

THE DANISH
INSTITUTE FOR
HUMAN RIGHTS

CASE STUDY:
EQUITABLE ACCESS
TO ENERGY AND
INDIGENOUS
PARTICIPATION IN
CHILE'S ENERGY
POLICY

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CASE STUDY: EQUITABLE ACCESS TO ENERGY AND INDIGENOUS PARTICIPATION IN CHILE'S ENERGY POLICY

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1 INTRODUCTION

The relationship between renewable energy development policies and communities living in poverty or marginalisation is a complex one, and many challenges lie ahead. A cleaner energy matrix is not necessarily more inclusive or equitable, an issue that is particularly evident in rural, vulnerable and indigenous contexts, where despite the use of local land and natural resources, the benefits of the energy transition are often one-sided.

In this regard, it is becoming increasingly necessary to take action to effectively incorporate human rights of the most vulnerable population groups into national energy agendas, both in policy aimed at decarbonising the energy matrix and also when it comes to universal access to energy.

In the specific case of Indigenous communities, there is an unfortunate precedent of poor practices and abuses that at times overshadow progress in this area. In the transition to renewable energies for environmental reasons, states and companies often intervene in areas of ancestral use by Indigenous communities,ⁱ without sufficiently taking into account human rights standards and without adequate consultation and participation of the affected peoples in the process. This has given rise to tensions and conflicts that have involved – depending on the given context – states, companies and Indigenous communities whose lands are used or whose rights are affected.ⁱⁱ

A human rights approach in the context of renewable energy and Indigenous peoples requires a comprehensive look at international human rights and sustainable development standards. The 2030 Agenda has several Sustainable Development Goals (SDGs) which are relevant within this context, including SDG 7 on affordable and clean energy and SDG 13 on climate action. These have to be applied in compliance with universal human rights standards, especially the International Labour Organization (ILO) Convention on Indigenous and Tribal Peoples (ILO Convention No. 169) and the UN Guiding Principles on Business and Human Rights (UNGPs). These create obligations for states and additional responsibilities for companies and provide guidance for the transition to renewable energies in a way that leaves no one behind and protects and respects the rights of Indigenous peoples. The human rights-based approach also emphasises participation, as Indigenous peoples traditionally have a close relationship with the environment, and their knowledge could guide action to combat climate change.ⁱⁱⁱ

At the national level, countries need to design their transition plans towards renewable energy through a human rights-based approach. So far, there are few examples of energy transition considering human rights and sustainable development frameworks in any comprehensive manner. Benchmarks and model examples of how to move forward are needed. For this reason, this document presents a specific case study as an example of good practice in the energy sector in Chile, where very early action has been taken in this area, especially in the field of access to energy and the reduction of energy poverty, but also in aspects such as participation and more recently in the Just Transition Framework.

Already in 2016, the Chilean Ministry of Energy adopted a long-term energy policy, embodied in the Energy 2050 document, which has ambitious plans for the transition to renewable energies (70% before 2050). Chapter 2 of this document, 'Energy as an engine for development', establishes its main goal as being to ensure that access to energy considers quality provision for vulnerable households, ensuring safety and efficiency. The aim is to reduce energy poverty and ensure access to energy that meets the basic needs of households in the most remote areas.

On the other hand, and with the objective of addressing injustices experienced by Indigenous peoples in the context of energy projects, the Chilean energy policy also includes a standalone chapter on Indigenous matters that is aligned with the standards of ILO Convention No. 169. The chapter addresses the participation of Indigenous peoples and also article 7.1 of the convention according to which Indigenous peoples shall have the right to decide on their own priorities regarding their development process.^{iv}

Energy 2050, including the Indigenous chapter, has five focus areas on indigenous issues, two of which are particularly relevant to human rights of Indigenous peoples and to the development of the present document: 1) equitable access of the Indigenous population to energy services, and 2) energy development ensuring respect for the rights of Indigenous peoples. The first is in line with target 7.1 of the SDGs, and responds to the situation in Chile where there is 99% coverage of access to energy services, but where the challenge has been to ensure equal access, especially for Indigenous peoples and people living in remote communities.^v The second stresses the participation of Indigenous peoples and the recognition of their rights in the design, execution and monitoring stages of public energy policies, whether in the area of generation, transmission and access or that of gap reduction projects.

The current government has defined its priorities in the Energy Roadmap 2018–2022, which includes the focus of the 2050 Energy Policy on equitable access to energy and incorporates the Indigenous chapter. Thus, in its axis number 2, 'Energy with a social seal of approval', the roadmap reinforces a line of action for access to and improvement of household energy supply, focusing on isolated, vulnerable sectors and/or with Indigenous population,^{vi} which corresponds precisely to the framework of action in which the case of good practice that we present below is embedded.

Although the work on energy access dates back to the beginning of the Ministry of Energy, over the last few years a policy direction of equitable access to sustainable energy has been consolidated, democratising the use of renewable energy in rural and vulnerable areas, with a focus on the Indigenous population. In the case of electrification in isolated areas experience has shown that the implementation of small-scale renewable solutions, deployed in a decentralised manner and in collaboration with local Indigenous communities, are suitable and economically viable alternatives in these difficult-to-access areas. In this sense, materialising

the socio-economic benefits of renewable energy and securing the inclusion of historically marginalised populations in sustainable development are issues that can and should go hand-in-hand.

Renewable energies can foster micro-entrepreneurship, job creation, improve the development of the local value chain and strengthen identity elements related to respect and care for nature.

