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Study of Student Community Movements Against the Development of a Geothermal Power Plant in Gunung Talang

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Abstract
This research aims to analyze the student community's resistance to developing geothermal power plants (in Indonesia, referred to as Pembangkit Listrik Tenaga Panas Bumi, abbreviated as PLTP), analyze movement patterns, and assess the resistance movement's challenges. This study used qualitative research methods. Data were collected by interview, observation, and document study. According to the study's findings, the rejection movement began with local media coverage of police officers' coercive tactics to secure the activities of corporations conducting preliminary research at the project site. The student community perceives PLTP development activities as environmental injustice, even though the projects are ostensibly environmentally friendly. Patterns of rejection movements are carried out in three ways: 1) Disseminating information; 2) Employing provocative tactics (delivering criticism of environmental injustice and police repression through performing arts such as theatre, murals, short monologues, and poetry readings); and 3) Mobilizing public support (through campaigns in public spaces and using social media, to campaign for the potential impact of PLTP development). The roots of rejection are typically minimal because there is no apparent conflict of interest between students and the PLTP development business (in contrast to the local community as the affected party).

Keywords: *social movement, resistance movement, geothermal power plant, development*
Paper type: *Research paper*

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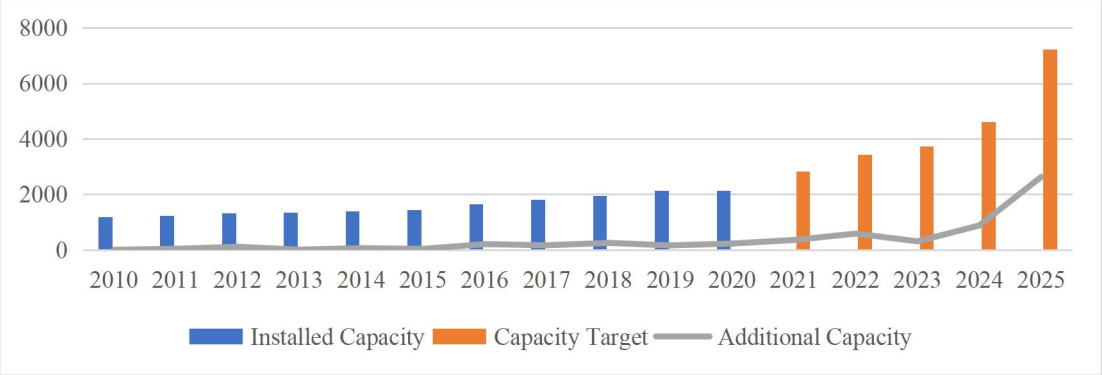
INTRODUCTION

Indonesia's government is committed to increasing renewable energy use and lowering carbon emissions. Geothermal energy is one of the renewable energy sources that the government is promoting to generate electrical energy to meet the renewable energy mix target. Geothermal energy development should be considered because: Indonesia has relatively large geothermal energy reserves; this energy is renewable, making it superior to fossil fuels; it is environmentally friendly (low CO2 emissions compared to fossil fuels), and this energy is relatively stable (in comparison to other renewable energies such as solar, wind, and wave energy) (DirjenEBTKE-KESDM 2020; Dowd et al. 2011; Dutu 2016; KementerianESDM 2018). This commitment is demonstrated by Indonesia's increased installed PLTP capacity from 2010 to 2020. The following graph illustrates the growth in PLTP installed capacity in Indonesia:

Diagram 1.

The Trend of Increasing Installed Capacity of Geothermal Power Plants in Indonesia



Source: (DirjenEBTKE-KESDM 2020, 2021, KementerianESDM 2018:55)

The diagram above depicts Indonesia's installed capacity of geothermal power plants in 2010 at 1.189MW, increase to 2.130,7MW by 2020, a 44 percent increase. The data from 2021 to 2025 represent targets for installing geothermal power plants. The government's commitment to achieving the PLTP development target is demonstrated by its accomplishments in 2018. Indonesia is the world's second-largest producer of geothermal energy, trailing only the Philippines. If the

Government of Indonesia meets its target of 3.729,5MW installed capacity by 2023, the planned installed capacity will reach 3.729,5MW. Indonesia overtook the United States as the world's largest producer of geothermal energy in that year, based on installed capacity (assuming no additional capacity in America) (DirjenEBTKE-KESDM 2020, 2021, Kementerian ESDM 2018).

