



Les Amis
de la Terre
France

GREENPEACE

BANKTRACK

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Subject: Request to withdraw from the expansion project of Tanjung Jati B coal-fired power plant in Indonesia

We write to you as a group of civil society organizations about your institution's participation in the project to expand the Tanjung Jati B coal-fired power plant in Jepara, Central Java, Indonesia (hereinafter "TJB2 project"). Société Générale, along with Crédit Agricole, were reported in January 2016 to have joined the lending group,¹ following the withdrawal of BNP Paribas.

TJB2 project comprises the building of Units 5 and 6, 1,000MW each using ultra-supercritical technology, adjacent to the existing Unit 1 to 4 which have a combined capacity of 2,640MW. Sponsors of the project are Sumitomo Corporation, KEPCO, and PT United Tractor, which is a distributor of heavy machinery and the mining unit of the largest conglomerate in Indonesia, Astra Group. A power purchase agreement with the state utility company PLN for the duration of 25 years has been secured.

The Tanjung Jati B expansion project is expected to be completed in 2019 while the financing is targeted for completion within six months. The project cost is estimated at US\$4bn, mainly funded by project finance (US\$3bn).

There are a number of high risks involved in this project. First and foremost is the threat posed to the climate because of the added greenhouse gas emissions the plant will produce. Then there is the damage it will cause to the health and livelihoods of local people. Last and not least is the risk involved in financing an asset that would be stranded when it is forced to retire early or be run at a low capacity.

Energy security for the people of Indonesia would be better addressed by investing in the strong geothermal potential in the country, rather than in new coal plants designed to provide a market and secure demand for the national coal mining industry. The project faces strong local opposition and has united global civil society organizations in our common fight for climate justice. These issues are summarized in the annex.

¹ The syndicate of banks is composed of BTMU, Mizuho Bank, SMBC (financial adviser) and Sumitomo Trust, Crédit Agricole and Société Générale.

We hope that, as a major global financial institution, Société Générale will refuse to play a role in financing this damaging project. The expansion in coal use is inconsistent with the Paris Agreement and the agreed international objective of “holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels”².

In 2015, Société Générale announced its decision to end its financing of coal-fired power plants in high-income level countries³, and its support to all coal mine projects and to companies specialized in this area, because of its concerns about climate change. These decisions were welcomed as important first steps towards the end of the bank’s support for coal. But they are insufficient in the face of the urgency of climate change.

We believe that directly supporting the building of this new coal capacity, which will lock in a carbon-based infrastructure for many years to come whatever the technology of the plant, will discredit your institution’s stated position on climate change.

If you wish to send a clear signal that Société Générale is engaged in the global energy transition, Société Générale should extend the scope of its recent policy on coal power plants, and announce that there will be no financing of any new coal-fired power plant anywhere in the world, and start by immediately withdrawing from Tanjung Jati B.

These decisions would not only be welcome globally, they would put Société Générale in a good position to phase-out any support to companies engaged in coal in the coming years. These decisions would also maintain the bank’s position as a champion in the global fight against climate change.

We want to remind you that Natixis has already committed to finance no new coal plants around the world, and that BNP Paribas chose to withdraw from the Tanjung Jati B project. It is now time for Société Générale to follow these two banks by issuing a public **statement stating its withdrawal from the lending group for the Tanjung Jati B coal expansion project and the end of its coal project finance.**

As a global network of non-governmental organizations (NGOs) which are focused on preventing the development of new coal mines and power plants, we will be closely monitoring Société Générale’s position on these issues in the coming months, and will react accordingly.

Yours sincerely

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² Statement by leading climate and energy scientists, New unabated coal is not compatible with keeping global warming below 2°C, <http://www.europeanclimate.org/documents/nocoal2c.pdf>.

³ According to the World Bank classifications.

ANNEX

THE RISKS OF TANJUNG JATI B COAL EXPANSION PROJECT

CLIMATE RISKS

At global level

The Tanjung Jati B coal expansion project is highly inconsistent with the Paris Agreement and the agreed international objective of “holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels”⁴.

A report published in December 2015 by Climate Action Tracker showed that “ **even with no new construction, emissions from coal-fired power generation in 2030 would still be 150% higher than what is consistent with scenarios limiting warming to below 2°C above pre-industrial levels (middle of the range). If the planned new coal capacity [2440 planned coal plant, equaling 1428GW] – estimated by the Global Coal Plant Tracker – were to be built, it would exceed the required levels by 400%**⁵

Despite growing rapidly, retirement of coal plant does not go fast enough to offset new plants, as demonstrated in the new report published by Greenpeace, Sierra Club and CoalSwarm.

In addition to speed up the retirement process of coal plants, the safest and easiest measure to prevent runaway climate change is to stop planning new plants and cancel any announced and pre-permitted coal-fired power plants, including the TJB2 project.