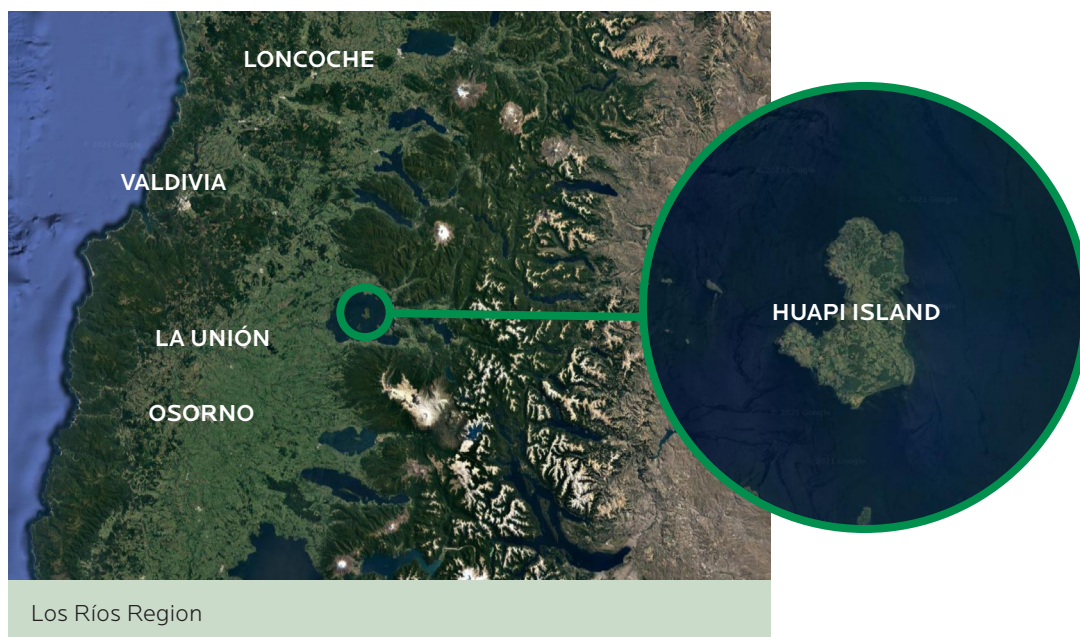
An example of this synergy is the photovoltaic (PV) electrification project in Isla Huapi, in the southern part of the country, implemented in 2017–18. The electrification project was drafted by the Ministry of Energy at the request of the municipality of Futrono, which was in charge of the bidding process, and was built by the Chilean energy distribution company Sociedad Austral de Electricidad S.A. (SAESA). A unique aspect of this experience relates to the participation of the Mapuche Huilliche community that inhabits Isla Huapi. This community is one of the very last groups to have access to modern and safe energy in the district of Futrono, where the island is located, and they demanded that the electrification be carried out using renewable energy and with an active role to be played by its beneficiaries. The Isla Huapi project includes core elements of a human rights-based approach to the development and implementation of renewable energy, which could be replicated in other countries and sectors.



2 THE ISLA HUAPI ELECTRIFICATION PROJECT: an example of incorporating PV energy in Indigenous territory guided by the voice of its own community

2.1 BACKGROUND

Isla Huapi is located in southern Chile, specifically in the middle of Lake Ranco, in the commune of Futrono, Los Ríos region. Approximately 300 people live on the island, which has 145 households. In terms of legal status, there are two communities on the island, both springing from a single community that self-defines as Mapuche Huilliche.^{vii} The island's inhabitants are mostly farmers and support themselves through the sale of their agricultural products and tourism. A large number of the households keep livestock (poultry, cows, and horses) to generate food and to help with farm work.



FROM THE OUTSET: ENVIRONMENTAL AND PARTICIPATORY APPROACHES

The Isla Huapi electrification project has an extensive history. Since the 90s, several ways to bring electricity to the island have been sought. The solutions they were using (kerosene, candles, gas lamps, battery-powered lanterns and generators) did not provide constant power and involved safety hazards. The lack of access to an

electricity supply had a significant impact on the quality of life of the island's inhabitants, as it limited their activities to daylight hours, prevented them from preserving fresh food and exposed them, inter alia, to fires caused by candles and gas lamps.

Nevertheless, the proposed electrification initiatives were all abandoned for a number of reasons. Among the various solutions assessed, the community rejected the diesel electrification option. On the one hand, they wanted a clean energy solution, as diesel could have generated a lot of noise and polluted the island's land and water. On the other hand, the community wanted to be involved in the research and development of any solution to be installed. **By demanding participation in the development of such a solution, the community was, in effect, demanding the rights granted in ILO Convention No. 169.**

ILO Convention No. 169, Article 7:

- 1.** [The peoples] shall participate in the formulation, implementation and evaluation of plans and programmes for national and regional development which may affect them directly.
- 4.** Governments shall take measures, in co-operation with the peoples concerned, to protect and preserve the environment of the territories they inhabit.

RELATIONSHIP WITH ENERGY POLICY

The Isla Huapi project was implemented in parallel with the development of the 2050 Chile Energy Policy and its Indigenous chapter. The project was developed by the Ministry of Energy following the current guidelines for the development of rural electrification initiatives that are financed with public funds, more specifically, methodologies for the formulation and project evaluation that were developed in conjunction with the Ministry of Social Development and the Family. These methodologies exist for all types of investment initiatives (sanitation projects, road construction, etc). At the local level, the municipality of Futrono was in charge of guiding the project development, with emphasis on sustainability. The methodology applied included elements of equitable access to energy, which would later be incorporated into the current policy framework on energy and the Chilean National Action Plan on business and human rights.

