Indonesia. The Gloomy Truth Behind Geothermal Energy: A misleading Narrative of “Clean Energy”

“If our land, water sources, air and livelihoods are being destroyed by geothermal exploration and exploitation, how can this energy be called “clean”? “Clean” for whom?” Despite the heavy violence and criminalization towards those resisting the destruction of their territory in Indonesia, their struggle is now getting bigger and stronger.

Geothermal energy is seen as one of the potential energy sources claimed to provide “clean energy.” **In May 2015, Indonesia’s President Joko Widodo launched a development project to generate 35,000-megawatts, which included geothermal power plants**. The project was to be completed during his first presidential period (2014 – 2019). Many parties considered this too ambitious and unreasonable because under the previous regime only 10,000 megawatts of power plants were set up in two terms of presidency. However, the president argued that infrastructure development nowadays, especially in electricity, is needed to support the achievement of Indonesia's economic growth target of 6 to 7% per year.

The World Bank introduced the use of Public Private Partnerships (PPP) in the country several years ago, which opened access for the private sector to build energy infrastructure through concessions and auctions. **PPPs also ensure that the private sector (both domestic and multi-national corporations) get a large portion of the energy generated** in comparison to the public sector, and facilitate companies to get involved. To date, the National Electricity Company has undersigned Power Purchase Agreements for 25 years with 53 independent power producers, to establish around 22,000 megawatts or 74% of the total project.

To ensure that this runs without difficulties, the government included it as part of the 2017 National Strategic Project Based on Presidential Regulation no.58, on the amendment to Presidential Regulation no.3 of 2016 on the Acceleration of Implementation of National Strategic Projects. Investors benefit from this decision in various ways, such as facilitating the processing of **obtaining permits**, obtaining **security guarantees** and **safeguards** by the state's civil and military apparatus and **access to exploration and exploitation in Protected Forest areas**, including the moratorium area.

Today, one of the areas affected by the “service to investors" is Nagari Batu Bajanjang, located in Lembang Jaya Subdistrict, Solok Regency, West Sumatra Province.

Geothermal Shock

Below the Earth's crust, there is a layer of hot and molten rock, called magma. Heat is continually produced in this layer, mostly from the decay of naturally radioactive materials such as uranium and potassium. The areas with the highest underground temperatures are in regions with active or geologically young volcanoes.
The presence of heat sources, abundant precipitation, and the occurrence of volcanic rock as cap rocks and reservoir in Sumatra makes it a target for geothermal energy development.

Lembang Jaya Subdistrict, Solok Regency, is comprised of Six *nagari* (villages); Batu Bajanjang Nagari, Koto Anau Nagari, Batu Many Nagari, Nagari Bukik Sileh Salayo Tanang, Koto Laweh Nagari and Nagari Limau Lunggo. **These *nagari* or villages are on the mountainside of Mount Talang, one of the active volcanoes in West Sumatra**, about 70 km. east of Padang, the capital of West Sumatra Province. 87% of the inhabitants of Batu Bajanjang subsist as farmers, with a cultivated land area of 11,793 hectares. The main agricultural products grown are rice, shallots, potatoes, cabbage, tomatoes, sweet potatoes and carrots. In 2018, their rice production reached 32,001.9 tons, which led the governor of west Sumatra to proclaim **this region as one of the rice barns crucial to meeting regional food needs**.

The Mount Talang area has been established as a protected area because of its important function for water catchment. This means that no permit can be issued there, but the geothermal law provides an **exception for geothermal** exploration and exploitation.
In mid-2017, the Ministry of Energy and Mineral Resources, through the Investment Coordinating Board, issued a permit for geothermal exploration and exploitation in the Lembang Jaya sub-district to a consortium of foreign and domestic companies. The concession is for an area of **27,000 hectares, which includes community-owned land, rice fields, and farms**. The exploration and exploitation period will run for 37 years and might be extended as long as potential geothermal energy can be extracted. The permit was issued to the Turkish consortium PT Hitay Power Energy and PT Dyfco Energi, which defeated the state-owned enterprise PT Pertamina Geothermal Energy.

