DEFENDING INDIGENOUS TERRITORIES THROUGH ENERGY SOVEREIGNTY: COMMUNITY ENERGY PROJECTS IN GUATEMALA

by

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Abstract

In an environment where large-scale hydropower projects pose a continuous threat to Indigenous livelihoods and territories, this research follows Indigenous communities and a civil society organization (CSO) in Guatemala as they defend Indigenous territories by establishing and controlling small-scale community energy initiatives. These projects represent concrete energy alternatives that go beyond typical forms of resistance against extractivism prevalent across Latin America. This study delves into the activities of Colectivo Madreselva (CMS), a prominent civil society organization (CSO) that supports communities in designing, building, and managing micro-hydroelectric projects in Zona Reina region (Uspantán, Quiché). Their advocacy carries a particular significance in Guatemala, a country deeply scarred by a 30-year genocidal civil war against Indigenous peoples. The core of the analysis revolves around the Indigenous communities' unique strategy of defending their territories through energy sovereignty. By building and controlling small-scale hydropower projects, these communities not only secure an energy provision for themselves but also resist large-scale hydropower initiatives. This thesis provides a detailed examination of the role played by CMS in fostering these micro-hydropower projects and explores the challenges that communities face in their quest to maintain autonomy over their energy projects as an alternative to mega-developments. The study also scrutinizes the past and present impacts of the Guatemalan state's and corporations' counterinsurgency tactics against Indigenous peoples now involved in developing community energy projects. In shedding light on the intricacies of energy and food sovereignty, land rights, and Indigenous resistance in the context of post-war Guatemala, this thesis offers insights into the possible trajectories toward achieving a sustainable and just energy transition.

Lay Summary

This research explores how Indigenous communities in Guatemala are resisting the threats of large-scale hydropower projects by taking control of their energy production. Supported by the civil society organization Colectivo Madreselva (CMS), these communities are creating small-scale, sustainable energy alternatives through micro-hydropower projects. This approach not only provides energy for these communities but also serves as a form of resistance against the advance of large-scale projects on their territories. However, these endeavours face various challenges, including counterinsurgency tactics by the Guatemalan state and corporations. In a nation still feeling the impacts of a 30-year civil war against Indigenous peoples, this study shines a light on the complex issues of energy and food sovereignty, land rights, and Indigenous resistance. It ultimately provides insights into potential pathways toward a more sustainable and equitable energy transition.

Preface

This thesis, including design, analysis, and presentation, is the original work of the author. It included fieldwork in Guatemala approved by the UBC Behavioural Research Ethics Board under certificate No. H22-00506. Portions of this research informed the report "¿Quiénes dan la Luz? Defendiendo territorios a través de la soberanía energética" shared with the partner organization, Colectivo Madreselva, as part of the research results from the June and July 2022 fieldwork.

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List of Abbreviations

AIN - Ayuda de la Iglesia de Noruega

AMALUNA - Asociación Civil Maya Luz Comunitaria Nuevo Amanecer

AMM - Administrador del Mercado Mayorista

ASEG - Asociación de Electricidad de La Gloria

ASHDINQUI - Asociación Hidroeléctrica para el Desarrollo Integral del Norte de Quiché

BCIE - Banco Centroamericano de Integración Económica

BHRRC - Business & Human Rights Resource Centre

BINGO - Big International Nongovernmental Organizations

BUN-CA - Biomass Users Network of Central America

CCA Coalition - Climate Change Act Coalition

CMS - Colectivo Madreselva

CNEE - Comisión Nacional de Energía Eléctrica

COCODE - Consejos Comunitarios de Desarrollo Urbano y Rural

CODECA - Comité de Desarrollo Campesino

CODIDENA - Comisión Diocesana de Defensa de la Naturaleza

COIN - Counterinsurgency

COMUDE - Consejos Municipales de Desarrollo

COPAE - Comisión Pastoral Paz y Ecología

CPO - Consejo de los Pueblos Mayas de Occidente

CPR - Comunidades de Población en Resistencia

CSO - Civil Society Organization

DOT - Defense of territory

EGSAA - Empresa Eléctrica de Guatemala, S.A.

EIA - Environmental Impact Assessment

EJOLT - Environmental Justice Organizations, Liabilities and Trade

ESMAP - Energy Sector Management Assistance Program

FBO - Faith-Based Organization

FENERCA - Fomento de Energías Renovables en Centroamérica

FMAM - Fondo para el Medio Ambiente Mundial

FOCAEP - Fondo de Acceso Sostenible a Energía para la Reducción de la Pobreza en América

Central

FOCER - Fondo de Cooperación para Energías Renovables y Eficiencia Energética

FONAPAZ - Fondo Nacional para la Paz

FPE - Feminist Political Ecology

FPIC - Free Prior and Informed Consent

GPE - Geographical Political Economy

HMH - Holocaust Museum of Houston

IDB - Inter-American Development Bank

IFI - International Financial Institution

ILO - International Labor Organization

ILSA - Instituto Latinoamericano para una Sociedad y un Derecho Alternativos

INE - Instituto Nacional de Estadística

INGO - International Nongovernmental Organization

IRENA - International Renewable Energy Agency

IUCN - International Union for Conservation of Nature

KW - Kilowatt

MEM - Ministerio de Energía y Mina

NGO - Nongovernmental Organization

OAS - Organization of American States

OECD - Organisation for Economic Co-operation and Development

OLADE - Organización Latinoamericana de Energía

PAC - Patrullas de Autodefensa Civil

PNC - Policía Nacional Civil

PNUD - Programa de las Naciones Unidas para el Desarrollo

PREPCA - Programa Regional de Energía y Pobreza en Centro América

SAT - Superintendencia de Administración Tributaria

SDG - Sustainable Development Goals

SEGEPLAN - Secretaría de Planificación y Programación de la Presidencia

UICN-ORMACC - Unión Internacional para la Conservación de la Naturaleza - Oficina

Regional para México, América Central y el Caribe

UNDP - United Nations Development Programme

URNG - Unidad Revolucionaria Nacional Guatemalteca

USAID - United States Agency for International Development

WB - World Bank

WFDD - World Faiths Development Dialogue

WWF - World Wildlife Fund

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Dedication

To Claudia. And to every mother who stayed silent so that their daughters could later speak.

Chapter 1: Introduction

This thesis delves into the relationship between community energy projects and the defence of Indigenous territories from large-scale energy development in Guatemala. By employing a case study methodology and using energy sovereignty as a critical framework, this study examines the role of Indigenous communities and civil society organizations (CSOs) in developing community-based energy initiatives to defend their land while acknowledging the challenges that emerge during the planning and implementation of such projects. The thesis also emphasizes the interconnectedness of food and energy sovereignty and their implications on Indigenous self-determination struggles. By adopting a Feminist Political Ecology (FPE) perspective, this research investigates the complexities and contradictions within Indigenous-led community energy projects and underscores the importance of addressing historical injustices and empowering communities in their pursuit of defending their territory.

Micro-hydroelectric development is an instrument for achieving energy autonomy and empowering indigenous communities in different contexts. For example, Cruz-Herrera et al. (2018) analyzed the sustainable socio-environmental management in an Ixil community in Guatemala, emphasizing the role of community-based hydroelectricity for the management, conservation, and use of natural goods to achieve more autonomy and better living conditions in the communities. Similarly, Butchers et al. (2021) have highlighted the factors influencing the sustainability of micro-hydro projects in Nepal, while Greacan (2003) discussed the political implications of micro-hydroelectricity and its marginalization in Thailand. In this direction, Hernando-Arrese and Rasch (2022) examined the injustice and resistance towards small hydropower projects in Southern Chile, showing that this infrastructure is subject to complex political relationships and can become vectors of exclusion and marginalization. Moreover,

energy justice in relation to small-scale energy development was explored by Islar et al. (2017) in Nepal, and Kabalan et al. (2014) in the Philippines, who delved into the role of community engagement in developing a micro-hydroelectric project. Regarding the long-term sustainability of these projects, López-González et al. (2019) analyzed technical, economic, social, and environmental aspects of small-scale energy projects in Venezuela using indicators and sustainability criteria such as the involvement of local organizations, the government's role, and the alignment of the projects with national policies. These sources provide valuable insights into the complex interplay of factors contributing to micro-hydro projects' success, resistance, and sustainability in different contexts.

This research contributes to the fields of energy autonomy and sovereignty, Indigenous self-determination, and micro-hydroelectric development by exploring how Indigenous communities and civil society organizations in Guatemala utilize community energy projects to protect their territories from large-scale energy development. This thesis argues that when strategically harnessed by Indigenous communities with the support of grassroots civil society organizations, community energy projects can stand as powerful shields, defending territories from large-scale developments. But the road to successfully implementing such a strategy is not straightforward, dealing with deep-rooted challenges like the enduring scars of colonization and counterinsurgency, divisions within communities along generational and gender lines, and the constant pressure from state and corporate actors. Moreover, our findings show that adopting a relational approach to energy and food sovereignty, community ownership and active involvement, particularly when faced with external threats, is crucial to navigating these challenges.

By adopting a relational approach to food and energy sovereignty, this study emphasizes the importance of local understandings of community and territory in ensuring just outcomes in energy transitions. Through the nexus between food and energy sovereignty for the defense of territory we can learn that "struggles for land concern not just production and nutrition but also nested relations of give-and-take among people, soil, seeds, ancestors, and entities (...)" (Nelson, 2020, p. 227). By examining the challenges and successes of community energy projects in Zona Reina, this thesis sheds light on the complex interactions between various actors, institutions, and scales involved in these initiatives. Furthermore, the research highlights the role of gender and generational dynamics within communities, stressing the importance of addressing these issues to achieve more inclusive and sustainable energy projects. Overall, this thesis provides valuable insights into community-led energy initiatives as an alternative to large-scale energy development, focusing on their potential for fostering Indigenous self-determination and achieving a more just and sustainable future. In what follows, I will describe the research questions and primary concepts that oriented this project, followed by a discussion of my positionality as a foreign researcher in Guatemala, the methodological options that guided my research process, and a summary of the following chapters.

1.1 Research questions and main concepts

Upon initiating this project, I aimed to uncover the distinct elements that make community energy projects successful alternatives to large-scale energy development and extractivism, a destructive approach that takes excessively from territories, prioritizing short-term gain through the unjust exploitation of both natural and social environments (Gudynas, 2010), which represents a key factor of violence against Indigenous peoples in Guatemala. The

primary research questions guiding this thesis are: (i) how do Indigenous communities and civil society organizations (CSOs) use community energy projects to protect their territories from expansive mega-developments, and (ii) what key challenges arise when these actors design and execute such projects.

According to Chagnon et al., extractivism "forms a complex ensemble of self-reinforcing practices, mentalities, and power differentials underwriting and rationalizing socio-ecologically destructive modes of organizing life through subjugation, violence, depletion, and non-reciprocity" (Chagnon et al., 2022, p. 760). This broad definition is particularly helpful to our approach in this thesis, in which the focus is not on extractive projects but on alternatives developed to avoid the prevalence of extractive practices in Indigenous territories. Although our analysis does not focus on extractivism as such, it is vital to highlight how the interest of corporations and the Guatemalan state in using territories for large-scale hydroelectric development impacts communities defending their territory with community energy projects. Undermining community work is among the goals of some corporate and state actors interested in exploiting these territories, and we argue that this practice is critical to enacting an extractive project.

The notion of "total extractivism" is also crucial for comprehending state and corporate practices undermining community projects geared toward defending territory. According to Dunlap and Jakobsen, the idea of "total extractivism" is essential for comprehending state and corporate practices that undermine community projects geared toward defending territory. Dunlap and Jakobsen (2020) assert that total extractivism is a propelling force in global capitalism, employing aggressive technologies to exert control over land, inhabitants, and social relationships. Moreover, this system aims to normalize its violent methods and modes of

thinking, as it forcibly 'pacifies' various aspects of nature and society. Dunlap and Jakobsen suggest that while total extractivism tends to permeate every facet of contemporary political economies, it never fully succeeds and continually encounters resistance, adaptation, and negotiation.

Another key feature of extractivism highlighted by the Mayan Kaqchiquel journalist Francisca Gómez Grijalva, is the gendered character of extractivist violence. She affirms that the continuum of violence against women is a reality in the expansion of extractivism in Guatemala, as political and economic power groups continue to rely on violence against women as one of the many mechanisms of repression, domination, and control that are still used to instill fear, provoke shock, and immobilize their communities or Peoples who express opposition to extractive-capitalist interests (Grijalva, 2013).

Lastly, 'green' extractivism widens the classical concept of extractivism as appropriating "natural resources" for export as raw or barely processed materials (Gudynas, 2018). Alexander Dunlap defines "green extractivism" as a form of resource extraction framed as environmentally sustainable or renewable. However, it perpetuates the same social and ecological consequences associated with traditional extractive industries (Dunlap, 2018). Green extractivism often involves the development of large-scale renewable energy projects, such as wind, solar, or hydroelectric power, that are promoted as alternatives to fossil fuels. However, these projects can still lead to land dispossession, ecological degradation, and social conflicts similar to those caused by conventional extractive practices like mining or oil drilling. In this context, Dunlap argues that green extractivism masks the underlying social and environmental issues while allowing for the continued exploitation of natural resources and marginalized communities (Dunlap, 2019). This concept encompasses the type of extractivism that the projects we discuss

in this thesis oppose: large-scale renewable energy development, and more specifically hydropower dams.

Large-scale hydroelectric projects have an extractivist character perpetuating various form of violence, disproportionately affecting indigenous and marginalized communities (Del Bene, Scheidel, & Temper, 2018; Dávalos, Rodrigues-Filho, & Litre, 2021). In Latin America, the construction of these projects often involves land grabbing, displacement, environmental degradation, and loss of cultural heritage (Hirsch & Utreras, 2010; Mayén, 2019). Resistance to these projects stems from violating human rights, including the right to self-determination and consultation, as well as the infringement on traditional ways of life (Batz, 2017; BHRRC, 2017). Furthermore, the struggle against large-scale hydroelectric projects is fueled by the perception that the benefits of these projects, such as electricity generation, are disproportionately distributed in favour of powerful actors, while the social and environmental costs fall on local communities (Lacey-Barnacle, Robison, & Foulds, 2020; Rodríguez-Carmona & De Luis Romero, 2016). As a result, communities and organizations are mobilizing to resist these projects, using a range of strategies that include legal actions, protests to demand consultation, respect for their rights, and recognition of their ancestral territories, and direct actions such as road blockades, occupation of dam construction sites, and the formation of grassroots movements (Del Bene et al., 2018; Hernando-Arrese & Rasch, 2022).

Micro-hydroelectric community projects can be seen as a form of resistance to extractive large-scale hydroelectric projects by offering an alternative, decentralized, and community-driven approach to energy production. These small-scale initiatives prioritize local control, environmental sustainability, and social equity, challenging the dominant extractivist paradigm. For instance, in Nepal, community-managed micro-hydro projects have successfully provided

electricity to remote rural areas, promoting local development and self-reliance while avoiding the social and environmental impacts associated with large-scale dams and fuel wood consumption (Koirala, 2007). An example from Colombia is the United Nations Development Programme (UNDP) community-based micro-hydro initiatives that have empowered local communities to take control of their energy sources, enhancing energy security and promoting sustainable resource management (Ramírez, 2022). In the Brazilian Amazon, the programs Light for All (Luz para Todos) and More Light for the Amazon (Mais Luz para Amazônia) have installed small-scale solar panels in remote communities. These state-led projects provide clean and affordable energy while respecting the local environment and indigenous territories, involving communities in the decision-making around the project (WWF, 2023). A study on rural electrification in the Brazilian Amazon compares this initiative with Colombia and other Latin American countries discussing the role of decentralized renewable energy systems, such as micro-hydroelectric plants, in improving energy access for rural communities (M. F. Gómez & Silveira, 2010). By fostering community-driven energy solutions, communities developing micro-hydroelectric projects across the world challenge the extractivist logic of large-scale hydroelectric projects and engage in the broader struggle for energy justice and environmental sustainability (Lacey-Barnacle et al., 2020). In Ecuador, there are also robust examples of microhydroelectric and photovoltaic community energy projects focused on using clean energy generation to protect local biodiversity and livelihoods (Criollo Alvarez et al., 2020; Fundación Rosa Luxemburgo, 2021).

In this thesis, energy sovereignty serves as a critical framework, emphasizing people's ownership of the energy transition process and addressing land use, livelihood issues, and environmental impacts of community energy projects (Okpanachi et al., 2022). Focusing on

political economy, socio-ecological dynamics, and the significance of local understandings of energy, this approach aims to ensure just outcomes in energy transitions (Broto, 2017; Laldjebaev et al., 2016). Energy transitions that prioritize the interests of elites and international corporations while neglecting the self-determination of Indigenous peoples can deepen inequalities and yield negative social, environmental, and political consequences (Broto et al., 2018; Carley & Konisky, 2020; Sovacool et al., 2021). Centring the political economy and power relations in the debate about community energy projects allows scholars to avoid depoliticizing energy transitions and disempowering the poor (Newell & Mulvaney, 2013).

The discussion of energy sovereignty is crucial due to increasing social complexity and dependence on electricity, essential for achieving human rights, such as food security and healthcare (Gould, 2006; Kaul, 2010; Timmermann & Noboa, 2022). In addition, technological advancements have made independent energy production systems more efficient, sustainable, and financially accessible to individuals and communities (Kaundinya et al., 2009; Lahoud, 2018). However, achieving energy sovereignty requires political-organizational skills and access to funds, means of production, and information (Espe et al., 2018; Thombs, 2019). Ultimately, energy sovereignty challenges traditional energy access perspectives, underscoring the importance of authentic citizen participation and rights in the decision-making around energy, a vital aspect of the community energy projects analyzed in this thesis (Broto, 2017).

The connection between food and energy sovereignty, particularly relevant to understanding Colectivo Madreselva (CMS)'s work with communities in Zona Reina – a region in the north of Quiché, Guatemala – characterizes their relational approach to programs and collaboration with communities. CMS, a 25-year-old civil society organization situated in Guatemala City, has collaborated with Indigenous communities throughout Guatemala in

developing "alternative lifestyles." Their primary focus has been on community-based energy initiatives and agroecology projects led by women, two complementary programs that demonstrate their integrated understanding of food and energy sovereignty (Colectivo Madreselva, 2020). Food sovereignty programs emerged after CMS noticed an urgent problem in the region related to the expansion of cardamon monoculture and consequent sub nutrition that affected the region. While families replaced their corn crops with cardamon, whenever the price of cardamon is low in the market there is a local food shortage, as they cannot feed themselves out of cardamon (CMS activist, personal communication, June 2022h).

Both food and energy sovereignty are intrinsically connected to Indigenous self-determination struggles, emphasizing communities' rights to access natural goods and develop sustainable systems based on local needs and capacities (ILSA, 2010). Agroecology, a central component of food sovereignty, ensures agroecosystems' resilience while supporting energy sovereignty through local, sustainable energy sources that do not compromise food production (ILSA, 2010). In Abya Yala, Indigenous and rural social movements strive for various forms of sovereignty, such as food, territory, water, and energy, with concepts of autonomy and sovereignty often overlapping in defence of territory, agroecology, and educational projects (Rosset & Barbosa, 2021). In the case of Zona Reina, energy sovereignty – soberanía energética – was the predominant term used by activists and community members in interviews and conversations. As further discussed on Chapter 2 and 3, the struggle for energy sovereignty is

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¹ The term "Abya Yala," which refers to the territories spanning North, Central, and South America, was chosen by the second Continental Summit of Indigenous Peoples and Nationalities of Abya Yala took place in Quito, Ecuador, in 2007. This term is literally translated as "land in its full maturity" or "land of vital blood" from the Guna language (Choquehuanca, 2020), and it represents the indigenous people from these continents. The label "Latin America" is also used, having its origins in both imperial and anti-imperial endeavours of 19th-century Europe, as noted by Webber (2018). Throughout this thesis, I will use "Abya Yala" and "Latin America" interchangeably.

deeply connected to food sovereignty, and the agroecology programs in Zona Reina emerge in response to the terrible conditions of commercialization of Cardamom, the main source of income in the region.

The relationship between food and energy sovereignty movements corresponds to complex interactions between various actors, institutions, and scales, providing an example of relational thinking discussed by several political ecologists. As we will see in the coming chapters, these movements often involve collaborations and coalitions between local communities, civil society organizations, and transnational networks, which work together to contest and resist dominant power structures and advocate for alternative models of development (Bakker & Bridge, 2006). FPE scholars argue that relational thinking also encourages the recognition of non-human agencies and inter-species relationships in food and energy sovereignty struggles (Haraway, 2016; Sultana & Loftus, 2011). In summary, relational thinking offers a comprehensive framework to understand food and energy sovereignty struggles as interconnected, complex, and context-dependent processes that involve multiple actors, institutions, and scales, as well as human-environment interactions.

Timmermann and Noboa (2022) provide a detailed framework for understanding energy sovereignty and its policy implications in the energy sector, which proved helpful in interpreting Zona Reina's community energy projects. Drawing parallels between the food sovereignty movement and the energy sector, the authors outline the core values of energy sovereignty as: (i) accessibility, ensuring energy access for all; (ii) empowerment and recognition, developing and sustaining capabilities to collaboratively produce solution-oriented energy system knowledge and participate effectively in governance; (iii) stewardship and sustainability, designing and managing decentralized renewable energy systems while protecting the environment; (iv) self-

sufficiency, reducing negative impacts of exploitative business practices; (v) resilience, maintaining production capacities while withstanding various shocks, including socioeconomic, political, environmental, and climatic; (vi) peace, establishing production systems that avoid hostile relations; (vii) transparency and self-determination, creating democratic decision-making mechanisms that give a voice to underrepresented groups and limit corporate takeover; (viii) gender-justice, acknowledging the contributions of women and eliminating barriers to their empowerment. This framework is informed by the food sovereignty movement led by Via Campesina and its influential Food Sovereignty Declaration (Via Campesina, 1996), which lists seven key demands. In addition, Timmermann and Noboa include an eighth demand related to gender issues.

Two other concepts that will be extensively mentioned and discussed in this thesis are the ideas of territory and community underlying the energy projects analyzed here. In the context of community energy projects in Zona Reina, both concepts are characterized by multiplicity and co-existence of multiple meanings for diverse stakeholders who share the overarching objective of defending their territory through energy sovereignty. As we will observe on Chapter 3, people provided different and complementary responses when asked about their understanding of "community" in the interviews. However, among the community members, this concept is very grounded on their location and use of territory and is often associated with the importance of leadership and trust for the defence of territory. Other features, such as the territorial and locational dimension of the term, union, cohesion, and more idealistic responses, highlighted mainly by CMS activists, are associated with their concept of community. This thesis reflects on how local understandings of "community," by community members and CMS activists working in community energy projects, influence the ownership models and territorialities adopted by

grassroots communities developing clean energy projects and impact their collective action towards energy sovereignty.

The concept of diffractive multiplicities (Blaser, 2018) is very instrumental to understanding how a decolonial project admits differences in a way that colonial projects, like the large-scale hydropower development interests in the region, do not. Mario Blaser's emphasis on multiplicity and equivocation offers an interesting approach to comprehending and engaging with practices diverging from traditional colonial tendencies towards singularization. One example of colonial singularization is the territorialization process underlying extractive projects, which does not admit multiplicity or coexistence with divergent ways of using the territory where they operate. Additionally, Blaser delves into the intricacies of coloniality, scrutinizing how power dynamics associated with colonization can erode alternative forms of worldmaking and "storying" the world. He cautions us that without acknowledging these power imbalances, our efforts to address multiplicity and divergence may inadvertently perpetuate coloniality.

The contribution of Lorena Cabnal is precious to illustrating and complementing Indigenous understandings of land and territory. She described *cuerpo-territorio*, a concept that comes from conversations within and among Indigenous feminist groups across Abya Yala, by redefining violence against women and land as connected to patriarchal origin and classification stories that predate colonization (Cabnal, 2013). Oppression is felt and repeated through the body, which is not separate or limited, but linked with community life, the social body of the colonial nation-state, and our relationships with the environment. If we use *cuerpo-territorio* as an analytical framework, defending territory should necessarily include defending women's bodies from "low" and "high-intensity" patriarchal violence (Segato & Monque, 2021). Adding a gender focus to this thesis is a crucial shift to its original framing, which focused on the social

conflicts these communities potentially established with corporate and state actors interested in using their territories for large-scale energy development. In the coming section, I will provide more details on how gender inequalities within community energy projects became a key topic discussed in this thesis.

1.2 Positionality statement

As a Latin-American woman who grew up in an environment of structural machismo in Brazil and a home of quotidian domestic violence, I was forced to become a feminist at a very young age. Studying geography opened my eyes to this shared reality in various parts of my country and the world, even though I have never openly given a feminist focus to my research before. Before my M.A., I had always studied themes around international security and urban violence, a research agenda, like many others, dominated by men. This thesis represents a shift in many aspects: from an urban to a rural focus, in collaboration with a civil society organization rather than a university, with Indigenous participants, and in a country I had never visited until 2022 in my fieldwork in Zona Reina. My first contact with the communities was reading their story in Vancouver as a suggestion from a Guatemalan-Canadian friend who has a wide experience on human rights organizations. My first in-person interaction with activists from Colectivo Madreselva (CMS), in Guatemala City, reinforced both what my friend and my readings had told me: that they were a ground-breaking example of resistance to defend their territories creatively and collectively. And they are. However, the community power in these projects is intertwined with dynamics of machismo and gender inequality that reproduce the marginality of women who do not have access to electricity provided by the micro-hydro projects because of their "lack of participation" in the construction process in case they do not

count on a male partner to do the "hard work" that being an associate requires. Those women who have access to electricity but do not have a say in the decision-making process in the community energy associations are also affected by these violent dynamics at another level. Observing these internal dynamics of conflict and connections within a historical context of armed conflict and counterinsurgency was undoubtedly facilitated by previous research on violence and security in Latin America (Granovsky-Larsen & Santos, 2022).

Recognizing my positionality is essential to understand how I got to certain conclusions after observing the lives of Indigenous Q'eqchi', K'iche' and Ixil women in Zona Reina, adding a feminist focus to my work that started by assuming these projects as coherent decolonizing strategies to defend territory from extractivism and 'developmentality' more broadly (Srinivasan & Kasturirangan, 2017). By "refusing imperial extractivism", these communities are "seizing "power", organizing and bringing light and with it autonomy and dignity" (Nelson, 2020, p. 233). However, what I could see was that "[S]uch solidarities involve navigating complex power relations" that reproduce women's marginality at the same time that they question the 'center' represented by corporate and state interests aiming to use their territories for large-scale hydroelectric projects (Sultana, 2021, p. 161). Sultana (2021) highlights the importance of positionality to Feminist Political Ecology (FPE) for going beyond dualisms that reduce the complexity of power dynamics and for recognizing violent processes within environmental struggles and 'alternatives' to developmentality, just like in my personal experience in Zona Reina.

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² Model of development "centred around consumption-fuelled economic growth and surplus accumulation, [which] has depended on the intensive exploitation of people and nature, thereby adversely impacting societies and ecologies throughout the planet." (Srinivasan & Kasturirangan, 2016).

As further discussed in Chapter 4 of this thesis, for example, we reflect on the fact that community women who were not involved in the decision-making around the energy projects or in the 'hard work' of construction and maintenance of the projects had a notable relational thinking regarding how their agroecology project was connected to energy sovereignty, as protecting the forest by growing food in their parcels would keep the rivers alive and maintain the micro-hydroelectric projects operating. By acknowledging the interconnectedness of environmental, social, and political processes that shape energy and food sovereignty struggles, women involved in the agroecology demonstrated a relational thinking that highlights the complex relationships between communities, ecosystems, and political actors in their pursuit of control over resources and decision-making processes (Escobar, 1999). This observation was crucial for theoretically orienting this study using an FPE perspective, shifting this thesis focus to the complexities and contradictions within Indigenous-led community energy projects, which aim to challenge large-scale energy development with a community governance structure.

1.3 Methodology

This research happened in close collaboration with Colectivo Madreselva (CMS). This Guatemalan civil society organization enabled contact with Indigenous communities building and managing community energy projects in Zona Reina, which comprises the municipalities of Uspantán (Quiché) and Ixcán (Alta Verapaz). The role of CMS was crucial for both establishing contact with communities and providing the space to dive deep into the collective's internal dynamics. Fieldwork was undertaken in Guatemala City, Uspantán and Ixcán throughout June and July 2022. I undertook 44 semi-structured interviews and spent several hours observing organizational processes and local dynamics in both CMS headquarter in Guatemala City and the

communities of Zona Reina. Interviews were conducted in Spanish with occasional simultaneous translations by a bilingual CMS activist and a community partner for participants who spoke Q'eqchi' as their first language.

All interviews were audio-visually recorded, and recordings were revisited in the summer of 2022 to transcribe main quotes and code key topics. This study was oriented by ethical guidelines recommended by the Tri-Council Policy Statement in the Ethical Conduct for Research Involving Humans Course on Research Ethics, a certification I obtained in September 2021. All my interviews, listed on Appendix A, were introduced by an explanation of my research and written, or oral, consent (Appendix B) was required from participants before starting. All the 44 interviews were audio-visually recorded, as besides the thesis, I intended to produce a video showing CMS and communities' work on the energy projects as more accessible and useful a research result to promote their work for a wider audience. Besides sharing their time, stories, and wisdom through the semi-structured interviews, community partners also contributed with photos of their own community energy facilities, referenced on Chapter 3 of this thesis.

Participants were anonymized because, as land defenders opposing mega-development and extractivism in Guatemala, one of the deadliest countries for environmental defenders (Global Witness, 2021), they are exposed to different threats from state and corporate actors, as further discussed in Chapter 4. In our direct quotes, authors are referred to according to the group of interviewees they pertain to, namely CMS activists, Directors (members of the board of directors of one of the community energy associations), Associates (associate members of one of the community energy associations), and Non-associates (community members who are not part of any community energy association, and, therefore, have no access to power generated and

distributed by the community energy projects). Scripts with guiding questions for each group of interest can be found on Appendix C. Direct quotes from the interviews with Indigenous community members and CMS activists were translated from Spanish, and some have been edited for style. All notes and expressions inserted in square brackets are my own.

This research included several literature reviews of scholarly and non-academic sources, like CMS and other CSOs' reports on community energy in Guatemala, as well as reviews of internal documents detailing the community energy projects supported by CMS and internal rules of procedures of the four operating projects covered by this thesis. However, fieldwork experience was vital to understand the processes documented by such documents on the ground. My immersion in the context I was investigating made my short fieldwork an ethnographic experience in which I lived with multiple activists, with different roles and times of experience working with community energy, both in Zona Reina and the capital. This intensive contact with my research partners allowed me to partly rely for my analysis on direct observation of the energy projects and internal events such as weekly staff meetings and extraordinary assemblies of community energy associations in Zona Reina. CMS agreed to provide me with access to their internal meeting and to community convenings so I could better understand organizational dynamics and how they implement their defence of territory strategy. This study covers five case studies of community energy projects in Zona Reina: four with operating micro-power electricity project (Unión 31 de Mayo, Lírio Putul, La Taña and La Gloria) and one intercommunity project under construction (Los Copones).

1.4 Summary of chapters

The following three chapters of this thesis delve into different geographical areas and themes, each of which is aligned to answer one of the research questions.

Chapter 2, titled "How to build ownership? Colectivo Madreselva and community energy projects in Guatemala," responds to the first research question on how civil society organizations (CSOs) and Indigenous communities employ community energy projects to shield their territories from large-scale hydroelectric development. CMS's and communities' efforts in Zona Reina aim to build energy sovereignty and defend Indigenous communities against extractivism, large-scale energy projects, and land dispossession. While community ownership is vital to these endeavours, the concept remains contested and must consider the historical context, territorial struggles, and local power dynamics (Butchers et al., 2021; Kunze & Becker, 2015). In addition, this chapter delves into the challenges CMS faces in securing funding for community energy projects, navigating the landscape of international support, and the impact of Guatemala's electricity sector privatization on community-based initiatives (Alford-Jones, 2022). Finally, it outlines the big picture of Guatemalan energy policy and CSOs landscape, focusing on our case study organization's history and work.

Chapter 3, "It is not an Eden': Challenges of Community Organizing in Post-War Guatemala," deals with the second research question, which concerns the key challenges that surface when designing and implementing community energy projects. These projects are deeply rooted in the armed conflict that began in 1960, during which numerous communities were displaced and formed the *Comunidades de Población en Resistencia* (Communities of Population in Resistance or CPR) (Fundación Arias para la Paz y el Progreso Humano, 2000b).

Following the 1996 Peace Accord, these communities encountered various obstacles in securing their territories, rights, and well-being, primarily due to a strategic state effort to weaken the political action strength they had built during the armed conflict while hiding from the army in the mountains (de Leon Ceto, 2013). This chapter delves into the history of state-led counterinsurgency in Guatemala and its enduring impact on Indigenous governance models, which continue to shape community energy projects in various ways. Additionally, it discusses five community energy projects in Zona Reina, analyzing their construction, operation, and perceived benefits and challenges. The chapter finally identifies two main challenges faced by these projects: generational differences in fostering a sense of community ownership and gender inequalities perpetuated through the distribution of access to community energy service and active participation in decision-making processes related to project management. These challenges underscore the need for ongoing efforts to address historical injustices and empower communities in their pursuit of defending their territory.

