o agencia pública) para realizar el proceso?

5. Desde su punto de vista, ¿fue el proceso abierto y justo?
  - a) Si es así, ¿por qué cree eso?
6. ¿Tuvieron los participantes (o usted) un rol activo en el proceso de toma de decisiones?
7. *En el sentido de si tuvieron en consideración lo que usted quería decir*
8. a) ¿Fueron otros participantes y usted capaces de proveer de retroalimentación (o *feedback*<sup>1</sup>) al proyecto a través de dar soluciones alternativas en una manera que llevara a cambios en los objetivos de la política?
  - b) ¿Estaban abiertas a la discusión los goles de la política?
9. a) ¿Observó igualdad entre los participantes del proceso?
  - b) ¿Y hubo colaboración entre ellos?
10. ¿Confía en la información que le fue provista?
11. ¿Quién tuvo el poder final en la toma de decisiones?
12. ¿Cree usted que desde su participación fue posible mejorar los resultados de la política en relación con las metas de esta?

### **Cuestionario 2: Preguntas de la entrevista para autoridades y representantes de la empresa**

1. ¿Quiénes fueron los participantes del proceso?
2. ¿Por cuánto fueron los participantes parte del proceso?
3. ¿Cuál fue el objetivo del proceso de participación?
4. ¿Hubo otra cosa que haya impulsado a la empresa (o agencia pública) a realizar el proceso?
5. Desde su punto de vista, ¿fue el proceso abierto y justo?
  - a) Si es así, ¿por qué cree eso?
6. ¿Tuvieron los participantes (o usted) un rol activo en el proceso de toma de decisiones?
7. *En el sentido de si se tuvo en consideración lo que tenía para decir*
8. a) ¿Fueron los participantes capaces de proveer de retroalimentación (o *feedback*) al proyecto a través de dar soluciones alternativas en una manera que llevara a cambios en los goles de la política?
  - b) ¿Estaban abiertas a la discusión las metas de la política?
9. a) ¿Observó igualdad entre los participantes del proceso?
  - b) ¿Y hubo colaboración entre ellos?
10. ¿Qué tipo de información se le proveyó a los participantes?
11. ¿Quién tuvo el poder final en la toma de decisiones?
12. ¿Tuvieron los participantes (público general) la posibilidad de mejorar los resultados de la política en relación con las metas de esta?

### **Appendix B: Tables of the variables, dimensions and interview questions**

*Table 9: Variables, dimensions and interview questions for the general public*

<b>Variables</b>	<b>Dimensions</b>	<b>Interview questions for general public according to their dimension</b>
(a) Rationales for participation	Legalistic Normative	12. Do you think that from your participation it was possible to improve the policy outcomes in relation to the goals? 5. In your view, was the process open and fair? a) If yes, why do you think so?

<sup>1</sup> The word “feedback” has been anglicized into the Spanish-Chilean vocabulary, so it can be used as well.

	Instrumental  Substantive	6. Did the participants (or did you) have an active role in the decision-making process? 7. <i>Meaning if they considered what they (or you) had to say?</i>  3. In your view, what was the objective of the participation process? 4. Can you think of other drivers of the company (or public agency) for conducting the process? 8. (a) Were you and other participants able to provide feedback on the project by giving alternative solutions in a way that could lead to changes in the policy goals? (b) Were those policy goals open for discussion? 9. (a) Did you observe equality between the participants in the process? (b) And was there collaboration between them? 10. Do you trust the information that was provided to you?
(b) Inclusiveness of stakeholders and general public	Narrow or Broad	1. Who were the participants in the process? 2. For how long did you participate of the process?
(c) Participation levels	Information Consultation  Involvement  Collaboration  Empowerment	10. Do you trust the information that was provided to you? 8. (a) Were you and other participants able to provide feedback by giving alternative solutions in a way that could lead to changes in the policy goals? (b) Were the policy goals open for discussion? 6. Did the participants (or did you) have an active role in the decision-making process? 7. <i>Meaning if they considered what they (or you) had to say?</i> 9. (a) Did you observe equality between the participants in the dynamic? (b) And was there collaboration in that dynamic? 11. Who had the final decision-making power?