The permit, however, was issued **without a proper process of consultation** with affected communities. **This triggered protests from the communities**. As it is generally known, before getting permission for a concession, a company is required to obtain environmental permits and present comprehensive information to the public about the possible environmental impacts and damage while providing an opportunity for the affected communities to express their collective decision, without any pressure or coercion, something that is known as the principle of Free, Prior and Informed Consent. However, the facts in the field indicated that **the socialization process was in reality forcing communities to approve this geothermal project by arguing that this was a part of a "National Strategic Project"**.

Recently, it was revealed, maybe surprisingly, that before the geothermal permit was issued, **the central government**, through the Ministry of Energy and Mineral Resources, **unilaterally designated the Mount Talang** (or *Gunung Talang*) and Bukit Kili areas **as geothermal concessions**, which would be offered to investors through an auction process. Hearing about this information was a peak moment where the communities felt betrayed by the government: How could the government give away an area of 27,000 hectares which intersected directly with their living space, without hearing their opinions and obtaining consent? Communities felt treated only as an object of development and not a subject in which their concerns are supposed to be noted and taken into consideration. **This situation then sparked further resistance from the communities**, demanding that the government restore their rights to a healthy and clean environment.

Against a misleading narrative of "clean" energy

Resident Y, an onion farmer who lives and tills around the mountainside of Mount Talang, never expected to have to deal with the police and court trials. Y is one of 13 residents who are **criminalized for opposing the construction of the geothermal power plant labeled a "National Strategic Project"**. In reality though, instead of committing criminal acts, what he does is freeing the people from the limited information they receive. He is a key actor in the **Mount Talang Lovers Community Association, an organization established to resist the suppression of people and**

territories in the name of development.

Proclaimed as “green energy” and “clean energy,” geothermal energy is seen as an unavoidable choice in the struggles against destructive energy sources. **This narrative of geothermal energy as "clean" and "necessary" facilitates the stigmatizing of communities who protest against this project**. They are considered to be an opposition to a global movement trying to explore “cleaner” and “greener” sources of energy. However, communities in Mount Talang basically demand and question simple things: “If our environment (land, water sources, air and livelihoods) is being destroyed and polluted by geothermal exploration and exploitation, **how can this energy be called “clean”? “Clean” for whom?** And why are we not being heard at all in this process?”

The question they raise is grounded on solid argumentations. **Throughout the whole process of geothermal energy development in Indonesia, many villages have been feeling a direct environmental impact**. In Mataloko, East Nusa Tenggara, hot water mixed with mud flooded their fields. Initially the problem was confined to small well-like holes, but after six months these had enlarged multiple times. This condition caused declining of crop yields, minor earthquakes, and even sulfur bursts. Similar conditions have also been reported in Slamet, Central Java, Lebong Bengkulu, Sarula North Sumatra, Lahedong, and Kerta Sari.

This further strengthens the community's will to fight the oppression and imposition of this project which threatens to cause significant harm to their livelihoods. They did everything to maintain their living space. **From building guard posts and public kitchens around the company's concession area to consistently refusing companies to enter and build factories because of the difficulty of revoking the permit of an established company**. This advocacy works triggered local government and companies responding with pressure. The company utilized police and military facilities to break through community barricades. **The military was ordered to conduct war training in the area, even though the community protests were peaceful**. On at least three occasions in 2018, people were heavily injured while communities and police clashed. A woman brought her 12-year-old son to take part in the road blockade. Her reason was simple, she wanted her child to witness and learn about this struggle over land rights so that the water, air and the environment would not be polluted and privatized by this project.

Subsequently, **three people have been imprisoned on charges of provocation against the geothermal project**. They were sentenced to three years and six months. This has not made the community back down; on the contrary, they were even more energized. Now, **the community is preparing a lawsuit** against the Ministry of Energy and Mineral Resources which unilaterally designated their villages and land as geothermal working areas. **Their struggle is now getting bigger and stronger**.

Wendra Rona Putra, lbhpadang@gmail.com
Director of LBH Padang (Pandang Legal Aid)