Indeed, the Isla Huapi project did not have a human rights analysis per se, but its implementation took into account several aspects compliant with a human rights perspective. Throughout implementation, the Isla Huapi project was also adjusted to Indigenous participation standards and aligned with the SDGs. It also contributed to the consolidation of the energy policy which, in subsequent stages, has been incorporating a human rights and sustainable development perspective.

INDIVIDUAL PHOTOVOLTAIC PROJECT BIDDING

At the beginning of the 2010s, a family from Isla Huapi researched an individual PV solution^{viii} that they installed in their household, which had positive results. Consequently, the community decided to suggest to the authorities the adoption of

this solution for the whole island. On that basis, between 2014 and 2016, the Ministry of Energy in coordination with the Municipality of Futrono, established a dialogue with the island community about the feasibility of this solution, making economic analyses and quantifying public funds required for the project.

In 2017, the electrification project was drawn up by the Ministry of Energy at the request of the Municipality of Futrono, which was in charge of the bidding process. The bidding criteria were built on previous tenders, but also included new elements related to the search for the best technical solution for the island, and – as the technical expert of the project from the Ministry of Energy said: ‘with less emphasis on the price of the solution and the execution time, and more emphasis on the relationship with the inhabitants of the island’. Based on the desire of the community, proposals were sought to install a sustainable individual solar energy solution on the island, i.e. one PV array per household (consisting of eight solar panels per household). More than 20 companies expressed interest and, after a field visit to the island, eight concrete bids were submitted. The electricity distribution company Sociedad Austral de Electricidad S.A. (SAESA)^x won the bid, partnering with Wireless Energy, a company with experience in the execution of PV projects.^x

INSTALLATION: LEARNING BY DOING

Equipment installation on the island took place between July 2017 and March 2018.^{xi} The community participated in the project decision-making through regular meetings that were convened by the electrification committee, comprised of inhabitants of the island, and which was established as the official counterpart of the project. The installation of the solar panels progressed systematically, testing the system in one household and then building the systems for the other houses. The implementation was characterised by a state presence and the presence of the company on the ground throughout. SAESA's fieldwork coordinator was present on the island for a period of eight months during the equipment installation. The state focal points also spent long and frequent periods on the island.

At the beginning, the challenges were many, and efforts were made to generate an environment of mutual knowledge and trust among the inhabitants of the island, in order to dialogue and exchange opinions on the project's implementation. For example, during the installation of each panel array, the family could participate



in defining its location (as far as technically possible) and they received training on how to use and maintain the electrical equipment. Community members say that this methodology built trust and increased the sense of inclusion and collaboration, as they were able to discuss each stage of implementation with government and company counterparts. Relationship building is a key element that deserves to be highlighted as an important achievement of the project, as a relationship between community, government and company can be sensitive if not developed in the right way.

According to the UNGPs on business and human rights, the state and businesses have complementary responsibilities to protect and respect human rights. Chile's NAP reiterates this point. Regarding the Isla Huapi project, SAESA comments that what made their work easier was that the state, at the national and municipal level, generated clear expectations of the company's work, and actively guided it. This message about the need for clear expectations on the part of the state has reference in the UNGPs, and has been reiterated in several instances related to the issue of business and human rights, including by the UN Working Group on Business and Human Rights, that follows up on the implementation of the UNGPs, and in regional consultations in Latin America and the Caribbean organised annually by the UN in Santiago de Chile.^{xii}

Saesa officials:

'When you design a project for a community, you know that the costs and timelines will be different. You cannot impose a design; you have to do it by listening to the community and taking their rights into account'.

An important project challenge was the novelty of installing an individual PV project – i.e. a PV system with solar panels for each household – of which neither the government nor the company had any previous consolidated experience. Therefore, solutions had to be found along the way, where the need for collaboration between the community, the state and the company was obvious. The community participated in each stage of the installation: it gave its opinion on the installation site for each array, participated in the installation, was trained in the use of the equipment, and organised itself into an electrification committee as the official counterpart of the community in the project's development. The result reflects the pride of all parties involved in a job well done, where a project for access to electricity using renewable energy, guided by the needs of the community itself, was successfully implemented.

The completed project was handed over to the island community in March 2018 and has been operational since then. It has 151 individual solar energy arrays, including the households, four churches and the ruca ('house' in Mapudungún, the traditional Mapuche construction that is normally for community use). Following a state requirement, the company gave a one-year guarantee to the community against any technical failures that might occur. After the one-year guarantee, a walk-through was conducted to ensure that everything was working properly. The company has demonstrated flexibility in terms of the durability of the warranty, by responding positively to the need for technical reviews of the electrical equipment to ensure it is performing correctly.

2.2 THE VALUE OF EQUITABLE ACCESS TO SAFE AND CLEAN ENERGY

The mayor of the Municipality of Futrono describes the Isla Huapi electrification project as a debt owed by the public sector to the community. Indeed, the island community was one of the few communities in the commune of Futrono that did not have access to electricity. It was, therefore, the implementation of a measure to guarantee equitable access to electricity.

Equitable access to energy is linked to the right to enjoy, without discrimination, an adequate standard of living, which is defined in article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR).^{xiii} Certainly, community representatives describe having access to energy as a huge change in their lives and an improvement in their living standards and quality of life.