Chapter 4, "Community Territorialities Resisting Harmful Legacies of

Counterinsurgency," investigates the concept of 'territory' underlying small-scale energy projects in Zona Reina and how they differ from and challenge state and corporate concepts of territory, diving deep on the causes underlying the challenges faced by communities and CMS. The chapter examines the interplay between community energy projects resisting counterinsurgency legacies "from below" (Borras & Franco, 2013) and the various political responses attempting to undermine these projects "from above" (Geenen & Verweijen, 2017), acknowledging their mutual influence (Verweijen & Dunlap, 2021). The case study of Zona Reina contributes to the counterinsurgency debate by demonstrating that such techniques might be applied beyond large-scale extractive projects. The chapter focuses on community and territory underlying micro-

hydropower projects in Zona Reina and the external threats posed by state and corporate actors interested in large-scale energy projects. It also discusses challenges to community ownership, such as the limited capacity of CMS to fully transfer control of energy projects to communities due to corporate and state tactics aimed at discrediting and stopping community energy initiatives. Finally, the chapter aims to reveal the strategies and intentions of actors "from below" (communities and CMS) and "from above" (various levels of the Guatemalan government and transnational energy corporations) in using this territory for extractive purposes.

The concluding chapter summarizes the main findings of this thesis, bringing attention to three main arguments developed in previous chapters: (i) the projects' main difficulties are rooted in the brutal history of colonization and counterinsurgency experienced by these communities, which also resulted in a strong sense of community and resiliency; (ii) internal gender-based and generational divisions within communities undermine the projects' design, conduct, and outcomes; and (iii) communities and CMS have partly tackled these challenges by adopting a relational approach to energy and food sovereignty in defending Indigenous territories. Chapter 5 ends by presenting potential topics to be explored in future research, such as examining the social-environmental impacts of small-scale hydropower development on territories, exploring how these projects can perpetuate top-down power dynamics affecting marginalized groups, and analyzing the roles of local governments, energy companies, and civil society organizations in driving these dynamics.

Chapter 2: How to build ownership? Colectivo Madreselva and community energy projects in Guatemala

Based on the concept of energy sovereignty, community energy projects provide a way for communities to defend their territories and resist large-scale energy projects that promise, but often fail, to deliver energy to communities in rural Guatemala, which are "expensive to connect to the grid," according to private distribution companies (Alford-Jones, 2022, p. 4). This chapter will focus on the history and work of *Colectivo Madreselva* (Honeysuckle Ecologist Collective or CMS), a 25 years-old civil society organization (CSO) based in Guatemala City that has worked with Indigenous communities across Guatemala to build "alternative modes of life," primarily working on community energy and women-led agroecology projects (Colectivo Madreselva, 2020). The Honeysuckle is a flower with healing properties that is capable of absorbing pollution more than any other flower, naming the Collective because of the care they dedicate to protecting nature and fostering healthy socio-political processes for the defence of territory (CMS activist, interview, June 2022a).

The alternatives to mega-development and extraction they support, which would take place in their territories if they were not building and managing community projects, aim to strengthen their autonomy and ability to resist harmful large-scale projects. Their programs around building alternative ways of life support rural communities to design, fund, and implement energy and food sovereignty projects. The community energy projects, which will be the focus of this thesis, prioritize community-led decision-making, equitable allocation of costs

and benefits, and ensure that diverse groups, regardless of ethnicity, gender or income, have access to energy provision (Finley-Brook, 2019).

'Local,' 'decentralized' or 'community' ownership is a disputed concept, but it has been highlighted as key to the success of such micro-hydro projects since it entails collective legal ownership titles and organizational structures that emphasize meaningful participation of local people in decision-making (Butchers et al., 2021; Kunze & Becker, 2015). By avoiding large-scale energy projects and ensuring that communities are 'in control' of their own energy provision, CMS aims to use community energy projects as a tool for communities to defend their territories against extractivism. Policymakers usually refer to community-owned energy projects as those in which local stakeholders own a majority of the project, and the community has voting rights and control through a community-based organization that might have the form of cooperatives, partnerships, NGOs, community trusts, housing associations, etc. (IRENA, 2020).

In this thesis, 'community ownership' goes beyond the predominant influence of communities over the ownership, building and managing of small-scale energy facilities. It speaks to a historical duty to meet needs that external stakeholders, such as the state, corporations, and even some CSOs, have often failed to fulfill, such as access to electricity and sovereignty over their territory. These external actors have never recognized Indigenous community access to electricity and land as a legitimate right, given the absence of Indigenous sovereignty considerations in legal texts and environmental impact assessments (EIAs) (Aguilar-Støen, 2015; Sieder, 2010). As we will observer later in this chapter, the Guatemalan state failed to approve a legislation following the principles of the International Labor Organization (ILO) 169 Convention on the Rights of Indigenous and Tribal Peoples (Aguilar-Støen, 2015). Access to

both land and electricity are under permanent threat from energy companies interested in exploring the hydropower potential of the numerous rivers of Zona Reina, Quiché, the main territory CMS acts, as large-scale energy companies have been expanding on neighbour communities with nearby projects such as the Palo Viejo and Chixoy³ dams (Colectivo Madreselva, 2019b). Besides that, with the privatization of electricity service, remote rural areas were considered too expensive and not worth integrating into the grid for the companies undertaking rural electrification in Guatemala (Alford-Jones, 2022). As a result, electricity came to be seen almost as a 'favour' that charity organizations could offer these communities with the support of international donors.

In Abya Yala, there are emerging initiatives of grassroots movements managing small-scale energy projects to both reclaim their territories and oppose mega-development energy projects in Colombia, Ecuador, Costa Rica and Mexico (Arboleda Montaño, 2016; Dupuits, 2021; J. E. Gómez & Torres, 2020; Gutiérrez Arguedas & Villalobos, 2020; Hernández, 2007; Silber-Coats, 2017). There is still a knowledge gap in the energy justice dimensions of sustainable energy transitions in Latin America, and communities face different challenges in developing effective ownership over their projects (Alford-Jones, 2022).

As further developed in the last chapter of this thesis, the sense of community of the Indigenous peoples in Zona Reina (Q'eqchi', Quiché, and Ixil Mayan ethnicities) is deeply territorial. Consequently, their sense of ownership is also influenced by their historical struggles

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³ Initiated under the regime of General Kjell Laugerud García in 1976, the Chixoy hydroelectric project was a massive dam construction that was set to displace thousands of Maya-Achi' individuals across the Río Negro valley in the province of Baja Verapaz. When communities resisted relocation, the succeeding military government led by General Romeo Lucas García deployed soldiers and civil patrollers. These forces obliterated ten communities in the basin, resulting in the death of approximately five thousand people in the region between 1980 and 1982 (Nelson, 2020, p. 238).

to defend territory from military invasion and occupation during the armed conflict and corporate interests in the so-called 'post-war' neoliberal era, as described in detail in chapter two (Caballeros, 2020; Payeras, 1985; Worby, 2000). In this case study, the process of building community ownership is not led by a CSO, and its roots date back to the resistance to the armed conflict that took place in Guatemala from 1980 to 1996 (Falla, 1992; Payeras, 1985). However, there are organizational behaviours and decisions of CSOs that might enable these communities to exercise their ownership more effectively, such as only working with communities that required their support and demonstrated interest and cohesion to lead the process. Although CMS plays a crucial role in promoting the projects, especially during the construction phase, they ensure the sustainability of the projects by having the communities as leading partners throughout the whole process, as described in detail in chapter two.

Studies of micro-hydro projects in the Global North demonstrate that their ownership structure is crucial to ensure an energy transition with positive environmental impacts and benefits for communities (Miller et al., 2019; Rygg et al., 2021). Community ownership might take different forms depending on the local settings and stakeholders involved. These include full ownership (100% owned by the community), joint ventures (community and development partner), mutual ownership, split ownership, community benefit funds, consumer trust, and others (Green Cat Renewables, 2018; Haney & Pollitt, 2013; IRENA, 2020). But more than defining a model, analyzing community ownership requires confronting technical aspects such as contract types, funding arrangements, and benefits sharing with the local history and land structure of the territories at stake, as observed in comparative case studies in Southern Africa (Jonker Klunne, 2012; Mutubuki-Makuyana, 2010). These studies demonstrate that off-grid hydropower for rural electrification is highly context-dependent. Different financial and

ownership schemes might work best for each country depending on the role of various stakeholders (policymakers, investors, and communities) in small-scale energy development.

In the Global South, studies demonstrate both the benefits and risks that small-scale energy development might hold. On the one hand, such projects hold the promise of community engagement and 'empowerment,' democratizing the grid and increasing access not only to renewable energy sources but to other rights such as education, jobs and health care (Höffken, 2016; Islar et al., 2017; Klunne, 2007). On the other, small-scale and energy development, both private and community-led, might act as tools to replicate top-down power dynamics of gendered, racialized, and marginalized groups, with the support of either local government, energy companies or NGOs (Greacan, 2003; Kabalan et al., 2014; Monyei et al., 2018; Tulachan, 2008; Wiese, 2020). In our case study, these dynamics are observed within community energy projects in the communities, and the supporting organization studied. These contradictions and power imbalance dynamics are more self-evident and deeper in contexts with a colonial history and more structural inequalities.

Following this Introduction, the chapter will first include a brief literature review on the role of Civil Society Organizations and international aid in financing new infrastructure and facilitating a 'clean energy transition' in Latin America. This review will be followed by situating CMS and community-owned micro-hydroelectric projects in the broader context of the energy transition in Guatemala, describing the main challenges resulting from the privatization of the electricity sector in 1996 and the creation of tax incentives for a 'clean' energy transition led by private corporations.

Following this analysis of the neoliberal context of privatizations in post-war Guatemala, we will analyze the funding landscape for community energy projects in Guatemala, which is not

exclusive to CMS. Colectivo Madreselva counts mostly on international funding from European faith-based organizations to support communities in their struggles to defend their territory against mega-development. This chapter will also review reports of formal collaborations around small-scale energy projects between CSOs and international funders. The idea here is to highlight the differences between CMS' priorities to ensure community autonomy in defence of territory and other organizations focused on the energy component of the projects rather than a broader struggle for environmental justice.

Besides describing the funding landscape for community energy, this chapter will close by explaining the challenges CMS faces regarding limited funding and difficulties in managing funds from international funders, based on semi-structured interviews conducted with CMS staff. They have a reduced capacity to promote more comprehensive and higher-budget micro-hydro projects and expand their impact for different reasons. Firstly, because of their option for not working with donors aligned with large-scale energy development, which could provide the organization with more funds. Secondly, short-term grants from faith-based organizations can only cover some phases of a project. Furthermore, participants highlighted reasons like the limited funding rubrics for personnel payrolls, the lack of support from local and central governments, and others in the interviews, further described in the fourth section of this chapter.

2.1 Civil Society Organizations and energy transition in Latin America and Guatemala

Latin America has been recognized for its vast potential as a site for different renewable energy sources. It is currently leading the global production of biofuels and hydroelectric power with the chance to become a key player in the world's transition toward renewables (Howe, 2015; Meza, 2018). From colonial exploitation to "green neoliberalism," energy development in the

region continues to be a complex process because of human rights infractions, attempts at community development, and geopolitical rearrangement⁴ (Dunlap & Jakobsen, 2019). Frequently, renewable energy projects replicate many social impacts and environmental damage seen in the extractive industries they seek to replace. The reproduction of structural violence and environmental degradation through renewable energy projects has happened through a systematic disrespect for Environmental Impact Assessments and Indigenous Free Prior and Informed Consent (FPIC), disproportionately affecting indigenous and low-income populations.⁵ The literature on energy geographies has investigated a growing number of case studies that exemplify such impacts by replicating traditional extraction logic under a new sustainability label, which is widely documented in Guatemala (Aguilar-Støen, 2015; Batz, 2017, 2020; Botón Simaj, 2007; Del Bene et al., 2018; Granovsky-Larsen, 2018; Hirsch & Utreras, 2010; Mayén, 2019).

Energy geography studies have focused on how renewable energy infrastructures mimic extractive logic and dynamics and the role of energy infrastructure in reproducing "particular forms of political economy" (Bridge & Gailing, 2020, p. 2). For example, by analyzing the implementation of the SDGs in Bolivia — a strategic territory for clean energy development, for its rich lithium reserves — Hope (2020, p. 209) affirms that "sustainable development is materialized through infrastructures and megaprojects" following an extractive logic that the SDGs discourse tries to render invisible. When talking about the environmental conflicts around hydropower development, Del Bene et al. (2018, p. 629) developed the idea of "renewable"

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⁴ According to Howe, "as colonial and corporate extractivism have benefitted affluent patrons and regions at the expense of others, so too can (...) renewable energy initiatives operate as new axioms for resource exploitation in the name of clean development." (2015, p. 234).

⁵ Structural violence is the "mother" of all other forms of violence, an invisible violence manifested as an unequal power over the distribution and use of "resources" to subaltern and marginalized groups (M. Santos, 2000).

extractivism," which refers to projects that "despite the claims of being carbon neutral and green, form very much part of the (...) economic and energy model of extractivism and mega-infrastructures". Studies of wind energy projects in Southern Mexico show that "renewable energy can be installed in ways that do little to challenge the extractive logics that have undergirded the mining and fossil fuel industries" (Boyer & Howe, 2019) and that "green" development projects are "being implemented in nearly the same way as other fossil fuel, mineral and timber extraction projects" (Dunlap, 2018, p. 138). In a later work, Dunlap & Arce (2021, p. 3) stressed that philanthropic organizations, "if not handled carefully," might "advance processes of infrastructural colonization" and advance a "trajectory of ecocide and genocide against Indigenous populations" (p. 23).

Critical literature on energy transition also addresses why and how Guatemala faces a very conflictive and environmentally destructive transition towards renewable energy. On the one hand, the official narrative about the energy transition in the country completely ignores the injustice associated with mega-hydroelectric development, highlighting only the supposed "benefits of energy access and the importance of energy infrastructure for economic growth" (Alford-Jones, 2022, p. 2). However, different types of injustices are perpetuated by such projects, deepening disparities and energy poverty, keeping communities disinformed and excluded from the decision-making processes, and denying their capacity to exercise self-determination over their territories where such projects are built (Alford-Jones, 2022). In Guatemala, researchers and social movements have focused on the resistance to mega-hydropower and their associated injustices and on the responses from the state and corporations to contain resistance. The Business and Human Rights resource centre, for instance, implemented a survey to document cases of human rights abuses in ten hydroelectric projects in Guatemala to present to the Inter-American Human Rights

Court (BHRRC, 2017). Butt et al. (2019) also investigate the drivers of these environmental conflicts and violence that cost the lives of hundreds of land defenders in Guatemala and elsewhere, arguing that "businesses, investors and national governments at both ends of the chain of violence need to be more accountable" (p. 742). The Peasant Development Committee (CODECA) has also published a study on the socioeconomic impact of the privatization of the distribution of electricity in Guatemala and the increasing resistance from users living in both urban and rural settings (CODECA, 2014).

One of the main recent theoretical contributions from the energy geography literature is the geographical political economy perspective (GPE), which reflects on the "spatialities of transition," namely the "multi-scalar character of space" and "the legacies of a history in shaping regional development pathways" (Bridge & Gailing, 2020, p. 1040). In other words, the historical effects of extractivism in Abya Yala still resonate in the supposedly sustainable development that renewable energy projects represent. The GPE approach highlights the ambivalent character of "new energy spaces," which combines both possibilities of reproducing and challenging traditional patterns of exploitation, constituting spaces of struggle where different dynamics of accumulation and resistance occur.

2.2 Situation of CSOs within the landscape of 'clean energy transition'

Civil society organizations (CSOs) have played a key role in reporting and addressing environmental and human rights abuses but also in providing companies with a "social license to operate" in Latin America (Verweijen & Dunlap, 2021). With the support of the state and corporations, CSOs also act as key implementers of the SDG agenda worldwide. They are essential to understand how this discourse is assembled and applied to new energy spaces. At the same time,

organizations more grounded on grassroots movements are crucial to building political networks and ensuring a "just transition" (Newell & Mulvaney, 2013), prioritizing human and environmental rights throughout the process. However, many studies overlook relationships that non-state actors such as CSOs establish with the state, corporations, and communities to produce new energy spaces.

In what follows, I review energy and CSOs studies approaching the role of CSOs in facilitating a clean energy transition, mainly in Latin America but also more generally. Although geographers conducted most of the studies analyzed, no disciplinary criteria orient the selection. The initial search tried to filter studies that approached the overlap between energy transition and the importance of CSOs in undertaking it. However, there needs to be a clear overlap between the geographies of energies and CSOs in the literature studying the new energy spaces in Latin America, even though both topics critically address contemporary development geographies that are increasingly concerned with climate change mitigation and social justice. To address this lack of studies directly approaching the role of CSOs in the energy transition, we searched for studies that analyzed both things separately. First, we looked at CSO studies to understand how these organizations' structure policies related to social justice and climate change in the region. Second, we searched for energy studies about the politics of the renewable energy transition in Latin America.

CSO studies might bring some insights into understanding CSOs' role in the energy transition in Latin America. The "NGO boom" of the 1990s followed the implementation of neoliberal structural adjustment policies across the region, which were characterized by a dramatic cutting back on social programmes expenditure (Alvarez, 2009, p. 176) and, as a consequence,

NGOs⁶ assumed the role of alleviating poverty and other forms of social injustice (Eversole, 2016), becoming the "community face" of neoliberalism (Petras, 1997). Since then, NGOs have attracted the attention of critical geographers interested in whether and how civil society might offer "genuine alternatives" (Mitlin et al., 2007) and answers to the socio-spatial inequalities caused by uneven development dynamics (Bebbington, 2004; Lehmann & Bebbington, 1998; McIlwaine, 1998). Although there is no consolidated research agenda on the role of CSOs in the complex energy transition landscapes in Latin America, existing studies highlight the ambivalent roles CSOs can play by either reproducing green extractivism or supporting communities resisting extractive projects creating energy alternatives that represent vehicles of environmental and social justice (Aguilar-Støen & Hirsch, 2017; Dunlap & Arce, 2021b).

Guatemala has a long history of international development funding through CSOs. Like many other "underdeveloped areas," it was targeted by Harry S. Truman's Point Four program in 1949 to receive the "benefits of industrial progress" through a significant influx of U.S. dollars (Beck, 2014). After the U.S.-sponsored coup in 1954, Guatemala went through 30 years of a violent military dictatorship that involved the genocide of indigenous and rural populations, a dramatic increase in poverty levels, and a massive displacement of people from rural to urbanizing areas (Beachum, 2020). At this time, international development funding came mainly from the United States Agency for International Development (USAID) and religious groups from the United States and Europe. This funding was allocated to provide security training to

⁶ NGOs correspond to "private, non-profit, professional organizations with a distinctive legal character, concerned with public welfare goals" (Clarke, 2008, p. 2-3). NGOs are just one type of organization within the broader spectrum of civil society organizations. In terms of usage, NGOs are usually understood as more institutionalized and structured organizations, while CSOs are commonly associated with local and national grassroots movements. In this thesis we use the term as a more specific and institutionalized form of CSO.

weaken potential leftist guerrillas and fund "pacification programs" around healthcare, basic infrastructure, and access to credit and technology (Schlesinger & Kinzer, 2005). Funding streams have changed and evolved since then. The 1996 Peace Agreements opened a new chapter in the international funding landscape of Guatemala, with an intense inflow of funds from International Financial Institutions (IFIs), international NGOs, and networks of individual donor nations interested in funding different streams of programs around environmental, gender, childhood and Indigenous rights but also in implementing neoliberal structural adjustment policies (Pozos et al., 2014).

The 1996 Peace Accords focused on the so-called 'post-conflict' political and economic order than on the actual peacebuilding process and re-integration of dissent into the post-war settings, establishing 'development' and extraction as the mainstay of the rebuilding efforts (S. Granovsky-Larsen, 2017). Throughout the 1990s, many state social services were outsourced to national and international NGOs, which operated independently of the state, filling their vacuum on essential services and being exclusively accountable to their donors. As a result, many social movements submitted themselves to the logic of 'NGOization,' a process of co-optation of Indigenous dissent that 'offers them a job' instead of directly repressing their resistance to development projects (Hale, 2004; Konforti, 2018).

Along with the maturation of these organizations in the last decades, NGO studies have consolidated as a field with contributions from different disciplines (Bryant, 2009), either recognizing the importance of CSOs in enabling progressive politics and creative alternatives or questioning the limiting compromises that these organizations have established to ensure their projects and existence. Scholars have raised essential questions regarding the possibility of development alternatives and improvement of local livelihoods within institutional and neoliberal

settings (S. Granovsky-Larsen, 2019; Mitlin et al., 2010; Overton et al., 2013), considering the "NGOs landscapes" (Sundberg, 1998) as part of the (re)production of space and illuminating "the inter-scalar processes that affect the forms taken by social movements, NGOs and community development in particular locations," primarily based on case studies (Bebbington, 2004, p. 727).

Geography has a clear analytical potential to analyze the overlap between NGO landscapes and new energy spaces in descriptive and normative terms. By providing spatial and historical context to a wide variety of CSOs involved in reworking places, livelihoods, and political economies (Bebbington, 2004), geography can bridge a critical gap in terms of mapping the organizations currently working around renewable energy development and their impacts in Latin America, as well as their transnational networks. Identifying those landscapes and the distribution of CSOs activities can provide valuable insights into the alternatives those organizations have offered to rework the relationship between state, capital, and civil society (Hickey & Mohan, 2004), especially in an international context of growing hybridity among CSOs and businesses (MacLean et al., 2015; Newell & Bulkeley, 2017). This thesis will not dive into this mapping endeavour, focusing instead on a case study of CSO engaging in the clean energy transition to achieve the defence of Indigenous territories by the Indigenous communities themselves. Yet, some key findings can be highlighted.

Various case studies point to some of the dilemmas of these contested energy-CSOs landscapes from a geographical perspective. The multidimensional nature of energy transitions currently benefits from an interdisciplinary research effort of studies engaged in the overlapping area of energy transition and CSOs, such as development and environmental studies, public policy, anthropology and geography. The transition toward renewables figures in the agenda of states and corporations as a strategic move to exploit energy sources while achieving the SDGs (Hope, 2020).

The participation of social-environmental CSOs in backing those projects might play a decisive role in their execution through implementing community-based projects related to conservation and small-scale energy projects funded by corporations and supported by states (Fundación Solar, 2018; IUCN et al., 2014; Menton & Gilbert, 2021).

While some studies value the possibility of engagement that CSOs can offer at the community level (Aguilar-Støen & Hirsch, 2017), others present a more negative view of the supportive position of these organizations (Dunlap & Arce, 2021b; Schaeffer, 2017; Silber-Coats, 2017) by stressing the harmful impacts of large-scale energy projects on local communities. Yet, both sets of studies acknowledge the nexus between energy development and environmental and human rights infractions, opening an avenue for academic inquiry around how these discourses interact to justify the existence and operations of specific CSOs and build new energy landscapes in Latin America.

The most critical and insightful studies on the topic of CSOs and energy transition in Latin America show how the work of CSOs can be "modified to suit extractive interests and to explain the wider holding together of the sustainable development assemblage." (Hope, 2020, p. 216). With a focus on international NGOs (INGOs) working in Bolivia, Hope (2020) addresses the different ways the state and private funders deal with small-local NGOs and INGOs. This support depends on the organization's open support to community resistance against extractivism or on their compliance with the SDG agenda as if these two ideas were opposed and the latter was "away from the conflictive politics and contested landscapes of extractivism" (Hope, 2020, p. 217). This is not the case for renewable energy projects that replicate extractivist dynamics. Even national human rights NGOs might serve a project of producing social pacification and enforcing the "social license" clean energy projects require to operate, functioning as "mechanisms of

pacification by shifting rebellious groups from total rejection to negotiation" (Dunlap & Arce, 2021b, pp. 15, 17).

Big international organizations traditionally focused on other areas that might incorporate the clean energy agenda into their portfolios under climate change mitigation. Menton & Gilbert (2021) reflect on how Big International NGOs (BINGOs) become complicit in "green violence" associated with militarized conservation and establish partnerships with extractive corporations that help fund conservation by offsetting the biodiversity and carbon impacts of extractive and green energy projects. Extraction-conservation partnerships are another example of the inconsistency of these sustainability narratives undertaken by traditional extractive companies with the support of conservation NGOs "greenwashing" their practices (Le Billon, 2021). Although their focus is not on Latin America or energy-related organizations, the authors suggest that environmental BINGOs' partnerships with extractive corporations and their complicity in green violence reproduces colonial patterns and "forms of environmentalism" (Le Billon, 2021, p. 878) that rely on the capacity of corporations to scale up conservation efforts at the cost of environmental defenders' lives.

Energy geography studies have also provided theoretical tools and case studies focused on formulating and classifying democratic alternatives to the existing energy systems. Research on energy democracy — "an umbrella term for demanding more just, democratic, and sustainable energy systems" (Becker & Naumann, 2017, p. 4) — has opened the discussion on the "different roles [that] state and civil society actors" might play in building alternative energy systems. More optimistic views about the contribution of civil society organizations to energy democracy highlight the potential of network engagement for more participatory decision-making on energy development. Aguilar-Støen & Hirsch (2017), for example, show how communities in Guatemala

counted on support from national and international NGOs to challenge Environmental Impact Assessments on mining and hydroelectric development. Alford-Jones (2022) points to the possibility of justice-centred local approaches to the energy transition, mentioning the alignment of actors such as international aid, legislators, environmental and planning ministries, and the judiciary as key to ensuring different types of justice (distributional, recognition, and procedural) to the national energy policy in Guatemala, indeed implementing both the SDGs and Paris Agreement.

Chile represents an example of a contested energy landscape where coalitions of CSOs have played a core role. On the one hand, they influenced environmental policymaking toward non-conventional renewable sources (Madariaga & Allain, 2020) and, on the other, built effective resistance models for big hydroelectric projects (Schaeffer, 2017). Although in the first scenario, renewable energy is assumed as inherently positive, its incorporation has not led Chile to more "democratic and decentralized energy systems that promote (...) effective participation of communities in energy decision-making." (Flores-Fernández, 2020, p. 173). This dispute of narratives amongst CSOs is also visible in Silber-Coats' analysis of small-hydropower development in Mexico, where discourses of "clean energy" community-based solutions contrast with "water theft" initiatives (Silber-Coats, 2017). The question here is not if small-hydro or renewable sources, in general, are good or not, but the values and social relations embedded in their development. In that sense, it is vital that critical studies about organizations working with communities undergoing energy transition identify who, in effect, owns, regulates, and benefits from the projects and who suffers from the costs. Critical studies might support this by moving beyond "physical constructionist paradigms in energy systems" (Campbell et al., 2016, p. 142) toward an approach that situates the different actors enabling or challenging the transition and

exposes the territorial impacts of their practices, which includes the final destination and use of the energy generated.

Investigating the 'development history' of communities implementing community energy projects and the political dynamics surrounding such projects is raised as a powerful non-energy-centric approach to studying community energy development. Lai (2019, p. 177) argues that "[G]eographical research on energy could benefit from an interrogation of how a [community energy] project co-evolves with site-specific concerns resulting from a community's development history through 'networked politics of place' (Pierce et al., 2011). This thesis will unpack how community energy development is entangled with territory-making practices by communities and external actors influencing local dynamics (such as CSOs, different levels of state, and corporations). To do so, it is key to assume that "[E]nergy initiatives do not happen in a geohistorical vacuum" (Lai, 2019, p. 185), and that is why the next section aims to situate the microhydroelectric projects of Zona Reina and CMS's work around community energy in a broader context of the energy transition in Guatemala, reviewing the main challenges resulting from the privatization of the electricity sector in 1996.

2.2.1 Situating micro-hydropower projects in Guatemala's energy transition

In the mid-1980s, General Alejandro Gramajo, the mastermind behind the shift from military autocracy to the neoliberal peace of a civilian governance, announced that he was waging a "war by other means." This statement, inspired by Carl von Clausewitz, referred to the exercise of control and power over life (biopower) and death (necropower), and the stifling of revolutionary aspirations through the propagation of faith in liberal democracy and its institutions, including "human rights". It also signified the second stage of the "shock doctrine",

where mass killings were supplanted by neoliberal restructuring. This restructuring reflected the observation that "Under a privatized system, there are no political, only legal, remedies." (Bradbrook, 1996, p. 213). The Guatemalan state's wave of privatization sought to depoliticize the 'post-conflict' reconstruction by serving only the interests of local and transnational elites, while disregarding those most affected by the armed conflict and Indigenous genocide of the 1980s and 1990s.

The 1996 Peace Agreements marked the initiation of several general laws designed to privatize land, forests, fossil fuels, telecommunications, electricity, and other essential services. These laws transformed the state's role from a regulator and primary provider to a facilitator of corporate interests, overlooking crucial historical and political considerations about the conflict's impacts on Indigenous populations. The General Electricity Law was succeeded by numerous plans and supporting bills to facilitate a fully privatized and 'clean' energy transition. However, this transition failed to acknowledge environmental and social justice claims from the communities directly affected by these changes (Alford-Jones, 2022).

In what follows, we will discuss the main features, goals and changes promoted by the 1996 General Electricity Law (Ley General de Electricidad, 1996) and the subsequent Incentive Law for Renewable Energy (Ley de Incentivos Para El Desarrollo de Proyectos de Energía Renovable, 2003). Both aim to ensure incentives for an energy transition based on hydroelectric development with no concerns for human rights or justice. We will describe this by first characterizing the different steps of neoliberalization attempts in the energy sector in Guatemala. Secondly, this section describes the institutional arrangements needed to ensure a particular form of 'peace,' under which neoliberal policies and profitable investment opportunities are available to primarily transnational elites. Finally, we will mention the significant impacts of the

privatization for both winners and losers of this neoliberal energy transition, focusing on the role of CSOs, multilateral banks, and development aid in enabling such a process.

In 1996, the government of Álvaro Arzú approved the General Law of electricity and created the Wholesale Market Manager (*Administrador del Mercado Mayorista* or AMM), as well as the National Commission of Electricity (*Comisión Nacional de Energía Eléctrica* or CNEE) and AMM regulatory authorities, opening the doors to the privatization of the electricity distribution previously led by National Institute of Electrification (*Instituto Nacional de Electrificación* or INDE). The General Electricity Law in Guatemala set the bases for the sector privatization in 1996, under the promise of producing more accessible and higher quality services covering more regions and ending with the energy losses that characterized the previous period when the state used to control 95% of the national production (CODECA, 2014; Solano, 2009). In addition, the Inter-American Development Bank (IDB) encouraged unrestricted private investment, despite concerns that the CNEE and AMM lacked the "structure or capacity to conduct independent oversight of regulatory tasks" (Alford-Jones, 2022, p. 4).

Before 1996, INDE administered the National electricity mix, which generated 95% of electricity, mostly from hydroelectric dams, like the conflictive Chixoy (Solano, 2009, p. 4). INDE and the Colombian company Electric Company of Guatemala, S.A. (*Empresa Eléctrica de Guatemala, S.A.* or EGSAA) were the only two companies in the sector. However, the Law established the separation of generation, commercialization, distribution and transmission providers. As a result, many of these companies were sold to mainly Spanish owners at a meagre price (Rodríguez-Carmona & De Luis Romero, 2016). For example, the distribution company from INDE was valued at 400 million USD, but it got sold for 101 million USD to the Spanish company Unión Fenosa (Solano, 2009, p. 24). By separating the functions, the government

aimed to foster competition and reduce fares, but in practice, the opposite happened. One of the counter-intuitive results of these legal constraints that denied generation companies from distributing energy was that some hydropower companies exploiting rivers nearby rural communities were not legally allowed to provide energy directly to them, maintaining communities without access to electricity (Alford-Jones, 2022). Furthermore, despite the numerous generation and commercialization projects currently operating within a privatized market regulated by CNEE and AMM, Guatemala still has the highest fares in Central America (Forbes, 2022). Between 1980 and 1989, the average price increased by 44%, while between 1990 and 1998, with the ongoing privatization, the increase reached 145% (Solano, 2009, p. 21). The Peasant Development Committee (CODECA) estimates over a 200% increase in the price of electricity from 1997 to 2014 for residential users (CODECA, 2014, p. 26).

Despite its publication in 1996, following the Peace Agreements, the negotiations around the "liberalization" and privatization of the electrical sector started with Former President Jorge Serrano Elías (1991-May 1993), with the support of international development aid organizations, like the USAID, and International Financial Institutions (IFIs) such as the World Bank. These organizations played a crucial role in carrying out rural electrification in Guatemala and setting the basis for an externally oriented energy sector. For example, USAID hired Sebastián Bernstein from the Chilean consultancy company SYNEX, supported by the World Bank, to formulate a proposal for a new electricity law (Solano, 2009; USAID-Guatemala, 1994). The

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⁷ The IDB challenged the regulatory capacity of these two organization by saying that "The MEM does not have the structure, capacity or resources to perform its functions adequately; its normative, regulatory and business roles are confused and mixed together and there is political interference in its business and regulatory decisions" and "In accordance with the government 's policy objectives, the CNEE will have the autonomy and independence to perform its function, but it is clear that this is a temporary alternative pending a political situation that will enable creation of an autonomous and independent CNEE" (IDB), 1997, pp. 8, 20).

resulting General Law was "crafted and implemented with the support of multilateral development banks and donor countries such as the United States" and was considered as a 'best practice' to "reduce inefficiency and foster competitive energy markets," promising to "improve the quality of life for all Guatemalans, 'especially the poorest" (Alford-Jones, 2022, p. 4; Inter-American Development Bank (IDB), 1997; UNDP/World Bank & ESMAP, 1993).