Attempts to expand the use of geothermal energy for geothermal power plants in Indonesia have run into several roadblocks. Before 2014, there was a slight increase in installed capacity due to local governments' limited ability to promote geothermal development to developing companies, and the licensing process was not uniform. The licensing process's shift from decentralization to centralization has successfully attracted investors to grow geothermal power plants (Winters and Cawvey 2015). With the Regional Government's authority over geothermal management being transferred to the Central Government, this effort can be considered effective in increasing installed capacity, totaling 727.2MW from 2014 to 2020 (DirjenEBTKE-KESDM 2020; Dutu 2016).

The next obstacle to the development of the PLTP is opposition from various stakeholders. The public favors geothermal development over the use of fossil fuels (Dowd et al. 2011). However, geothermal energy support is typically insufficient compared to other forms of renewable energy (such as solar, wind, and wave) (Dowd et al. 2011; Popovski 2003). There is a tendency for rejection, particularly in the project site area (due to the project's impact on local communities) (Cataldi 1999; Setyawati 2021). In Indonesia, seven instances of geothermal development have been rejected by local communities (Adityatama et al. 2019). Among them is the growth of PLTP in Gunung Talang, Solok Regency, West Sumatra Province, Indonesia, the subject of this article's study. Numerous studies have demonstrated that local communities oppose PLTP development, including: 1) Local entrepreneurs who manage lodging and hot springs in Japan oppose PLTP development (Kubota et al. 2013; Shortall and Kharrazi 2017). 2) PLTP Baturraden, Indonesia, local communities oppose geothermal development (Hariyadi 2019). 3) Shifts in the local community's attitude, initially supportive, have resulted in a refusal to develop PLTP in Idamdehe Village, Halmahera Regency, Indonesia (Djumaty 2015). Local communities frequently reject extractive industry activities. The presence of energy extraction near their homes and places of business that harms their social, economic, environmental, and

cultural well-being is a reason to take action against them (Arevalo 2006, Djumaty 2015. Hariyadi 2019, Kubota et al. 2013).

However, what about other parties who object to the presence of a geothermal power plant development company but are not directly impacted by it? This research is directed at the student community, which opposes the development of the Gunung Talang PLTP Solok Regency, West Sumatra Province, Indonesia. Based on empirical evidence, they do not live in the vicinity of the geothermal power plant development site. They have never communicated with the government or development firms. They never witnessed the Police's repression firsthand. As stated in this paper, there is no direct conflict of interest between the student community and the PLTP development company. Santoso and Kusumasari conducted a similar study (2019). They researched the Aliansi Selamatkan Slamet (An environmental organization that promotes nature conservation in Gunung Slamet, Central Java, Indonesia) resistance movement during the development of the Baturraden PLTP in Indonesia. The Aliansi Selamatkan Slamet sparked debate and convinced others to join the movement. According to Santoso and Kusumasari (2019), the Aliansi Selamatkan Slamet raised awareness about the local community's resistance and organized a joint resistance movement. The student community did not attempt to raise awareness of the local community in this study, as there was already local opposition to developing geothermal power plants. The student community organized a protest against the Gunung Talang PLTP development plan with the local community.

In this paper, the student community is a third party not directly involved in the conflict. Their presence begins with witnessing the police's repressive actions while escorting representatives of development companies to the exploration point. This was perceived as an injustice during the development of PLTP, and they responded by waging a resistance campaign. Thus, to examine the pattern of movement chosen by the student community, Adam and Shiver's (2017) outsider tactics are relevant to this study. Adam and Shriver argue that outsider tactics typically employ extra-institutional methods (i.e., there is no direct negotiation between parties with conflicting interests), including the following: 1) disseminating information; 2) provocative tactics, such as holding a drama show

highlighting government policies and development company activities; 3) eliciting community support for not working with the company; 4) invading government-sponsored press conferences with the intent of disrupting the event. This strategy is used to garner public attention (Adams and Shriver 2017). Because the student community is not directly involved in the PLTP project in this study, outsider tactics are used to analyze the pattern of resistance movements.

According to empirical evidence, the student community believes that the development of PLTP in Gunung Talang violates environmental justice. This paper applies Wenz's (2007) concept of environmental justice to determine whether the government's environmental ideals are compatible with environmental justice. Before delving into this perspective, this paper will attempt to explain the reasons for the student community's rejection; analyze movement patterns; examine the resistance movement's challenges.