The individual PV arrays installed cover the basic electricity needs of families on the island – as they say, ‘to live well on a daily basis’. Each household now has enough power for lighting, television, refrigeration, washing machines and other, less

demanding, needs such as cell phone and tablet charging, among others. In particular, the community wanted to have enough electricity to cover the use of these appliances and electrical devices, since the possibility of using them significantly improves families’ quality of life. This has even meant that the island population has increased (since the final electrification project by about 100 people). The ministry is currently developing PV arrays for the new households under construction, which will receive financing as of next year.

Article 7, ILO Convention No. 169

2. The improvement of the conditions of life and work and levels of health and education of the peoples concerned, with their participation and co-operation, shall be a matter of priority in plans for the overall economic development of areas they inhabit.

According to community members’ statements, **equitable access to energy has a positive, catalytic effect on the enjoyment of a number of internationally recognised human rights** – based on the International Covenants on Economic, Social and Cultural Rights and on Civil and Political Rights and other key documents, such as ILO Convention No. 169 as well as on the **implementation of several SDGs including** (not an exhaustive list):

- The rights to **food** and **health** reflected in SDGs 2 and 3, through access to food refrigeration which also leads to better hygiene standards, and the possibility to store and preserve food, e.g. from summer to winter. This also has an impact on sustainability, as less food is wasted.
- The right to **education**, linked to SDG 4 on inclusive and quality education, as the electric light allows children and teenagers to do homework after school hours. In parallel to the main project of electrification of the community’s houses, a separate project to install solar panels on the island’s school and its gymnasium was generated, to provide better conditions for studying and sports for the students.

- The right to **work**, linked to SDG 8 on employment, as several people in the community have been able to develop better quality tourism activities. In particular, several women have been able to move forward with tourist accommodation and handicraft enterprises, thanks to the fact that they have, for example electricity and internet access in their workshops and in the cabins they rent out.
- The right to **live free from discrimination**, which is part of the universal human rights principle on equality and non-discrimination and guides the 2030 Agenda for Sustainable Development commitment to leave no one behind, and SDG 10 on equality within and between countries.
- The right to **access to information**, included in SDG 16 and in the UN International Covenant on Civil and Political Rights,^{xiv} by having access to telephones, televisions and radios, as well as better internet connectivity. In today's digitised era, it is important to highlight the importance of access to electricity in the enjoyment of civil and political rights – something one community member described as 'a window to the outside world'.
- The right to a **healthy environment**, linked to SDG13 on climate change and SDGs 14 (underwater life) and 15 (terrestrial life), as the community no longer has the need to use polluting solutions such as gas or diesel.



María Maillanca Barrientos, tourism entrepreneur, and Victor Anchimil Antillanca, a teacher at the Isla Huapi school and president of the community, say that having access to electricity generated a significant improvement in the quality of life for the island's inhabitants. María has been able to develop her tourism and handicraft activities thanks to the project.

Several of the aforementioned effects are also relevant to the eradication of poverty as reflected in SDG 1, especially energy poverty. The installation stage of the project also had a positive effect on the enjoyment of the right to work, as SAESA trained and hired people from the community to carry out some of the work on the island. Community members comment that the skill levels of the people involved increased, and with it also their likelihood of finding future work.

The testimonies of the local people demonstrate the importance of applying an equitable access to electricity approach. It also shows the positive impact that access to clean, good quality electricity can have on the fulfilment of a community's human rights. From the perspective of the human rights and sustainable development framework, this contributes to equality and non-discrimination. In addition, it highlights the need to reach the people that are left furthest behind, to ensure that none are forgotten.

2.3 COLLABORATION BETWEEN THE MAPUCHE HUILICHE COMMUNITY, THE STATE AND THE COMPANY: PARTICIPATION AND DIALOGUE AS AN ENGINE FOR CHANGE

The Isla Huapi electrification project is characterised by a high level of participation and ownership by the Mapuche Huilliche community throughout the project. Community members comment that this was a key factor. One of the reasons that previously presented solutions had failed was that they were presented to

the community as 'ready-made', rather than as something to be discussed and planned jointly – in other words, without taking the participation component into account.

In the human rights approach to development, participation is a principle, a fundamental right and a methodology. It follows a logic of 'nothing about us without us'.

Within the state, the start-up of the project involved collaboration between several entities, under the coordination and leadership of the Ministry of Energy. At the central level, there was collaboration

between the Ministry of Energy and the Ministry of Social Development and the Family, who had to approve the project. At the local level, as the administrative entity responsible for Isla Huapi, the Municipality of Futrono participated and assisted in the process with technical support from the Ministry of Energy. Although coordination at this level of complexity presented several challenges, the commitment to the project and the priority given to it by the various entities made it possible to find flexible solutions to move forward.



Professionals from SAESA in Osorno, Chile. Rolando Salvo, who lived on the island for eight months during the installation stage of the solutions, was in charge of community relations.

From the Ministry of Energy, the project was closely monitored by a technical expert in engineering and a professional sociologist in community relations. Both professionals accompanied the preparation, installation and monitoring of the project, visiting the island for long periods, thus establishing links and building trust with the community. SAESA's project coordinator lived on the island during the equipment installation stage, and he also had a mixed technical–social profile. The combination of technical knowledge and expertise in community relations is described by the Mapuche Huilliche community, the Ministry of Energy and the company as having been very good and is highly recommended for future projects.