Furthermore, multilateral banks and development organizations such as the IDB, the United Nations Development Program (UNDP) and even conservation CSOs like the International Union for Conservation of Nature (IUCN) have also supported different small-scale energy projects in rural communities. Their goal was to support rural electrification and reach other sustainable development goals (SDGs) connected to clean energy development and gender equality (Fundación Solar, n.d., 2013; IUCN et al., 2014; UNDP, 2015); at the same time, they fund large-scale mega-hydroelectric dams associated to environmental conflicts that negatively affect local communities.

Guatemala is one of Central American Isthmus's leading power generators and suppliers and also needs the service so their companies can compete with cheaper electricity (Solano, 2009). Because of their high hydropower potential, the country has more possibilities to build new large and medium hydroelectric projects. However, opportunities for small-scale community-based energy development go against the electrification system regulated by the 1996 General Electricity Law (Alford-Jones, 2022). Large-scale projects were chosen to structure the national system because of the high demand of the industrial sector and regional markets, targeted by the transnational companies now running the sector. The extractive inclination of such companies drove their attention away from rural and Indigenous communities unable to afford the increasing fares for the electricity service. According to Alford-Jones (2022,

p. 4), the Guatemalan electricity sector was designed as urban-focused and centralized grid systems, with an externally oriented goal of making Guatemala a relevant and modern player by commercializing clean and 'sustainably' developed energy in the Central American energy market (IDB, 2008; MEM, 2007, 2009). The 2003 Incentive Law for Renewable Energy Development creates more incentives for the private sector to invest in the Guatemalan 'clean' energy sector by providing tax exemptions to attract investors (Alford-Jones, 2022).

Many public subsidies backed up the privatization process, and INDE had to establish a "social fare" in the 1990s, subsidizing millions of users who could not afford high electricity costs. Without this social fare, the electricity market would not be attractive to the foreign and local capital that INDE paid for their services (Solano, 2009). The Guatemalan government knew privatization would not incentivize rural electrification (IDB, 2008; Ley General de Electricidad, 1996, Art. 47). IDB funds supported Phase I of Guatemala's Rural Electrification Program but faced problems attracting private investment. The high infrastructure costs of installation and connection of isolated rural communities to the grid and low return in terms of profit were a repeller of international investment, as rural populations could not afford the high cost of the service (Alford-Jones, 2022; Arriaza, 2005). Although subsidies alleviated many users who could not pay for the electricity service, their main goal was to allow many generating and trading companies to remain in the business. Many companies would have gone bankrupt or left the country without these subsidies. The main incentive for these subsidies was not the demand of impoverished communities without access to electricity but the competing demands from trade agreements such as the Dominican Republic-Central America Free Trade Agreement (Tratado de Libre Comercio entre República Dominicana, Centroamérica y Estados Unidos or CAFTA-RD) and the Mesoamerica Project (Solano, 2009). In a regional market, energy prices

need to decrease to become competitive. Companies pressured the Guatemalan state to subsidize them to consolidate the country as a regional player exporting energy.

Privatization has brought several negative consequences, such as delegating strategic decision-making in the energy sector to transnational capital, thermoelectric dependency and rising rates for the end-users. At the beginning of the 1990s, the primary energy source was hydroelectricity, managed by the state-led INDE. Removing INDE from the position of leading electricity distributor allowed transnational companies searching for immediate profit to privilege the construction of highly polluting thermoelectric power plants whose operation depends on petroleum derivatives — bunker and diesel, mainly supplying energy for industries (Armas, 2013). The thermoelectric sector dominated the energy scene to the extent that in 2008, the electricity matrix relied 46% on oil for electricity generation. According to local politicians, electricity prices were exposed to highly volatile international oil markets (MEM, 2008).

To revert the hydrocarbon dependency for electricity production, the government has promoted multiple projects with capital coming from different countries. Former President Álvaro Colom announced that opening the country to hydroelectric projects and coal plants was their strategy to ensure that by 2022, hydroelectric plants would generate two-thirds of the electricity in the country (Solano, 2009, p. 5). The Division of Strategic Projects of the CNEE launched the 'Indicative Expansion Plan of the Power Generation System 2008-2022' (MEM, 2009) to project future scenarios of how the energy matrix would change in Guatemala. It highlights the need for the country to exploit their hydroelectric potential as the most economical supply option, ensuring competitive electricity costs. For 2022, this document projected that the energy mix should generate at least 48% of the total electricity produced, but in 2020 Guatemala

surpassed this mark, reaching a hydroelectric production of 52,30% out of the full power generated (OLADE, 2022).

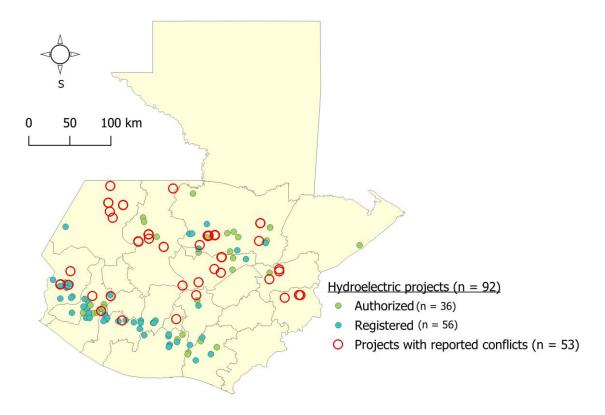
One of the main goals of the General Electricity Law of 1996 was to enable an energy transition based primarily on hydroelectric power over hydrocarbons, a project already ongoing during the authoritarian regime, with projects like the conflictive Chixoy dam, marked by massacres, displacement and cultural erasure throughout the 1980s (Thiele & Gomez, 2015). Not by chance, the General Electricity Law uses national security arguments to justify a new structure for the Guatemalan energy sector, foreseeing possible resistance such projects would face. The preamble of the Law defines energy development as a critical development objective of "national urgency" and a "fundamental obligation of the State" (Ley de Incentivos, 2003, Preamble). These considerations aim to ensure the energy supply for the growing industrial sector in the country and to compete with other countries in the Central American market, despite potential resistance that might emerge from local communities (Solano, 2009).

Accordingly, Free Prior and Informed Consent (FPIC), an international requirement from policies and regulations involving mega-development projects built in Indigenous territories, is absent from national energy policies (Ley de Incentivos, 2003; Ley General de Electricidad, 1996; MEM, 2007). Instead, the social-environmental costs are only considered because of social protests of communities that denounce the harmful effects of such projects on their territories and livelihoods. Clear examples are the community consultation that took place in Ixcán in April 2007, which resulted in open opposition to the hydroelectric project Xalalá

⁸ Guatemala ratified the Indigenous and Tribal Peoples Convention from 1989 (ILO 169) in June 1996, despite the absence of any mentions of it in subsequent energy policies (United Nations, 1996).

(Solano, 2009, p. 4). As communities express opposition and demand consultations, policymakers view these supposed 'beneficiaries' as threatening national energy policy (Skarwan, 2011, p. 72). These conflicts with local communities are not a problem limited to the armed conflict years. Figure 2.1 shows numerous hydro dams (mostly large-scale) currently associated with environmental conflicts in Guatemala.

Figure 2.1 Hydrodams-related conflicts in Guatemala



Adapted from: MEM (2022), EJOLT (2023), and Granovsky-Larsen & Larreátegui Benavides (2023).

The Peasant Development Committee (CODECA, acronym in Spanish for *Comité de Desarrollo Campesino*) highlighted some consequences of the privatization process for rural and indigenous communities:

• overload of the fares for 87% of rural users, who earns less than urban users and pay the equivalent of more than 13% of the minimum wage for the monthly electricity bill (p. 38);

- arbitrary overbilling in rural areas due to charging for public lighting in the monthly bill of many communities that do not even have this service (p. 38-39);
- worsening of the service quality due to blackouts and irregularities in the voltage of the electrical flow (according to a survey CODECA undertook, 94% of peasants and indigenous people living in rural areas responded that the privatization worsened the quality of the service (p. 8);
- the criminalization of peasant and indigenous protests against electricity companies caused the death of 17 users, 220 injured, 97 imprisoned, and seven kidnapped in 2012-13 alone (p. 20).

On the other hand, the true winners of Guatemala's energy transition were a conglomerate of large transnational corporations (Spanish and later British companies) currently dominating Guatemala's electricity generation and distribution networks (Alford-Jones, 2022). Despite attracting foreign investment, one of the goals of the privatization of electricity was to reduce the cost of the service to the Guatemalan industrial sector, the leading national consumer. While local elites benefited significantly from government subsidies, the primary beneficiaries were a conglomerate of foreign companies that invested and profited immediately from such projects. Electricity producers initially built hydroelectric plants for a brief period, having high return rates because of the high electricity demands from the industrial and extractive sectors. Besides that, distributors and traders paid a much lower price for electricity than users in the retail and residential markets. Furthermore, they had almost no formal barriers to private investment in electricity generation, free access to use public waters, and no substantial requirements for social-environmental pre-feasibility studies (Alford-Jones, 2022; Solano, 2009).

Multilateral banks and development aid also played a crucial role in shaping energy policy in Guatemala. Finance from the IDB, USAID, and others oriented Guatemala's "infrastructure planning decisions toward regional integration initiatives," externally oriented

goals, and justice failures, as they completely disregarded the impacts of such policies at the community level (Alford-Jones, 2022, p. 5; Echevarría, Carlos et al., 2017; U.S. Department of State & USAID, n.d.). The coming section will delve deeper into the funding landscape for small-scale community energy in Guatemala, a type of project that contrasts with the electric system designed by the abovementioned policies based on a centralized urban-focused grid. It failed to reach isolated rural and Indigenous communities, while small-scale energy projects are usually based in rural territories under energy poverty. However, in the 2000s, many CSO-led small-scale hydroelectric projects received support from the same multilateral banks and development organizations that supported Guatemala's national energy policy from the 1990s. The following section will set the background for our case study of CMS, an organization that opted not to be supported by multilateral banks or international development agencies that helped to establish a national energy policy that disregards human rights protection and the defence of Indigenous territories.

2.3 Micro-hydro funding landscape in Guatemala

How much autonomy communities and local stakeholders can enjoy when funded by a foreign donor? The role of funders and funding choices in supporting or undermining the autonomy of local Civil Society Organizations (CSOs) in designing and implementing development projects is a question of interest for critical development studies (Bebbington, 2005; Cook et al., 2017; Leve & Karim, 2001; Martinez & Cooper, 2017). This section will explore the current funding ecosystem in Guatemala for community-based clean energy projects to understand the underlying historical relationships between donors and CSOs supporting communities in these projects. Firstly, it will briefly review the literature about the history of funding dynamics for

community development in Guatemala, setting up the background to understand different patterns of funders' behaviours around community energy projects in the country. Secondly, it will review reports and other publications from various organizations working on micro-hydropower development in Guatemala, aiming to identify the main funders and how the CSOs supporting those projects portray the relationships with their donors. The goal is to understand why our case study, Colectivo Madreselva, presented in the last section of this chapter, opted for not working with significant development funders and how this impacts Madreselva's capacity to provide communities with autonomy and ownership over their community projects.

2.3.1 A brief history of development funding in Guatemala

Throughout the 1960s, most funding came from sources based in the United States, as different U.S. government administrations sponsored programs aligned with anti-communist and modernization rhetoric. These programs included rural leadership and agricultural training, essential infrastructure buildings, and literacy campaigns (Beck, 2017; Rohloff et al., 2011). For example, the Guatemala-based Catholic church played a similar role as a development actor in Guatemala by supporting the military government, USAID, and Peace Corps volunteers with agricultural projects that "promoted synthetic fertilizers, pesticides and non-traditional crops among Guatemalan peasants." These programs adopted and perpetuated an anti-communist discourse that stimulated the "modernization" of rural populations, aligned with a neoliberal agenda of privatizing public services and opposing the revolutionary agenda of structural redistribution (Beachum, 2020, p. 17).

However, in the 1970s, a more progressive stream of the Catholic church, associated with liberation theology, became a key supporter of Indigenous communities, laying the groundwork

for structural changes, such as land redistribution and conflict resolution by providing technical assistance on local food production and agroecology projects (Giraldo, 2018). This approach sharply contrasted with the interests of traditional development actors, donors and international financial institutions (IFIs), which back in the 1970s focused on distributing seeds, fertilizers, and loans, which did not address the root causes of poverty and inequality (Beachum, 2020). Influenced by "liberation theology," some faith-based organizations (FBOs) offered a different kind of technical support to communities for local food production, supporting these communities' aims for land redistribution and peace (Holt-Giménez, 2008). Because of their connection with grassroots movements that the military regime identified as insurgents and communists, they were targeted and repressed by the military government. Throughout the most brutal years of the armed conflict, these organizations also played an essential role in assisting communities of political refugees in Mexico (Martinez & Cooper, 2017). Another important event that increased international funding to Guatemala was the 1976 earthquake (see Figure 2.2), which killed 25,000 people and injured another 76,000, devastating towns and increasing international attention on rebuilding programs (Beachum, 2020; Sollis, 1995).

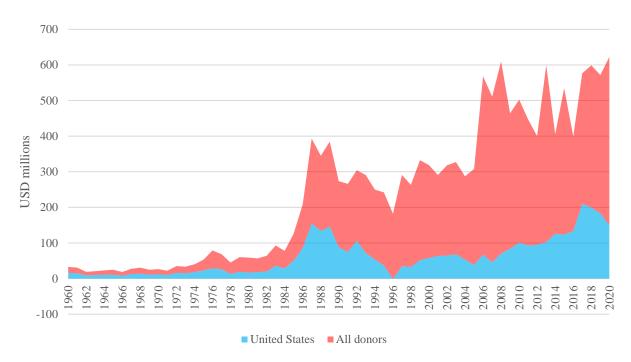


Figure 2.2 Official Development Assistance Disbursements to Guatemala (1960-2020)

(Source: OECD, 2022).9

In addition to the harsh political repression against rural and indigenous communities, the military regime in Guatemala introduced structural adjustment policies that significantly reduced the budget for essential services and privatized public sector enterprises (Granovsky-Larsen, 2014). These policies dramatically reduced access to critical services such as access to potable water and, as a result, increased child mortality rates and the gap between the rich and poor as well as reduced life expectancy (Sollis, 1995, p. 526). Consequently, in the 1980s, the number of international NGOs in Central America increased significantly, and so has the international funding from different sources (see Figure 2.2). By the end of the decade, in 1989, around 700 development NGOs were operating in the country, many of which included "conservative, often

⁹ The data was extracted from QWIDS (Query Wizard for International Development Statistics) database, selecting the United States and Official donors as the sources of funding.

evangelical, agencies that worked in the United States Agency for International Development (USAID) funded emergency programmes" (Sollis, 1995, p. 527). Despite the difficulty of collecting data on the exact amount of international funding coming from various sources, Sollis (1995) estimates the annual allocation of over \$200 million in Central America by the end of the 1980s. By the end of the 1980s, Guatemala was receiving over 10 billion dollars annually for official development assistance, and the United States was far from being the main donor (see Figure 2.2). In the context of an increased presence of the United Nations in the region and their peacebuilding operations and human rights missions, new indigenous civil associations began to further organize as institutions. These social movements pushed for legal channels to present their claims publicly, mainly under the Pan-Maya movement's umbrella (Beachum, 2020).

USAID was historically connected to a US-sponsored military coup in 1954 that intended to stop structural reforms of land redistribution, then identified as a communist threat to neoliberal democracy. Since before the coup in the 1950s, the organization's "Report of a Mission" describes a strategy of "colonization" of rural areas through agricultural programs and corresponds to a detailed exploration of the country's natural, social, political and economic context (International Bank for Reconstruction and Development, 1951, p. 84). USAID funded streams mainly related to agriculture, financing, and education during the armed conflict. However, in the late years of the Guatemalan civil war, their funding agenda diversified significantly, including themes such as the conservation of natural assets and institutional strengthening of the export sector (USAID, 2020). Although the intentions of many of these programs included the diversification of exports and modernization of agriculture, the results were increased poverty and inequality (Benz, 2021).

With the 1996s Peace Accords, USAID included the rule of law, justice sector reforms and healthcare in their funding focus, maintaining and strengthening traditional funding streams like bilingual education, gender parity, and food security. Clean energy development also figures among the 'post-conflict' themes supported by the organization, which currently funds both technical and regulatory reforms around the production of solar energy in Guatemala (Sanchez Molina, 2018; Tetratech, n.d.). Funding for renewable energy is not a new stream for USAID in Guatemala, but sometimes it is channelled through other funding lines, such as 'entrepreneurship' or 'development innovation' (USAID, 2020). The organization participated actively in enacting the Guatemalan General Electricity Law (*Ley General de Electricidad*) and its bylaws after the 1996 Peace Agreements, advocating and providing technical and financial support for the privatization of the sector (de Córdoba & Belt, 2018).

The Interamerican Development Bank (IDB) and the World Bank (WB) also have a long tradition of intervention in Guatemala. These institutions funded many projects connected to massacres of indigenous populations throughout the armed conflict. There is an emblematic example of the Chixoy Hydroelectric Dam, where 70 women and 107 children were brutally murdered in 1982 by military soldiers and members of the Xococ Self-Defense Patrol who arrived in the villages in a company truck associated with the Chixoy Dam, funded by both the IDB and the WB (Thiele & Gomez, 2015). In addition, these institutions have been funding numerous projects connected with environmental conflicts, many related to energy megadevelopment projects. The Environmental Justice Atlas currently reports eight high-intensity conflicts around projects financed by the IDB or the WB, six in operation, one under

construction and one stopped in Guatemala (EJOLT, 2022). However, both organizations also present various funding streams, covering educational programs, economic and financial modernization, and rural poverty alleviation projects (IDB, n.d.-a; World Bank, 2021b). The IDB has invested in small-scale energy projects since 2007 in Guatemala, starting with a \$400,000 loan supporting feasibility studies on small hydropower plants (IDB, n.d.-b). The World Bank has explored small-scale energy projects in countries like Costa Rica, Nepal, Afghanistan and Central Europe, but its current presence in Guatemala remains primarily restricted to megadevelopment projects (World Bank, 2002, 2015, 2013, 2016, 2021a)

International conservation NGOs and funders have also composed the Guatemalan funding scene with a more robust presence since the 1990s. They have historically been associated with agendas that conflict with local interests around "appropriate contributions to conservation objectives" (Sundberg, 1998, p. 404). The International Union for Conservation of Nature has been in Guatemala for almost three decades and currently includes funding streams like sustainable agriculture, gender equality and energy security (IUCN et al., 2015; IUCN, 2019; UICN-ORMACC, n.d.), counting on the support of fossil fuels and mining industries representatives like Shell and Rio Tinto (Workman, 2013). The United Nations Development Program (UNDP) is another critical development funder that has advanced small-scale clean energy projects in Guatemala. From 2007 to 2013, they invested \$14 million to establish small-scale hydroelectric projects in the country's poorest areas, identifying sites with the potential for

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¹⁰ The eight reported conflicts funded by the IDB or the World Bank include five mega-hydroelectric sites (Yich Ki'sis, San Mateo Ixtatán; Chixoy dam and Rio Negro massacre; Palo Viejo; Santa Rita S.A. Hydrodam in Monte Olivo; and Santa Cruz Barillas dam and Hidralia), two conservation areas that created forced displacements (Comunidad de Laguna Larga, in the Maya Biosphere Reserve and Laguna del Tigre and Sierra del Lacandón National Parks) and the gold and silver mine Marlin (EJOLT, 2022).

hydroelectric installations and building micro-hydropower plants with the support of local partners (Fundación Solar, 2018; UNDP, 2015). The funding streams supported by the United Nations Development Program (UNDP) go way beyond clean energy production and date back to 1975, having helped numerous projects around poverty reduction, post-conflict governance, and gender equality and have now added emphasis to streams like nature-based development solutions, clean and efficient access to energy, and climate resilience (PNUD, n.d.).

Christian or faith-based organizations (FBOs) also figure prominently among the donors for development projects in Guatemala. Just like secular donors, they vary in terms of streams of programs that they support and work. Some have a more social-political engagement, advocating for human rights and the defence of territory, while others are more focused on development issues, such as education, economic opportunities, healthcare, infrastructure, etc. (Clarke, 2008; Glosnek, 2017). The presence of religious organizations refers to the colonial history of Guatemala, where the Catholic church played a crucial role in establishing missions to diffuse colonial culture and power structures. Many Catholic, Evangelical, and ecumenical FBOs have been working through development programs across different areas with local partners (WFDD, 2017). Like the secular civil society organizations ecosystem in Guatemala, the landscape of FBOs is constantly changing, making it challenging to accurately identify which are currently operating in the country.

Another important factor that characterizes a new phase in the development funding ecosystem in Guatemala, after the post-conflict funding wave, is the Law of NGOs approved in 2020, which represent increasing legal restrictions surveillance from the government over non-profits and civil society associations funds (Arana, 2021; Beltrán, 2020). The enforcement of the law is discretional, which means that the Ministry of the Interior (controlled by a military officer)

decides which organizations should be subject to it, reporting their funds and details of their uses (CMS activist, interview, June 2022c). "This discretionarily will be applied with political goals. This is the first step to criminalize defenders, by [watching over] their organizations" (CMS activist, interview, June 2022c).

The following sub-section will discuss how these major funders have supported the work of local and national CSOs around community energy projects. It will do so through a review of communication materials produced by the beneficiary organizations, focusing on how they represent and acknowledge their achievements, funding sources, and partnerships.

2.3.2 Traditional 'development' funding for community energy projects

This section focuses on CSOs receiving funding from traditional development donors. It aims to identify the main actors supporting micro-hydroelectric development in Guatemala, how they portray themselves concerning their donors, and how they report their projects' results and impacts in their publications. This is important for establishing the particularities of our case study organization, Colectivo Madreselva, which opted not to receive funds from organizations openly supporting conflictive energy projects.

In terms of local CSOs receiving funding from classical development donors for microhydro projects, *Fundación Solar* (Solar Foundation, working with both photovoltaic and microhydroelectric energy), *Asociación para el Desarrollo Rijatz'ul Q'ij* (Sunseed Association for Development), and *Asociación Hidroeléctrica de Desarrollo Integral Norte del Quiché* (Hydroelectric Association for Integral Development North of Quiché or ASHDINQUI) are the most prominent organizations working in different parts of Guatemala today, with an emphasis on the northern region. In addition, several regional coalitions are increasingly supporting small-

scale renewable energy projects in Central America and Guatemala, including micro-hydro. By reviewing their websites, it was possible to see that USAID prefers to support initiatives backed up by regional coalitions (FENERCA – BUN-CA, n.d.; FOCAEP – BUN-CA, n.d.; FOCER – BUN-CA, n.d.; PREPCA, 2012).

In addition, UNDP, USAID, IDB, the International Union for Conservation of Nature (IUCN), historical donors to Guatemalan CSOs, and the Latin American Energy Organization (OLADE, acronym in Spanish for *Organización Latinoamericana de Energía*), a new partnership focused on energy development, were found to support the CSOs mentioned above in the reports analyzed. However, they are far from being the only big funders of micro-hydro development in Guatemala. The Centro-American Banco for Economic Integration (BCIE, acronym in Spanish for *Banco Centroamericano de Integración Económica*) and many embassies and international cooperation agencies from Japan, Canada, Germany, Italy, and the Netherlands were found as supporters of these small-scale projects under corporate social responsibility programs, usually in partnership with the Guatemalan government (Fundación Solar, n.d.; MEM, 2015; OLADE, 2016).

Guatemalan civil society organizations benefiting from international funding from traditional development donors often identify themselves in a less politicized way in their reports and online presence. Fundación Solar, for instance, presented itself as a "private development organization that supports and develops projects focused on the use of renewable energy and the conservation of the environment" in a grant proposal to the Organization of American States (CCA Coalition, n.d.; Fundación Solar, n.d., p. 21). An interesting statement from Rijatz'ul Q'ij defined the CSO as an "apolitical, non-religious, and not-for-profit" organization composed of social entrepreneurs committed to innovative solutions to Guatemala's social, political, and

environmental problems. The executive director of this organization used to be a consultant for OLADE, which indicates how familiarity with the funding ecosystem might improve their chances to 'succeed' as an energy-focused civil society organization (MEM, 2015a). In Guatemala, this approach to 'depoliticizing' the organizations might play a strategic role for organizations to receive funding from private actors or disassociate their work from the government and political parties, as is the case for Colectivo Madreselva. However, one of the implications of depoliticization might be a 'de-historicization' of the social problems tackled by the CSOs, in this case, energy poverty.

An IUCN report, for example, describes the energy poverty condition "as a result of the historic abandonment by the state of the rural areas and indigenous communities of the country. Structural inequalities are reflected in several aspects, including the lack of comprehensive rural development policies to enable sustainable processes" (IUCN et al., 2015, p. 7). This shallow approach to the structural causes of poverty and inequalities completely ignores the 36-year-long armed conflict and military dictatorship in Guatemala, representing a discourse that defines political problems, like land concentration, as policy problems. By doing so, these organizations call for more 'state presence' to ensure their projects sustainability and effectiveness at the risk of further harmful effects by the state and corporations backed by the state over communities. As described in the following section, addressing the root causes of energy poverty, connected to the defence of territory and natural goods for Indigenous peoples, is a priority for an energy sovereignty approach adopted by Colectivo Madreselva and entirely ignored by CSOs relying on major development donors.

The main common trait across the analyzed reports, news and audiovisual records related to micro-hydroelectric development funded by big development funders in Guatemala is the

quantitative emphasis of the metrics used to assess and report the results, impacts and success of a given project and the lack of a historical perspective to explain the causes of problems they are addressing with their programs. An example of this quantifying approach is the way the potential reduction of carbon emissions is framed by a few reports and news analyzed in this paper. For example, a UNDP and government-funded project implemented by Fundación Solar was described as having the potential of reducing around 6,157 tons of carbon dioxide every year for the next decade, "opening a possibility for entering the carbon market" (Fundación Solar, 2013, p. 39). Another micro-hydroelectric plant, funded by the UNDP, the BCIE, and the Global Environment Fund (FMAM, acronym in Spanish for *Fondo Mundial para el Medio Ambiente*), was reported as having the capacity to mitigate 1,683 tons of CO₂ (MEM, 2015b).

The quantifying efforts might also apply to more qualitative variables, such as the levels of participation of people impacted by the micro-hydroelectric projects. When listing the results of a project of "women empowerment through access to electricity" in San Juan Cotzal, Quiché, Guatemala, a report from OLADE about projects implemented by Fundación Solar highlights that two rural women were "trained as electric technicians and empowered" and that "one hundred solar photovoltaic lighting systems" were installed (Rojas & Siles, 2015, p. 134). The politics of representing women as logically empowered by technicist training already holds an underlying stereotype of powerless Indigenous women who benefitted from international aid funding and the passive position they occupy in the social relations established by these projects. However, instead of focusing on personal stories and experiences - a format other international funders explore more (Méndez, 2019) - traditional development funders supporting microhydroelectric development tend to use a more quantitative approach that focuses less on local stories and historical causes of problems their programs supposedly address. A CMS activist

interviewed for this research stated that CSOs, with the support of large funders which also fund megadevelopment projects, "favour community development to reach a social licence for megaprojects. We [CMS] refuse this obscenely fake and anti-ethical approach of manipulating communities to dispossess territories with megaprojects" (CMS activist, interview, June 2022a).

CSOs partnering with big development funders usually rely on the support of many different funders, including smaller international donors and FBOs. Fundación Solar, for instance, has received funding from several traditional development funders since its foundation in 1993, including the UNDP, World Bank, IDB, USAID, OAS, and others (Fundación Solar, n.d.). They have also benefited from funding from the Norway Church Aid, a faith-based organization that will be further analyzed in the coming case study section (WFDD, 2017). As seen in the case for Colectivo Madreselva, CSOs opting to be primarily funded by non-traditional development organizations do not necessarily count only on big development donors' support, applying and receiving funds also from smaller and faith-based agencies.

One of the reasons organizations relying on large donors keep applying for and receiving support from different donors is the shorter timeframe of the grants assigned, which poses the need for engaging with other funders and funding streams. Nonetheless, opting for not receiving funds from large development donors is a political statement. As we will see in the next section, it represents a resistance to the idea of development underlying the aid these organizations offer. This concept of development and aid is historically attached to the reason why communities suffer from energy poverty, being connected to a series of conditionalities that might limit the capacity of the communities to design and implement their programs autonomously, a priority for Colectivo Madreselva.

2.4 Colectivo Madreselva: history, work, and challenges

Colectivo Madreselva (CMS) is a 25-year-old civil society association based in Guatemala City. Its work is inscribed in a territorial strategy of energy and food sovereignty of Indigenous peoples that goes beyond ensuring energy provision to isolated rural communities (Colectivo Madreselva, 2020). Madreselva's strategic purposes are to fight, peacefully and legally, in alliance with communities, movements and peoples to defend life, territory and *bienes naturales* (natural commons). Their goal is to strengthen political, technical, and organizational capacities with equity, promote actions and values of *pensamiento ecologista* (ecologist thinking), and generate decent development alternatives based on responsible use of natural goods in water basins and territories (Colectivo Madreselva, n.d.-b). In what follows, we will briefly describe its origins and primary institutional shifts that made CMS one of Guatemala's most relevant socio-ecological organizations. This section will also present the main programs of the organization with a focus on the support for alternative life models, where community energy projects are included and will end with a brief discussion on the main challenges CMS currently faces in terms of governance and funding.

2.4.1 Brief history of a social, political, and ecological project

Madreselva's political inclination towards Indigenous sovereignty and community autonomy is evident on the organization's website, social media, and reports, especially their publications on the community energy projects Madreselva supports. This is the most striking difference between Madreselva's publications and the reports from organizations relying on grants from big development funders. One example is the evident opposition that Madreselva expresses regarding corporate interests in rural areas where communities lead small-scale energy

Autonomy, Clean Energy, and the Right to Self-Determination of Peoples," Madreselva explicitly describes what kinds of hydroelectric projects they support and reject, claiming that they "oppose the concession of [Indigenous communities'] rivers for private projects unilaterally focused on the hydroelectric generation and that do not take into account the current and diverse use of our rivers" (Colectivo Madreselva, n.d.-a, p. 21). Another indicator of the politicized nature of their content is how they frame the community energy projects as a strategy to defend indigenous territories from mega-development interests and the militarization that usually accompanies such projects (Sanchez Molina, 2018). Madreselva also explicitly addresses corporate interests threatening the regions where community energy projects are being developed, naming companies that do not cover remote territories that are not profitable for them and advocating not only for clean energy access but for energy autonomy and self-determination rights (Colectivo Madreselva, n.d.-a, p. 3).

However, by interviewing different activists, I could notice that there are differences in the political character of the organization. Activists more engaged with the communities on the ground had more clarity on the importance of acknowledging CMS work as political, while one activist working in the headquarter of the organization at the department of Planning, Monitoring and Evaluation in Guatemala City, managing and applying for funds, considered their work "apolitical" (CMS activist, interview, June 2022b). However, this consideration was made concerning party-related politics, something very corrupt in Guatemala from the highest levels of the central government to small-scale municipal government.

The conflict between a political and an apolitical approach to CMS community work dates back from when the organization was founded in 1996, not coincidently the same year the

armed conflict reached a formal end. Back then, Madreselva was made by a group of young middle-class professionals from Guatemala City, many of whom worked voluntarily, with a conservation focus on protected areas and national parks (CMS activist, interview, July 2022d).

In their first decade, CMS had a conservation focus that disregarded communities as part of the territory they advocated for protecting. By connecting with communities affected by the degradation of protected areas by industrial and extractive activities, CMS adopted a more politicized focus on the people and socio-environmental rights, transitioning from an environmentalist-conservationist to a socio-ecological approach. According to a CMS activist (CMS activist, interview, June 2022h),

The environmentalist defends trees, plants, and animals and steps over the communities. There was a moment when Madreselva was like that, declaring some protected areas without previous consultation. Now we evolved towards a *pensamiento ecologista* (ecologist thinking) that considers people in the systems of protection. Not only protecting the mountains but protecting human life with dignity. We cannot talk about defending nature if we do not defend the people who inhabit nature.

Another CMS activist says that when they joined the organization, "there was a very romanticized vision to conserve nature as it is, without questioning the conservation model used in Guatemala. When communities started to defend their territories against mega-projects, they searched for Madreselva's support, which made us change our focus." (CMS activist, interview, July 2022c).