METHOD

Qualitative research methods effectively comprehend the perspectives of research subjects (Creswell 2007). Qualitative research methods are most appropriate for eliciting the fundamental arguments of the student community against the development of PLTP and for identifying patterns of resistance. In-depth interviews, observations, and document studies were used to collect data. In-depth interviews were conducted with members of the rejection movement in the student community. The student community can be located by searching on social media platforms. This search began with information provided by the Solok Regency Government (the One Stop Service Investment Office) in conjunction with the application for a research permit. According to the district government representative, the campaign against the development of PLTP in Gunung Talang also took place online. According to information obtained by a representative of the Solok Regency Government, a social media movement called "#savegunungtalang" was circulating. Then, using the Google search engine, we looked for accounts that expressed rejection. The search results indicate that social media accounts, namely @talangmelawan, consistently inform the rejection movement on the social media platforms Twitter, Instagram, and Youtube. To connect with this student community, use the Direct Message menu to contact the @talangmelawan account manager. Following approval, an interview with the

account manager was conducted. They are a group of students who actively participate in resistance movements, either in person or online. This study used a snowball mechanism to locate informants.

Observations were made to see the activity of the rejection movement. Some of the student community activities observed were: when the student community visited local communities at the offices of Non-Governmental Organizations (NGOs) who helped advocate for their struggles. From observations, it appears that there is engagement between the student community and the local community. Since the research process started in early 2020, it has been challenging to observe past activities. For this reason, studying the documentation of student community activities in the form of photos and videos is very helpful. By looking at pictures and videos of student movement activities, it provides an overview of the efforts of the resistance movement.

Document studies are conducted by collecting and analyzing related documents, such as: 1) Various studies on the rejection of PLTP development; 2) Documents on the development of PLTP in Gunung Talang (the subject of this study); 3) Documents stored by the student community in voicing their opposition to the Gunung Talang PLTP development; and 4) Social media uploads used by the student community to promote the resistance movement. Two social media platforms were used to collect social media uploads: Instagram and YouTube, both owned by the @talangmelawan account. The data collection period for the account upload is between 2018 and 2020. (in 2019 the rejection movement began to subside). The decision to use this platform is based on Saputra's (2019:209) research on social media use among students in Padang City, West Sumatra Province, Indonesia. Students primarily use three major social media platforms: Whatsapp, Instagram, and Youtube. Although the study was limited to the city of Padang, the findings are representative of the student community's use of social media accounts. The Whatsapp platform was omitted from the study due to its being private and ineffective at disseminating information about resistance movements.

The use of information in social media for research on grassroots movements has been carried out by Zhou and Pan (2017). Zhou and Pan (2017)

conducted a study in which they analyzed the posts of 155 NGO accounts on the Chinese Weibo Platform to uncover information, dialogue, and promotions expressed by NGOs. In this study of the student community's opposition to the development of geothermal power plants, the student community's social media uploads were analyzed as part of a discussion about the pattern of rejection movements they used.

The data analysis process was carried out using the NVivo platform. Importation of interview data, observations, and documents into the NVivo platform. The data was then codified according to time and context to determine the rejection movement's start and identify the rejection movement's pattern. The following process is data interpretation to ascertain the basis for student groups' arguments against the development of PLTP, identify patterns of resistance through the use of mind maps, and identify obstacles in the rejection movement.

RESULTS AND DISCUSSION

A Brief History of Geothermal Energy Utilization in Indonesia and PLTP Gunung Talang