From the community's standpoint, the PV project began concretely through visits to the island by state authorities to talk with community representatives about the fact that they wanted to move forward with the long-promised electrification project. At the time, the community had two major basic service needs: access to energy and access to water. A decision was adopted, together with the authorities, to give priority to energy, which was found to be essential to increase the standard of living of the community and its members.

Community member:

'The interactive installation of the project demonstrated that the members of the Isla Huapi community are worthy, like any citizen of the country'.

A complicated stage from a participation point of view was when the state first presented the outcome of the bidding process to the island community. Although the community had been informed that the Municipality of Futrono would be in charge of the bidding process, they did not receive any update regarding the fact that the company and the project had already been defined. The community complained that they had not been part of the evaluation process. There were also several myths and misunderstandings about the technical solutions presented by the company – among them, those related to

the origin and type of battery and inverter to be used – which were questioned by the community. On the other hand, there was frustration about the timing and manner in which the result of the bidding process was shared (as the last item of a meeting with the community where several points had already been discussed).

Lonko (in Mapudungún: lungko = head) of the community on Huapi Island: 'What made all the difference this time was that we were listened to. The community also sees it as an opportunity to collaborate. It opens doors for trust and commitment. The fact that the ministry keeps visiting and following up also makes a big difference'.

The community then requested another specific meeting dedicated to explaining the bidding process and the technical solution presented by SAESA. In this meeting the details related to the solution were discussed and disclosed. E.g., the community had heard that European panels were better than

the Chinese panels that were to be used. The company and state authorities then had to clearly explain why this solution had been chosen and ensure that a high technical standard would be applied. This served as a good learning experience on the importance of participation and communication at every stage. It was key for the community to have a good understanding of the work to be done on their land, in order to move forward with the project.

According to the three project partners – the Mapuche Huilliche community, the state and the company – transparency and dialogue were the two key elements for the success of the project. Through both, and with long-term work, trust was gradually built. Between the three parties everything, from the most important elements such as the energy type and the type of solution (individual arrays rather than a large,



Lonko of the Mapuche Huilliche community of Huapi Island, Héctor Luis Ñancumil Treuquil

concentrated plant) to smaller details such as the lightbulbs to be used were discussed. Also, at the community's request, the design of the fences to be built around each photovoltaic array was modified for better protection.

Still, not everyone agreed with the project. Some had concerns about, for example, the aesthetic compatibility of the project with the surroundings, and the costs associated with the panels for each household. It took time and several conversations to overcome the distrust shown by part of the community

and build cohesion. Some beneficiaries tell how they went to the first meetings with uncertainty and resistance but received answers to their doubts during the dialogue sessions, which made them want to move forward. 'I wondered how this is all going to work and how much is going to come out but, over time, through the conversations I realised that everything was going to work out well. I am very satisfied with the project', said one community member.

The project did not have a conflict resolution or complaint mechanism, but further disputes were prevented through dialogue and transparency. The problems that arose were settled between the three project partners. One aspect to consider for future projects would be the incorporation of a transparent and effective conflict resolution mechanism.

As mentioned above, in parallel to the implementation of the Isla Huapi project, the Ministry of Energy developed the Indigenous chapter as part of a long-term energy policy. The chapter opens the possibility of giving continuity to energy projects that respect the human rights of Indigenous communities, where the case of Isla Huapi represents an example of good practice to follow.



Verónica Duarte with her family watching TV at night. Several people in the community comment on the value of having a television to know what is going on in the world outside the island.

2.4 ELECTRIFICATION COMMITTEE: COMMUNITY-BASED MANAGEMENT MODEL

A committee for the electrification of the island was established as a mandatory part of the project's implementation. The committee is the official counterpart of the community before the authorities and the company. The committee started out with 20 members and currently has about 40, and its membership is gender balanced. The president and treasurer posts are elected on a rotating basis. The committee was created at the beginning of the project and has closely followed all stages of the project, from installation and start-up to maintenance responsibility. It plays an important role as a liaison between the Mapuche Huilliche community, the authorities and the company.



Alejandra Ñancumil Loncochino, treasurer of the Electrification Committee, says that the committee is very representative of the island's inhabitants.

Since the expiration of SAESA's warranty in 2019, the committee has been in charge of the equipment maintenance and any technical failure of the energy solutions. After a conversation with the community, the committee has established a fixed monthly fee to be paid by each household with a solar panel, which is currently 3,000 Chilean pesos. The solution of a fixed fee instead of payment by consumption was discussed with the beneficiaries as a fair and predictable solution for everyone. Beneficiaries also had to be trained to understand the value of this payment, as the committee received questions related to the following issues, e.g. the need to pay, even though the sun generates light for free. During the training, emphasis was placed on the need to maintain available funds in the event of equipment failure or that any other unforeseen eventuality should require repair. Likewise, the need to take care of the equipment so that it lasts over time was also discussed. One year after the completion of the facilities (in June 2019), the president and treasurer of the committee commented that the beneficiary households pay their instalments on time in a responsible manner. The interviewed beneficiaries, for their part, say that they are happy to pay their dues. They see value in paying for and participating in the maintenance of the equipment, especially because of the change in their lives that has come from having access to electricity, and for how well it works with potential maintenance.

The president of the electrification committee emphasises the need for an Indigenous community to organise, gather and reach out to the communal or provincial authority to demand change. He also says it is necessary for the community to identify its priorities and move forward in an orderly, organised and peaceful



'Pay for electricity here'. The place where community members pay their monthly electricity usage fee.

manner. Because they organised for the electrification project, community members now know that they can approach the mayor (chief authority of the municipality) with a problem or suggestion. 'Now there is a different kind of posture on the part of the community towards the authority. The community feels heard and knows that the state has to be accountable for its commitment', he says.