As ecologists, CMS became "an organization that sews the historical, political, and social background of contamination (...). Our vision changed a lot and became a *ecologismo sócio*-

político (social-political ecologism)" (CMS activist, interview, July 2022c). An institutional landmark of this giro ecologista (ecologist turn) was the publication of the Manual de Resistencia Ecologista (Ecologist Resistance Manual) in 2006. This document systematizes the ecologist character of CMS, acknowledging the rights of communities regarding activities that degrade their territories, and defining a strategy to resist mega-development projects legally and peacefully (Colectivo Madreselva, 2006). CMS impulses a socio-ecological movement nationally, inspiring organizations such as COPAE (Comisión Pastoral Paz y Ecología, or Peace and Ecology Pastoral Commission), CPO (Consejo de los Pueblos Mayas de Occidente or Council of the Mayan People of the West), CODIDENA (Comisión Diocesana de Defensa de la Naturaleza or Diocesan Commission for the Defense of Nature), and the Huehuetenango Departmental Assembly in Defense of Natural Resources (Asamblea Departamental de Huehuetenango en Defensa de los Recursos Naturales) (CMS activist, interview, June 2022a).

The ecologist or socio-environmental turn of CMS brought communities to the forefront of their work defending territory and natural assets. It introduced a more "purposeful action" perspective to the organization's community work. CMS was moving away from a strategy that exclusively said "no" to mega-development to one that also said "yes" to using natural assets to benefit rural and indigenous peoples, avoiding that these assets are "stolen" by transnational and national private companies (CMS activist, interview, June 2022a). They started to discuss not only the conservation of natural assets per se, but how the communities might defend these assets by either protecting or using them to benefit local communities.

2.4.2 CMS activities and programmes

CMS currently works along with four strategic program lines: ecologist thinking, organizational strengthening, alternative life models, and defence of the territory and natural commons (bienes naturales). The micro-hydroelectric community energy projects are generally allocated under 'alternative life models,' even though they present aspects of each of the four program lines, as we will see in detail in the coming chapter. For now, a critical cross-cutting element in the different community projects Madreselva undertakes is the protagonist role of the communities. CMS does not start a community energy project or a campaign to defend the territory against mega-development projects if the communities do not present a formal request and consent from the community to work on the project along with Madreselva. According to a CMS activist, "the mining companies call us enemies of development, saying that we are creating conflicts in the communities, but we were never the ones to get there with a ready project" (CMS activist, interview, July 2022c).

Throughout the [design and] construction process of a community energy project, CMS provides the communities with technical, legal, political, and organizational training on how formalize their associations and to build and] operate their facilities. After the project is built and operating, Madreselva remains in touch with the board of directors to provide them with technical capacity buildings and support in case of an emergency, such as the need for tools and spare parts for industrial machinery. CMS also provides management advice around legal and accounting concerns of the communities, such as legalizing cooperatives and community energy associations, supporting the electoral process of the board of directors, or mediating conflicts regarding minor corruption complaints (CMS activist, interview, July 2022d).

With the "schools of ecologist thinking," CMS also educates the communities on how to implement a socio-ecological approach to their projects, integrating energy sovereignty with reforestation, watershed protection, and agroecological projects to defend their territories, and how to manage them horizontally (CMS activist, interview, June 2022f). It is essential to highlight that in terms of political training, CMS always plays an advising role rather than "intervening directly" in the communities. Madreselva suggests approaches and mediates conflicts when required, "but the communities are the ones who decide everything in their assemblies" (CMS activist, interview, June 2022d). For CMS, "to build a sense of community ownership to maintain a transparent and democratic management" of the community energy projects is crucial (CMS activist, interview, June 2022a).

If they depend on an NGO, this institution will control and make the decisions, a risk we want to avoid. The process [CMS supports] is not only providing energy, but healthy processes with technical, environmental, and social sustainability. (CMS activist, interview, June 2022a)

To avoid this dependency and make a case for a stronger community sovereignty, CMS has also focused on fostering exchange between the different communities working on energy projects, providing training to electricians from other communities, and bringing together members from various community energy associations for the schools of ecologist thinking (CMS activist, interview, June 2022h).

A key trait of Madreselva is the combination of technical and political expertise to support communities in defending territory. The team comprises six engineers (one environmental, three civil and two agricultural) – most of them with a strong social sciences background – and three technicians in agroecology, besides the management team and C

administrative personnel. This strong technical component dates back to CMS's origins in 1996, when their activities included analyzing and criticizing Environmental Impact Assessments (EIAs) from mega-projects (CMS activist, interview, June 2022a). Now it is more visible in the design of alternatives for community energy generation and distribution, which requires developing pre-feasibility studies with the support of the communities and presenting them to both communities and donors, besides working with external consultants (CMS activist, interview, June 2022e). Communities and donors, in turn, present this material to regulatory state authorities and other stakeholders they are accountable to.

Developing EIAs in partnership with the communities is a very important activity CMS develops, as most of the environmentalist organizations in Centra America focus on analyzing studies conducted by corporations before installing a mega-project, as a requirement from local governments, following international standards, instead of undertaking themselves an assessment (Craik, 2008; Redacción AFP, 2014). Before community energy projects became a strategic program of CMS, they also worked on reviewing and exposing inconsistencies and lack of public participation in the elaboration of megaprojects' EIAs designed by large companies (CMS activist, interview, July 2022b). This technical expertise of CMS team is combined with some activists' strong militant background, which links the energy sovereignty struggle to a struggle for democracy. "In the background of every energy autonomy process, there is a democratic culture that speaks to our political experience during the armed conflict. (...) we have always been promoters of a democratic culture." (CMS activist, interview, June 2022f).

Another element of community energy projects that illustrate the integrative socioecological perspective adopted by CMS is the food sovereignty component they all present, which is deeply connected to the energy sovereignty aspect of these projects. As detailed in the coming chapter, constructing a micro-hydroelectric project from scratch requires much hard work from the community. However, communities are usually structured under a patriarchal model, which makes it harder for women to play an active role in the construction or the political-organizational work around these projects. To counterbalance this gender inequity in energy projects, Madreselva develops agroecology projects where women are the protagonists. By participating in workshops on small family farms and gardens, seeds production, crafting natural products such as shampoo and soaps, etc., women support their families and communities with organic products for family consumption and exchange with neighbours, besides becoming "political subjects in their communities" (CMS activist, personal communication, June 2022j). The intrinsic connection between water, land and forest is critical to understand the relationship between the energy and food sovereignty programmes of CMS since that, in the long run, "if there is no water, there is no energy," and protecting the rivers and forests is key to ensure the continuity of their community energy projects (CMS activist, personal communication, June 2022j). Besides their gender concerns, the agroecological projects respond to the expanding agricultural frontier in the northern Guatemalan mountains, mainly in the water recharge areas (CMS activist, interview, June 2022h). Ensuring that the micro-hydroelectric community energy and agroecological projects are not damaging the local ecosystems is essential to their technical sustainability.

Furthermore, in a region where most of the population faces food insecurity and subnutrition, producing their organic food by using "simplified technical agriculture that cares about the land" is considered a priority of CMS work on agroecology (CMS activist, interview, June 2022g). According to an activist, "energy sovereignty provides more access to valid information [through the use of communication technologies, access to internet, social media, and education materials] so that they know their rights to food, education, how to access land, etc.. It opens windows to see their communities from other perspectives" (CMS activist, interview, June 2022g). The practical experience community members get by designing, developing, and managing their community energy projects provides communities with a robust background that powers other domains of social struggles and community initiatives.

2.4.3 CMS' main challenges

"Everything ends in financing. Willingness to help, people to support and demands from the communities we have lots" (CMS activist, interview, July 2022d). CMS has over 100 requests from communities across Guatemala interested in building their energy projects. However, despite the organization's numerous historical partners, CMS presents funding and capacity limitations that deny their action outside the current geographic focus of Zona Reina in northern Quiché, even though there are numerous requests from other communities to receive CMS support in their territories. The "carrot and stick" approach of their funders is often acknowledged as a reason for the delay and insecurity of CMS projects:

"Behind them, there is always a clear interest in controlling. (...) We have developed a relationship of dialogue, from an autonomous perspective, with our

¹¹ Only 42 out of the +100 requests have been filed and classified by location. The other requests made both via email or physical mail have not been filed yet because of the work overload in the communities (CMS activist, personal communication, June 2022g).

¹² At the time of the fieldwork (July 2022), the donors mentioned by CMS activists in the interviews included: Norwegian Church Aid, Church of Sweden, Christian Aid, Christian Aid Ireland, Dan Church Aid, *Peripheris*, *Entrepueblos*, Action Aid Spain, Bread for the World, Lutheran World Federation, and embassies from Norway and Japan (JIICA, acronym for Japan International Cooperation Agency). CMS had also gotten some funds approved but not yet deposited by Ford Foundation Mexico and was considering applying for loans from the European *Banca Etica* (ethical banking), with low-rate interests for large inter-community projects.

donors. (...) We are very clear with our priorities, but north is north, and [donors from the north] always try to impose their criteria" (CMS activist, interview, June 2022a).

In what follows, we will describe four primary financial problems highlighted by CMS activists with different levels of experience working in different areas of the organization. After that, we will discuss internal governance challenges and difficulties in withdrawing from territories, leaving the communities alone to operate and manage their projects and being able to move to other communities also asking for CMS support.

Firstly, a critical financial constraint CMS faces is regarding funders leaving Guatemala because of external pressure from the state or local elites, which implies the loss of previously approved grants. An example is the Norwegian embassy in Guatemala closing in 2016 (Ixchiú Hernández, 2015). "We received lower wages for two years because of this withdrawal," said one of the activists (CMS activist, interview, July 2022b). Swedish cooperation also withdrew from Guatemala because of a priority shift in the funding streams because of the invasion of Ukraine (CMS activist, interview, June 2022h). International cooperation in Guatemala supported many initiatives without satisfactory results because of the lack of government support and increasing surveillance and control of funding flows, which intensified after national and international organizations started to denounce corruption in Guatemala's justice system (Albani, 2022; TeleSUR, 2022). One of the control devices used to increase surveillance over CSOs operations was the NGO Law from 2020, which gives the Ministry of Interior the capacity to monitor organizations funds and operations (Arana, 2021).

CMS's second financial challenge is the amount of the grants. Besides their short-term duration (4 months months-1year), grants usually are not enough for the execution of an entire project, requiring Madreselva to stagger and, consequently, slow down the projects. "The strategy of the [cooperation] agencies is to fragment the cooperation towards various recipients" (CMS activist, interview, June 2022a), and, as a consequence, organizations like CMS must manage funds from multiple donors that have different timelines, sometimes for a single project (CMS activist, interview, June 2022c).

A third financial hurdle is the fact that funders often release the funds slowly, following no strict deadlines for payments. The numerous payment delays of preapproved grants put CMS in a very complicated situation to keep their staff onboard (CMS activist, interview, June 2022e). Even though staff members often accept to receive lower salaries when the Collective is going through hard times, some activist claimed they "were not born in a golden cradle … we cannot ask people to work for free" (CMS activist, interview, June 2022h).

In the fourth place, even though CMS activists support communities with project design, supervision of activities, and community organization and training, donors usually do not include payroll rubrics in their grants. They usually ask organization to focus their budgets on implementation costs such as construction materials, capacity building in the communities, and field visits logistics. "After the Peace Agreements, there was a peak of international aid and many bad practices in the use of resources. Since then, there have been several restrictions to the flexible use of rubrics" (CMS activist, interview, July 2022a). CMS uses the 'organizational strengthening' rubric for personnel payments to mitigate this critical restriction.

Lastly, reporting requirements are usually an obstacle that CMS deals with daily. Reports, accounts and probity declarations are part of the international "cooperation culture," as they are transferring public funds and need to report back about the adequate use of such funds (CMS activist, interview, June 2022c). Even keeping track of all these processes, there is no guarantee that the funds will be renewed, and the short-term partnerships extended.

CMS has gone through different crises and moments of financial hardship.

According to an activist,

"Projects' construction lasts two to three years, and sometimes we don't have any ongoing grants. Now, we are more activists, and there are more donors. Ford Foundation and another Spanish agency have just gotten in touch with us. We have always operated like this, and there is always an [funding] agency that comes to save us." (CMS activist, interview, June 2022h).

The difference of the current crisis they are facing, in which many activists feel discouraged to continue, has a governance component regarding the internal structure of CMS. The main challenges CMS faces in terms of governance are a problematic horizontality in its internal structure and an alleged lack of political clarity from those who play administrative roles in the office.

Firstly, CMS tries to implement its ecologist agenda through a horizontal governance structure that counts on a board of directors and a board of activists (*mesa de activistas*, in Spanish), which do not include technicians working on the ground. The *mesa* of activists counts on four coordinators, which are indicated by the *mesa*, with usually two years mandates. The coordination activities are typically added to the

activists' roles in CMS, representing an increase in their salary, as the amount of work and responsibilities are also more significant. In practice, however, this horizontal structure where everybody participates in the decision-making process does not perform that smoothly. Coordination roles are usually concentrated by older activists with more work experience in the organization, creating internal tensions between younger and older generations.

The horizontality discourse is a strong point of characterizing the organization as a 'collective' and not an NGO, but for some activists, this is an 'ambiguous' discourse.

"We are not ready for not having leadership. This is just discourse. Nobody makes some decisions because they don't want to deal with the consequences. This ambiguous and depoliticized horizontality is the reason for our current political and economic crisis. We need a lot of political and context clarity to solve this crisis." (CMS activist, interview, June 2022h).

Although CMS activists avoid hierarchy in their governance structure, there is a significant dependency on historical leaders within the organization, namely those capable of building political trust networks with communities on the ground and funders abroad.

This reflection introduces the second governance challenge CMS is currently struggling with: the lack of political clarity of their work in the field and at the office.

There is a clear gap between the political consciousness of activists working on the ground and those working in the office performing administrative roles such as funding applications and management, with accounting and legal responsibilities. Some activists

claim this is why CMS is currently facing a financial crisis that might threaten its work's continuity.

"Under a real horizontality, everyone must be clear around a common goal. We need cohesion in the action strategies; we can't dedicate exclusively to the 'technical.' Horizontality is clearly political. People who consider themselves apolitical (...) are cancer for this horizontality." (CMS activist, interview, June 2022h).

The lack of political coherence to make decisions around funding allocation and management puts CMS in a difficult position to reach its ambitious goals. More than a financial crisis, Madreselva currently faces a complex governance crisis that has absorbed a lot of their time and energy, making them lose the "strategic vision that substantiates [the] alliances" that sustains them (CMS activist, interview, June 2022c). Complicating matters, Guatemala is an increasingly challenging environment for CSOs, especially after the approval of the Law of NGOs in 2021 (*Reglamento de la Ley de Organizaciones no Gubernamentales para el Desarrollo* (Regulation of the Law of Non-Governmental Organizations for Development), 2021), which established increased surveillance from the government and a discretionary capacity of the Ministry of Interior to impose legal and financial restrictions to NGOs (Beltrán, 2020; Araña, 2021). Madreselva is not registered as an NGO but as a civil association, which makes this regulation unapplicable to them; however, it is a discretionary decision from the Ministry of Interior to decide to which organizations this law applies or which not.

The NGO Law is one more form of criminalization of social movements that contest the State. (...) It gives the State an open book to the financing of NGOs. If they inspect an NGO that works with human rights or defence of the territory [for

example], they find out where the NGO is working to support communities that are resisting hydroelectric projects. This violates the communities' ability to continue in the resistance because it compromises [our] funding and the [capacity of donors] to invest alternatively in NGOs that promote community development. They take away [the organizations'] funding, adding this vulnerability [to our work] (CMS activist, interview, June 2022h).

Finally, the challenge to leave a community after the completion of the project is a long-term limit of CMS action that prevents them from working with other communities interested in building their energy projects to defend territory. Although they try to escape the classic 'dependency syndrome,' a cycle of creating dependency and maintaining the reproduction of inequality in the communities they support, the situation of historical abandonment and a permanent threat from corporate interests against these communities prevents CMS from entirely leaving the territories (Shepherd et al., 2011, p. 2).

We never know when to leave because there is so much need for maintenance. Some groups try to enter [the territories] and take advantage of the project. This is exhausting. There must be a withdrawal process, the donors recommended this to us, but soon they took it back because they saw that Guatemala has a historic deficit in terms of social development (CMS activist, interview, July 2022c).

Some activists recognize the dependency dynamics that staying in the territories might establish. They are more prone to drawing and implementing a withdrawal plan, recognizing the need to 'let them go.' However, others acknowledge that "there is no dependency" and "communities have achieved defending themselves" (CMS activist, interview, June 2022h). They reinforce that CMS plays an advisory role once the

community energy projects are established, offering management training and accountability support to ensure communities are assisted with the transparency of their projects in a country so volatile to corruption as Guatemala.

Financial and governance problems of CMS are less internal than it seems to be. In the fourth chapter, for example, we will discuss how these unintended dependency dynamics are part of a structural context of increasing control over organizations like CMS, employment of counterinsurgent-like tactics against Indigenous social movements, and prioritization of corporate interests and extractive projects rather than community initiatives by the Guatemalan state. In this chapter, we tried to situate CMS and the community energy projects they support in the broader context of energy transition in Latin America and Guatemala, reviewing the main challenges resulting from the privatization of the electricity sector in 1996 and describing the funding landscape for community energy in Guatemala. We identified essential aspects of CMS work and socio-ecological vision, which will be more deeply analyzed in the coming chapter, that focus on their work in Zona Reina, Uspantán, in the department of Quiché. In the next chapter, we will see more challenges in their on-the-ground community action, such as the role of the state in adding obstacles to community organizing, the historical heritage of the armed conflict to Indigenous governance models, and other difficulties more specific to the process of building and implementing community energy projects in Guatemala.

Chapter 3: 'It is not an Eden': Challenges of community organizing in postwar Guatemala

The revolutionary character of the community energy projects supported by Colectivo Madreselva (CMS) has its roots in the armed conflict that has affected Guatemala since 1960. The first community energy project of the region is in the village Unión 31 de Mayo, formally established in 1998 by the Guatemalan state to relocate some communities displaced by the conflict. These communities, also known as *Comunidades de Población en Resistencia* (CPR, acronym in Spanish for Communities of Population in Resistance), spent years in the jungles and mountains of Guatemala in attempts to escape persecution from the army and paramilitary groups targeting Indigenous peoples from 1960 until the Peace Accord signed in 1996 (de Leon Ceto, 2013). It is important to highlight that not all displaced people and communities were organized under a CPR unit, for example, in 1997 approximately 324,187 people were considered displaced (*población desarraigada*), including returnees and repatriates, as well as internally displaced persons, which included but were not exclusive to the Communities of Population in Resistance, CPR (Fundación Arias para la Paz y el Progreso Humano, 2000b, p. vii).

The population of Unión 31 de Mayo is constituted of groups and families from different ethnic origins and territories from across the country which, as a result of the repression of the authoritarian and violent military regime, had a shared experience of about 15 years of forced displacement into the mountains of Chajul, Quiché in the CPR Sierra, which during the war was mostly located in the Sierra de Chamá. It is important to highlight that many CPR members did not want to live in the new settlements at *finca El Tesoro*, which did not have soils as fertile as in

the Sierra and was mostly used as a cattle ranch before the CPR was settled there. Many families preferred to move to the lands acquired at the South Coast, others in Ixcán, and others could return to their original communities. Furthermore, there was a clear state interest in disarticulating a group highly educated in political terms and with a lot of autonomous capacities that could be dangerous for the neoliberal post-war configuration planned by the state, which, as we will see in this chapter, created different barriers for the settled communities to organize politically (Colectivo Madreselva, 2014).

The shared condition of escaping state's persecution and suffering scarcity of food, drinking water, spices, clothing, shelter, and other resources recomposed these diverse communities from different territories and ethnic backgrounds into a new community, the CPRs (Community energy associate, interview, June 2022c, interview, June 2022d, interview, June 2022e, interview, June 2022f; Director, interview, June 2022f, interview, June 2022j). By sharing a condition of extreme vulnerability, they were required to commit integrally to their new 'mountain-based refuge' community to ensure its survival. During these fifteen years, the Communities of Populations in Resistance (CPRs) developed a strong sense of community and self-sufficiency, drawing together the possibilities of a future that included educational, health and food production systems, which in turn would require not only access to land, but also clean water, primary education, healthcare, and electricity (Director, interview, June 2022d). Legally acquiring a piece of land from the state through the creation of the Unión 31 de Mayo village and its almost 40 hectares of community land after the conflict formally ended was a crucial but insufficient step to ensure the fundamental rights and well-being of the new community.

This chapter will describe how communities in Zona Reina – a region composed of six micro-regions and 95 villages, adjacently located to the Chajul mountains, where CPR Sierra

refugeed during the war (CMS activist, interview, June 2022h; Estudiantes de la Universidad Mariano Gálvez, 2015b) – came into existence as a result of the armed conflict and what community building process they followed with the support of external partners such as CMS and civil society organizations focused on the transition from an authoritarian and genocidal rule to democracy. Based on testimonies from community members and secondary sources, the first section will first briefly tell the history of state-led counterinsurgency in Guatemala, which used a 'scorched earth' strategy to annihilate the rural and Indigenous social base of the guerrillas that challenged the military regime in Guatemala. That section will focus on the impacts of the conflict on Indigenous governance models that emerged during the war but still characterize the community energy projects in Zona Reina. The second section will analyze five community energy projects in Zona Reina (four operating and one under construction), describing where and how these projects were built and presenting the perceived benefits mentioned by community members engaged in their construction and operation along with Colectivo Madreselva. Finally, the third section will focus on two perceived difficulties of these projects: the generational challenge to cultivate a sense of community ownership over the projects and the gender inequalities perpetuated through the distribution of community energy rights. These challenges connect us back to the first section, about the history and impacts of the armed conflict on current governance and leadership models and how hard it is to keep 'passing on' the history of communities in resistance to younger generations. These challenges also connect us back to the previous chapter in which the roles of CMS are questioned as a facilitator of community energy projects that enable a just energy transition and the defence of territory, advising communities not to replicate violent power dynamics against women and other more vulnerable groups.

3.1 "The sacred forest saved us": Impacts of counterinsurgency in Zona Reina and their influence over community energy management

Zona Reina is one of the six zones of Uspantán municipality, located in the northwest department of Quiché, Guatemala. Uspantán has over 65,800 residents distributed across 181 communities, out of which 90% are rural residents of Mayan ethnicities (48% Q'eqchi', 40% K'iche', 4% Ixil, and 8% do not identify as Indigenous) (INE, 2018). In this region, eight in every ten people live in poverty or extreme poverty, with high levels of malnutrition, low levels of formal education and growing unemployment among young people, which in turn fosters (illegal) migration to the United States (Colectivo Madreselva, 2019b). Zona Reina counts 86 out of the 181 communities in Uspantán, with a population of around 40,000 people or 8,000 families, and it is located between two great mountain ranges; in the northern part, the Cuchumatanes massif; to the southwest, the Sierra de Chama; and to the south the mountainous range of El Amay. It links up to the protected areas of Sierras de Acul and Visis Caba, located in the municipalities of Chajul and Nebaj, in the department of Quiché, where the ethnical majority is Ixil, as well as the still forested regions of Ixcán, the largest municipality by area within Quiché. Zona Reina has a high hydropower potential. Covering 580 km², Zona Reina is part of a broader territory, including many basins, sub-basins, and small valleys (Colectivo Madreselva, 2019a). It also still preserves critical water recharge zones with humid and warm tropical and subtropical forests, numerous springs of water, affluents, small rivers and other sources flowing from its basins and sub-basins, which attracts the attention of corporate actors interested in developing large-scale hydroelectric projects in the region (Pohlenz de Tavira, 2021).

Ixcán ALTA VERAPAZ Cobán QUICHÉ Uspantán Area of interest Municipality Unión 31 de Mayo Department La Gloria Community energy projects Lírio Putul Rivers Roads Elevation 500 m 100 m

Figure 3.1 Community energy projects in Zona Reina

Adapted from: DIVA-GIS and SEGEPLAN

Before the armed conflict, this region was characterized by large *fincas* (farms), where Indigenous residents worked as *mozos* primarily for the benefit of the *patrones* (landowners) in exchange for a miserable salary, a small piece of land to live, and a portion of the crops they grew (Inter-American Commission on Human Rights, 2015). "The elders say they carried the *patrones* (bosses) to the *fincas* using a *mecapal* (leather strap) through pathways that not even beasts could cross. This explains how the Indigenous population used to be treated" (Colectivo Madreselva, 2014, p. 34). During the short "Democratic Spring" in Guatemala (1944-1954), under the rule of Jacobo Árbenz Guzman, the main two fincas in this region, *La Perla* (Chajul) and *San Francisco* (Cotzal), went through a process of land redistribution that benefitted some

families previously subordinated to large landowners, opening possibilities for Indigenous groups to organize politically to reclaim their right to land (González, 2011; Handy, 1994). However, this short democratic experiment did not substantially change the land distribution in Zona Reina. The subsequent interruption of the agrarian revolution and establishment of an authoritarian military regime dramatically affected Zona Reina's land tenure system. In 1954, a coup d'état put in power a military regime that cancelled all the progressive agrarian and labour reforms promoted by Árbenz, implemented censorship of journalists, students, and political activists, and pursued violent persecution against 'communist threats,' which included any person doing community work (Handy, 1994; Payeras, 1985). As a result, many finqueros (farm owners) moved out of their lands because of the conflict and did not return to them after the conflict ended 36 years later because of the degraded conditions of the properties. For Indigenous populations, violence changed its face from labour exploitation and poverty in the fincas to everyday life militarization, displacement and deprivation (Colectivo Madreselva, 2014).

Armed guerrillas emerged in response to the state violence during the military regime, supporting the agrarian and social revolution interrupted by the coup. The primary approach used by the Guatemalan army to deter armed and unarmed 'insurgents' was the 'scorched earth' strategy, which corresponded to the ethnic cleansing of hundreds of Indigenous communities, killing or forcibly disappearing over 200,000 people and displacing an additional 1.5 million (HMH, 2022). The regime institutionalized state violence to control increasing demands and revindications that the elites in power considered a threat to their interests, labelling them as communist, insurgent, and subversive. The scorched earth strategy was a counterinsurgency tactic that affected thousands of people who were not involved in or even knew about political-

military organizations opposing the authoritarian regime. Counterinsurgent campaigns "have a record of viewing civilian populations, particularly unarmed, politically mobilized and often racialized civilians, as insurgent threats to government control" (S. Granovsky-Larsen & Santos, 2022, p. 123).

Counterinsurgency (COIN) is at the very heart of the Guatemalan state, and its anatomy has evolved by different events in the 1960s and 1970s leading to the coup of 1982, structuring the military regime years and, after the Peace Agreements, characterizing the "political-military" political project of the contemporary state bureaucracy (Schirmer, 2000). In the 1966-67, for example, with training and guidance from United Sates Army, a brutal COIN campaign massacred "thousands of poor rural ladinos (mestizos), along with most of the guerrilla leadership) (Schirmer, 2000, p. 17). In 1978, with a partial reduction of U.S. military aid and failure of the army to completely defeat the guerrilla, the Guatemalan army started to develop their own military "science" and theories, using repression of popular resistance and massacre of Indigenous population in general as counterinsurgency tactics, moving from an occupational model to a more confrontative and violent approach to "annihilate the guerrilla and recuperate the population" (Schirmer, 2000, p. 38). Later in 1982-83, the psychological warfare and "pacification phase" started, creating a network of informants and patrollers that kept supporting massacre operations, "creating "killing zones" and forcing refugees and guerrillas to flee into the mountains or Mexico" (Schirmer, 2000, p. 1954).

In the case of the department of Quiché, one of the *departamentos* with "the heaviest guerrilla activity", the main targets were initially campesino (peasant), religious and cooperative leaders and politicians (Colectivo Madreselva, 2014; Schirmer, 2000, p. 54). However, it increased to the point that the civil population, organized or not, was heavily impacted by

massacres, massive sexual violations, and displacement perpetrated by the army (Falla, 1992; Ibarra, 1991). In the beginning of the 1980s, the Army declared that the entire ethno-bio-region including Maya-Chuj, Q'anjob'al, K'iche', and Ixil peoples in the Ixcán area (north of Zona Reina) as "internal enemies" (Nelson, 2020, p. 228). One of the survivors describes:

I was seven years old when the war began (...) I came to *La Gloria* because of the war. The people there did not know if I participated in the guerrilla (...) I saw the war; I slept with my dead father for 24 hours. I saw him being killed live. They threw a grenade at me and 'killed' me for twelve hours because of the sound (Community energy associate, interview, June 2022e).

Entire villages were destroyed, including innocent babies and pregnant women. Both men and women were horribly subjected to widespread sexual abuse (Nelson, 2020, p. 228). Another villager from Unión 31 de Mayo was 18 when the army killed their father and many siblings. He says: "We moved to various parts of this department and received attacks during our fourteen years on the mountain. We governed ourselves and appointed our own leaders" (Director, interview, June 2022f).

Among the displaced people from different parts of the country, the *Comunidades de Población en Resistencia* (CPR) represented the survivors in resistance to the state violence that swept away over four hundred communities and villages (Farfán, 2010). The CPR represented a military tactic of the revolutionary organizations aiming to create a "liberated territory" that could eventually be recognized by international law and considered in future peace negotiations (Nelson, 2020, p. 228). During the conflict, the CPR lived under highly vulnerable conditions, with limited access to food, clean water, and shelter, heavily relying on the herbs and few crops

available in the mountains and on the collective work of the community members. The "sacred forest" saved them (Huet, 2008).

... the diet was reduced to a minimum, and people remember with sadness the sorrows they endured without food, water, salt, or land to cultivate. They cooked at night so that the smoke could not be seen. Women were in charge of constantly keeping an ember alive to be able to cook (Colectivo Madreselva, 2014, p. 45).

Women, who sometimes were pregnant or nursing without enough food for themselves, caring for children and elders, used to wear clothes that were gradually wearing out. Despite the challenges of maintaining their dignity under these circumstances, they committed themselves to this project of liberation, playing a core role in the resistance, which came at the cost of immense suffering (Nelson, 2020, p. 229). Several women in the CPR had to deal with the unbearable emotional traumas of the war, when some of them suffocated their own child to prevent their "cries from giving away their position" (Nelson, 2020, p. 248).

There was a need for an integral commitment to ensure the community's subsistence in this context, and everybody, including women and children, had a role. In this context, a strong sense of community and solidarity emerged in the CPR and with effects felt to the date. The forest not only saved them, but also strengthened the community in different ways:

During the violent 1980s, we planted various things that benefited the community. But the patrols and the army came to destroy us. Whoever lost their harvest, counted on the solidarity from others to support. We must continue supporting each other now, diversifying production and promoting food sovereignty. It is time to cultivate and water our ideas in this place where things grow, instead of buying and selling (Director, interview, June 2022d).

After the Peace Accords, the CPR continued to use community mechanisms of decision-making with the support of civil society organizations to put into practice projects that they started to discuss still during the conflict collectively:

Since the mountain [years], we have hosted many assemblies. We appointed a delegation to negotiate with the government, which, under pressure from the international community, bought several farms to resettle the CPRs. (...) We decided that we would demand electricity [and] schools from the government. The accompaniers supported us in making the plan. Here they showed us how a community energy plant worked; they made a relief map and explained where the water had to come from, how it would work, and the amount of work we should contribute. In an assembly, we said yes, which is how the project began (Director, interview, June 2022f).

For over ten years, the CPR autonomously managed children schooling, subsistence supplies, their spiritual lives, interpersonal relations and power. They were able to create "an exciting imaginative space for those struggling for the dreams of the revolution in the aftermath of ferocious genocidal violence and insurrectionary defeat" struggles (Nelson, 2020, p. 229).

Throughout the conflict, especially during its late years, human rights observers worldwide started to accompany the different CPRs. The CPR Sierra, located in the Quiché mountains (Sierra de Cabá, more precisely), was mainly accompanied by an organization called *Asociación Siembra Canaria*, or just *Siembra*, from the Canary Islands, who officially worked as human rights observers in Guatemala since 1999. Siembra was the association that first supported Unión 31 de Mayo in building its community energy project. Siembra's concept of

'solidarity as reciprocity' complements and resonates with the 'collectiveness experience' of the CPRs in the mountains. As a report from Siembra explained, the organization tried to avoid

(...) having an *actitud asistencialista* (welfarism attitude) [which is] why we are committed to the <u>encounter</u> between peoples. For considering them protagonists of their own history and wanting to learn from each other. (...) We understand that it is about political and critical solidarity, which approaches the [root causes of the] problem as the influence of neoliberalism, which is creating greater differences between North and South." (Siembra, 2010, emphasis added).

Siembra accompanied the CPR for prolonged periods during their resettlement to ensure that the state provided some basic living conditions to the communities persecuted during the war. Their activities adapted to the communities' capacity-building needs, promoting education and historical memory recovery, supporting gender issues, and alternative energy demands (Colectivo Madreselva, 2014). Besides Siembra, CPR members were in touch with different embassies to report human rights abuses perpetrated by the army during the conflict.