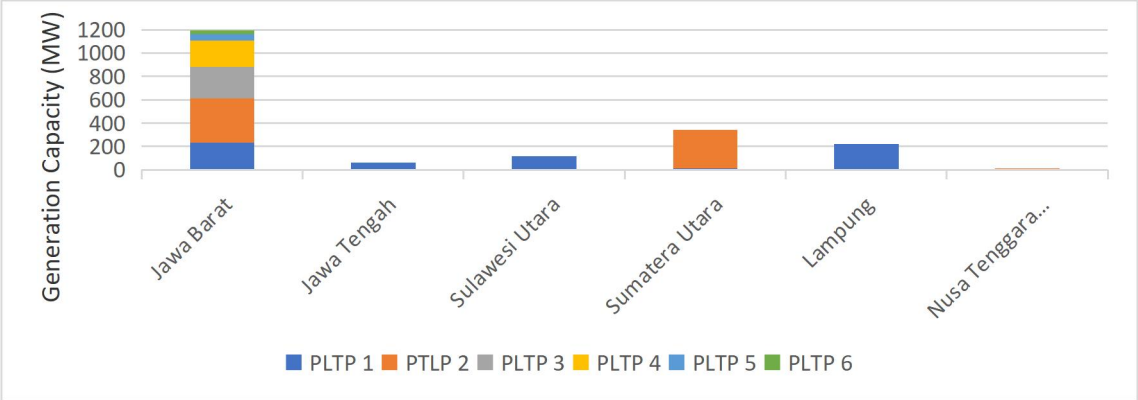
The idea of utilizing geothermal energy in Indonesia had existed long before Indonesia's independence (when the Dutch colonized Indonesia). At that time (in 1918), Van Dijk proposed developing geothermal energy in the Kamojang area (administratively located in West Java Province, Indonesia). However, the idea did not immediately receive a response from the Government. The first exploratory drilling was carried out only eight years later. In 1926 exploratory drilling succeeded in producing steam. Then geothermal exploration was also carried out in 1928 but has not found an energy source. The study of geothermal resources was carried out again after Indonesia's independence. In 1964 and 1968, the Indonesian Government received assistance from UNESCO and France to increase the use of geothermal energy. Then in 1969, the Indonesian Government supported geothermal exploration activities. The support was for its exploration activities in 1970-1972, which the Geothermal Power Research Institute carried out, and the Indonesian Survey (Hadimuljono, Kurniawan, and Rahardjo 2018:23–25; Nasruddin et al. 2016:737). In 1978, the first power plant was constructed in Indonesia, administratively located in Kamojang, West Java. Then this PLTP operated in February 1983, with an installed capacity of 30MW.

The additional power of the Kamojang PLTP continues to be increased so that in 2008 there were IV units developed, which so far produce up to 200MW of electrical energy (Al Hakim 2020:4; Nasruddin et al. 2016:738).

Based on 2018 data, 13 Geothermal Working Area locations spread throughout Indonesia, which have produced electricity with a total installed capacity of 1,948.5MW (DEN 2019:104). Based on this data, if classified by geothermal producing areas based on regencies/cities in Indonesia, six regencies/cities have produced geothermal energy (managed by 13 PLTP development companies), see the following figure:

Diagram 2.

Installed Capacity of Geothermal Power Plants by District in Indonesia



Source: (DEN 2019:103–4)

Diagram 2, West Java Province in Indonesia's most extensive geothermal producing area, with 6 PLTP locations managed by companies (State-Owned and Private Enterprises). Furthermore, North Sumatra Province 2 PLTP locations. Lampung, North Sulawesi, and Central Java each have 1 PLTP area. And East Nusa Tenggara has two PLTPs, but with the lowest installed capacity, the development of which is carried out by the National Electricity Company (DEN 2019:103). To increase the installed capacity of PLTP, the Government of Indonesia already has data on 65 Geothermal Working Areas, one of which is in Mount Talang, Solok Regency, West Sumatra Province, Indonesia (KementerianESDM 2018:58).

The location of the Gunung Talang Geothermal Working Area is estimated to have a potential of 20MW, has been auctioned by the Central Government to investors for its development. A consortium of Turkish companies won the auction. The geothermal development process in Indonesia opens up opportunities for investors (such as State-Owned Enterprises, Private Companies from within and outside the country). Although the management is open to the private sector, state control remains strong; this can be seen in the monopoly policy of purchasing electricity by the State Electricity Company (PLN) (Setiawan 2012:14; Winters and Cawvey 2015:32). In the case of PLTP development in Gunung Talang, the Company began to carry out socialization activities and geoscience studies to find the location of the geothermal reservoir. However, the Company's presence was rejected by the local community. Demonstrations to local governments, and blockades of access to WKP locations, were carried out to show refusal by local communities (discussed in another article). There was vandalism and an attempt to burn a car belonging to the company survey team during the blockade. The clashes led to the arrest of 3 suspects and the stipulation of 9 people on the Wanted person List (in Indonesian, it is called the Daftar Pencarian Orang, abbreviated as DPO). Four months later, the Company resumed geoscience studies, accompanied by police officers. At that time, the local community blocked access to the exploration site, and clashes were unavoidable. Then, the rejection by the local community became the spotlight of the local media, and this is where the student community started to know about the issue of geothermal development in Gunung Talang.