2.5 CAPACITY BUILDING AND ENERGY EDUCATION

Capacity building and energy education were an integral part of the project. On the one hand, the SAESA team, in charge of building the arrays on the island, was trained. On the other hand, the authorities and the company gave talks and training to the community of Isla Huapi about the project and the use of the equipment. On average, one talk or training session per month was organised to discuss with the community about some stage or element of the project, amounting to a total of 20 instances of training for the community throughout the project.

Capacity building is a key component of the human rights approach to development. It also plays a central role in the measures committed to in Chile's energy policy. Similarly, energy education is one of the measures that the Indigenous committee, which follows up on the Energy Policy's Indigenous chapter, also defines as a priority action in the implementation of Chile's energy policy.

A great deal of interest and participation was shown in the organised talks and training sessions. In the stories of the members of the Mapuche Huilliche community, much emphasis is placed on the importance of these events as a way of safeguarding their rights related to access to energy. They commented on the importance of understanding how solar energy and the equipment in their homes work, in order to use them responsibly and sustainably, and to know how to take care of them.

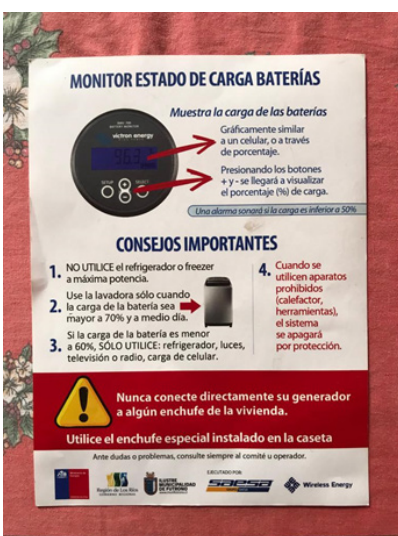


Through energy education, families have increased, above all, their knowledge about electricity in a practical way. In winter, the sun generates much less light, and families have had to learn, for example, that they cannot use machines that use large amounts of electricity (such as hair dryers) or wash clothes at night when the sun does not generate electricity to recharge their batteries. Should this happen, they have to wait until the battery is recharged before they can use electricity again.

Community members emphasise that they want development, but with respect and knowledge on behalf of all stakeholders. Through the training sessions they felt respected and included as a true counterpart in the implementation of the project. Capacity building is also a positive tool to counter down possible myths about renewable energy and generate a common understanding of what is to be achieved in a multi-stakeholder project. In the case of Huapi, training served to build mutual understanding between the state, the company and the Mapuche Huilliche community, and to clear up some misunderstandings, for example, about the solutions to be used. 'At first, the community rejected our proposal because they had heard that another solution was better. Through the training, the collaborative relationship evolved from this rejection to something that now resembles friendship', says SAESA's fieldwork coordinator.

Chile's National Action Plan on Business and Human Rights includes several actions on capacity building on business and human rights for public officials, companies, Indigenous peoples and other rights-holders. In the NAP, the Ministry of Energy committed, among other things, to develop training instances on renewable energy for Indigenous leaders focused on the topic of human rights and business. Since the adoption of the NAP in 2017 the ministry has conducted seven training workshops targeting Indigenous and non-Indigenous communities, and four workshops for companies, covering a total of about 420 participants.

2.6 ENVIRONMENTAL AND SOCIAL SUSTAINABILITY OF THE PROJECT



Training material on the responsible use of the equipment.

Another important aspect of the Isla Huapi project is that it took into account social and environmental sustainability aspects. The components mentioned above – participation, dialogue, transparency, a community-based management model, and an emphasis on energy education – contribute to a socially sustainable and durable solution. Projects implemented without these steps run a greater risk of generating disagreements and conflicts. The renewable energy solution was an important requirement of the community and is an aspect that generates sustainability of the project from an environmental and a social viewpoint.

A commitment is in place between state authorities, the company and the Huapi community to ensure the sustainability of the electrical installations in the future. There are also formal structures in place to provide follow-up, between the

island's electrification committee, the municipality and the Ministry of Energy. After the expiration of the guarantee in 2019, the company no longer has an official role in monitoring, but it remains committed to the project and visits the island occasionally. The electrification committee can also contract SAESA or another company with the funds it manages, in case of need for technical assistance or equipment repair.

Equipment renewal has an important environmental sustainability aspect. The batteries need to be replaced approximately every seven years, depending on usage, and the solar panels have a lifespan of 20 years. Equipment replacement and waste disposal in a sustainable manner, that does not place an additional burden on the community and the environment, will be important.



3 CONCLUSIONS, LESSONS LEARNED AND CHALLENGES FACED BY THE ISLA HUAPI RENEWABLE ENERGY ELECTRIFICATION PROJECT

The following section describes the main lessons learned and challenges of the Isla Huapi case and how it has influenced Chilean energy policy, constituting an example of good practice that can be replicated in other, similar, contexts.