We had to go to other countries to tell them about the internally displaced persons from Guatemala, like Mexico, Norway, United States. The army qualified us as guerrilla members, [so] we visited many embassies in Guatemala City and asked the Norwegian and Belgian embassies to make our situation known. We created a multipartite commission with embassies and religious institutions and announced that [the state] had hidden this violence for years. There were ten thousand people in the CPR, and we made them publicly known (Director, interview, June 2022f).

The CPRs settlement was a controversial process that continued the counterinsurgent politics by different means and impacted communities' internal dynamics to date. During the war, counterinsurgency was led and operated mainly by the Guatemalan state, specifically the national army, with the support of paramilitary groups in coordination with the military regime (Kepfer, 2014). After the conflict was formally over, the state selected the worst and more isolated areas to accommodate the communities. In the case of Unión 31 de Mayo (previously CPR Sierra), the community was placed in an abandoned Finca called *El Tesoro*, wholly disconnected from the rest of the country, with no access to roads or basic infrastructure. Community members were taken by army helicopter, while some got there walking long journeys, and after being 'settled,' they were left behind by the central and local governments.

An accompanier from Siembra tells that with the arrival of President Álvaro Colom to the power, there was a strong campaign to persuade former CPR members to move to a different settle from the ones where they would live with the group they have resisted the armed conflict with. Besides the poor soil fertility of finca El Tesoro, they negotiation leaderships representing the state lied to the communities saying that there were other *campesino* families reclaiming their territory, that they should go to a different region where there were no risks.

At that moment it was a collective trauma to assume that they had to get out of there. Anger comes out of my mouth when [I] analyze the arguments that people gave to leave and you realize that they don't hold up. They said (...) that the peasants from Chajul were reclaiming those lands. If you go to that place now, years later, there are only a few families from Chajul and CPRs settled there. It makes you want to cry because there is nothing left of what there was, of everything that

the resistance built. Everything was eaten by the jungle (Colectivo Madreselva, 2014, p. 52).

Furthermore, Unión 31 de Mayo, as a 'rebel community,' was strategically established in a zone of fincas of former *patrulleros* (patrollers), which included Campesinos forced by the army to exercise surveillance on neighbours that could potentially be guerrilla members during the war (CMS activist, interview, June 2022j). The *Patrullas de Autodefensa Civil* (Civil Self Defense Patrols or PAC) were local militias created by the Guatemalan Army at the end of 1981 that "extended military control into rural villages" as part of a counterinsurgency policy and officially disbanded after the 1996 Peace Agreements (Granovsky-Larsen, 2021, p. 73; Remijnse, 2001). The impacts of civilian patrols in the communities has left lasting marks on the social dynamics of Indigenous communities, spreading mistrust among neighbours and, in some cases even maintaining their operations nowadays, challenging the "reach and legitimacy of the Guatemalan state" (Bateson, 2017, p. 635). The region they were allocated was "heavily militarized, and their new neighbours had endured over a decade of army counterinsurgency propaganda denouncing the CPR as dangerous "reds"" (Nelson, 2020, p. 230)

[In] La Taña, the problem was that [the San António] river crossed some villages that were not politically welcoming (...) They were ex-PAC, who until then had been *encabronados* (angry) with the CPR, [they were] people who were known by having fought both sides of the trenches (Colectivo Madreselva, 2014, p. 63).

Another Siembra accompanier mentions the high militarization levels of the settlement areas and how hard was for resettled communities to survive there:

This zone [Finca *El Tesoro*] was militarized and was on of the most aggressive against these communities [the CPR]. It was full of *patrulleros*. When we arrived

we started to notice. It was a finca owned by the father of our current mayor. In the negotiations between URNG [Unidad Revolucionario Nacional Guatemalteco or Guatemalan National Revolutionary Unity], the government, FONAPAZ [Fondo Nacional para la Paz or National Fund for Peace], and then the mayor (...) decided that finca El Tesoro was going to be the first settlement after the expulsion. There resided people who are now in Lírio Putul, (...) who served this finca as colonos. (...) It looks like coincidence that the first CPR group was settled among villagers that used to support the army before in the military attacks to the mountain refugee communities, however this could have been a strategy of population control and a political business that benefitted key actors in the region (Colectivo Madreselva, 2014, p. 51).

Other villages today running community energy projects, such as La Taña, also started to have ownership over their land as a direct result of the armed conflict. One of the villagers from La Taña, who currently plays a management role in AMALUNA (an acronym for *Asociación Civil Maya Luz Comunitaria Nuevo Amanecer* or New Dawn Mayan Civil Association of Community Energy), explained that the previous landowners had to leave their *fincas* because of the war, and as an aftermath, villagers appropriated their land.

For many, the war was fear and terror, but for others, it was an achievement. (...) [Previously], the people who lived here had to ask the *dueño* [owner] for permission to do everything. When these *patrones* no longer exist, the land is divided, and people begin to sow for consumption and income by growing cardamom (Director, interview, June 2022e).

Even with all these difficulties, Unión 31 de Mayo was the first community in Zona Reina to build and run their community energy project, inspiring neighbour villages to join the movement with the support of Madreselva. There was no previous collaboration between Siembra and CMS, and Madreselva still did not focus their programs on alternative ways of living. However, the invitation from Siembra to transfer the community energy projects to CMS was motivated by the commitment of Madreselva to the defence of territory supporting community *consultas* in the region. Furthermore, the proposal found an echo in some internal interests, mostly from engineers in the collective, in working more proactively towards concrete solutions for the energy demand of the communities (CMS activist, interview, June 2022b, interview, July 2022).

It took around six years for Unión 31 de Mayo residents to light their first lamp with power from the community micro-hydropower plant. The project started in late 1998, when the community and the accompaniers from Siembra worked on the *Diagnóstico Rural Participativo* (Participatory Rural Diagnostic), an analysis of the community's needs. In 2000, following the diagnostic, Siembra and Unión 31 de Mayo began to work on the technical study to identify the best site for the plant and guided the construction process (Colectivo Madreselva, 2014). During the years of construction, men used to carry materials such as pipes, cement, the turbine and others, bought in Santa Cruz del Quiché (the department's capital) or the *cabecera municipal* (municipal capital) of Uspantán for approximately 8 km. Throughout this process, women played a core role in waking up earlier to prepare food for their children and husbands, working in the ditches, doing their dirty laundry, working in the fields, and constantly accompanying and encouraging them. "It increased their domestic workload, and [they] had to take other responsibilities with their families and community" (Colectivo Madreselva, 2014, p. 62). The

construction process also included workshops on accounting, management, and electrical systems in Zona Reina and the Canary Islands.

In 2004 the community started to have access to power from the micro-hydro dam. However, the project was interrupted right after its start in 2004 because of internal divisions promoted by a foreign evangelical pastor in Unión 31 de Mayo and the institutional exhaustion of Siembra in Zona Reina. "Groups were formed that turned against the project, as a result of the influence of the gringo, and that is why we failed on the first attempt. (...) But then the people from the Canary Islands contacted Madreselva and the project started working", shares a senior member of the board of directors of 31 de Mayo (Director, interview, June 2022c). The turbine remained inactive until 2009, when a community consulta (consultation) approved its restart with the support of CMS and international donors such as the Norwegian Embassy and AIN (Ayuda de la Iglesia de Noruega or Norwegian Church Aid) in 2010, inaugurating the community energy association Luz de Los Héroes y Mártires de la Resistencia (Light of the Heroes and Martyrs of the Resistance). The association's name evocates that they are themselves light: "our survival, our struggle, our work. We are always more than just ourselves. We are an example, a hope, a sign for the rest of Guatemala" (Nelson, 2020, p. 230). Because of the lack of funding and 'emotional energy' to keep pushing such an ambitious project (CMS activist, interview, June 2022a), in 2009, Siembra reached out to Madreselva to ask if they were interested in supporting Unión 31 de Mayo with restarting their community energy project.

Some of the reasons for the project's interruption included internal divisions created by disagreements on how public education plans should be implemented, mainly between a popular project originated by the CPRs and the official program from the Ministry of Education; the limitations of community authorities to manage political differences within the community; and

the emergence of a foreign religious leader that discouraged the community work on the energy project, promising to distribute solar panels to everyone to prevent them from dedicating their precious time and efforts to this project (Colectivo Madreselva, 2014). An accompanier from Siembra reports:

(...) he [the evangelist] gathered the people together and asked them why they were going to continue working if he was going to give each one a solar panel, and upon hearing that the people stopped working, because it is easier to have a panel than to continue working, because the work was heavy. So people divided and formed the San Antonio La Nueva Esperanza community (Colectivo Madreselva, 2014, p. 70).

This promise has never been fulfilled, but it increased internal divisions in the recently settled community of Unión 31 de Mayo, which broke down into four smaller communities: San António Nueva Esperanza, Tesoro 9 de Marzo, San Marcos La Nueva Libertad, and Unión 31 de Mayo. In 2005, such disagreements led to an important rupture due to a tense relationship between community energy supporters and a foreign pastor, who created several educational institutions led by religious philanthropists in the area (Colectivo Madreselva, 2014; Estudiantes de la Universidad Mariano Gálvez, 2015a).

The conditions of isolation and hardship the CPR faced after settled might have eroded social relationships and furthered divisions. In informal conversations with CMS activists, they said that the arrival of evangelical churches also contributed to the lack of community unity.

People interviewed for CMS book *El Camino de la Luz* tell that during their mountain-based

refugee, the majority was catholic or *costumbrista*¹³, "in these moments the individual religion was not a factor of division" (Colectivo Madreselva, 2014, p. 70). However, during the resettlement of the CPRs, CMS activists claim that they had a special treatment by the intelligence agencies, which employed different methods to divide them so they could not serve as an example for other Indigenous communities, and one of them was exactly fostering the creation of multiple evangelical churches (CMS activist, interview, July 2022).

Protestant religions try to divide families around individual interests. (...) There are thirteen evangelical churches in a community with 300 families in total. This is a post-counterinsurgent policy, to ensure there is division and they cannot serve as an example to other communities. The state, national and transnational companies are enemies of community energy, as it can inspire other communities [to organize] (CMS activist, interview, June 2022a).

Another potential reason for the erosion of community unity and the spirit of the CPR is the institutional incentives from educational institutes led by evangelical leaders and the municipal government to establish auxiliary *alcaldes* (mayors), Community Development Councils representatives (COCODEs) created in 2002, ¹⁴ Municipal Development Committees (Comités Municipales de Desarrollo or COMUDEs) ¹⁵, and educational unities of different levels

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¹³ The term "*costumbrista*" refers to individuals who practice the syncretic religion combining Maya and Catholicism in Maya communities (MacKenzie, 2009).

¹⁴ SEGEPLAN (acronym in Spanish for Secretariat of Planning and Programming of the Presidency) is the State planning entity that provides advice and technical assistance to public institutions and the Community Development Councils (COCODEs) to align public policy processes, planning, and programming with the National Development Plan and Policy, as well as ensure their proper implementation and evaluation (Regional Observatory on Planning for Development, n.d.-b).

¹⁵ COMUDEs are a higher administrative unit than COCODEs. They involve a broader community representation, often including representatives from different COCODEs within the municipality. COMUDEs typically coordinate with municipal governments to discuss and implement larger-scale development projects that impact the entire municipality. In essence, COCODEs and COMUDEs are part of a hierarchy of community development councils in

(primary to higher education) in communities derived from Unión 31 de Mayo, such as San Antonio La Nueva Esperanza (Estudiantes de la Universidad Mariano Gálvez, 2015a).

Internal divisions are not exclusive to 31 de Mayo; villages such as La Taña is also subdivided into three communities: La Taña, Tesoro Chiquito, and Montecristo. In the case of 31 de Mayo, however, it is interesting to note that community divisions are deeply political, reflected in the composition of the village. "What geographically would be considered the village of San Antonio contains populations that identify themselves as members of 31 de Mayo, and the same is true of the other villages" (Colectivo Madreselva, 2014, p. 71). Adding to that, Unión 31 de Marzo is a mix of Q'eqchi', K'iche' and Ixil ethnicities, but some of them are predominant in specific communities, such as Ixil people in San Marcos and El Tesoro 9 de Marzo. Although all the resettled CPR members came from CPR Sierra, internal differences and disagreements started to emerge, especially between K'iche' and Ixil members. However, these differences got accentuated with the penetration of neoliberal Pentecostal churches in the region, characterized by an individualistic ideology brought by foreign evangelical missionaries to Zona Reina.

The literature on resettled rural villages in Guatemala, El Salvador, and Brazil show some recurrent patterns of internal social division and intensification of inequalities as a result of the way the resettlement processes are undertaken. Irma Alicia Velazquez Nimatuj (2005), for instance, reflects on the social and political divisions, intensified gender inequalities, and management debilitation occasioned by the resettlement policies and public abandonment of rural communities in Nueva Cajolá, Quiché by the Guatemalan state. In the Northeast of Brazil,

under a military dictatorship in the 1970s, "the military resettled poor families in colonization programs," providing incentives to large-scale sugarcane monoculture, leading to an increase land concentration and heavily impacting labour conditions in the region (Wolford, 2010, p. 125). Regarding the impact on resistance, Rose Spalding provides an interesting case study of El Salvador showing that resettlement dynamics directly affected spatial alliances and local-national connections against mining development (Spalding, 2018). From these examples we can notice that resettlement struggles and challenges are not unique to the communities considered in this thesis.

Internal divisions created by the counterinsurgent policies during and after the war have significant implications for how community projects are managed in Zona Reina. As we can see in this section, since the CPRs, during the war, these communities have suffered the effects of the scorched earth strategy, followed by a strategic settlement in a hostile environment by the state. More recently, they have faced significant influence from external actors such as religious-philanthropic leaders and, as we will see in the coming sections, energy companies that discourage community work around energy projects because of their interests in building large hydro dams in this region. A very concrete example of these discrediting and defamation campaigns were led by the municipality:

Our parents who suffered from the conflict had in mind that businessmen lie, their memory is very present. (...) The mayor (...) came again to say that CMS did not want the development, that the *muni* is the one that gives support. [He said that] CMS is lying, that it is a rich institution, that it appropriates the fees paid [by the associates]. Many indigenous people allow themselves to be convinced by the authorities. But we already understand that things are not like that. (...) What the

municipalities say is that the project is very small, that for the present it can be useful but not in the future (CMS activist, interview, June 2022e).

In the forthcoming section, we will observe how community energy projects deal with these counterinsurgent policies, aiming to use their projects not only to provide energy at a just cost to their communities exclusively but to defend their territories against corporate interests that degrade the environment and dispossesses the Indigenous peoples from their territories. After characterizing community energy projects as one of many tactics of defence of territory and resistance to the expansion of neoliberal development in the country, this chapter will dive deeper into the difficulties to continue operating these projects, focusing on two main challenges that will bring us back to the gender and generational implications of counterinsurgent policies in Guatemala.

3.2 Community energy projects for the defence of territory: characterizing case studies

As observed in the previous chapter, a core focus of Colectivo Madreselva is the defence of territory. Therefore, even though community energy projects are considered under the alternative ways of living area of work, they overlap with the goal of defending territory from extractive interests mainly related to mega-hydroelectric development in Zona Reina. In this section, we will characterize five energy projects visited during our fieldwork in Zona Reina, four operating and one under construction, providing more details on where and how these projects were built, presenting the perceived benefits mentioned by community members engaged in their construction and operation, and describing how these projects correspond to an attempt to defend territory from corporate interests backed up by the Guatemalan state.

The four operating projects analyzed in this study went through a similar planning and implementation process, standardized by Colectivo Madreselva and used in the projects under construction. They started with a *solicitud* (requirement) from the communities to CMS, aiming to respect the community ownership over the project even before it starts, as they 'want to break the vicious cycle of [philanthropic] cooperation to offer projects' (CMS activist, interview, July 2022). Then, after an internal decision of the mesa de activistas (activists board) to process their request, they organize a meeting with the community presenting the basic needs to implement the project, with a focus on the communities' contributions: identification of 'non-qualified workforce from the socios (project associates), the appointment of a community 'junta directiva' (board of directors); providing wood, sand, and crushed stones necessary for the construction; 16 and assessing the land structure and owners of the area where the turbine and power plant will be placed, ensuring that the land is community-owned or that the owners consent with the project. CMS manages the 'qualified workforce,' including engineers and hydrologists, as mapping the community's natural and socio-economic aspects is usually done 'in-house' (CMS activist, interview, June 2022g).

Once the community commits to these resources, CMS assesses the hydroelectric potential of the project through a pre-feasibility study undertaken during the summer because of the heavy rainy season storms. In these studies, CMS identifies satellite and map sheets to determine the hydropower capacity, how many people to include, the type of equipment required, pre-dimensioning the construction work and providing the team with a quotation of

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¹⁶ The agreement CMS establishes with the community to build the energy projects requires the community to contribute with sand and crushed stones (taken from the local river or community-owned material banks (*bancos de materiales*), and 50% of the necessary wood, bought from nearby suppliers (outside the communities) (CMS activist, interview, June 2022g).

consultants and staff needed to execute the project. The next step is to present the study to the community and donors to get their consent and the green light to start the project. Getting the community's approval and the support of international funders is critical to start the construction because while the community provides the workforce, funders are responsible for the financial resources required to implement the project. The Planning, Monitoring and Evaluation staff of CMS is responsible for finding and managing grants from different donors, as the approved applications usually grant fewer resources than the amount they applied for, requiring them to think creatively about how to allocate resources in a way that does not compromise the construction phase. CMS closely follows the construction process, providing technical and political support to the community working in the trenches and in the organizational process of putting together a board of directors, internal rules of procedure, and formalizing their association. After the construction, CMS provides them with fifteen days of accompaniment with an electrical specialist who instructs the community electricians on how to take care of the plant (CMS activist, interview, June 2022g).

The following subsections are based on both a literature review of publication about community projects and the history of our case studies, a review of CMS internal documents regarding the community energy projects, semi-structure interviews conducted in the communities and direct observation of the energy projects and community social dynamics during a two-months fieldwork in Guatemala.

3.2.1 Unión 31 de Mayo

Figure 3.2 Water intake and powerhouse of Unión 31 de Mayo



Photos by Gilberto Pastor, March 2023

Unión 31 de Mayo was the first community energy experience in Zona Reina and the first supported by CMS, on May 31, 2011, today counting on approximately 700 associate members and a potential of 75 Kilowatts (KW) (Colectivo Madreselva, 2022; Director, interview, June 2022a). By then, Madreselva focused their defence of territory strategy on providing communities resisting mega-development with communication and legal support to promote *consultas* and make their struggles visible to a larger audience. Although large-scale hydropower companies have not directly threatened 31 de Mayo through specific projects, the hydropotential of the rivers in Zona Reina makes it particularly attractive for hydroelectric development, and projects such as the Xalalá Hydro dam that affected the northern part of Zona Reina, closer to another case study, Los Copones (Botón Simaj, 2007; Reemtsma et al., n.d.).

As discussed in the previous section, 31 de Mayo has a long history of resistance and articulation against the Guatemalan state counterinsurgency strategy. After their settlement in Zona Reina, the community went through internal subdivisions primarily because of external actors and dynamics taking place in their territory, such as religious leaders from evangelical denominations that, besides increasing the number of churches in the community, influenced areas such as education and even energy provision, encouraging the use of individual solar panels instead of a community-owned model supported by CMS. Such a proposal indicates the individualistic ethos of 'market-friendly' evangelical churches in Guatemala, which was a vital part of the post-war political and economic order (Dary et al., 2019; Huang, 2015). In Guatemala, evangelical traditions have always identified with the military regime: General Efraín Ríos Montt, for example, who assumed the presidency in 1982-83 and was responsible for over 10,000 human rights violations and acts of violence according to the United Nations Commission for Historical Clarification (Comisión para el Esclarecimiento Histórico de las Naciones Unidas or CEH), was evangelical, and "his dictatorship was supported politically and financially by various Pentecostal churches in the U.S., which were tightly connected to Ronald Reagan's administration" (Egoshi, 2018, p. 3).

One of the effects of these internal conflicts was rumours and threats against CMS and community members leading the project, illegal connections and sabotage acts to the electrical system that collapsed it, and the interruption of the community energy project for five to six years. During these difficult years of internal divisions, community members who engaged in the construction of the community energy counted on the unconditional support of Madreselva to defend the project, whose activists were even physically threatened by people opposing the project. However, the community realized the importance of the project when the promises of

individual solar panels from evangelical leaders were not fulfilling their need for electrical power and by noticing the continuing support from CMS. Therefore, after an internal *consulta*, they decided to restart the project with CMS support (Colectivo Madreselva, 2014).

Today, the Unión 31 de Mayo community energy project supplies all four communities created after this internal division, which supported regaining solidarity and a sense of unity that the divisions had shaken started in 2005 in the community. However, these communities keep their general assemblies, and local religious celebrations separate, showing that the marks of these internal conflicts still exist but with very few community members who are hostile to CMS and known as 'saboteadores' (saboteurs) by the people who engaged in defence of the community energy project (Community energy associate, interview, June 2022f). As the community grows, the board of directors considers adding a new turbine to the project. Despite the internal divisions, the community energy project *Luz de Los Héroes y Mártires de la Resistencia* succeeded and inspired all subsequent projects CMS supported in Zona Reina.

3.2.2 Lírio Putul

Figure 3.3 Water intake, reservoir, and powerhouse of Lírio Putul



Photos by Julio Sacul, March 2023

The second community energy project in Zona Reina was with Lírio Putul, the smallest community out of the four operating projects analyzed in this thesis, counting on 77 associate members, representing 77 families, with a potential of 21 KW (Director, interview, June 2022b). This community has an important natural advantage that brought it to the top of the list of communities requiring CMS support – they had the source of the river Pajuil that supplied Unión 31 de Mayo's turbine (Colectivo Madreselva, 2022). Any interruption in the river flow in Lírio could compromise the project of 31 de Mayo, which is why Lirio got the top of the list of communities interested in developing their community energy projects in Zona Reina after Unión 31 de Mayo, starting their operations in May 2015. The basic quota for this community is Q 40, for consumption up to 25 KW/residence, which corresponds to ten quetzals more than the other neighbour communities, which a member of the board of directors explained as a way to

save money for emergencies and a future expansion of the canal (Director, interview, June 2022b).

One particularity of this community is the fact that it has chosen not to be formalized in the Superintendency of Tax Administration (SAT, acronym in Spanish for *Superintendencia de Administración Tributaria*) because of their fear of being privatized by the state:

In Guatemala, there is much corruption. We are not educated, but we realize how things work. If we let the State in, they can privatize us and charge [a cost that] is not fair (...) They have told us that we have to register with the State, and we are afraid that it will claim it as its own and [that] change[d] our minds. We do not want to get involved with the state. The owners are the associates, those who have worked. We have made our own agreements. (Director, interview, June 2022b).

Another particularity found in Lírio Putul is its growth, with new young families that have not been part of the community energy construction process and, therefore, do not have access to power. This challenge will be further discussed in the coming sections.

3.2.3 La Taña

Figure 3.4 Water intake and powerhouse of La Taña



Photos by Damián Catún, March 2023

La Taña was the first inter-community energy project supported by CMS, providing energy to three communities: La Taña, Montecristo, and Tesoro Chiquito, with a potential of 90 KW from a Sataan River affluent, starting their operation in October 2016 (Colectivo Madreselva, 2022). Many villagers from 31 de Mayo migrated to La Taña because of its larger territory and infrastructure, such as a community health center, proximity to the nearest road to Uspantán and other villages, and better internet access. With one the most institutionally consolidated community energy associations, AMALUNA counts on more than 500 associates

(Director, interview, June 2022g), having a solid emergency fund that was even able to provide CMS with a loan to cover personnel payrolls because of a delay in an already approved grant payment. Besides the financial stability of AMALUNA, this indicates the community's confidence in CMS, as they have not charged any interest for the loan even though CMS had initially offered to pay for it. Moreover, the history of cooperation they built with La Taña and other communities in Zona Reina allowed them to move their collaboration to a different level, even though CMS understands that asking for AMALUNA's support was an alternative to the risky option of getting indebted with a bank at high interests rates (L. Santos, 2022).

However, more than the institutional robustness of this project is needed to ensure complete coverage of the communities supplied by their community power plant. For example, in La Taña, many single mothers, widows, single women and young families still do not have access to electricity because they cannot count on the support of male partners who worked on the project's construction or have paid the membership fee to join AMALUNA as an associate (Non-Associate, interview, June 2022, interview, July 2022c, interview, July 2022d). These gender inequalities characterizing some community energy projects will be more thoroughly addressed in the coming sections.

3.2.4 La Gloria

Figure 3.5 Water intake and powerhouse of La Gloria



Photos by Neftalí Domínguez, March 2023

The last community energy project built in the proximities of Union 31 de Mayo was La Gloria, starting operations in November 2017 and today counting on 103 associate members and a potential of 45 KW from La Gloria River (Colectivo Madreselva, 2022; Director, interview, June 2022h). A natural reserve in their territory received attention from civil society associations working with conservation, attracting a small amount of public and private investment not coming through CMS. Although young, La Gloria Electricity Association (ASEG, acronym in Spanish for Asociacion de Electricidad de La Gloria) is very independent, the only one in Zona Reina has directly applied for private funding to expand their project. They are also the only ones that have included widows and elders as a group exempt from electricity fees in their internal rules and statute (Director, interview, June 2022h). It is visible that, although they have not

received direct support from the other neighbour community energy projects, along with CMS, they have benefitted from the experience in other communities, tailoring their project slightly differently by including new actors and conditions.

3.2.5 Los Copones

Figure 3.6 Copón River



Photo by the author, June 2022

Finally, Los Copones is the only project under construction covered by this research, where CMS started to work with the communities in July 2019. It is also the most ambitious in terms of electrical potential (135 KW) and geographical coverage, as it corresponds to an intercommunity effort to provide energy for eight different communities: Arroyo de leche, Playitas Copón, San Pedro Cotijá, San Pedro Cerro El Alto, Santa Maria Chailá, San Pedro Chailá, Nueva Astúrias, and Ventana del Cielo (CMS activist, interview, June 2022i; Colectivo Madreselva, 2022). These eight communities are located south of Copón River, in the municipality of

Uspantán. In the long term, there is an interest to incorporate other eighteen communities located north of the river, in the municipality of Ixcán, which have not been included in the project because of a budget constraint (CMS activist, personal communication, June 2022h). This project faced two significant challenges. On the communities' side, they had problems engaging members of the eight communities at the same level. This problem started to be addressed by constituting a board of directors with at most one member from each of the eight communities (Director, interview, June 2022i). On CMS' side, there was a two-folded problem: firstly, a technical problem in the pre-feasibility study that budgeted less than half of what the project required in terms of funding; secondly, there were not enough political efforts to support the inter-community collaboration. As a result, there was a political discouragement of communities and an increasing lack of confidence in CMS capacity (CMS activist, interview, June 2022j).

CMS and the communities consider all the five projects briefly described above as a strategy to defend territory from extraction and degradation coming with mega-development projects. In a post-conflict environment, these projects constitute vibrant spaces for collective action and political activism in rural Guatemala (Illmer, 2018). Defending territory from mega-development advances a historical struggle of Indigenous peoples in Latin America, who have used different tactics to resist dispossession. The defence of territory is what connects them with each other and with the agroecology projects implemented by CMS along with community women in parallel with the energy projects. Nevertheless, what does 'defence of territory' mean for those engaged in the community energy projects analyzed in this study? Various studies discuss the use of 'defence of territory' as a concept to characterize Indigenous struggles in Guatemala and Latin America. We will go through some of them before diving deep into the communities' perceptions of how their projects execute their goal of defending territory.

3.3 Benefits of community energy projects for the defence of territory

Copeland (2019) defines defence of territory (or DOT) as a paradigm that "mobilizes a mix of indigenous cosmovisions, place-based identities, and international indigenous rights law to unite grassroots resistance to (...) different faces of "extractivism"—in a movement for an alternative model of territorial relations in which indigenous land claims, governing structures, and values predominate" (Copeland, 2019, p. 22). As we will further discuss in the coming chapter, this paradigm requires a conception of territory that goes beyond the colonial understanding of the territory as a container of resources to govern, assuming it instead as an interactive life world though which practices against extractive development and neoliberalism are possible. More than a physical space, the territory is a relational space with both material and symbolic connotations, presenting multiple functions, meanings and disputes to dominate or appropriate it (Haesbaert, 2007). An Indigenous territory corresponds to a set of practices and meanings that embody their "local life worlds" and, as a consequence, is always multiple, diverse and complex (Haesbaert, 2007; Illmer, 2018, p. 776).

In Guatemala and Latin America, Indigenous movements for the defense of territory have highlighted the multiple aspects of territory, including the connection between the body and the land. This connection is particularly evident in the Indigenous women simultaneous struggles for the defense of 'territorio tierra' (land territory) and 'territorio cuerpo' (body territory), as they suffer the consequences of both struggles in their bodies, especially in a context where violations have been used as a war tactic during the armed conflict and even more recently, by private and

¹⁷ Henri Lefebvre (1991) distinguishes appropriation from domination, the first being a more symbolic process, loaded with the practices that "printed" various forms and contents to the territory throughout time, the use value, and the second more concrete, functional and linked to exchange value.

public security officer protecting extractive projects (Cabnal, 2013). Latin American decolonial approaches to body and territory or body-territory/territory-body, use multiple dimensions around the axis of "defense of life", which can refer to one's own life, the life of the collective body or the lives that we inhabit various territory "worlds" (Haesbaert, 2020). In these contexts, the territory of life is also the territory of resistance to the extractive model of devastation and genocide of indigenous people, and defending one's own body is, in practice, a synonym of defending the territory (Alves, 2021).

By analyzing the interactions between DOT and food sovereignty struggles in Huehuetenango, Guatemala, Copeland argues that keeping the paradigms of DOT and food sovereignty in tension can open a path to "building decolonial alternatives in societies fragmented by repressive violence and savage market forces." We can extend this argument to the energy sovereignty struggle underlying community energy projects, as besides proving a compelling critique of the extractive character of large-scale hydroelectric development, they offer a development alternative based on local Indigenous cosmologies that consider their territory as an essential part of their communities and vice-versa, at times interchanging the two concepts of territory and community with each other as we will see in the next chapter. Energy sovereignty struggles, thus, could be considered part of this "repertoire of contention" against extractive development and decolonizing "[p]ostdevelopment alternatives rooted in Indigenous cosmologies" (Copeland, 2019, pp. 22, 37).

According to Illmer (2018), the *defence* of territory reflects a sociopolitical and cultural connection to particular spaces that has resulted in various instances of resistance to dominant political and economic actors' encroachment into Indigenous territories. The process occurs in a context of 'state capture' by local and transnational elites and unlawful actors through

corruption and expanding neoliberal policies mostly linked to extraction (Garay-Salamanca & Salcedo-Albarán, 2012). In the 2000s, new political dynamics started to emerge in Guatemala, using the defence of territory paradigm, as rural communities united to resist mega-development projects through popular consultations, questioning the authoritarian nature or decision-making processes that affected the Indigenous peoples and their territories and reclaiming an issue that by 2003 was "confined to environmental organizations. (...) Roadblocks, protest marches, community assemblies, workshops and visits to congress have formed part of this flow of social organizing embedded in a discourse emphasizing the defence of territory" (Illmer, 2018, p. 775). The community energy projects are an addition to this list of tactics that shifted the landscape of collective organizing in Guatemala but with a more propositional approach that emphasizes the possibility of alternatives to extractive models. As we will further discuss in the coming chapter, the idea of territory is critical to representing the struggles of Indigenous communities fighting extractivism and mega-development. According to Illmer (2018), the category of territory overcomes two significant divides: first, between "human" and "nature," understanding nature as part of the social dynamics and actors; second, between "individual" and "collective," pointing to the importance of the "community" as a signifier that includes both collective and individual dimensions of political action.

In the community energy projects described above, the complexity and multiplicity of practices and meanings of the territories are clear. Different opinions and ideas co-exist in the ordinary and extraordinary assemblies held to discuss and manage community projects, not only around energy issues but also drinking water projects, healthcare, cardamom production, management of conservation areas, and replenishment of watersheds. The micro-hydroelectric projects in Zona Reina divert a maximum of 40% of summer dry season river flow, and, so far,

all the operating projects are located in the same water basin, and each community located in the basin are included in the project (starting with Unión 31 de Mayo, followed by Lírio Putul, La Taña and La Gloria) (CMS activist, interview, June 2022g). These communities were consulted before the restart of the project and got waitlisted by CMS to have their own energy projects built.

Disagreements and small conflicts are discussed and solved in assemblies, trying to conciliate individual perspectives with collective interests and prioritizing community well-being. A clear example of valuing the greater good at the expense of the individual well-being is a statement from a community woman that does not have access to electricity because, as a poor single mother, she is not entitled to get electricity as she could not count on the support of a male partner who would have been involved in the construction of the community energy project nor pay for the right to power: "Thank God that there is power here for the other families. I do not have the money to be part of the association. It would cost me between eight and nine thousand Quetzals. However, it is good that my uncles and brothers have. (...) This [project] is a blessing, a gift to Zona Reina." (Non-Associate, interview, June 2022). In the last section of this chapter, we will further discuss cases of gender inequalities within community energy projects. However, another important takeaway from this statement is the strength of a community mindset in which community energy projects overcome the divide between individual and collective well-being, even when not providing the service for the entire population in the villages.