The Emergence of the Movement to Reject the Development of Geothermal Power Plants by the Student Community

The presence of the student community in the movement against the development of PLTP emerged after clashes occurred at the exploration location points. Local media coverage of the conflicts raised the awareness of one of the students (as an agent who encouraged the formation of social movements by the student community) that there had been repressive actions by the Police against the local community. An agent who promotes the construction of a student community is a student studying at a university in Padang, West Sumatra. This student has served as President of the Student Executive Board (Badan Eksekutif

Mahasiswa or abbreviated BEM is a student organization on campus) and has a network with the Minangkabau Raya Student Circle Alliance (abbreviated as Aliansi Limamira). With the network owned by the Lamamira Alliance, the student contacted BEM from several campuses in West Sumatra. After successfully gathering students from various universities in Padang City, West Sumatra Province, held a dialogue about geothermal development at Mount Talang. The issues discussed were about reporting on geothermal development and clashes between the community and the Police. During the discussion, an agreement was made that student representatives would visit the location to find out what was happening to the local community in the hope of helping the local community. However, the discussion did not reveal what action plans the students would take. The students (as agents) decided to visit the location of the PLTP development plan.

The student said that when they first came to the location, local people were cautious about new people in their area. Confirming that he was a student, the local community asked him to show a student ID card. The local community's caution is reasonable because, after the clashes, nine local people were on the wanted list, and the presence of these students was suspected of making arrests of their colleagues. After the student succeeded in convincing the local community, a dialogue ensued between the two parties. Local people share their experiences of struggling to resist, reasons for refusal by local communities and showing the damage to property of a local community member during the arrest of their family member (who is suspected of being involved in vandalizing and burning a company car). For local people, vandalism and the burning of company cars are events that are out of control. According to the local community, the Company was asked to wait for an agreement at the local level. For local communities, the PLTP development plan requires local community involvement, transparency of impact information. They have the right to decide for themselves to accept, accept with conditions, or reject the project's presence (following the principle of Free Prior and Informed Consent, which has been recognized at the global level (Dunlap 2017)). At the end of the dialogue between the students and the local

community, the student stated that he was trying to help the local community's struggle by participating in voicing their aspirations.

However, the student returned to Padang City, writing about his experience meeting with the local community. The student returned to the city of Padang, which is where the campus is located. To visit local communities, they travel ± 75 km (BPS-Kab.Solok 2019). Field findings met with the local community, then uploaded to social media accounts. In addition, discussions were held on meeting with student communities, with various parties (such as students who are members of the BEM organization and students who are members of the arts community). In this discussion, the student community's movement against the development of geothermal power plants began to be active. The parties who consistently join this movement are students who initiated the movement, students of the arts community, and other students as individuals who are interested in joining the aspirations of rejection. The process from the agent to the PLTP rejection movement can be seen in below:

Tabel 1.

The process from agent to Student Community Movement

Local Media News	Agent	Student Community	Visiting and Dialogue with Local Communities	Trust Between the Local Community and the Undergraduate Student Community	Student Community Engagement	**A Movement Against the Development of Geothermal Power Plants**

Source: Research Findings

After establishing trust between the student community and the local community, regular visits to the planned location of the Gunung Talang PLTP development were carried out by the student community. Holidays tend to be used by the student community visiting the local community. The student community carried out various activities at the Gunung Talang PLTP development location, such as sharing experiences and conducting educational activities regarding geothermal development (Obtained from literature searches, discussions with engineering students, NGOs advocating for local communities).

The results show that the student community paradigm sees the development of PLTP, which can impact "borne" by the local community. This paradigm departs from the idea that every activity, no matter how small, has an

impact. The potential impacts of PLTP development highlighted by the student community, such as 1) The existence of PLTP development can reduce agricultural land managed by local communities (has implications on the economy such as lowering income). 2) The idea of developing PLTP to create jobs was criticised by the student community. According to them, limited local human resources, access to jobs that require skills for the PLTP development sector. 3) Environmental impacts include utilising forest areas that have become buffer zones to maintain water availability. 4) Physical changes with the existence of pipelines near settlements and fields belonging to local communities. 5) Potential failure of PLTP development, which seems to be ruled out. The student community believes that the Government and Development Companies only focus on positive impacts. The student community has a paradigm that the effort to provide electrical energy that is claimed to be environmentally friendly creates a "high cost" that must be borne by the local community (environmentalism causes environmental injustice).