Table 10: Variables, dimensions and interview questions for authorities and representatives of the company

Variables	Dimensions	Interview questions for authorities and representatives of the company according to their dimension
(a) Rationales for participation	Legalistic  Normative    Instrumental   Substantive	12. Did the participants (general public) have the possibility to improve the policy outcomes in relation to the goals? 5. In your view, was the process open and fair? (a) If yes, why do you think so? 6. Did the participants (or did you) had an active role in the decision-making process? 7. <i>Meaning if they were considered what they had to say?</i> 3. What was the objective of the participation process? 4. Were other drivers of the company for conducting the process? 8. (a) Were the participants (general public) able to provide feedback on the project by giving alternative solution in a way that could lead to changes in the policy goals? (b) Were the policy goals open for discussion open for discussion? 9. (a) Did you observe equality between the participants in the process? (b) And was there collaboration between them? 10. What kind of information was provided to the public?
(b) Inclusiveness of stakeholders and general public	Narrow or Broad	1. Who were the participants in the process? 2. For how long were the participants part of the process?
(c) Participation levels	Information Consultation	10. What kind of information was provided to the public? 8.(a) Were the participants (general public) able to provide feedback by giving alternative solution in a way that could lead to changes in the policy goals? (b) Were the policy goals open for discussion open for discussion?

Involvement	6. Did the participants (or did you) had an active role in the decision-making process, meaning if they were considered what they had to say?
Collaboration	9. (a) Did you observe equality between the participants in the process? (b) And was there collaboration between them?
Empowerment	11. Who had the final decision-making power?

## Appendix C: Codes

- (1) Participants
- (2) Participation duration
- (3) Objective of the participation
- (4) Other drivers of the company
- (5) Fairness and openness
- (6) Active role in the decision-making process
- (7) Authorities or company considered what participants had to say
- (8a) Ability to provide feedback by giving alternative solutions in a way that could lead to changes in the policy goals
- (8b) Policy goals open for discussion
- (9a) Equality in the process
- (9b) Collaboration between participants
- (10.1) Trust of information
- (10.2) Kind of information provided
- (11) Final decision-making power
- (12) Possibility of improving the outcomes of the policy

## Appendix D: Codebook

Table 11: Codebook of Planta Solar El Milagro

Question / Interviewee	ID 1 - PSEM (Community)	ID 2 - PSEM (Community)	ID 3 - PSEM (Community)	ID 4 - PSEM (Company)
(1) Participants	Municipality	Municipality	?	Municipality
	SEA	SEA	SEA	SEA
	Community	Community	Community	Community
	Company	Company	Company	Company

			SEREMI (environment)	Voluntary participation
<b>(2) Participation duration</b>	One assembly (or workshop)	One assembly (or workshop, talk)	One assembly (one hour)	Two assemblies
	Until observations are made (physical and then online)	Online observations	Not direct participation on observations, through an acquaintance (previously discussed)	
<b>(3) Objective of the participation process</b>	Informative	They give information and answer questions	Just comply with the checklist of having the citizen's participation	Informative
	SEA is obliged to coordinate the process	Convince the public or "sell" the project in relation to the benefits (job related)	Purposely involve the community in a non-effective manner, as can be seen from the low "energy" on the project's announcement to the community	People make observations during and after via online
	SEA makes observations too			
	Give the word to the citizens			
	Company point of view, take measures, negotiate to not get opposition			
<b>(4) Other drivers for the company (or municipality) to do the process</b>	No, done only because of legal obligation	To have evidence that it was done	They could've done this process not against the community (in other words, they did against them)	No, only the requirement of the SEA; second time voluntary (doubts)
	For them not to oppose when they came with the project	Looking for a better image		
		For the sake of the doing it		
<b>(5) Fairness and openness</b>	Open	Not fair because of scarce diffusion (of the municipality)	Open	Fair: response by the company by committing with a demand of the SEA that took the citizen's observation
	Not fair because of scarce diffusion (of the municipality)	Not enough time for proper diffusion	Not fair because of scarce diffusion (of the municipality)	
<b>(6) Active role in the decision-making process</b>	No, it is not the citizens' jurisdiction (only non-binding observations taken by the SEA)	Participation by asking questions	No, is not the citizens' jurisdiction, but they presented their concerns	No, it is not the citizens' jurisdiction (only non-binding observations taken by the SEA)
				Not in the participation process, but they can put a claim appeal to stop the project
<b>(7) Authorities or company considered what participants had to say</b>	-	Respected and considered what they had to say	Does not know, but the company try to justify themselves by explaining why they were correct	-
	-		Company it's not obliged to listen even if the community opposes the project	-
<b>(8a) Ability to provide feedback by giving alternative solutions in a way that could lead to</b>	Observations are not usually binding, but SEA can receive one and demand	No possibility of giving alternate solutions	Yes, they gave alternate solutions or recommendations (to study the soil for example)	Yes