Community members highlighted three main benefits in the interviews: benefits for the local economy, community strengthening, and low cost of electricity service compared to if it was offered by a private company, but still not low enough for it to be affordable by everyone.

The first is mainly expressed by the fact that the money from the *cuotas* (electricity fees) stays in the community. According to a member of the board of directors of AMALUNA,

The main benefit is that [the turbine] is *comunitaria* (community-led). If it is a company, we will not see the funds. If the company comes, the benefit is for them rather than for the community. With these fees, we buy spare parts and maintain the turbine (...) Businesses started with community electricity (...), and there are many advantages. The money stays here. If a piece is gone, there is already money to repair it. That is why we do not want to involve companies (Director, interview, June 2022g).

Besides repairing the turbine when needed, the money raised from the *cuotas* is also used to pay electricians that work in the plants, lawyers in case there are any attempts to shut down their operations, an accountant to support the SAT registration, etc. In addition, the association's treasurer keeps accounting stubs and rendering accounts in assemblies with the support of an external auditor, usually a staff member from CMS (Director, interview, June 2022f).

Secondly, the low cost of the electricity service is also a significant benefit highlighted by the communities. The minimum *cuota* is 30-40 Quetzales (4-5 USD), depending on the community project, and if the family exceeds the consumption thread established by the association, they pay for the additional watts used. Members of the board of directors, who change every two years, and CMS staff members highlight that although one of the advantages of a community energy project is allowing the community to manage the funds from the *cuotas*, it comes with the responsibility to "make the project work" (CMS activist, interview, June 2022i).

Here we pay 30 [Quetzales] per month. It does not reach the amount that energy business people charge because they use it as a business. Here the people did all the work, and the turbine will be expanded by the young people who have worked and contributed [financially] to expand the project. CMS has worked to conserve the mountain, reforest the basins, [promote] agroecology programs... Our project is not a business, like business energy. Not ours. The fees are for the maintenance of the project (Community energy associate, interview, June 2022f).

Lastly, community strengthening is a crucial result of community energy projects, by both engaging the community members around the construction and management of the facilities and also by increasing their access to other rights, such as education, healthcare, and income from small local businesses (CMS activist, interview, June 2022i). This outcome is also essential to ensure the defence of territory by communities permanently threatened by external interests. A community associate highlights that

[T]he project is a development for the community, bringing many benefits. The community energy project was built among friends. It is a wonderful thing to have this service; it benefits everyone. It brings much development to the community, benefits for the future of our children, grandchildren... (Community energy associate, interview, June 2022g).

However, as highlighted by a CMS staff member in informal communication, community energy projects are not an Eden Garden. In the coming section, we will look at the main challenges communities face from the construction to the management phases, which include more general difficulties around funding and administration, internal conflicts, and climate change. Besides presenting those, we will focus on two specific challenges related to the

importance of generational differences in influencing project maintenance and the gender injustices perpetuated by some internal dynamics.

3.4 Challenges of community energy projects

Community energy projects in Zona Reina face different challenges that, on the one hand, directly threaten the possibility of maintaining the project and, on the other, exclude some community members from using the service. In the following paragraphs, we will discuss five general challenges that might compromise the projects' continuity: financial challenges, dependence on external actors, internal community conflicts, transparency of operations, and climate change. Afterwards, we will focus on two main challenges that result in the exclusion of single mothers, widows, older adults, and newcomers or young families from benefiting from the energy project because of their difficulties to directly contribute to the project's [construction and/or] maintenance through their workforce or financial resources.

Even though community energy projects have a non-capitalist character seeking to provide energy and well-being for the community but not profits, they are still conditioned by their demanding work in the fields. The primary source of income in Zona Reina is the sale of cardamoms, or 'the green gold' (CMS activist, interview, June 2022i). Many of them travel long journeys to get to the fields where they work the land, in villages such as Lancetillo La Parroquia, located 20 km away from the communities analyzed in this study (Director, interview, June 2022d; Non-Associate, interview, June 2022). "If they go work in the energy project, they miss a workday," which is positive for their entitlement to electricity from the project, but also represent a loss of cardamom-related income (Community energy associate, interview, June 2022i). This reliance in the community labour directly affects the projects in their different

phases, but mainly in their initial stages of construction, when more work is required. In the case of Los Copones, the project got paused because of the cardamom season, which requires more dedication from the associates building the energy project.

Another critical limit already discussed in the previous chapter is the dependence of the projects, mainly in the construction phase, on CMS. Donations managed by CMS primarily fund the construction costs. At times, the amounts approved by donors are insufficient to cover expenses related to equipments, construction workers, materials and the 'qualified workforce' required in the initial phases of such a project. In Copones, another reason the project got delayed was that the pre-feasibility study underestimated the final cost of the project, applying instead for half of the funds they needed for an intercommunity project with this dimension (CMS activist, interview, June 2022j). CMS staff attribute such failure to the extremely demanding work conditions of the activists, including the fact that personnel do not always get paid for the work as they should because of the reasons discussed in the previous chapter, related to the inadequate financial management of the limited organization funds. As a result, communities are directly affected by having their projects delayed, their expectations frustrated and a feeling that their scarce time is being wasted, and as a result they loose confidence in CMS' work and, most importantly, in their projects. "They do not have money to pay for the machinery and the builders," said a community woman who sees her husband going to work on the project every month (Community energy associate, interview, June 2022h).

The complexity of building a community energy project in Zona Reina territory not only reflects challenges arising between community members and project participants such as CMS and contractors, but also between local and external actors as a result of disagreements around community energy versus the energy provided by companies and the state. There are several

internal divisions within communities that are promoted not only by corporate and state megadevelopment representatives but also by religious and philanthropic leaders, as evidenced in the case of Unión 31 de Mayo when they first launched the project in 2004 (Colectivo Madreselva, 2014). Despite the significant acceptance of community energy projects, some people consider that energy provided by companies would be more efficient and require less work and initial investment from consumers. For numerous reasons, community members who do not have access to the service are particularly susceptible to such opinions.

One of the groups that do not have access to electricity from the community project consists of young families whose heads have not worked on the project's construction because they were too young at the time of the construction or their parents have not worked on the project, which would give them a discount in getting the right to electricity, or even people who have recently migrated from other villages. An example is a non-associate couple who had recently connected to the community energy project of Lírio Putul as temporary 'users' while they built their house in the community, as at the time of the construction he could not work on the project because he was underage. So far, their father did not have access to electricity because he did not work on the construction or join the association afterwards paying an association fee, so they could not inherit the right or a discounted cost to the electricity right. According to a non-associate from a young family,

[energy from] companies are better than community energy because they (...) show in their computers how much each person consumes and must pay. (...) To continue with [receiving] electricity, I must work and go to meetings to hear the opinions [and ideas] they give us (I have not been to any assembly yet). [Now],

we are working on the school project, paving the road, [and] the drinking water project (Non-Associate, interview, July 2022a).

The commitment to unpaid labour is an accepted trait in Indigenous community governance in Guatemala and Mexico, through a structure of membership in community associations and *quotas* of work in communal projects as a requirement for full community rights even before the postwar resettlement (S. Granovsky-Larsen, 2019; Smith, 1994).

Transparency concerns are a particular challenge noticed in Lírio Putul. One female associate of their community energy association, who does not actively participate in the project, complained about the high fares they are paying for electricity and claimed that "[The association] says they are saving money, but the *compañeros* do not say where the money is. They do not say how much they have or what they are investing [in]. Every month we pay all this money and do not know where it is going" (Community energy associate, interview, June 2022a). The lack of clarity on how the money is being used might be connected to the little participation of women in meetings and association assemblies. However, it places a risk for community project management and success. If people are not clear about how their contribution is being invested, there are more chances for distrusting, discrediting and eventually opposing the project.

Another constraint that emerged in several interviews, both with CMS staff and community members, was the changes in the rain regime in Zona Reina and how they have affected the community energy projects. According to one of the CMS engineers, "the rain is very catastrophic, with landslides, [and] the roads can collapse for several days," which can

delay or even derail the projects (CMS activist, interview, June 2022g). A member of the board of directors of AMALUNA comments that

[I]n Tesorito, there are many landslides, and the brothers from there came to live here [in La Taña]. The collapse affected many pipes, and repairing them costs a lot. But that did not discourage us. We continue to fight for our development.

In the inter-community project of Copones, the delays in the construction were also connected to the rains and landslides affecting the machinery and the impossibility for associates to work (Community energy associate, interview, June 2022h).

(Director, interview, June 2022g)

To sum up we can observe that the community energy projects analyzed here both consolidate and fragment communities because of their criteria of inclusion, based on labour power, wealth, age, and gender. In the coming sections, closing this chapter, we will discuss two crucial mechanisms of exclusion within community energy projects observed in Zona Reina, which also pose fundamental challenges to the sustainability of the projects. Finally, we will see how reducing the project's legitimacy among the excluded might offer competing projects, led by corporate energy companies and the state, a fertile terrain to thrive.

3.4.1 Generational differences and challenges for perpetuating a sense of community ownership: the importance of memory

CMS supports rural communities in designing, funding, and implementing energy justice projects that prioritize community-led decision-making and equitable allocation of costs and benefits and ensure that diverse groups (regardless of ethnicity, gender, or income) have access to energy provision (Finley-Brook, 2019). However, the exclusion of certain groups represents a

risk to perpetuating a sense of community ownership in the projects, which already face threats from external actors that insist on discouraging the local population from working on the project.

One of the associates told me that

There is infiltration of transnational companies. This is a manipulation; it is not people's fault. [The companies] say that the projects do not have an impact, that the people's work are not worth, to value their own work. In the beginning, there was a problem because some people believed the companies saying that their service was better and more trustworthy than a community energy project.

(Community energy associate, interview, June 2022d).

A CMS activist reinforce that "companies convince some people that INDE, EEGSA, Energuate can provide better service and gain some of the villagers" (CMS activist, interview, June 2022i). Representatives of dam projects conducted extensive public relations efforts in the Zona Reina, enticing some community members with promises of affordable high-tech hydroelectricity without any labor involved. However, no power lines have been installed in any communities to date, and the voltage is too high for domestic use, making it improbable that they ever will be (Nelson, 2020).

In this section, we will discuss how younger generations have been distancing themselves from community energy projects, either for not having directly participated in the collective construction process or for not being able to access the service because of their lack of financial means. The difficulties of perpetuating a sense of collective ownership in younger generations who have not experienced the solidarity required for survival during the genocide or building a community energy project constitute a critical challenge faced by the community energy projects currently in operation. "The younger generations take [the community energy project] for

granted, [because] there is already an established organization. For them, it is easier." (CMS activist, interview, June 2022d). Adding to that, the difficulties for young families to acquire the right to electricity service, as they cannot afford the association fee (sometimes, even with the discount for being direct descendants of associates), reduces the chances of developing a strong sense of ownership of the project serving their communities.

An example of potential limits for young community members access board of directors member from Unión 31 de Mayo reports that they require 1,500 Q (nearly 190 USD) from the young new association members to enlarge the project: "the [project's] enlargement is for them, for their future" (Director, interview, June 2022f). In other cases, such as in La Gloria, the fee to join the association might get to 5,000 Q (630 USD) if people – or their parents - have not taken part in the construction (Director, interview, June 2022h).

The difficulty of incorporating the younger generation might represent the weakening of the community ownership over the project. 'Local,' 'decentralized,' or 'community' ownership is a disputed concept. However, it has been highlighted as a key to the success of such micro-hydro projects since it entails collective legal ownership titles and organizational structures that emphasize meaningful participation of local people, in this case, the ones who represent the future of the community, in decision-making processes (Butchers et al., 2021; Kunze & Becker, 2015). However, if this participation is mediated by the financial capacity to join the association, it remains limited to those with a more stable income or savings, which is not the rule for a context of extreme economic vulnerabilities such as Zona Reina.

One board of directors member from Unión 31 de Mayo expressed concerns about educating young generations on how they got the projects in the community's hands.

"We should tell them how our project differs from the corporate ones. Otherwise, we will lose it. Everybody that passed through it worked hard, *a puro pulmón* (full-throated). But some young people do not have time for this, they just work. But, unfortunately, there are [also] leaders that do not want to share [our story with them]." (Community energy associate, interview, June 2022f).

The difficulties in keeping the memory of the project's construction alive, a much more recent process, resembles the hardship of recovering the hurting memories of the armed conflict that left deep marks in these communities. Some CMS activists see their work as distant from other not-for-profit organizations focused on the politics of historical memory, mainly aiming to hold accountable people responsible for crime wars during the conflict. One activist old that one of the first things he heard when he joined CMS was that "here, you will not speak about historical memory. What we want here is the support of all [community members] to the community energy, creating and strengthening association bonds" (CMS activist, interview, June 2022c). Even though the focus of CMS has become the development of alternative ways of life for the defence of territory, there is no way to sustainably keep such community-led projects without clarity from the community members on why it is essential to maintain the community status of such projects.

However, preserving the memory is not easy in a context where war-related traumas are so recent and barely approached. In an informal communication with a CMS activist, it was mentioned that a woman working in the agroecology project told their children about their life in the mountains during the war, and they did not believe their own mother's story, which highlights the hardship to keep the memory alive among these

communities. Another example of a strategic erasure of resistance memory refers to the resettlement process of CPR Sierra, in which several technical materials written during the years in the mountains of Cabá were lost, an evidence of the memory erasure project that came along with the resettlement: "[They] formed a library [with] materials related to the resistance, there was a dynamic team that produced materials to inform people and [archive] testimonials. The transfer [by helicopter] was so badly organized and painful, terrible, in the rainy season as well" (Colectivo Madreselva, 2014, p. 53).

CMS has led efforts towards a historical rescue of the community energy in Zona Reina by editing the book El camino de la luz: Historias del proyecto comunitario de energía eléctrica "Luz de los Héroes y Mártires de la Resistencia" Uspantán, Zona Reina, Quiché, Guatemala (The way of light: Stories of the community electricity project "Light of the Heroes and Martyrs of the Resistance" Uspantán, Zona Reina, Quiché, Guatemala) (Colectivo Madreselva, 2014). The association's name invokes the memory of those who died during the war trying to defend their territories and communities, representing a memorialization process of an active infrastructure instead of static and 'dead' memorial. The audiovisual collective Sandía Digital, from Mexico, also filmed a documentary called "La energía de los pueblos" ("The People's Energy") about energy sovereignty, using the case of Zona Reina as a paradigm of community energy, along with other two Mexican case studies (Combe, 2020). However, naming the project after such a lively memory has not been enough to keep the memory alive amongst newcomers, and our interviews highlighted that older community members urge for additional ways of educating younger generations on the importance of memory to keep the project running. A senior community leader from La Taña reports that they have had many problems with the younger generations:

Men and women have participated and seen the work. Young people have focused on studying, and the study they were given is individualistic, discriminatory, and authoritarian. Many of them do not want to be close to us. (...) The falling price of cardamom also takes young people to migrate to the North [i.e. the United States]. Young people must care for the forests, cultivate trees, and not destroy them. We are interested in sharing so that these ideas circulate in defence of our territory.

The current education model has been under debate since the beginning of the communities, right after they were settled in Zona Reina. The winning project was the one aligned with a conservative national program, supported by evangelical non-profits such as the one that fostered divisions around the community energy project, which does not cover themes such as the memory of the conflict and undermine a sense of the collective and the value of community (Colectivo Madreselva, 2014). A CMS staff member reinforced that "the new generations do not know the history of the problems of our country. Not knowing the history of having memory is a threat for what it is coming" (CMS activist, interview, June 2022f). Besides challenging the sense of community, an individualistic mindset and education is backed up by a lifestyle disseminated by television and internet that does not value a community life, targeting illegal migration to the United States as the only possible pathway for prosperity. The access to electricity becomes then a double-faced coin, on the one hand strengthening the communities and on the other challenging the community status of Zona Reina's energy projects.

A young community member, also a CMS activist, shared that he saw the community full of young professionals, some with a higher education degree that do not

want to keep fighting to maintain the community energy projects: "Most young people no longer think about these things. They think this project is small. They want megaprojects, large hydroelectric companies. According to them, that is development. They say that as professionals we must develop our community" (CMS activist, interview, June 2022e).

Policymakers usually refer to community-owned energy projects as those in which local stakeholders own most of the project. The community has voting rights and control through a community-based organization that might include co-operatives, partnerships, NGOs, community trusts, housing associations, etc. (IRENA, 2020). Such community ownership might take different forms depending on the local settings and stakeholders involved. Analyzing it requires confronting technical aspects such as funding arrangements and benefits sharing with the local history and land structure of the territories at stake (Mutubuki-Makuyana, 2010). This chapter highlights the need for also considering political aspects, such generational differences and gender inequalities, as further developed in the coming section, in the way that these communities manage their projects.

In Zona Reina, communities own and manage the totality of the projects, even though they heavily rely on external support from organizations like CMS and international donors. Facilitating engagement and access of young community members to the energy service and enabling community members that were part of the project's first steps to share their stories with their younger counterparts were highlighted in our interviews as potential ways to ensure effective community ownership of the projects. However, the case of young community members without access to energy in these communities shows us that there are groups left behind within the communities. So far, there seems to be limited opportunities for these young community members to gain entitlement to electricity from their community's project mentioned

above, through fees and labor contributions that are not always feasible for them. In the coming section, we will observe another group left behind and how this exclusion dynamic replicates gender injustices against Indigenous women in the communities.

3.4.2 Gendered exclusion from community energy projects: boundaries between CMS and the communities

An unexpected finding from the fieldwork was that these unique community-led projects left some essential and particularly vulnerable community members behind, namely single mothers, widows and elders who could not 'work' or pay someone to work for the project when needed. Despite the uniqueness of the community energy projects analyzed in this study and the benefits they represent to the communities benefited, it is vital to recognize that Indigenous systems and governance models can also become sites of unequal and exploitative gender power relations (Farhana, 2021). Women played an integral role in the construction of community energy projects, demonstrating resilience and commitment to collective efforts. Their day began early, preparing food for the workers, caring for children, and when necessary, tending to agricultural tasks while men were occupied with building the micro-hydroelectrical plants. They also undertook the labour-intensive task of cleaning the men's mud- and sweat-soaked work clothes by hand in the river. These crucial contributions, often unseen, were essential in maintaining daily life, sustaining the community's livelihood, and ensuring the successful completion of the energy projects (Nelson, 2020).

In what follows, I will discuss some of the nuances of women's participation in the community energy projects, the historical reasons for excluding certain women from the projects, and the challenges for CMS to prevent gender injustice in the projects. Because of their

commitment to non-intervention in the Indigenous communities' decisions, they risk replicating top-down power dynamics of gendered, racialized, and economically marginalized groups, as observed in other examples of small-scale energy development in the global south (Greacan, 2003; Kabalan et al., 2014; Monyei et al., 2018; Tulachan, 2008; Wiese, 2020).

Male associates from the board of directors acknowledged that "In the statute, it says that only those who worked in the zanjas (mill run) should become associates, but if it was not for the women making our food, nothing would have happened" (Director, interview, June 2022f) and that "[the women] wake up at night to start making food for those work[ing] for the community energy" (Director, interview, June 2022i). Both quotes assume a distinction between the male work in the zanjas and the female work of making food, which has not been explicitly named like work, which partly explains why the fact that many women who do not have a husband or male relatives who can 'work' for the project cannot become associated to it and have access to the service. However, a young female associate from La Gloria shared that she also does 'work' for the project: "When there is work to do, I gather sand in the water intake. The majority [of workers] is male there, but women can do it, and it is a problem that they think we do not have this capacity. It is a huge obstacle." (Community energy associate, interview, June 2022b). This statement clearly shows how discriminatory gendered perspective either exclude or reduce the scope of entitlement to the project's electricity. La Gloria, just like Unión 31 de Mayo, ensures a minimum right to electricity (just enough to light up their residences and charge basic electronic devices) to widows, elders and people with disabilities, who for physical limitations, could not work in the construction and maintenance of the project (Director, interview, June 2022f, interview, June 2022h).

It was shocking to interview women who were active participants of the agroecology projects, contributing to and leading groups of women in the promotion of seeds workshops and supervision of family orchards, but did not have access to electricity. According to interviews in different communities, there are women in this situation in at least two case studies, La Taña and Lírio Putul. The discussion of including or not women that have not 'worked' to build the projects was part of Los Copones assemblies, with the majority inclined to not opening exceptions for those who do not work in the construction (CMS activist, interview, June 2022g; Community energy associate, interview, June 2022a; Non-Associate, interview, July 2022b). One of the limits of inter-community assemblies is the difficulties for members from more remote communities to get to the meeting venue, which usually require a transportation cost and missing a working day, which might result in certain groups and dominant views to prevail in polemic discussions, such as this one about exceptional inclusions in the project (CMS activist, interview, June 2022i). Another limit of community deliberative democracy is the fact that, although married women might be present with their husbands, they are not the majority when it comes to who speaking and positioning themselves publicly.

"The energy [project] requires a man to work at the power plant. My boy cannot work yet, " says a second-generation single mother who praises the project's benefits for the community despite not having access to electricity. Treating energy as a 'men's topic' assumes that men can do 'hard work' that women cannot do, something that goes against the history of CPR women and the current reality of women supporting the projects in different ways (including through 'hard work'). There is another assumption observed in conversations with women that were part of the board of directors, majorly occupied by men, that women should not

be in political spaces where the majority is male, especially if not accompanied by their partners.

A former board of directors member told me:

We were three women on the board of directors, but I was the only one with more participation among men (...). But men do not accept having their women surrounded by other men. People say that if you are *with* many men, you are *of* many men. There is no respect and understanding from most men toward women (Community energy associate, interview, June 2022f).

The motivations for the lack of women's participation in energy projects and the political life of the communities are various. In a focus group with community women conducted by CMS activists working on the agroecology projects, the main answers to the question of why women do not participate as much in the energy projects were: that the theme does not correspond to them but to their husbands; because they were shy or afraid to say 'wrong' or incomplete; and because their husbands do not allow them, and that they are the most indicated people to participate in the community energy project (CMS activist, interview, June 2022i). This reiteration of men as the most adequate ones to participate in the energy projects is very connected to the assumption that they are the only ones who can bear both the 'hard work' of maintenance and the political work of decision-making that these projects require.

Gender inequalities within the energy projects date back to their early stages, and the gender impacts of internal divisions were visible in one testimony from a Siembra accompanier about the contribution of these divisions to reduce women's participation, despite them being the primary beneficiaries of the community energy projects:

The impression I have had (...) is that the divisions and conflicts in the community have pushed women into the background, staying on the sidelines, at

least in public, and only in the privacy of their homes, individually, you can talk openly with many of them. However, all of them, without exceptions, value the project and the significance of having electricity for the community since they are the ones who perceive and value the benefits to a greater extent, for example: [the fact] that their sons and daughters, or even they can study, cook in the evening with more light, [and] not burn so much firewood (Colectivo Madreselva, 2014, pp. 71–72).

With the resettlement of the CPR, there was an intensification of certain fault lines as the state of emergency and extreme conditions during the years of displacement kept latent. During the years in the mountains, "many men seemed to feel that radical gender equality was necessary during the war but "back at home" expected women to "go back to normal." (Nelson, 2020, p. 241).

Physical violence against women within Zona Reina communities is also a reality that has been documented by the anthropologist Diane Nelson, who questions how such revolutionary men can perpetrate patriarchal violence against their wives at home, a practice often associate with alcoholism (Nelson, 2020).

It was hard to know that the deeply *consciente* [conscious] men she worked with and admired would drink too much and beat their *compañeras* [partners], or that these proud, strong women were living with such fear and violence. Few women had options beyond the household, and improved legal protections for women had little traction, as some local leaders were also perpetrators, making it difficult for omen to turn to them for succor (Nelson, 2020, p. 245).

Although physical violence has not been observed in our fieldwork, alcoholism is a problem that affects many community men, some of them associates and directors at the community energy associations.

A baseline study developed by CMS in Copones before the community started to work on the energy project showed that 60% of the respondents considered that men are more capable than women of producing food, but only 42% agreed that men are more capable of occupying leadership positions within the community. For another question in the survey, 83% of the respondents considered that there is no need for women groups in the community (Colectivo Madreselva, 2021, pp. 17–18). According to this baseline study, the main economic activity of the mothers is related to care work within the homes: self-description as 'housewive' accounted for 92% of the female households surveyed, while 7% work in agriculture and 1% are teachers. The annual income is non-existent for 41% of the female respondents, and the remaining 59% registered an annual income under Q 6,000 (760 USD), reinforcing the traditional relationship of men as income providers (Colectivo Madreselva, 2021, p. 31). Despite the marginalization of women in the discussions and decision-making around the energy projects, they continue to be "the best indicated to say where to put a spotlight, for example. Women wake up before everybody else when it is still dark to prepare food and take care of the house. They need lighting close to their kitchen sink", which was not considered by the electrician when they connected a new house to the grid (CMS activist, interview, June 2022i).

The agroecological work of CMS with women in Zona Reina presents a two-folded goal: firstly, to protect the water recharge areas and river flows in response to the expanding agricultural frontier in the mountains through the monoculture of cardamom, and secondly, to engage more women in the discussions and decision-making around the community energy

through their participation in agroecological groups (CMS activist, interview, June 2022i, interview, June 2022j). Initially, these projects targeted male and female community members, as the current dependency on a monoculture model, which requires much deforestation to feed the wood-fired community cardamom dryer, affects the food security of all families. When the price of cardamon is low in the market, there is a local food shortage, as edible crops, like corn, have been significantly replaced by cardamom in Zona Reina (CMS activist, personal communication, June 2022h). However, the notorious lack of female participation on the boards of directors from different community energy associations inclined CMS to add another focus to these projects, which now is oriented by three goals: conservation, food sovereignty, and women participation (CMS activist, interview, June 2022j). Increasing women's participation has also emerged as a donor requirement, and agroecology projects have responded to this demand (CMS activist, interview, June 2022h).

Women used to make the food, but now we have pressured the engineers to also call-in women electricians. Women can do more than carry sand and make food.

(...) We will have to be very intelligent to handle this problem. This is a challenge for the collective. We cannot manage on behalf of women if we allow the reproduction of injustices. Colonial and patriarchal practices are structural and very strong in Mayan communities. The woman is seen as an object of service.

Agroecology work has empowered women with the energy and confidence to communicate these injustices (CMS activist, interview, June 2022j).

A strategy that CMS has used to naturalize different form of women participation in the community projects is playing a role model with female engineers in the field, encouraging

young girls to study and showing them that they could also become engineers or whatever they want.

The need for acting 'intelligently' and diligently when introducing feminist claims of gender equality and women's participation has emerged in more than one interview:

[Agroecology projects are] part of a democratic struggle and practice in communities where, due to their isolation, people do not have the experience of free participation. There is participation, but (...) conditioned by forms of leadership that are heavily impregnated with patriarchy. Only men have rights. Women make tortillas. This also reinforces that community energy does not have only technical aspects (CMS activist, interview, June 2022h).

It is important to recall that before the communities, these territories held fincas, where the power dynamics were highly patriarchal, and the figure of power, *el patrón*, justified his power also with a gendered argument.

Although CMS has identified this reality of gender inequality within the reach and governance of the community energy projects, they acknowledge that their approach should not be imposed on the communities but rather advising them on how to address these issues. One of the following steps under discussion at the end of our fieldwork was the design and implementation of a survey to identify all cases of women that do not have access to electricity and the reason they are not entitled to the right to electrify from the community energy projects. Another proposed step is to promote workshops on community energy, focused on educating women on how the generation, distribution, and management processes operate, giving them a chance to engage more actively in distinct aspects of the projects (CMS activist, interview, June 2022j).

Finally, a recommendation CMS has made during the initial stages of projects under construction is to foster discussions about including marginalized groups (widows, elders, and people with disabilities) as beneficiaries and associates of the project, still excluding single mothers and women, somehow pushing them towards marriage. They experimented with one of the projects in construction, introducing this topic in the early project assemblies. The board of directors claimed that "if they open these exceptions, there will be more and more people who say they are sick because they do not want to work but still want access to electricity" (CMS activist, interview, June 2022g). CMS recognizes that such a context of exclusion requires enormous political and organizational work from the initial stages of the project.

The suggestions we give them are taken very seriously. For example, there was significant political-organizational work in La Gloria, and they considered this in their internal regulations. Furthermore, these people will not have significant consumption, which was one argument to convince them to grant the right to widows, elders and people with disabilities. People in the projects under construction had more resistance to this idea because they wanted everybody to work and could not risk not having it at this stage (CMS activist, interview, June 2022g).

The main challenges to ensure complete coverage of these projects in the communities are connected to an assumption that dates to the conflict years, which required an integral commitment from every community member to ensure the community's survival. Furthermore, the structural *machismo* and historical gender inequalities within Indigenous communities in Guatemala, reinforced by new religious and institutional traditions that still assume women's roles as restricted to family care work, add another layer to these challenges, reducing the reach

and sustainability of the community energy projects in Zona Reina, and opening the door for actors opposing the projects to convince the communities that the projects are not worth their work and dedication. In the coming chapter, we will discuss how these community energy projects might counterpose external threats from the state and corporate actors that might benefit from the limits of community energy projects to reach the whole community, discrediting their community work and introducing private electricity as a more feasible and advantageous option.

This chapter focused on presenting the field sites where CMS works in Zona Reina, northern Quiché, Guatemala, aiming to characterize community energy projects as one of many tactics of resistance against the expansion of neoliberal development and extractivism in the country. First, it dived deeper into the community's history, dynamics, and processes, identifying how the armed conflict impacted how communities organize themselves politically and work collectively in Zona Reina. The history of the CPR and the internal displacement to the mountains of Quiché fostered a sense of cohesion and unity that got progressively eroded by the institutionalization of communities (with COCODEs, COMUDEs, and auxiliary mayors, for instance) and the arrival of external religious leaders and evangelical churches, which are aligned with the neoliberal individualism that orients the political and economic reforms after the 1996 Peace Accords. However, the sense of community inherited from the CPR is still alive and keeps projects like community energy, agroecology, potable water and others running in Zona Reina. In the next chapter, we will discuss in depth the concept of community underlying these projects and how this idea is also grounded on understandings of territory that oppose corporate and state territorialities.

Chapter 4: Community territorialities resisting harmful legacies of counterinsurgency

What is the understanding of 'territory' underlying small-scale energy projects? How do they differ from and challenge the state and corporate concepts of territory? To answer these questions, this chapter will discuss the interplay between different ways community energy projects have resisted counterinsurgency legacies in Zona Reina using tactics "from below" (Borras & Franco, 2013) and the various political responses trying to undermine community energy projects, or tactics "from above" (Geenen & Verweijen, 2017), assuming that "they mutually shape one another" (Verweijen & Dunlap, 2021, p. e. 2). The case of Zona Reina's small-scale energy development adds a new dimension to the debates on counterinsurgency ('COIN'), showing that COIN techniques (from above) might be used beyond the widely documented cases of extractive mega-development projects (Brock & Dunlap, 2018, 2018; Dunlap, 2019a, 2019b; Dunlap & Brock, 2022; Dunlap & Fairhead, 2014; S. Granovsky-Larsen, 2023; S. Granovsky-Larsen & Santos, 2022).

This chapter will focus on the concepts of community and territory underlying the political projects of the micro-hydropower projects in Zona Reina and the outside threats of state and corporate actors interested in developing large-scale energy projects in the region. It will also discuss the existing challenges to community ownership, mainly the reduced capacity of CMS to leave Zona Reina and let communities take complete control of their energy projects because of the different tactics deployed by corporate and state actors to discredit and stop the community energy projects. This approach aims to evidence the strategies and intentions of actors from below (communities and CMS) and from above (different levels of the Guatemalan

government and transnational energy corporations) interested in using this territory for opposing purposes. The coming section will discuss the methodological option of analyzing political practices "from below" (e.g. the community energy projects) in relation to practices "from above" (e.g. the abandonment of state and interests of energy corporations to develop large-scale hydro dams in the area).

4.1 From community ownership to community territoriality

My research trajectory has historically focused on analyzing the motivations and practices of actors from above who used violence to implement their political projects, creating resistance and reactions from below. For this study, the direction of my analysis changed dramatically, as the main object of interest is the motivations and practices from below that materialize themselves in the community energy projects here analyzed. These practices cannot be characterized without considering the context of state violence and abandonment that Zona Reina has been submitted to since before the armed conflict, as observed in the previous chapter. It is critical to consider the enduring counterinsurgency legacies—the historical impacts of such a remarkably violent period as the counterinsurgent warfare against Indigenous populations during the Guatemalan military regime—on how communities organize and the challenges they face to defend their territory nowadays.

I started this research assuming that the main reason for the success of these community energy projects was the strong sense of community ownership they could build during the armed conflict, with the CPR, and during the actual construction of the community turbines, fostered by a unique approach to charity and community work from CMS. However, my experience in the field revealed that what sustains these projects goes beyond a sense of ownership and organizational incentives from a partner organization such as CMS. The concept of community

ownership did not capture the complex and multiple relationships these communities established with their territory – which includes rivers, animals, forests, mountains –, neighbours, and external partners (like CMS and donors) to enable the community energy projects. However, the ownership structure exists in parallel with a specific territoriality, dialectically shaping each other in a dynamic relationship between community ownership and community territoriality.