Patterns of Rejection Movement

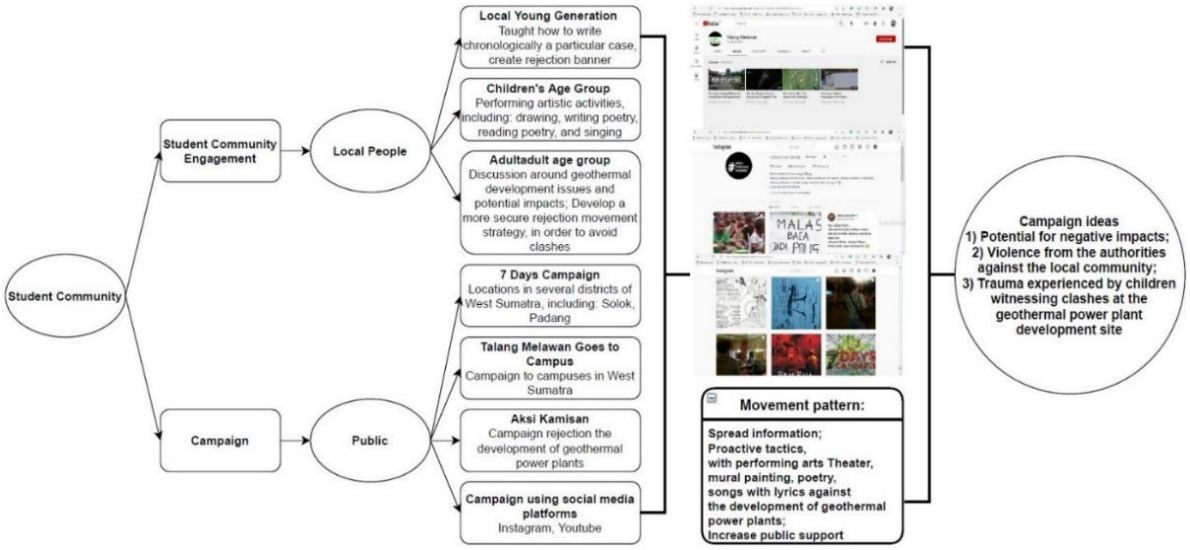
Before discussing patterns of a resistance movement by the student community, it is better to discuss the activities they carry out with the local community—these activities, published in the campaign of the resistance movement. When the student community visits the local community, several activities are carried out, such as: First, Activities with young age groups (High School and College Students), the student community teaches them how to write a chronology of events. The purpose of teaching is to write a chronology to document through detailed notes about unexpected events experienced by local people (such as the Company forcing its way into the location of an accident). Then the young age group and the student community made banners voicing the rejection of PLTP development. The banner is installed at the location of the PLTP development plan. Second is activities with children's age groups (those not yet in school and elementary school). The student community held trauma healing activities. The student community had trauma healing activities. Based on the findings of the student community that there were children who were traumatized

when they witnessed the clashes. These trauma healing activities include: drawing, writing poetry, reading poetry, telling stories, singing.

Interestingly, based on field observations, the children's age group was taught the song "Talang Melawan" (a piece made by the student community, which voiced their rejection of the development of the Gunung Talang PLTP). When confirmed to a group of children, the research findings showed that they understood the song's lyrics "Talang Melawan" which contained a message of refusal to build a geothermal power plant. Third, activities with adult age groups, in the form of discussions. The issues discussed were related to PLTP development, potential impacts (learning from cases in other areas affected by PLTP development), and discussions around safe refusal strategies (avoiding repeated clashes). If we use the framework of outsider tactics proposed by Adams & Shriver (2017), the student community uses the tactics of disseminating information to local communities. The most apparent information dissemination occurred in making banners, teaching children and youth the song "Talang Melawan," and dialogue about PLTP development with adult age groups.