- **The focus on equitable access to renewable energy and the participation of the Mapuche Huilliche community** in the design, implementation and monitoring of the PV project was a good strategy to ensure that the project was implemented in such a way that the community's rights were met.
- The **tripartite collaboration between the state, the company and the Mapuche Huilliche** community in the development of the project favoured the implementation of solutions that complied with the human rights of the community's rights-holders. In such a collaboration, it was important to establish **clear expectations, structures and rules**. For example, the community established an electrification committee that played – and continues to play – a key role in the representation and organisation of the community. For the company, establishing a clear view of the state's expectations regarding the scope of the project was key.
- **The participation of the Indigenous community has to be the starting point, and must be carried out throughout the project cycle, to ensure that the project fulfils the community's development vision**, in accordance with Article 7.1 of ILO Convention No. 169. In discussions with state authorities, the Mapuche

Huilliche community clearly established having access to energy with renewable energy solutions as a development priority, and after that moving towards improvements in access to water. It was also clear from the outset that progress could not be made without the active involvement of the community, and without the long-term commitment of the state and the company.

- **Transparency and dialogue were two key elements for the success of the project.** Through this and long-term work, trust was gradually built. This approach may



Community member in front of her home equipment.

require some **flexibility in costs and project installation times**, but it has positive impacts in terms of the social and environmental sustainability of the solution. For the community, the constant presence and follow-up by the state and the company was important to ensure transparency and consistency of information throughout the project.

- **Training and energy education are key** to ensuring the effective participation of all stakeholders, the levelling of knowledge and the possibilities for communities to make informed decisions about a project. In the case of Isla Huapi, energy education also promoted the sustainable and responsible use of electrical equipment.
- **The combination of technical knowledge and experience of/education in community relations of the state and company personnel involved** is described by the Mapuche Huilliche community, the Ministry of Energy and the company as very positive and as something to be recommended for future projects.
- Although SAESA **had no previous experience in installing individual PV panels or working in Indigenous or remote territories**, thanks to the Isla Huapi project **it positioned itself in this market for off-grid solutions** and has since used the Isla Huapi project experience to develop other projects in this area. It is important for the company to build on the experience of the Isla Huapi project to ensure a human rights approach in its policy and practice.

CHALLENGES FACED BY THE ISLA HUAPI PROJECT

- The **lack of previous models of tripartite state–business–community collaboration projects built on the development vision of an Indigenous community**, with a solution (individual PV energy) of which the counterparts had no previous experience. The Isla Huapi case worked well because there was personal commitment, flexibility and adaptation from all parties, but this will not always be the case. It will therefore be important for states and companies to design, implement and report on the human rights and sustainable development policies that underpin and guide their projects, and to generate knowledge about existing good practices to guide future projects.
- SAESA **did not have a human rights policy or an established framework for respecting human rights that would have guided the Isla Huapi project**. The company was able to take steps to respect human rights and work with the necessary flexibility, due to the commitment of the company and its employees to work based on community needs, following the guidance of the state. For future projects, the development of a human rights policy is recommended.
- The Isla Huapi project **did not have a conflict resolution or a complaint mechanism**. Challenges and doubts that arose in the process were resolved

through dialogue. The incorporation of such a transparent and effective mechanism is an aspect to consider for future projects, since if a conflict arises, it is not always possible for the parties involved to resolve it. Such mechanisms should be established taking into account the effectiveness criteria of judicial and non-judicial complaint mechanisms which are defined in the UNGPs (Principle 31).

- The main lessons learned from the Isla Huapi project can be adapted to other, similar, energy projects aimed at providing energy to communities. Founded on a **human rights-based approach to development**, this is about ensuring equitable and non-discriminatory access to good quality and sustainable services, applying human rights and sustainable development policy frameworks in a holistic manner, and working on the basis of collaboration and participation according to human rights standards (especially ILO Convention No. 169), transparency and accountability. **Energy projects can be guided by the principles of the Indigenous chapter of Chile's energy policy, which include:**
 - o The promotion of equitable access, the participation of Indigenous peoples and prior consultation.
 - o Recognition of the exercise of rights by Indigenous peoples in the energy sector, in accordance with the provisions of ILO Convention No. 169.
 - o The promotion of a new relationship between Indigenous peoples, the state and companies, in which intercultural dialogue becomes the driving force for the country's energy development.
 - o The promotion of energy development consistent with the protection of the cultural heritage of Indigenous peoples and their environment.
 - o Recognition of the diversity of the Indigenous peoples living in a country. This implies that the actions undertaken by the Ministry of Energy, or any other authority, must go hand-in-hand with the implementation of actions relevant to the reality of each Indigenous people and their respective territory.^{xv}
- In projects involving Indigenous peoples, there may be **challenges related to heritage, land ownership and/or divergent opinions in the community**. Situations and solutions vary greatly from case to case, and there are no simple answers. The key is to remain aligned with human rights principles and standards related to participation and transparency in resolving potential challenges, and to not move forward if there is a risk of violating the rights of Indigenous peoples or other individuals or communities. In Isla Huapi, for example, through dialogue with the community, the solution of individual PV panels was chosen instead of a concentrated plant, as the community did not want the island's landscape to be criss-crossed with poles and cables, and the undergrounding of the power line was not possible for technical and economic reasons.

- Often, **large/megaprojects are implemented on Indigenous lands without the Indigenous peoples being direct beneficiaries.**^{xvi} While this was not a challenge in the Isla Huapi project, where the focus was on electrification of the community itself, it is often a challenge in larger projects that are installed on Indigenous lands, for example, because of their remote location or for reasons of structural discrimination. Again, in these situations, it is of utmost importance to respect the rights of the communities affected by the project according to human rights standards, especially ILO Convention No. 169, and in particular the right to consultation, participation and consent.