It also made me question whether these projects, for more disruptive and unique they might be, are perfect or a model to be replicated in other places because of their community ownership structure. In my interviews, I could notice different assumptions and understandings of what a community means. However, among the community members, this concept is very grounded on their location and use of territory, as I will further discuss in section 3.2. This inclined me to reflect on the idea of community territorialities instead of ownership to think of their multiple practices to defend territory using these projects. In this section, we will briefly enumerate some of the tactics observed on both sides, analyzing them in relation to each other in the coming sections. Before digging into how their ideas of community shaped the energy projects, I will briefly enumerate the practices from below and from above that I encountered in the "vibrant centres of resistance" that the Zona Reina community energy projects exemplify (Illmer, 2018, p. 772). As we will see in the coming subsections, in line with the community ownership and territoriality relationship, tactics from below and from above dialectically influence and constitute each other as both responses and enablers of certain dynamics and tensions.

4.1.1 Tactics from below

In what follows, I briefly describe four community goals and tactics observed in the fields, some already mentioned in the previous chapter, to defend territories in Zona Reina using community energy projects as a guiding strategy.

- (i) Strengthen community cohesion through planning, participation, and shareholding. Highly encouraged by CMS, the ownership model of the community energy projects requires an integral commitment from the community members in the design and planning phases. This is even one of the criteria Madreselva considers before starting a project in each territory, questioning if this community is "strong" enough to deal with the political articulation demands from such a project (CMS activist, interview, July 2022c). As a result of this long process of construction, communities start their own community energy association, an institution responsible for organizing the construction, maintenance, and management work of the associates or the "owners of the project" (Director, interview, June 2022b). Their governance is guided by regular assemblies where the decisions are made by and for the communities.
- (ii) Provide the community with a clean electric power source, reducing dependency on outside support of electricity provision from a large hydro-project or funding provision to pay for diesel generators or individual solar panels. The idea f 'energy sovereignty' that orients these projects requires self-sufficiency and environmental stewardship from the community energy projects to oppose the negative impacts of extractive projects with renewable systems that protect their territory (Timmermann & Noboa, 2022).
- (iii) Reinforce and demonstrate the validity of community autonomy aspirations and capacities demonstration effect to other communities nationally, building capacity of community members engaged in the projects locally. This demonstration effect might be unintended, as

CMS needs the ability or the strategic intention to cover the multiple regions requiring their support throughout the country. However, building technical and political capacity locally is critical to ensuring community-led processes.

(iv) Building alliances with anti-COIN external actors such as CMS, allied social/
Indigenous/ environmental movements, international donors, journalists, and researchers, making
their projects and struggle visible and supporting the community energy projects in different
ways. Despite the community focus of these projects, it is clear that in a context of low state
support and a silent dispute with state-supported energy companies for this territory, it is vital to
articulate different actors and coalitions to ensure the continuity of the projects.

4.1.2 Tactics from above

(i) Disseminating individualistic mindsets that discourage community work, easily spread out by broader access to technology and mass communication media (mainly television and social media accessed via mobile phones): one of the unintended effects of electricity provision (whether through community ownership or not) is the increase in material aspirations and consumerism, which might result in cultural and community cohesion losses. The content consumed via TV and social media are not grounded on their everyday or historical context, showing off urban lifestyles with no historical reference to their resistance and community articulation, making communities more vulnerable to COIN tactics firmly based on 'community-oriented' material incentives, financial compensation, job offers, and enchanting promises to bring roads, schools, healthcare, light and other public infrastructure. These tools pose a threat to loosen up community ties as community members might find social connections outside the community, with their relatives abroad through social media, for instance, instead of

strengthening local ties. It is important to notice, though, that tools like WhatsApp and phone calls are also key for community organizing and communication regarding the energy and agroecology projects.

- (ii) Deepen hierarchical relations and internal divisions within communities, thus facilitating COIN 'divide-and-counter' tactics: as observed in the history of fragmentation of 31 de Mayo in four other communities, religious actors not aligned to community work and values facilitate the rupture of a community's "social fabric," challenging community projects (CMS activist, interview, June 2022f).
- (iii) Taking advantage of the uneven entitlements to electricity from community projects, coopting people who do not want to or cannot invest their time in the project from benefiting from the community energy: this is more a risk than a modus operandi of state and corporate actors, as at the beginning of the project, cooptation tactics by companies were more evident, according to our interviews because of the uncertainty if the project would be capable of providing the entire community with power (Community energy associate, personal communication, June 2022f; Director, personal communication, June 2022f).
- (iv) Discrediting CMS and the community energy projects, highlighting they are not reliable or capable of providing power to the community in the long run: this is often described as the discourse that convinced community members to not only withdraw support from the project but also becoming violent against CMS staff members who had been invited by community members involved in the construction to restart the project, closing roads so CMS could not come to the community and threatening activists and community members defending the project (CMS activist, interview, June 2022d; Community energy associate, interview, June 2022f). The attacks happened back in 2012 and many community members from the group that

perpetrated the events, so called *saboteadores* (saboteurs), today benefit from the community energy project, but still dislike CMS and remain aligned to the religious leader that influenced the insurgence against the community project and the collective.

(v) Fostering illegal connections to the micro-grid that created overcapacity and system failures: community members say that in 2014, after the project had already been restarted, people who were not connected to the grid, mainly because of their lack of participation during the construction process, connected their houses to the grid illegally, without the support of an electrician, occasioning the burn out of the whole system. People who promoted the illegal connections were aligned to the religious leader that discouraged community members to work for the energy project. After associates took measures about the illegal connections, their response was extremely violent, resulting in attacks and lynching threats against their neighbours who were in favour of community energy and against CMS.

We requested 24 disconnections, with the support of the collective, of the PNC [Policía Nacional Civil], of human rights [officers]. Then they [the saboteurs] came to attack us with stones and sticks, and there was a disturbance between associates and non-associates. Those people said they would burn us and CMS, and in 2014 they came out with gasoline to attack us (Community energy associate, interview, June 2022e).

These violent reactions to a legal measure taken by community members pro-community energy, backed by the police and the Public Ministry, is an indication of the "dark side" of community autonomy, expressed through the assumption that doing justice with their own hands is a valid option (Godoy, 2004, p. 623).(vi) Creating rumours that the payment for *quotas* (electricity fees)

is being inappropriately used by CMS or directors of the community energy association: during this conflictive period, these external actors spread rumours about corruption within CMS. For example, a community associate told me:

They published in the press that Madreselva and us [community energy associates] were taking the energy away from these people. Finally, we managed to get the municipality to pay for the damage to the turbine. After that, we went to the Public Ministry to file a complaint against these saboteurs, and they had to pay for the damages. We had some sleepless nights thinking about how to deal with this situation and defend our project (Community energy associate, interview, June 2022e).

These rumours left some mark on the community. For example, in another interview, a community associate from Lírio Putul expressed concerns about the destination of their electricity fees, considering the possibility that CMS could have access to part of this money (Community energy associate, interview, June 2022a).

By describing the interactions between forces from above, trying to expand large-scale energy development in Zona Reina, and from below, defending territories through community energy projects, we can notice a range of "territorialities" (Haesbaert, 2007) in dispute. In the coming section (3.2), the focus will be on the community territorialities from below and how they have used mechanisms of thought leadership and trust-based relationships to defend their territories. Then, in section 3.3, we will have a closer look at the territorialities from above, ¹⁹ in

¹⁹ These territorialities from corporate and state actors are expressed through geographical strategies to control and impact social, capital, and informational dynamics by dominating access to a certain area (Sack, 1986).

¹⁸ Territorialities correspond to various "forms of appropriation and use of a portion of the space by different social groups" (Haesbaert & Limonad, 1999, p. 14).

which energy corporations and local government aim to integrate Zona Reina's territory into a larger capitalist space of dispossession, accumulation and service provision through large-scale energy infrastructures that do not benefit local communities.

4.2 Community territoriality among Mayan Indigenous peoples: the role of thought leadership and trust to defend territory

The literature has not given enough attention to the cultural influences of Mayan Ixil, K'iche', and Q'eqchi' traditions in the emergent practices of collective action in the department of Quiché, where rural communities constitute "centers of resistance" to mega-development projects with a holistic conceptualization of community (Illmer, 2018, p. 772). In this section, we will discuss how actors engaged in community energy projects characterize 'community,' focusing on the importance they attribute to leadership and trust for the defence of territory (Tzul, 2018). Their idea of community is deeply grounded on the multiple ways they use and inhabit their territories, which constitute what we will call 'community territoriality,' a concept able to capture some relationships and nuances that the idea of community ownership falls short in apprehending. Finally, this section will reflect on how local understandings of 'community' influence the ownership models and territorialities adopted by grassroots communities developing clean energy projects, impacting their collective action towards energy sovereignty.

The concept of 'defence of territory' is a political category mobilized by communities building and operating the energy projects analyzed in this study. As such, it considers different aspects of territories beyond the land itself, including immaterial elements that connect these communities to their land, rivers, mountains, and forests. The *defence* of territory requires a particular relationship of stewardship and care against external threats from powerful actors

interested in using these territories for extractive purposes. By interrogating participants about their understanding of community, we could observe the recurrence of two themes that speak to how they defend their territories in Zona Reina: leadership and trust.

Leadership appeared more evidently in the responses of participants engaged in managing community energy associations. By posing much responsibility to the leader, this argument challenged, at times, the community-led character of the project, which in the view of these respondents, relies significantly on the individual capacities of the leaders to guide and push the projects. This capacity is gender-coded and identified with the ability of male leaders to keep associates motivated and working on the project. "If the leaders have goodwill, patience, knowledge, and intention to improve their communities, the project does not fail. (...) If the leader fails, the project fails.", reports a member of the board of directors (Director, interview, June 2022c). Some take this argument further by saying that "a village without a leader could not be called [a] community. The leader has to care for the wellbeing of the village" (Director, interview, June 2022e).

A CMS activist reinforces the importance of leadership to enable their work when explaining the role of the New General Community Energy Association of Zona Reina:

Communities without leaders, without much trust in their neighbours and neighbouring communities, have lower levels of trust. (...) Working without leadership that can bring people together is not easy. The 'association of associations' supports this at the organizational level, bringing together leaders (CMS activist, interview, July 2022a).

Amongst community members that played leadership roles, there is an evident pride in how they coordinated their group work (composed mainly of men) around the energy project: "Here there

were ten in my group. When it was our turn to work, we were there at 6 o'clock. Those who were late were charged (money). In my group we worked like that." (Community energy associate, interview, June 2022d).

When it comes to trust, CMS activists use this term a lot to describe their relationship with the communities.

We have considered signing agreements with the [community] authorities. We have not done it yet, but we do not discard this possibility to ensure that the control of the associations does not fall into a corrupt mechanism. Now that we have their trust, our advice and guidance are highly valued (CMS activist, interview, June 2022a).

They attribute this trust to the community ownership structure of the projects from their early stages, claiming that "if you do not propose a project where the community makes the decisions (...), mistrust is created, some people might take advantage, and the project fails." (CMS activist, interview, July 2022b).

"In the early stages, it is hard for community members to trust and believe in the project" (CMS activist, interview, June 2022h). Trust often appears closely connected with the concept of leadership and as a critical element for the projects' success. A member of the board of directors of a community energy association claimed that if a leader promotes mistrust, people might not feel motivated to work on the project, bringing an example of a case of corruption that significantly delayed one of the projects.

A former [association] president grabbed 7,000 Quetzals without asking people, almost half the money [that was available] in cash. That is why the people did not want to collaborate anymore (...). A leader here cannot do that, [otherwise]

people no longer want to work. All the authorities came to the assembly, and authorities of our microregion named me as [the new] president (Director, interview, June 2022g).

Mistrust among leaders is highlighted as a critical barrier that communities face to getting ownership over their projects and bringing them to life (Director, interview, June 2022e).

Another community member who supports CMS as an activist mentioned that when a community fragments, they lose in terms of organization, and "if there is division and no confidence, the project gets lost" (CMS activist, interview, June 2022e). CMS activists also highlight communities with higher levels of trust as 'easier to work with.' "Trust is a democratic value that is part of social capital. We measure this in our baseline studies" (CMS activist, interview, June 2022g). According to them, trust in the community is 80% higher in Zona Reina than in public institutions (CMS activist, interview, July 2022a). CMS activists also consider that it is easier to work in communities with higher trust levels in the neighbours and leaders: "communities without leaders, without much trust in the community neighbours (lower trust levels), are harder to work with," clearly connecting the values of thought leadership and trust (CMS activist, interview, July 2022a).

Another overreaching topic present in the responses of community members and CMS staff working on the ground was the territorial and locational dimension of the term 'community.' An activist claimed that:

Community is a territory. Being in a community is not just about territory but people's experiences, individually and (...) as a group. [It is about] how they have come together to have the resources they have, (...) the history they have constituted over the years. It is the story of how these people have come together

to face situations in their lives, regardless of the differences they have among themselves, and how they have come together to transform what has arisen along the way (CMS activist, interview, June 2022c).

Another activist reinforces the heterogeneous character of communities and the multiple ways of thinking within social movements: "In Zona Reina, this concept recovers its validity - in a territory where they have a link, their struggle for the common good, from a [particular] language and worldview about the territory [...]." In these quotes, we observe the multiplicity of the territory uses in a community context – it includes the history and relationships of the communities inhabiting those spaces among themselves and with their lands. The territory is always multiple, diverse, and complex as a lived space-time. A core aspect of community territoriality is the multiple uses, purposes and ideas that coexist and produce these territories, sometimes in conflicting directions. The community energy projects of Zona Reina constitute a great example of what Haesbaert (2007) calls multiterritoriality. Unlike the unidimensional and "unifunctional" territories exemplified by nearby areas in Guatemala taken by large-scale hydropower development, mining, and agroindustries, subordinated to corporate and/or state standard logic of territorial control, in Zona Reina, multiple jurisdictions and forms of appropriation (co)exist and overlap.

Union and cohesion are other recurrent themes in the definitions of community among the community members, despite the differences and conflicts existing around different projects. The metaphor of 'family' is often used to explain the need to work together to achieve a common goal and oppose unproductive divisions (Director, interview, June 2022a, interview, June 2022b). Union is also highlighted as a tool to protect their territories from external threats: "[Community is] to be united before anything, good or bad. If we separate, we become

vulnerable. It is about unity. Sometimes there are invasions²⁰ because of the wealth of our territory. If we are united, it is easier to defend ourselves." (Community energy associate, interview, June 2022b). When talking about unity and commonality, some community members became nostalgic, describing the origins of the community and how it fragmented with a territorial rupture:

When we were in the mountains in the CPR, we lived *en común* (in common), all the leaders in the mountains. Community is an '*ajunto*' (gathering); it is to be united. Now they are villages, no more communities. People say community, but it is no longer. There was only one community when we lived in the mountains, [with] the CPR: Union, only one, May 31. Tesoro was part of Unión, but not anymore. [But] there is still a history of the community. (Director, interview, June 2022d).

More romantic concepts of 'community' also emerged in the expert interviews with CMS staff, highlighting belonging, resistance, and solidarity as other values identified with the idea of community (CMS activist, interview, June 2022b). However, activists more engaged in the community work on the ground recognized the multiterritorial character of the communities as not necessarily positive and democratic, stating that community is not a utopia or an 'Eden' as mentioned in the previous chapter:

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²⁰ "Invasion" in Guatemala refers to historical encroachments into indigenous territories, from Spanish colonization to modern corporate intrusions. <u>Batz (2017)</u> describes the arrival of megaprojects as the "fourth invasion," following Spanish colonization, plantation creation in the 19th and early 20th centuries, and the Guatemalan Civil War. These invasions have led to displacement, human rights abuses, and environmental degradation, symbolizing Guatemala's history of struggle and indigenous communities' ongoing defence of their territories.

There is everything, but after all, in the face of a dispossessing state that violates rights, [community] is the last trench of resistance for survival. It is not like in a democratic country, where there are affinities. Here it is a need for survival (CMS activist, interview, June 2022a).

A community member confirms this assumption of mutual support as a critical element of communities describing community as "where we help each other" (Non-Associate, interview, June 2022). When I asked one of the community women without access to electricity what community is for her, she answered me with the name of her neighbour, also a single mom without power at home (Non-Associate, interview, July 2022).

A plethora of ideas and conceptions populate the collective imagination about community in Zona Reina. Some are more complementary than others, but this diversity shows a multiplicity of contents and meaning in these territories, which might sometimes conflict with each other, as we have seen. In the coming section, we will observe how external interest attempt to take advantage of these conflicting views and ways of relating to the territory to undermine their community projects, deepening divisions and using tactics that remit back to the counterinsurgency years.

4.3 Corporate tactics to undermine CMS work and Indigenous community leaders

Large-scale corporate-owned and small-scale community-owned energy projects go through very different territorialization processes. In the former, the State and corporations integrate the territory into a larger capitalist space of dispossession, accumulation and service provision that does not benefit local communities. In the latter, communities with the support of CMS disconnect the community territory from a larger capitalist space of profit production,

generating their own micro-territorialities within the community, which are also influenced by external factors and 'dominant' territorialities. This section will reflect on how corporations and the Guatemalan state work together to break cohesion and solidarity within communities using tactics such as defamation, direct threats, persecution, and cooptation of community members and supporting organizations, such as CMS.

The conceptual framework that examines political reactions from both "above" and "below" clarifies the social dynamics at play within large-scale corporate-owned and small-scale community-owned energy projects. In the case of Guatemala, Borras and Franco (2013) discuss the global land-grabbing phenomenon, investigating how land deals are negotiated and challenged by various actors, such as local communities, the state, and transnational corporations. This approach is especially relevant for our case study due to the coexistence of these actors in Zona Reina, where community-driven initiatives supported by organizations like CMS stand in opposition to state and corporate interests. As we will explore in upcoming examples, these interests can be either evident or latent, as demonstrated by energy companies without active projects in the communities but with intentions to develop large-scale hydropower in the region. Borras and Franco emphasize the significance of recognizing a myriad of strategies employed by grassroots movements and impacted communities as they resist, as well as the counter-strategies used by influential actors to suppress or co-opt these movements.

Similarly, Geenen and Verweijen's (2017) research on the interplay between actions and reactions from both above and below offers a robust basis for evaluating how these varied actors, including corporations, the state, and local communities, interact within the scope of resource extraction and territorialization processes. By examining the tactics employed by these powerful (and less powerful) actors, we can gain insight into how large-scale energy projects and

associated interests come into conflict with community energy projects and their political endeavours of territory defence and resistance to extraction.

By embracing an interactionist approach that scrutinizes the interplay between actions and reactions from above and below, we can better understand how mobilization develops and the various aspects of these reactions. Verweijen and Dunlap (2021) further stress the value of studying political reactions from above, as it reveals how large-scale resource extraction and energy projects persist despite their detrimental socio-ecological consequences and widespread opposition. In the context of energy projects, analyzing the actions of corporations and the Guatemalan state, as well as their tactics for undermining cohesion and solidarity within communities, can offer vital insights into the intricate interplay of forces shaping these projects and their territorialization processes. This section will utilize the contributions of this literature to help illustrate the complex dynamics between corporate interests, state actors, and local communities in the context of Guatemalan community energy projects aimed at defending territory.

The tactics "from above" consider existing internal divisions in the communities shaped during the armed conflict and the settlement process in Zona Reina to create further conflicts able to undermine community projects, exemplifying how corporations and local governments can build on the legacy of traditional state-led counterinsurgent practices to challenge community energy projects. For example, the Guatemalan state placed 'rebel communities' such as Unión 31 de Mayo in territories surrounded by previous "civil defence patrols" (patrullas de autodefensa civil, PAC), local militias forced upon villages by the military that "extended military control into rural villages" and formally disbanded after the 1996 Peace Agreements (Granovsky-Larsen, 2022, p. 73; Remijnse, 2001). A former patrullero (patroller), forced into

this role by the army in one of the fincas surrounding Zona Reina, escaped to Cobán during conflict and struggled against the Xalalá Hydrodam in Ixcán. He reports that

When the armed conflict began, [and] the patrol started, they appointed me the patrol leader. The *patrón* said: we have to buy weapons and plant cardamom. They forced us to become patrolmen, carry *machetes*... [But] we were against the *contras*,²¹ who came with weapons (Director, interview, June 2022h).

Practices like intensified surveillance from the state through neighbour villagers over 'rebel communities' after the war have enduring implications for territories and communities defending them through inter-community solidarity networks, which are crucial to enabling off-grid microhydropower development. As discussed in our previous chapter, the state strategically placed former CPR members on farms surrounded by communities allied with the state through former PAC structures, which had political reverberations on the inter and intra-community socialization on these communal lands (Bateson, 2017).

By connecting the history of counterinsurgency in Guatemala (mainly developed in chapter 2) to current challenges faced by community energy projects, we can see the implications of state and corporate threats to community organizing in Guatemala, shaping the way communities defend and simultaneously produce their territories (Santos & Silveira, 2002; Haesbaert, 2013; López Sandoval et al., 2019). By describing the interactions between forces from above, trying to expand large-scale energy development in Zona Reina, and from below, defending territories through community energy projects, we can observe a range of territorialities in dispute.

 $^{^{21}}$ U.S.-backed and funded right-wing rebel groups in opposition to the guerrillas.

Although specific megadevelopment projects are not directly targeting the case studies developed in this thesis, there are examples of past attempts from large companies interested in establishing energy projects in the region. Palo Viejo project, built by Enel Greenpower from 2005, is a nearby large-scale hydro dam built in Ixil territory (San Juán Cotzal), a few kilometers away from Zona Reina (Batz, 2017). It was built without a proper consultation process and based on false promises of providing power to the nearby rural communities, and from the seven interviews where this project is mentioned, seven refer to the promises of energy provision to the communities (CMS activist, interview, July 2022b; Community energy associate, interview, June 2022c, interview, June 2022b, interview, June 2022d; Director, interview, June 2022a, interview, June 2022e, interview, June 2022d). Communities often manifest a strong response to fake promises coming from energy corporations:

Now they are trying to screw us, saying the *empresa* [company] will come and bring light. While we already have it! They come to screw us around, they won't leave us in peace. They are trying to destroy the project that all of us accomplished together. They are the same people who screwed up the cooperative. They don't want *lucha* [struggle], they don't want *bienes comunales* [common wealth], they want the *empresa*." (Nelson, 2020, p. 245).

Xalalá Hydroelectric dam is another example of false promises and attempts to win communities' trust around the downside of river Chixoy, close to where the Los Copones project is currently being built.

We had many problems with people from the Xalalá dam. The company said that we could build our small projects and that they would give us houses, schools, health centres, water, soccer games and shirts for the villagers. They started to

become friends with the people to kill them. They kept doing that for many years, paying people from Cobán, from Uspantán... Fooling the people and giving out money. In the end, the army always came to scare the people and to "search for drugs." The mayor often met with the companies to plan these threats (Director, interview, June 2022h).

Another promise companies and the municipality usually make to get communities' support, as in the case of Xalalá project, especially in electoral years, is that with the municipality's private electricity, they will build roads in the communities, a pressing demand since their settlement in Zona Reina. "The state puts the infrastructure, and the companies charge for the service" (CMS activist, interview, June 2022i). The cooptation tactics go further, including collecting information from community members: "They have come here to offer light from the government, they took out lists. I do not change my mind [though], because I have struggled a lot and to give good testimony to others" (Director, interview, June 2022c).

According to a CMS activist, in Zona Reina companies and mayors take advantage of the political and economic differences within the communities to further disagreements and divisions (CMS activist, interview, June 2022i). They create *alcadías indígenas* (Indigenous mayors) named by corrupt authorities to influence internal political dynamics, "disorganizing and demobilizing the communities." In electoral and pre-electoral years, they face many challenges because of the lack of cohesion within communities coopted by different political parties: "They buy actors who weaken community projects. The damage that can be caused depends on how organized the community is" (CMS activist, interview, June 2022i). One response from CMS to these tactics was a campaign of short 'audio spots' on YouTube to

educate communities about corruption and illegal charges from the distribution companies Energuate and EEGSA (*Empresa Eléctrica de Guatemala*, *S.A*), as well as the high fares they would have to pay and the environmental impacts of such megaprojects to their territories (CMS activist, interview, June 2022i).

In our interviews, people reported cases of infiltration, defamation and militarization practices led by both state and corporate actors in Zona Reina and surrounding territories. A community member from Unión 31 de Mayo shared that energy companies conduct "infiltration" and "manipulation" in their territories, by fomenting discrediting discourses that claim that

the project does not have impact, to value their own projects. But it is not people's fault. In the beginning of our [community energy] project ... some people did believe the companies, saying that their service was better and more trustworthy than a community turbine (Community energy associate, interview, June 2022c).

Another tactic highlighted by a CMS activist was the defamation of leaders to force them out of the project by groups of community members who were convinced to be against the projects (CMS activist, interview, June 2022e). CMS activists also noted a change in the criminalization patterns of energy companies against the resistance in Zona Reina, going from threats and direct aggressions against CMS activists, towards land defenders, which were noticed as empowered and reclaiming their rights. "First they individualized activists and organizations, then they criminalized defenders and leaders, and then neighbors, members of the communities" (CMS activist, interview, July 2022c).

In the surrounding area of Copones, where people resisted and did not allow the construction of Xalalá hydrodam, the army has done regular visits as they intend to build a military detachment in Ixcán and organized soccer matches to get closer to the communities

(CMS activist, interview, June 2022g). For their advocacy work in opposition to megahydroelectric development, CMS counts on precautionary measures from the Inter-American Human Rights Commission, because it has suffered direct threats from hydroelectric businessmen, for their opposition to the Rio Hondo Zacapa hydro dam, which is not located in Zona Reina, but is part of CMS programmatic axis of defense of territory. The village of San Juan Limonard, in the municipality of San Pedro Cotijá, Zona Reina, has also witnessed an increase in military presence. According to an association from Copones: "The businessmen want to put projects over there, but we don't want the companies, we want the community turbines" (Director, interview, June 2022g).

In conclusion, these quotes show coordination between companies and municipal authorities in their efforts for the companies to get the communities' licence to operate, a strategy widely used by extractive companies facing Indigenous resistance in other parts of Guatemala and Latin America (Becerril, 2018; Dunlap, 2019a; Dunlap & Arce, 2021b; S. Granovsky-Larsen, 2023; S. Granovsky-Larsen & Santos, 2022; Solano, 2015). Corporations and the Guatemalan state use counterinsurgency-inspired tactics to undermine community energy projects, such as defamation, direct threats, persecution, creation of persons-of-interest lists, and cooptation of community members and leaders. The state's history of counterinsurgency in Guatemala has ongoing implications for territories and communities defending them through inter-community solidarity networks. This thesis explores the interactions between forces from above, interested in expanding large-scale energy development in Zona Reina, and from below, defending territories through community energy projects. One of the key contributions of the previous section was to evidence top-down dynamics infiltrating territories of resistance, problematizing how tactics from above can adapt to different contexts. Large-scale corporate-

owned and small-scale community-owned energy projects undergo different territorialization processes, with the former benefiting corporations and the state at the cost of Indigenous communities. Although case studies in this thesis are not directly targeted by specific megadevelopment projects, there are examples of past attempts from large companies interested in establishing energy projects in the region, some successful (Palo Viejo dam) and others not (Xalalá dam). Overall, the corporate tactics including infiltration, cooptation, militarization (through PAC and encouraging community members to violently turn against each other), criminalization of land defenders create internal political dynamics that can disorganize and demobilize the communities and weaken community projects. In the coming section, we will observe CMS' coping strategies to keep supporting the communities in this context of permanent threats while trying to conserve communities' sovereignty over their projects.

4.4 Dependency or advice? The difficulties of withdrawing in a state of permanent emergency

The context of permanent threats from the state and energy corporations interested in the resources and hydropower potential of the region requires a constant presence of CMS in the communities. CMS characterizes its role as 'advisory' once the projects are built and operating, but at the same time, they recognize how CMS cannot just leave and focus on other communities. For example, as observed in Chapter 2, CMS activists shared that there are more than a hundred pending requests from other communities interested in collaborating with the organization to develop their own community energy projects. However, the lack of personnel and resources prevents them to move forward with new projects. This final section will inquire

about how (and if) community territoriality can actually challenge violent state-corporate strategies, reflecting on the particular concept of territory that such models entail.

Since the 1996, wide areas that were inaccessible to investment due to the armed conflict, became 'available' for extraction (mineral exploitation, large scale hydroelectric development, monoculture). The government of Alvaro Arzú became known for having "signed the Peace Agreements with one hand and privatized natural goods with the other, using a legal framework of dispossession", reinforcing an alliance between the state and corporations (CMS activist, interview, June 2022a). The Guatemalan state has been a historical "enemy of the autonomy and rights of Indigenous peoples over *bienes naturales*", through a permanent criminalization of land and river defenders in favour of transnational corporations' interests (CMS activist, interview, June 2022a). There is an underlying assumption behind the criminalization of land defenders and the systematic exclusion, or "precarious inclusion" (Haesbaert, 2018), of these communities into the Guatemalan state: the territories they inhabit and build in their daily lives are resources that could be 'better' exploited by energy and mining corporations.

Explicit state support for energy companies interested in exploring the hydropower potential of Zona Reina is one of the reasons acknowledged by CMS activists for not completely leaving the territory:

We never know when to leave the territory because there is such a need for maintenance, there are groups that try to enter to take advantage of the project. That is exhausting. There must be an exit process, the donors already recommended it to us but then they withdrew the advice because they saw that Guatemala has a historical deficit in social development. (...) In a democratic,

ecological society that protects its natural resources, Madreselva should not even exist (CMS activist, interview, July 2022c).

According to this activist, the Guatemalan state should be the one protecting "natural resources" and there should be no need for CSO intervention in that regard. However, the understanding of nature as "natural resources" explains the way the state and corporations approach these territories. Although the term "resources" implies a colonial conception of nature and territory as a passive actor entitled to be exploited (Curley, 2021), its occasional use by activists and Indigenous people in Zona Reina does not imply that communities and activists have the same intentions of corporations and the state towards territory. However, the naturalization of territory as a resource might limit their capacity of radically questioning the use of and care for the territory as an integrative part of the communities.

Many structural discourses and political dynamics limit the reach and potential of the community energy projects in Zona Reina. In a neoliberal post-war context, the Guatemalan state prioritizes extractive projects and supports corporate actors interested in controlling territory for extraction purposes (Granovsky-Larsen, 2023). Furthermore, the post-war state keeps historic characteristics such as a patriarchal structure and a counterinsurgent approach against Indigenous communities, which penetrates the community energy projects in different ways. For example, the internal gender inequalities that Indigenous communities reflect in women being left behind in terms of access and political participation, which is not an exclusive problem of community energy projects, but a structural power dynamic particularly common in Guatemala and exacerbated during the armed conflict (Burt, 2019; Yoc Cosajay, 2014). Another example, described in detail in the previous section, is the different counterinsurgent-like practices that the

state and energy corporations employ to weaken and infiltrate community energy projects in Zona Reina.

Although CMS does everything it can to not create dependency and ensure communities have the tools to own and lead the projects from their very beginning, in a state of permanent emergency and public abandonment from a rights provision point of view, it is hard, if not impossible, to let communities on their own. In addition, the internal challenges the organization faces, in terms of financial and governance problems, are also reflective of a larger context that does not support civil society organizations opposing development projects and interests prioritized by the state and corporations, making it more difficult to establish long-lasting and sustainable alliances with communities. CMS is a direct target of corporate threats because of its support to communities in resistance to megadevelopment projects, and one evidence of this highlighted in Chapter 2 is the clear right when one enters their office in Guatemala City. At the door, there is a female police officer put in place as a protective measure from the Inter-American Human Rights Court, that obliged the Guatemalan state to 'protect' CMS from potential threats coming from powerful families related to extractive industries (CMS activist, interview, June 2022g).

Building and maintaining community territoriality is not an easy process in the Guatemalan context, despite the political-organizational background these communities inherit from the war and the CPR experience. There are multiple attempts to undermine a sense of community and a community's uses of territory in Zona Reina, starting off with a problematic resettlement process that from the beginning tried to divide and erase a resistance memory in the communities (Colectivo Madreselva, 2014; Fundación Arias para la Paz y el Progreso Humano, 2000a; López Samayoa, 2017; Muñoz Sánchez, 2008). Contemporarily, these challenges include

an individualist mindset promoted by mass communication media and formal education, increasing precariousness of CMS work (because of management and financial difficulties), reinforcement of a historical patriarchal structure and counterinsurgent practices in the communities.

However, CMS's strategy to play an advising role in the communities is a way to mitigate this dependency that is much stronger in contexts where organizations are more vertical and do not give communities a say in the implementation and management processes.

Maintaining their work alive in the communities is also a form of resistance to the political-economic actors trying to undermine community work and impose a single form of territoriality based on large-scale extraction. As observed in section 3.2, a community territoriality is, by definition, multiple, admitting the coexistence of different uses and conceptions of territory. Although this multiplicity gives space for revolutionary practices and uses of the territory, it also makes it more permeable to opposition and authoritarian projects that might undermine its community character.