Movement patterns tend to vary when campaigning against PLTP development to the public (spreading information, provocative tactics, and gathering support). The ideas presented by the student community in the movement against the development of PLTP are: 1) The potential negative impact of company activities on the local community; 2) There have been acts of violence by the Police against local communities; 3) Trauma experienced by children during clashes. The student community spread this idea through campaign activities. There are direct campaign activities (campaigns in public spaces) such as the 7 Days Campaign; the drive to campuses in West Sumatra, known as "Talang Melawan Goes to Campus"; the campaign every Thursday, also known as "Aksi Kamisan." A series of student community activities with local communities and campaign activities in public spaces was disseminated using the social media platforms Instagram and Youtube. Figure 1. makes it easier to understand the patterns of student community movements.

Figure 1.
Patterns of Student Community Movements Reject the Development of Geothermal Power Plants



Source: Research Findings

The student community carries out the pattern of disseminating information, both during direct campaigns (in public spaces) and campaigns on social media. In public areas, they distribute leaflets containing information about geothermal power plants in Gunung Talang and criticisms about the development. The flyers were also uploaded on social media accounts. There are five pieces of information contained in the leaflet: 1) Information about the developer company that won the auction for the Gunung Talang WKP, Solok Regency, and the permits that the developer has obtained; 2) Unbalanced information regarding the impact of PLTP development during the socialization process; 3) Criticisms surrounding the development of PLTP tend to be enjoyed in urban areas (the electricity needs of urban communities tend to be significant), and the achievement of the energy mix target planned by the Government. But on the other hand, the interests of local communities are "sacrificed"; 4) Violence suffered by local people who voice their aspirations to reject the development of PLTP; 5) Several cases of PLTP development, which were assessed by the student community as having an impact on local communities, such as a) Subsidence and

damage to geysers occurred in New Zealand; b) The emergence of arsenic substances, barons in Turkey; c) The case of an earthquake due to the injection process in Switzerland; d) Explosion of dug wells in NTT; e) The hot mudflow tends to be close to local community settlements in South Sulawesi; f) Water pollution in PLTP Baturraden. This article proves that the student community is serious about collecting information from various studies, discussions with NGOs, and media news. So that is the primary argument for the rejection of environmental injustice in developing geothermal power plants.

The pattern of provocative tactics is also carried out during live campaigns and social media uploads. The subversive tactics carried out by the student community convey criticism by performing arts, such as theatrics, mural paintings, short monologues, poetry readings, musical performances. Performing arts most easily attract attention if it is held in a public space. The idea of refusal is also easily conveyed to the audience who attended the show. Some of the narratives expressed in the mural painting are as follows: " We are Farmers, Our Land is Running Out, We Die " (meaning: if farmers lose their agricultural land, they die); "Stop the Intimidation, we condemn bullying" (meaning: the student community condemns the act of intimidating the local community); "Take care of our land," and others. Performing arts tend to contain information on environmental injustices in the development of PTLP Gunung Talang. The target of this provocative tactic is to spread knowledge and garner public support. For disseminating information on the resistance movement, the pattern used by the student community tends to be successful. Campaigns on social media using the hashtag Save Gunung Talang (#savegunungtalang) can echo issues at the local level, becoming national media coverage (Pebrianto 2018). It should be remembered that efforts to raise the problems to become national media coverage are not carried out by the student community alone. It results from the cooperation of various parties, such as NGOs as advocates for local people's aspirations, local communities, participating public, and the student community itself.

Challenges of the PLTP Rejection Movement by the Student Community

This student community movement is vulnerable to stopping halfway. The challenge external to the student community is that if the local community stops the resistance movement, their movement will automatically stop. This condition

can occur when the PLTP development company improves relations with local communities initially in conflict but improved into partnerships. These efforts can be carried out if there is a guarantee of security and apparent mitigation efforts. The Company's presence is seen as a partner, not as a party that will hinder local people's access to natural resources. If this happens, the PLTP development company gets a social license, and exploration, exploitation, and production of electrical energy can run.

The challenge of the rejection movement comes from the internal student community. Time constraints, maintaining consistency of involvement in the movement, and the diversity of interests of each individual in the student community, are challenges for the student movement. Research findings prove that individuals in the student community are not active in the rejection movement after graduating and getting a job. Students are actively involved in the resistance movement, namely: those who are still in college and students who dedicate themselves to joining NGOs that help advocate the aspirations of civil society.