4 FINAL RECOMMENDATIONS

This section concludes with recommendations for other states with renewable energy projects (hosts and donors), energy companies, and other interested parties:

GENERAL RECOMMENDATIONS FOR STATES

- **Replicate the collaboration model between state, company and Indigenous community presented** in this case study in other energy access projects, with support from the current political framework that in Chile is constituted by Convention No. 169; the Energy Policy, especially its chapter on Indigenous matters; and the National Action Plan on Business and Human Rights. From a sustainable development and human rights perspective, a participatory and collaborative methodology is a requirement of the implementation of renewable energy projects.
- **Generate knowledge about the United Nations Guiding Principles on Business and Human Rights (UNGPs) and the rights of Indigenous peoples for companies and associations**, in order to advance the implementation of international standards on sustainable development and human rights.
- **Learn from the development and implementation of Chile's energy policy to inspire similar processes in other countries**, on how a policy and sectoral case can be built and advance the incorporation of Indigenous peoples' human rights and sustainable development in a comprehensive manner.
- **Document and share good practices from other renewable energy projects, and in other sectors, that consider human rights standards, sustainable development and Indigenous peoples' participation**, in order to generate more positive examples, good practices and action models.

RECOMMENDATIONS FOR BUSINESSES AND INDUSTRY ASSOCIATIONS

- **Consider lessons learned and challenges from the Isla Huapi case and reflect on how to integrate them into their own operations or sector.**
- **Exercise human rights due diligence and conduct a human rights impact assessment in the context of their operations**, based on international human rights and sustainable development standards and, above all, ILO Convention No. 169 and the UN Declaration on the Rights of Indigenous Peoples. In this process, use the Danish Institute for Human Rights' checklist on due diligence and Indigenous peoples, which sets out phases of analysis, impact assessment, consultation, and implementation and monitoring.



RECOMMENDATIONS FOR THE INTERNATIONAL COMMUNITY

- Use **international platforms** such as the Right Energy Partnership and the UN Major Group of Indigenous Peoples for Sustainable Development, as well as regional and global forums on business and human rights and on sustainable development (such as the High Level Political Forum and the Latin American and Caribbean Countries Forum for Sustainable Development, organised annually by the United Nations) to share Chile's example and gain further support for similar processes in Chile and other countries.
- Promote recommendations related to the energy sector from regional (Inter-American Human Rights System (IAHRS)) and international (UN, i.e. Universal Periodic Review (UPR), treaty bodies and special procedures) human rights mechanisms.

ENDNOTES

- i See for e.g., https://ssir.org/articles/entry/respecting_the_rights_of_indigenous_peoples_as_renewable_energy_grows and <https://www.un.org/sustainabledevelopment/blog/2019/07/on-the-frontlines-of-climate-change/>
- ii https://ssir.org/articles/entry/respecting_the_rights_of_indigenous_peoples_as_renewable_energy_grows
- iii So says, for example, indigenous leader and UN expert on Indigenous peoples in climate change, Hindou Oumarou Ibrahim. See <https://www.un.org/sustainabledevelopment/blog/2019/07/on-the-frontlines-of-climate-change/>.
- iv Energy Policy 2050, Indigenous chapter, <https://www.energia.gob.cl/sites/default/files/capitulo-de-pertinencia-indigena-de-la-politica-energetica-nacional.pdf>.
- v Ministry of Energy, Energy 2050, Chile's Energy Policy, page 12, https://www.energia.gob.cl/sites/default/files/energia_2050_-_politica_energetica_de_chile.pdf.
- vi Ministry of Energy, 2018–2022 Energy Route, page 26, <https://energia.gob.cl/rutaenergetica2018-2022.pdf>
- vii 'Hulliche' in Mapudungún translates to 'people from the south'.
- viii Photovoltaic systems: generation of electrical energy through PV panels that capture the sun's light energy and transform it into electrical energy. PV cells made of semiconductor materials are used to achieve this transformation. Source: Generators of Chile, <http://generadoras.cl/tipos-energia/energia-solar>
- ix <https://www.gruposaesa.cl/saesa/>
- x This documentation is limited to commenting on the role of these two companies only in the particular case of Isla Huapi.
- xi The project had a total investment of 1,803 million Chilean pesos, of which 1,000 million were contributed by the Ministry of Energy and the Energization Program of the Undersecretariat of Regional and Administrative Development (<http://www.subdere.cl/>).
- xii Report of the Working Group on the issue of human rights and transnational corporations and other business enterprises, A/HRC/32/45, 4 May 2016, paragraph 23, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G16/091/74/PDF/G1609174.pdf?OpenElement>. See also Report of the Working Group on the issue of human rights and transnational corporations and other business enterprises on the 'Regional Consultation for Latin America and the Caribbean: Public policies for the implementation of the United Nations Guiding Principles on Business and Human Rights, in the framework of the 2030 Agenda for Sustainable Development', A/HRC/32/45/Add.4, June 9, 2016, para. 43, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G16/115/73/PDF/G1611573.pdf?OpenElement>.
- xiii UN 1966, <https://www.ohchr.org/SP/ProfessionalInterest/Pages/CESCR.aspx>
- xiv UN 1966, <https://www.ohchr.org/SP/ProfessionalInterest/Pages/CCPR.aspx>
- xv Energy Policy 2050, Indigenous chapter, <https://www.energia.gob.cl/sites/default/files/capitulo-de-pertinencia-indigena-de-la-politica-energetica-nacional.pdf>, pages 42–43.
- xvi <https://www.un.org/sustainabledevelopment/blog/2019/07/on-the-frontlines-of-climate-change/>

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