Chapter 5: Conclusion

This study showed multiple ways of defending territory, focusing on case studies in Guatemala where Indigenous struggles for energy (and food) sovereignty intersected with struggles for defending territory from extractive large-scale energy development. Although each of the five community energy projects analyzed present particularities regarding local histories, they are all defined by two key features: the support of an uncommon Guatemalan CSO and a close relationship with Guatemala's recent "past" of armed conflict and counterinsurgency campaigns against Indigenous people. Colectivo Madreselva is a CSO that incorporates a very particular approach to aid and community work, unlike most organizations that also emerged in the 1990s. Their *ecologista* vision, which aims to create development alternatives based on responsible use of natural goods in water basins and territories, is strengthened by technical and political components that allow multidimensional and integrated programs seeking to address social struggles through concrete and community-led alternatives and infrastructure. These community-led initiatives, in turn, found fertile soil in Zona Reina, where Indigenous communities present a resistance trajectory that dates back to the Comunidades de Poblaciones de Resistencia (CPR) years during which these communities tried to escape genocide by hiding in the mountains of Quiche. Community energy projects analyzed in this thesis are not only exemplary achievements of defending territory from extractivism through community-level infrastructure. They take place in a complex political and economic environment that goes beyond Zona Reina's boundaries, in which the state, energy corporations, and funding and management bureaucracies pose different challenges to the work of Madreselva and communities. In what follows, we will summarize the three main arguments made throughout this study: (i) many of the difficulties these projects face have their roots in the genocidal

experience imposed upon these communities through the brutal history of colonization and counterinsurgency, which in parallel created a sense of resiliency that strengthened community ties; (ii) the design, conduct, and outcomes of these projects are undermined by gender-based and generational internal divisions and inequalities within communities; and (iii) communities and Colectivo Madreselva have partly addressed these challenges through a relational approach to energy and food sovereignty to defend Indigenous territories, strengthening a sense of community resiliency that dates back from the years of counterinsurgency.

The first key argument of this thesis is that the current difficulties faced to ensure the community energy projects' sustainability and the consequent defence of territory from largescale hydropower development have their roots in the historic counterinsurgent approach of the Guatemalan state against Indigenous communities and any other stakeholders challenging the neoliberal reforms and extractive projects enabled by the 1996 Peace Agreements. As explained in chapter two, community energy projects deal with social divisions leading to broader social fractures resulting in the creation of multiple communities, related to strategic state decisionmaking on where to relocate these communities, exclusion based on gender and labour participation in the community projects, and divided loyalties to the organic community governance versus the state structures such as the SAT or the system of COCODEs and COMUDEs, resulting from the post-war resettlement of the CPR. These challenges are not exclusive to communities in Zona Reina, finding an echo in other politically organized rural communities forged by states interested in demobilizing their political strength through a resettlement process in Guatemala, El Salvador and Brazil (Spalding, 2018; Velásquez Nimatuj, 2005; Wolford, 2010).

Institutional barriers and lack of state investment in basic infrastructure reflects on the spatial disposition of these communities, which do not count on public spaces for socializing and politically participating in community life. Besides that, the penetration of an individual mindset undermines a sense of community that is key for the continuation of the community energy projects. The primary sources of such a shift away from community thinking are an "individualistic education" and lifestyle promoted by neo-Pentecostal evangelical churches and leaders entering the region in the early 2000s (Dary et al., 2019; Director, interview, June 2022; Huang, 2015). The religious phenomenon of proliferation of evangelical churches comes along with the marginalization of traditional Mayan ceremonies, spirituality, and *costumbre* religion "to divide us, ever since the Spanish arrived", claims an older CPR leader (Nelson, 2020, p. 246).

In addition, access to an outside world somehow reduced the sense of community from the CPR years and was enabled by illegal(ized) immigration of family members and neighbours to the United States and widespread access to TV, the internet and social media, which represents a counter-productive effect of access to electricity. Through international remittances and online video calls using smartphones powered by electricity from the community energy projects, community members that immigrate provide some access to this 'other world' of consumerism and individualism to their families, something that is not aligned with the sense of community required in the CPR years.

In such a complex context, where project 'associates' deal with several challenges to sustain community projects, CMS has difficulty withdrawing from communities even after projects operate under a stable association and board of directors. Although CMS claims to only have an advisory role in communities with already operating projects, the organization is often obliged to maintain a stronger presence there and thus often lack the capacity to serve other

communities in and outside Zona Reina to help them develop new projects. At the same time, CMS staff support ongoing community projects with maintenance and accompaniment because of their limited number of activists and funding, which could be characterized as a relative dependency. In addition, CMS suffers from several internal management difficulties, deeper state surveillance as a result of political changes (explain) and the recent NGO law reforms, short-term and uncertain international funding, and internal governance inconsistencies further discussed in Chapter 2, which have caused multiple internal crises that directly impact their community work in Zona Reina.

The second argument comes from observing an unexpected dynamic in the fieldwork: gender-based dynamics of exclusion and difficulties in incorporating young community members represent an important limitation of the community energy projects analyzed in this thesis. For example, single mothers and, in some cases, widows and elderly people could not be 'associates' of the community projects because they had not provided direct labour inputs in their construction and could not pay the joining fee required by associations. Besides that, becoming an associate implies responsibilities to work for the project without payment, either joining regular and extraordinary assemblies or with maintenance activities when required. Furthermore, some community members currently excluded from the project sometimes cannot voluntarily commit time and workforce because of their primary paid and unpaid (domestic) work commitments, making their participation unfeasible.

Gender disparities are not explicit only in the case of women that do not have access to power but also in the "horizontal" but gendered governance structures in the associations, where political participation of women in assemblies and boards of directors of community energy associations is significantly lower than male associates. The *machismo* in Indigenous Mayan

communities is more prominent in Q'eqchi' communities – which represent the majority of the population of the communities covered in this study – manifesting in different forms of restrictions, exclusions and violence (Jones, 2022; Kistler, 2021; Wands & Mirzoev, 2022). In Chapter 3, we argue that not engaging women and young families in the project might threaten the projects' mid- and long-term viability [sustainability], leading excluded community members to lose confidence in community mechanisms and support mainstream large-scale energy projects' promises of providing higher-quality service. This argument is strengthened by our analysis of corporate and state practices employed by municipal authorities and company representatives in Chapter 4, which use defamatory campaigns against CMS and community members and false promises of more reliable energy provision to communities to make a case for their projects.

Here, the concept of 'underflows' (Hazard, 2022), as a mode of thinking and strategy emphasizing hidden flows and their movements, excesses, and relations, is a great way to frame invisible realities that are not proudly acknowledged. This resonates with the reality of gender exclusion I encountered in the community energy projects of Zona Reina. This thesis showed that the rivers that now generate power for Indigenous communities in Zona Reina have testified a complex history of violence and resistance that remains in their underflows, impacting the way communities organize and resist state and corporate-led counterinsurgency. My research pathway included different moments, firstly reading about the projects from Vancouver, secondly visiting the headquarter of CMS in Guatemala City and, finally, living with the communities in Zona Reina, where my contact with an impetuous rainy season intensified the power of 'underflows' that I could fully grasp only when I was back in Vancouver, making sense of the complex relationships I encountered in the field.

In the Introduction of *Underflows*, Wolfle Hazard (2022) calls readers to attend to political and social underflows by studying resistance to top-down management. The author provides concrete, normative examples of how underflows and river science can meet challenges such as climate change, settler-colonial legacies of environmental harm, and gendered violence. During my time in Zona Reina, I observed certain subtle dynamics and movements which resulted in the quiet exclusion of women from local communities. These women were barred from active participation in the decision-making process and denied access to energy rights due to the absence of a male partner or a paid day laborer, known as a *mozo*, who could assume the responsibility of assisting the community energy association with turbine maintenance. This was particularly evident when, following heavy winter rains, the canal would become obstructed by fallen trees. In other words, these women could not count on a man to control the river flows on their behalf. In a patriarchal and extraction-oriented society, rivers and women are seen as resources, and as Andrew Curley (2021) claimed, resource is just another word for colonialism.

The work of Dr. Eva Haifa Giraud (2019) is also very thoughtful regarding the role of exclusions in materializing particular realities at the expense of others and the importance of taking responsibility for these exclusions before finding ways to address them. In the case of the community energy projects analyzed in this study, the issue of women's participation and inclusion of widows, people with disabilities, and elders (not single mothers) was presented by CMS to communities that are now starting their own energy projects, constituting their local energy associations and formulating their rules of procedures. Some of the community association members claimed that they cannot discuss this topic now because, in the construction phase, they need the support of everyone. Such a contentious topic might keep many community members out of the project, as they might claim that people who have not worked will benefit

from it (CMS activist, interview, June 2022b). In other words, they claim that to ensure the right to electricity, they must sacrifice (at least for now) women's rights to benefit from the electricity service provided by the community energy projects and actively participate in the decision-making around the project management and. The response of CMS was to respect the communities wish only to include 'those who worked' in the project, disregarding other forms of work that women have historically supported the community with, which include more direct contributions, like cooking and bringing food for men working in the *zanjas* (mill run).

The third main argument of this thesis is that Colectivo Madreselva has used relationality as the main tool to implement the strategy of defending territory in Zona Reina, an aspect that makes this project a very particular way to propose concrete alternatives while defending territory from extractivism. CMS and the communities have addressed these challenges through a close relationship with communities from the beginning of their partnership, respecting communities' decisions and ownership over the project in its different dimensions. Community ownership has even led projects to use more rigid and less inclusive mechanisms, as observed in the case of community members excluded from the association because they have not worked on or paid the required fee to join the community energy project and in the case of more prominent male participation in the decision-making stances of the projects.

However, CMS is conscious of the limits of their community work, and one of the ways they have dealt with the root cause of the lack of participation of women in the community energy projects is through the integration with a food sovereignty program on women-led agroecology, with the aim of counterbalance community energy projects' gender inequity. By engaging women in the agroecology project through workshops on producing and growing seeds on their land or making shampoos and soaps with local products, they collectively build a

political space where women can speak, learn and create. By participating in workshops on small family farms and gardens, seeds production, and crafting natural products, women support their families and communities with organic products for family consumption and exchange with neighbours, besides becoming "political subjects in their communities" (CMS activist, interview, June 2022c). These activities also reinforce the importance of protecting water bodies and the forest while growing food and the connection of agroecology with the energy project, which would not exist without a flowing river, constituting a great example of entanglement. The intrinsic connection between water, land and forest is critical to understand the relationship between the energy and food sovereignty programmes of CMS since, in the long run, "if there is no water, there is no energy," and protecting the rivers and forests is critical to ensure the continuity of their community energy projects (CMS activist, interview, June 2022a). Furthermore, ensuring that the micro-hydroelectric community energy and agroecological projects are not damaging the local ecosystems is essential to their technical sustainability.

However, as Giraud says, recognizing these initiatives' entanglement and exclusionary dynamics might be enough to act in the territory but not intervene in it. Taking responsibility for and politicizing these exclusions is necessary to intervene and change such dynamics meaningfully. One of the ways of doing this effectively is to identify and analyze the "tactical interventions" happening on the ground, either led by communities and civil society organizations or by the state and corporations interested in intervening in the (Giraud, 2019, p. 19). It might also provide social movements with a sense of the tactics employed by communities in other territories, which ones have been worked for them and in what context they have been developed. In that sense, this approach might create relationality and solidarity ties between

social movements and scholars working in different territories, both identifying resistance practices and responses or the recurrence of corporate and state practices to repress, persecute, infiltrate, criminalize and contain Indigenous resistance.

CMS has also demonstrated awareness of being unable to withdraw from communities in such a fragile context of corporate and state threats to use this territory for extractive purposes. To mitigate this dependency, the organization heavily invests in capacity-building, especially during the construction process, training electricians and the board of directors on how to formalize their association and creating internal rules of procedures so that the communities have the technical and political tools necessary to manage the projects without relying exclusively on CMS' support. The need for a strong relationship between food and energy sovereignty, technical and political skills, community and activists is a crucial feature of the community energy projects in Zona Reina, a territory that has been the focus of different corporate and stateled 'strategies from above' to destroy communities and their cohesion (Verweijen & Dunlap, 2021).

Studying this particular way of defending territory opens many other research possibilities not adequately addressed in this thesis, such as the downsides of small-scale hydropower development and the social-environmental impacts such projects might have in the territories. There is a considerable body of literature that critiques hydroelectric dams in general, not just large-scale hydropower projects (Greacan, 2003; Monyei et al., 2018). This research demonstrates that small-scale energy development can potentially perpetuate top-down power dynamics that negatively impact gendered, racialized, and marginalized groups (Tulachan, 2008; Wiese, 2020). Furthermore, these dynamics can be driven by local governments, energy companies, or civil society organizations (Kabalan et al., 2014). There is also social movement

opposition to hydropower built around the ecological impact on the entire river and watershed and their ecosystems, which are necessarily affected when the river's natural course is altered (Bigda-Peyton et al., 2012; Kelly, 2019). Although we briefly mentioned that CMS undertakes an environment assessment, consulting other communities in the watershed that might be affected by the project, we have not analyzed how they mobilize Indigenous knowledge and participation in these pre-feasibility studies. Future research projects could include a focus on how CSOs and community partners consider the potential impacts of such projects, how they address them and ensure that other communities located in the same watershed are adequately consulted, even if they are not a part of the electrical generation and distribution network the project intends to cover.

Another critical research agenda to be further developed is the influence of a history of counterinsurgency and the different tactics to defend territories used by communities, asking questions of how community organizing can challenge the solid political dynamics of a counterinsurgent state. Investigating further the historical roots of challenges like internal social and territorial divisions, leading to fracture into multiple communities, exclusion based on gender and non-membership in association divided loyalties to organic community governance and state structures such as SAT, COCODEs, and COMUDEs are common elements of forging new rural communities after resettlement, that could help to understand the best ways to address counterinsurgent tactics to undermine these projects. Following one of the research questions that emerged after our fieldwork – can community organizing through small-scale energy projects challenge the legacies of a history of counterinsurgency? – with other examples from countries that experienced counterinsurgency campaigns would constitute another excellent

contribution that could enrich this literature and the repertoire of communities and social movements on creatively challenging counterinsurgent dynamics.

In conclusion, this study has shed light on the intricate and interconnected struggles of Indigenous communities in Guatemala, who are courageously defending their territory against large-scale extractive energy development while striving for energy and food sovereignty. The three main arguments presented here emphasize the impact of past and present counterinsurgency practices on these communities, the significance of addressing gender-based and generational internal divisions and inequalities, and the crucial role of relational approaches to energy and food sovereignty in defending Indigenous territories. By examining the challenges, achievements, and potential limitations of community-led energy projects, this research contributes to a broader understanding of the dynamics at play in Indigenous resistance movements and provides valuable insights for future research and grassroots initiatives to defend territory in a creative and propositional way. Ultimately, the perseverance and capacity of the Indigenous communities in Zona Reina and the committed work of Colectivo Madreselva serve as a reference to the resilience and determination of those fighting for a more equitable, sustainable, and just future.

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Appendix A: List of Interviews

| | Location | Group | Date | Total duration |
|--------------|------------------|---------------|-----------|-----------------------|
| Interview 01 | Guatemala City | CMS activist | Jun. 2022 | 1:15:36 |
| Interview 02 | Guatemala City | CMS activist | Jun. 2022 | 1:23:44 |
| Interview 03 | Guatemala City | CMS activist | Jun. 2022 | 1:03:10 |
| Interview 04 | Unión 31 de Mayo | Director | Jun. 2022 | 0:20:00 |
| Interview 05 | Unión 31 de Mayo | CMS activist | Jun. 2022 | 0:41:19 |
| Interview 06 | Lírio Putul | Director | Jun. 2022 | 0:25:56 |
| Interview 07 | Lírio Putul | Director | Jun. 2022 | 0:32:56 |
| Interview 08 | Unión 31 de Mayo | Director | Jun. 2022 | 0:43:30 |
| Interview 09 | La Taña | Director | Jun. 2022 | 0:42:00 |
| Interview 10 | Unión 31 de Mayo | Associate | Jun. 2022 | 0:48:44 |
| Interview 11 | La Taña | Non-associate | Jun. 2022 | 0:26:45 |
| Interview 12 | La Taña | Associate | Jun. 2022 | 0:18:47 |
| Interview 13 | Lírio Putul | Associate | Jun. 2022 | 0:27:29 |
| Interview 14 | La Gloria | Associate | Jun. 2022 | 0:21:23 |
| Interview 15 | La Taña | Director | Jun. 2022 | 0:49:50 |
| Interview 16 | Unión 31 de Mayo | Associate | Jun. 2022 | 0:31:36 |
| Interview 17 | Unión 31 de Mayo | Associate | Jun. 2022 | 0:28:07 |
| Interview 18 | Unión 31 de Mayo | Associate | Jun. 2022 | 0:42:01 |
| Interview 19 | Lírio Putul | Associate | Jun. 2022 | 1:08:07 |
| Interview 20 | Unión 31 de Mayo | Associate | Jun. 2022 | 0:28:52 |
| Interview 21 | Unión 31 de Mayo | Director | Jun. 2022 | 0:57:55 |
| Interview 22 | La Taña | Associate | Jun. 2022 | 0:18:57 |
| Interview 23 | La Taña | Director | Jun. 2022 | 0:33:08 |
| Interview 24 | La Gloria | Director | Jun. 2022 | 0:42:15 |
| Interview 25 | Guatemala City | CMS activist | Jun. 2022 | 1:03:59 |
| Interview 26 | Guatemala City | CMS activist | Jun. 2022 | 0:58:32 |
| Interview 27 | Copones | CMS activist | Jun. 2022 | 0:29:47 |
| Interview 28 | Copones | CMS activist | Jun. 2022 | 0:57:07 |
| Interview 29 | Copones | Director | Jun. 2022 | 0:41:15 |

| Interview 30 | Copones | Associate | Jun. 2022 | 0:24:23 |
|--------------|----------------|---------------|-----------|----------|
| Interview 31 | Copones | CMS activist | Jun. 2022 | 1:50:00 |
| Interview 32 | Copones | Director | Jun. 2022 | 0:49:53 |
| Interview 33 | Guatemala City | CMS activist | Jul. 2022 | 1:16:19 |
| Interview 34 | Guatemala City | CMS activist | Jul. 2022 | 1:25:52 |
| Interview 35 | Guatemala City | CMS activist | Jul. 2022 | 0:43:41 |
| Interview 36 | Guatemala City | CMS activist | Jul. 2022 | 1:07:00 |
| Interview 37 | Guatemala City | CMS activist | Jul. 2022 | 0:34:37 |
| Interview 38 | Lírio Putul | Non-associate | Jul. 2022 | 0:17:28 |
| Interview 39 | Lírio Putul | Non-associate | Jul. 2022 | 0:19:18 |
| Interview 40 | Lírio Putul | Non-associate | Jul. 2022 | 00:14:18 |
| Interview 41 | La Taña | Non-associate | Jul. 2022 | 18:40:00 |
| Interview 42 | La Taña | Non-associate | Jul. 2022 | 25:03:00 |
| Interview 43 | La Gloria | Associate | Jul. 2022 | 26:32:00 |
| Interview 44 | La Gloria | Director | Jul. 2022 | 41:27:00 |
| Interview 45 | La Taña | Non-associate | Jul. 2022 | 15:37:00 |

Appendix B: Interview Consent Forms

I. Interview Written Consent Request

Community Ownership and Micro-Hydroelectric Development in Guatemala

Introduction and Background

This consent form relates to a study about the role of local civil society organizations (CSOs) in the establishment of small-scale hydropower in the department of Quiché, Guatemala.

To this end, field research will be carried out during the summer of 2022 by Larissa Santos, MA student in the Department of Geography at the University of British Columbia (UBC), Vancouver - Canada. She is being supervised by Dr. Philippe Le Billon, a professor at the Liu Institute for Global Studies and Department of Geography at UBC, who acts as Principal Investigator. This research is carried out in collaboration with Colectivo Madreselva in Guatemala.

Our research aims to better understand the role of national civil society organizations in the establishment and management of community micro-hydroelectric plants. The project aims to assess the successes and challenges these organizations face in promoting community management of clean energy projects in the department of Quiché. The research is made possible through a master's fellowship awarded to Larissa Santos by UBC's Department of Geography.

You are being contacted because of [your role as an organization specialized in offering support to communities developing alternative energy development models / your work in support of community development of energy alternatives / your support to the management of a micro-hydroelectric project / your participation in a community that uses the energy services

provided by a self-managed hydroelectric plant. Your opinion and experience will help understand the process of development and management of a micro-hydroelectric plant, and contribute to the identification of alternative forms of community ownership in small-scale energy projects.

Interview Details

This study relies on interviews with community members and staff members of Colectivo Madreselva. Your participation is completely voluntary, and the interview should take between 30 minutes and one and a half-hour of your time. You can stop the interview at any point without explanation and consequences. Your name will not be included in the research report – this interview will be anonymized - unless you specifically consent to have your name included. The researcher's contact details are included here in case, following our meeting, you have additional information to provide, or you would like to change or withdraw the information that you have provided.

- I consent to being photographed, filmed, video/audiotaped, and/or having my voice or image recorded by electronic means by members of the research team, under the condition that my voice and/or image is distorted to provide anonymity. [Initials:]
- I consent to have the content of this interview in the outcomes of this research such as reports and papers [Initials:]
- I also consent to the distribution and publication of interviews, photographs, films, video/audio tapes and other recordings via print, television, radio, electronic or any other means, as long as my anonymity is conserved. [Initials:]
- In addition, I give my consent to the publication of this interview, photo, video or audio recording in an anonymous way [Initials:]

Risks associated with this interview may include raising your public profile for being seen speaking to the researcher. This may negatively affect perceptions among some members of your local community, which in turn may increase the risks of rejection by some members of your community and changing opinions about the role of supporting organizations in the energy projects. We are happy to discuss arrangements that would address these risks, notably through choosing an appropriate and discreet time and location for the interview. You do not have to answer any questions you feel uncomfortable with. You are also free to pause the interview to take a break or decide to withdraw from the study entirely, at any time.

The data we collect for this research will be safely stored by the researchers on a password-protected encrypted storage device, which will be kept in a locked office at the University of British Columbia after the conclusion of the fieldwork. Our research results will be published and widely communicated for the purpose of sharing stories about alternative ways of managing community energy projects that contribute to an energy transition in Guatemala based on environmental justice principles.

The data may be used for future publications and research projects, with the researcher using interview transcripts for comparative studies or studies on long-term changes in the models of community management and ownership over small-scale renewable energy projects. We are happy to provide you with a summary of the findings once we have completed the study near mid-2023.

Contact for Concerns about the Rights of Research Participants:

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in

| the UBC Office of Research Ethics by calling toll-free to the number or by |
|--|
| writing an e-mail to |
| |
| For More Information Please Contact Any of the Following: |
| Philippe Le Billon, Principal Investigator |
| Professor, Department of Geography |
| University of British Columbia Vancouver, British Columbia, Canada |
| Email: |
| Phone: |
| |
| Larissa Santos, Co-Investigator |
| Master's Student at the Department of Geography |
| University of British Columbia Vancouver, British Columbia, Canada |
| E-mail: Phone: |
| Consent to be Interviewed |
| Your signature below indicates that you have received a copy of this consent form for your own |
| records and that you consent to participate in this study. |
| |
| |
| Participant Signature Date |

Printed Name of the Participant

II. Interview Oral Consent Request

Community Ownership and Micro-Hydroelectric Development in Guatemala

Introduction to the Interview

[Appropriate salutation], my name is Larissa Santos. I am a master's student at the University of British Columbia, Canada. This research is being supervised by Dr. Philippe Le Billon, professor at UBC, who acts as Principal Investigator. We are carrying out research, in collaboration with Colectivo Madreselva, on the role of national civil society organizations in the establishment of community micro-hydroelectric plants. We are seeking to identify the successes and challenges that these organizations encounter in promoting community management over clean energy projects in the department of Quiché. We are interested in learning more about [your role as a member of an organization specialized in offering support to communities that manage energy projects / your work in support of community development of energy alternatives / your support for the management of the hydroelectric project / your participation in the community that enjoys the energy services of a self-managed hydroelectric plant. We believe that this research can contribute to the identification of alternative forms of appropriation and community management of clean energy projects.

Your participation is completely voluntary: you do not have to participate and there will be no consequences for you if you decide not to. If you decide to participate, we will not mention your name to anyone. If you agree, we can also record this interview. If you decide to participate in this interview, we can speak in a space of your choice, but you might be seen speaking with me. Some people in the community, or third parties, may not agree. I would like to discuss what

measures we can take to address this risk, especially by choosing the appropriate moment and place for the interview.

Written template for verbal consent

Thank you for your interest in having an interview with me. Before we begin, I would like to make sure that you understand the objective of this research, which are the risks involved, and a couple of other matters.

To begin, I would like to explain one more time who I am [explain the name and affiliations of the investigator].

Second, the interview questions address the history and strategies of community management of the micro-hydroelectric project(s) with which it is involved, with particular attention to the civil society organizations supporting such projects.

Third, if you decide to participate in this interview, you may be seen speaking to the researcher. It may occur that some people of the community, or third parties, do not agree. I would like to discuss measures that address these risks, especially the choosing of an appropriate moment and time for the interview. Do you understand these risks, and do you consider that other risks exist that we should consider?

In the fourth place, this interview will take between 30 minutes and one and a half hour approximately. It is completely voluntary, which means that you can decline to participate now, or decide to end the interview at any moment. You may also decide to not answer questions you do not feel comfortable with. The information that we gather will be safely stored by the

researcher on a portable storage device protected with encryption and password. Upon return to Canada, the storage device will be stored in a locked office at the University of British Columbia. It is possible that the researcher may use the information for future projects and publications.

In the fifth place, we prefer to keep your name secret (confidential) for your own security. Do you agree to keep your name secret? [yes or no].

In the sixth place, I can just take written notes about this interview, or I can record our conversation. If I record the conversation, I can use a program to distort your voice, to ensure that it cannot be identified. What would you prefer? [written notes / audio record / distorted audio record].

Last but not least, this investigation is realized by a university that tries to ensure that no one is being harmed by this interview. If you are not satisfied or if you have worries about this research, you can communicate with our Research Participant Complaint Line at UBC's Office of Research Ethics. If you have an e-mail, you can write to RSIL@ors.ubc.ct, or you can call for free to the number #1-877-822-8598.

Considering all that I have said, do you have any additional questions? [yes, no].

Do you agree in giving this interview, or do you prefer not to? [yes, no].

Written record given to the participant

This note is to help you get in contact with us if you would like more information about the research about community ownership over micro-hidroelectric projects in Guatemala:

Philippe Le Billon, Principal Investigator Professor, Department of Geography University of British Columbia Vancouver, British Columbia, Canada Email: Phone:

Larissa Santos, Co-Investigator

Contact with the researchers:

Master's Student at the Department of Geography

University of British Columbia Vancouver, British Columbia, Canada

E-mail: Phone:

Contact with the university:

Appendix C: Interviews scripts²²

I. Expert interviews: Colectivo Madreselva

- 1. What is your position and for how long have you been working with Madreselva?
- a. For how long have you been working with alternative energy development in Guatemala?
- b. What are the projects that you follow more closely?
- 2. Tell me about how Colectivo Madreselva first engaged with community-based energy production.
 - a. How does this connect to the organization's mission and vision?
 - b. How does this connect to other programs of Madreselva?
- 3. Are there any other partner organizations collaborating with the small hydroelectric projects supported by Madreselva?
- 4. What are the main sources of funding for implementing the micro-hydroelectric projects supported by your organization?
 - a. How have you applied for it?
 - b. Did you face any difficulties in accessing the funding?
 - c. What is the role of the state in the funding dynamics that support these projects? Are they also funders/partners?

²² These scripts evolved and got adapted over time as the fieldwork progressed. Here I include the original scripts prepared before fieldwork.

- 5. Are there any specific requirements from the funders that impact the level of participation and ownership of the community members over the project?
- 6. What are the different roles Colectivo Madreselva plays to support communities in building and managing clean energy projects in Zona Reina?
- 7. What kind of support does Madreselva provide to the communities in the different phases of the building and implementation processes?
- 8. In your view, what are the main barriers faced by the communities to develop local ownership over the project in face of state and funders' requirements to build alternative energy futures?
- 9. What are the successes and failures of your organization in promoting the ownership of communities over clean energy projects in the department of Quiché?
- 10. How is Madreselva's relationship with local associations and cooperatives?
- 11. How do different micro-hydroelectric projects in the region connect to each other?
 - a. Are there any exchanges between the management teams of each project?
 - b. If so, what is the role of Madreselva in facilitating these exchanges?
- 12. Do you coordinate any regular encounters/ events/ meetings with these local organizations?
 - a. If so, how often do they happen?
 - b. What are their purposes?

- 13. In your opinion, how do the communities perceive Madreselva's role in facilitating or limiting their participation in the design and implementation of a micro-hydropower project?
- 14. How did the covid-19 pandemic affect the management and implementation of the microhydro projects?
- 15. Are there any other projects that got inspired by the initiatives Madreselva piloted in Zona Reina? How did this process happen?
- 16. What does 'community' mean to you?
- 17. In your view, what are the main barriers faced by the communities to actually own the project?

II. Interviews with community members engaged in the management of microhydroelectric projects

- 1. In what energy project(s) have you been involved?
- 2. When did you first start to contribute to this project?
- 3. What is your role within the association?
- 4. Could you describe the process of building a micro-hydroelectric dam in the community? How did this idea emerge?
- 5. What was the role of Colectivo Madreselva in establishing the micro-hydroelectric

- project where you work?
- a. What kind of support does Madreselva provide to your community in the different phases of the building and implementation processes?
- b. What are the pros and cons of working with Madreselva?
- c. Any problems arised throughout your collaboration around the project? If so, how these issues were resolved? If not, how they could be addressed?
- 6. Are there any other organizations that supported you to put the project together? How did this collaboration occur?
- 7. Were there any other projects that inspired your community to develop its own microhydro plant?
- 8. What is your relationship with other micro-hydroelectric projects in the region?
- 9. Are there any exchanges (encounters/ events/ meetings) between the management teams of each project?
 - a. If so, who organizes them?
 - b. How often do they happen?
 - c. What is their purpose?
- 10. Could you describe a normal day at work for you in the association/plant?
- 11. What are the main benefits of having a small hydroelectric dam supplying the community?
- 12. What are the main challenges to keep running this project autonomously?

- 13. What are the main sources of funding for implementing the micro-hydroelectric project where you work?
- 14. Are there any specific requirements from the funders that restrict the communities capacity to participate and make decisions about the project?
- 15. Who owns the project?
 - a. Do you feel like the community has a say regarding important decisions about the project?
 - b. How does this participation happens?
- 16. What does 'community' mean to you?
- 17. In your view, what are the main barriers faced by the communities to actually own the project?

III. Interviews with community members using the electricity services provided by the micro-hydroelectric plants

- 1. For how long have you been living in this village?
- 2. What is your occupation?
- 3. How many people live in your house?
- 4. Could you remember how was before the construction of the micro-hydro plant currently supplying your house? What has changed?

- 5. Have you followed the process of building the project? How did you participate in it?
- 6. Do you know anyone working in the plant/association?
- 7. Do you think that the service provided by the micro-hydroelectric plant is good and reliable?
- 8. Have you faced any problems like 'blackouts' or unexpected interruptions in the electricity provision since the hydro dam has been installed?
 - a. If so, how often does this happen?
 - b. How do you deal with this?
- 9. Do you think that the service provided by the micro-hydroelectric plant is affordable?
- 10. How often do you pay for the electric services that you use in your household?
- 11. Does the amount vary a lot from time to time?
- 12. What is the average amount your household pays for electricity?
- 13. What are the main benefits and problems of having a small hydroelectric dam supplying the community?
- 14. How do you think the project could be improved?
- 15. What does 'community' mean to you?
- 16. Do you think is necessary that the community participate in the management of electrical provision in your village?

IV. Interviews with community members who are not benefitted from community energy projects (non-associates) despite living in communities that count on this infrastructure.²³

- 1. What is your name, age, and the energy project that benefits/would benefit your home?
- 2. Do you have any religion?
- 3. Do you consider yourself part of any indigenous group (Quiche, Ixil, Q'eqchi)?
- 4. How long have you been living in this community?
- 5. What is your occupation? What do you do for a living?
- 6. How many people live in your household?

History

- 7. Do you remember what it was like before the construction of the micro power plant in your community? What has changed?
- 8. Did you accompany the construction process of the project?
- 9. What are the main benefits of having a small hydroelectric power plant in your community?
- 10. Why do you still not have access to electricity?

²³ This script emerged during fieldwork, as I was not expecting to find such a significant number of people that was not part of the community energy project as associates or users.

11. What are the main problems of this project in an autonomous way?

Service

- 12. Do you use electric power in other homes? How often?
- 13. Do you think the price your neighbours pay is fair for the quality of service they have access to?
- 14. How do you light your home? How much do you spend per month on that?
- 15. Do you believe that if a company offered the service, you would benefit?

Future and Community

- 16. What would you need to do to have light from the community light project?
- 17. How could the project be improved?
- 18. Do you think it is necessary for the community to participate in the management of the electricity supply?
- 19. What does the word community mean to you?