Environmentalism Practices for PLTP Development in Line with Environmental Justice

Environmentalism's practice is occasionally viewed as incompatible with environmental justice ideals. As demonstrated in this study, the government's efforts to accelerate geothermal energy development are an example of environmental activism (reducing the use of fossil energy by increasing the supply of electricity from renewable energy sources). This practice is frequently viewed as incompatible with environmental justice. Among the criticisms leveled at environmental injustice are: 1) Geothermal development in forest areas is often criticized (Kubota et al. 2013:1081). At the same time, the Indonesian government has approved the use of geothermal energy, which is typically located in forest areas, because geothermal energy production is significantly less destructive than fossil energy mining (Winters and Cawvey 2015:39). Criticisms continue to be leveled, including the following: 1) The forest serves as a catchment area, ensuring water availability to the communities that surround it; 2) The geothermal reservoir is located on land owned by indigenous people (who work as farmers).

Thus, development is accomplished by "sacrificing" the agricultural land of indigenous peoples (local communities have the potential to be relocated). This circumstance gave birth to the concept of environmental injustice. If we borrow from Wenz (2007), there is no inherent conflict between environmental goals and environmental justice. Generally, conflicts exist between worthy ends, and there are instances of actual conflict between environmentalism and environmental justice in practice (Wenz 2007). If we use Wenz's (2007) argument, we must exercise caution in asserting that PLTP development is incompatible with environmental justice.

Environmental justice was initially associated with racial marginalization and did not receive equal treatment under environmental law. Environmental justice emerged in the 1980s due to the rejection of toxic facility placement on black ethnic minorities in the United States (Bell 2011). Environmental justice encompasses issues ranging from racial inequality to class inequality. Wenz (2007) emphasizes refuting claims that environmental policies exacerbate inequality between the rich and poor. As part of the fight against global warming, America imposes high taxes on petroleum and natural gas fuels. If not accompanied by alternatives to reduce reliance on these fuels, this policy harms the poor and low-income. To achieve environmental justice, environmentalists advocate for efficient transportation and prioritize assistance to the poor (highlighting the poor who move from their homes in sub-urban areas to work, and vice versa). Thus, efficient, environmentally friendly, easily accessible, and relatively inexpensive public transportation is a form of environmental justice (Wenz 2007).

However, is environmental justice possible in the development of geothermal power plants in farmer-managed areas? Suppose the environmental justice framework proposed by Wenz (2007) is followed. In that case, mitigation efforts should ideally be accompanied by economic compensation and compensation for land acquisition consistent with the principle of justice, thereby ensuring a higher standard of living for affected local communities (Arevalo 2006:6). Here, PLTP development firms are confronted with the challenge of demonstrating the value of their presence in the midst of local communities (Cataldi 1999). As a result, the development company's presence is viewed as a partner rather than a competitor in using natural resources by the local community.

If this occurs, there will be no criticism from parties not in direct contact with the development company (in this article the student community).

CONCLUSION

The movement to reject the development of the Gunung Talang PLTP by the student community started from the absence of a social contract between the Company and the local community. The surveillance of company activities by the police indicates the Company's weak ability to build partnerships with local communities. The student community participates in the movement, the problem is not how the issue spreads from the local level to the national level. However, it lies in the method used by the Corporate to convince local communities (as project-affected parties) that PLTP development activities are in line with the principles of environmental justice. Suppose the local community's interests conflict with the corporate. In that case, exploration is carried out on agricultural land owned by farmers, and it is demanded that the developer company's ability to provide fair compensation is required. Companies must give balanced information and have alternative solutions with fair principles. Affected communities get a minimum compensation balanced with their previously owned assets, or their lives will be better than before. This effort is risky for the Company's finances but is comparable to the social license obtained, considering the long period of geothermal development in Indonesia (±30 years the Company and the community establish partnership relationships). As the party with authority to manage geothermal energy, the government is expected to solve problems surrounding the construction of geothermal power plants. The pace of news coverage and campaigning against social media is hard to contain. If the focus is to stop the spread of the resistance movement, it will be less effective. Focusing on solving the roots of resistance is much more effective. For example, it is difficult for companies to obtain social licenses from local communities because they are worried that there will be allegations of pollution occurring in PLTP development in other locations in Indonesia. The government provides scientific studies to find the alleged corruption. The results of the survey are informed to the public (there is the transparency of information). If there is negligence on the

Company's part, the Company is obliged to overcome the pollution problem. This effort requires the government and companies' seriousness to maintain the local community's trust and affects the public judgment. If the Company's performance is good and the government conducts supervision by applying the principle of justice. The local community and other parties (in this study, the student community) will know perspectives on PLTP development upholding environmental justice.

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