changes in the policy goals	something to the company			
(8b) Policy goals open for discussion	No	No response	No, they didn't even were open to listen to the observations, be questioned or discuss things	Yes
(9a) Equality in the process	Does not know, few people	Yes, equal people and process	Yes	No
			Group with different backgrounds, where everybody contributes from their point of view	No, because some people are more influential than others because they have a prominent position in the community
(9b) Collaboration between participants	No response	Collaborative	Collaborative	Collaborative
(10.1.) Trust of information (question to citizens)	SEA yes; municipality put obstacles; company did not deliver properly the information (confusion by convenience)	Not trust at a 100%, they operate at the limits of the law (seeking the minimum; things for the company and not the people)	Yes, because they presented information that was not convenient for them	-
			But, too technical, many people would not understand the information	-
(10.2.) What kind of information was provided (question to authorities or company)	-	-	-	Declaration of environmental impact (what the project is about and their impact)
(11) Final decision-making power	SEA with organizations with environmental jurisdiction	SEA decides if they consider the observations of citizens	SEA	SEA with organizations with environmental jurisdiction
		People are not involved in making decisions		
(12) Possibility of improving the outcomes of the policy	Yes, possible to make certain changes	Yes, by considering the observations	Hopes that yes, not response yet	Yes, possible to make certain changes

Table 12: Codebook of Parque Solar Parral

Question / Interviewee	ID 5 - PSP (Community)	ID 6 - PSP (Community)	ID 7 - PSP (Community)	ID 8 - PSP (Company)
(1) Participants	Municipality	Municipality not present	Municipality (not always)	Not sure about presence of the Municipality
	SEA	SEA	SEA (not always)	SEA
	Community (JJVV & neighbours)	Community	Community	Community (rural and urban)
	Company	Company	Company	Company
		Communitarian relationship company		Communitarian relationship company
		SEREMI (environment)		Dirección de medio ambiente
(2) Participation duration	Two meetings/assemblies	One assembly	Five meetings	One assembly

	There were previous meetings as well, for specific communities, that the interviewee did not attend	Plus, the person was personally interviewed by the communitarian relationship company (informal)	Formal meetings	Previous workshop for people to teach how to do observations
			Informal meetings (without public authorities)	Some people left before it was finished
<b>(3) Objective of the participation process</b>	Informative	Informative	Informative	Informative
	Announce the viability of the project		Difficulty with the language	What benefits the project would have, know about concerns, risks and improve relations with the community
	Explain the benefits of the project, like a low environmental impact			Informal meetings before the process
	<i>Perception that the projects was already designed and was not told to the citizens</i>			
<b>(4) Other drivers for the company (or municipality) to do the process</b>	Convince the community about the project	For the company's image	With informal meetings they are interested that neighbours participate	No
	Done because of the strategic location	No, because of the legal requirements		If the developmental company want a third-party company for relations, it means it was less opposition
<b>(5) Fairness and openness</b>	Fair and open, because all actors (or stakeholders) were included in the process	Fair and open	Fair and open	Fair and open, given the limitations of the law
	However, the community was not included from the beginning of the project, only afterwards	Attentive, more conscious than previous company	But there is more information needed to understand better the project	Announcement its complicated because it depends on the municipality
<b>(6) Active role in the decision-making process</b>	No, only had a say in where the electric line would go through if they were affected by it	Only suggestions	Participation by asking questions	Only suggestions (depends on SEA if those observations are considered or not)
			Uncertainty of consideration of the observations	
<b>(7) Authorities or company considered what participants had to say</b>	Yes, the company heard what the people had to say, in the process and previous meetings	Yes, the company heard what the people had to say, in the process and previous meetings	Yes	Yes
<b>(8a) Ability to provide feedback by giving alternative solutions in a way that could lead to changes in the policy goals</b>	No, no possibility, everything was designed prior to the meetings/assemblies (but the Ministry was present)	Not at a structural level, only suggestions	<i>Insufficient response</i>	Yes, prior meetings helped to change the electric line for people that were affected by it
<b>(8b) Policy goals open for discussion</b>	No, but they were listening to the people directly affected by the electric line	No	Yes, but response focus on minor aspects of the project	<i>No direct response</i>
<b>(9a) Equality in the process</b>	Yes, everybody was represented	Yes, but the ministry had the authority role	Yes	Yes, everyone had the same capacity to participate

<b>(9b) Collaboration between participants</b>	Collaborative	Collaborative	Collaborative	Collaborative, even though there was a conflict
<b>(10.1.) Trust of information (question to citizens)</b>	Yes, trust on the information because there were state authorities present ("serious group")	Yes, interviewee trusts the information provided	Yes	-
<b>(10.2.) What kind of information was provided (question to authorities or company)</b>	-	-	-	Description of the project, location, electric line, the main affectations and how to deal with them, and the voluntary environmental commitments
<b>(11) Final decision-making power</b>	Does not know	Company	Company and SEA	The company, but based on what is asked by SEA
				Company can model their project so that it complies with everything
<b>(12) Possibility of improving the outcomes of the policy</b>	Yes, but not in the structural sense	Does not know if they would improve	Yes	Yes, by considering the observations
	Consideration over people concerns	Participation improved	Importance of communication	
	Will of the company of solving some issues			