It is noteworthy to mention that the use of the best available technology - the two new units at TJB2 would be supercritical, while units 1 to 4 are subcritical – do not make coal more consistent with the climate target. A recent OECD report stated that **even the most advanced (and costly) coal-fired power plants are not going to be consistent with a 2 degree goal unless they can capture and store the CO2 they produce.**⁶

In Indonesia

TJB2 project is part of the new energy program launched by Indonesia last year and which is designed to provide an additional 35 GW of power capacity by 2019. While the country is already heavily dependent on fossil fuels (gas, oil and coal), **this program will increase the part of coal in the energy mix, and increase its carbon intensity.**

Indeed, **out of the 35 GW planned, coal-fired power plants will represent 20 GW** (almost 60% of the new capacity), gas-fired project 13 GW and renewable energy sources only 3.7 GW, split in 2.4 GW of hydropower, 1.2 GW of geothermal energy and 120 MW of wind electricity capacity.

⁴ Statement by leading climate and energy scientists, New unabated coal is not compatible with keeping global warming below 2°C, <http://www.europeanclimate.org/documents/nocoal2c.pdf>.

⁵ The Coal Gap: planned coal-fired power plants inconsistent with 2°C and threaten achievement of INDCs December, 1st, 2015, Climate Action Tracker : http://climateactiontracker.org/assets/publications/briefing_papers/CAT_Coal_Gap_Briefing_COP21.pdf

⁶ Aligning Policies for a Low-carbon Economy, OECD, 2015, <http://www.oecd.org/environment/Aligning-Policies-for-a-Low-carbon-Economy.pdf>

It is noteworthy to mention that, **with 8530 MW of planned coal capacity, the state utility company PLN figures among the top 30 coal developers⁷** and a connected coal project will negatively impact the climate credibility of a bank.

ENERGY SECURITY

Banks could argue that Indonesia need to increase its energy production and that coal is the cheapest option considering the availability of coal reserves in Indonesia. Some might even be tempted to use the regular power blackouts to support this argument.

Indonesia does need a lot more power, but the reality is that **the blackouts generally happen on the outer islands, rather than in the Java-Bali-South Sumatra system, and building more capacity in Central Java will not solve energy poverty on the outer islands.**

More generally, **while any new coal will take a long time to be developed before bringing new capacity to the grid – TJB2 is planned to be completed in 2019 – renewables projects could deliver quicker and local solutions where energy is needed.** Indonesia has a lot of coal, but also have great geothermal potential and good solar potential, which are both underdeveloped.

Finally, TJB2 project, along with the construction of the 20 GW of coal-fired power capacity appears less as the cheapest solution to energy poverty than an attempt by the government to support the coal mining industry under pressure in a context of falling international demand, oversupplied international coal market and plummeting coal prices.

The new 20 GW should increase the need of 80-90 Mt/year of coal, of which 40% are expected to be supplied internally⁸ to the human and environmental costs of coal mining and burning in Indonesia, this plan will put high pressure on public budget and ordinary Indonesians. Indeed, the Indonesian Coal Mining Association is arguing the coal plants can't pay enough for the coal to maintain supply and has recently called for a huge public subsidy. If agreed, this subsidy would be payable for 25-30 years, amounting to about US \$6-7 billion.

It blows a huge hole in the coal association's claim that coal is "relatively cheap" compared to other sources of electricity. The cost of producing solar electricity in India, for example has fallen to \$6.5c / kWh (Rp. 830/kWh) as a result of ambitious government policies. That is less than 60% of the current cost of coal-generated electricity in Indonesia.

The money the coal companies are demanding would be better invested in renewable energy which, in the long term, would provide cleaner, cheaper energy for Indonesia people.

AIR POLLUTION AND HUMAN HEALTH

In 2015, Greenpeace and Harvard University modelled the health impacts of air pollution from coal-fired power plants in Indonesia⁹. The findings were extraordinary:

- **Existing coal-fired power plants in Indonesia cause an estimated 6,500 premature deaths every year.**

⁷⁷ According to Platts WEPP database, March 2015.

⁸ http://www.enerdata.net/enerdatauk/press-and-publication/energy-news-001/indonesia-releases-its-35-gw-power-capacity-addition-plan_32605.html

⁹ Harvard's Research Result: Human Cost of Coal – Indonesia, August 2015:

<http://www.greenpeace.org/seasia/id/press/reports/Harvards-Research-Result-Human-Cost-of-Coal-Indonesia/>

- **Each large new power plant (1000 MW capacity) is expected to result, on average, in the deaths of 600 Indonesians every year.**
- **With Indonesia's plans to build over a hundred new coal-fired power plants, this death toll could rise to 28,300 people every year if all plans are implemented.**

The health impacts cover strokes, heart disease, chronic obstructive pulmonary disease, lung cancer and other cardiovascular and other respiratory diseases. It is not only the old who are at risk. Indonesia's coal industry is believed to be causing the deaths of about 100 young children every year, from acute respiratory infections.

Of particular concern is toxic particulate matter (PM2.5), microscopic particles which are small enough to enter the bloodstream and are linked to respiratory illnesses and lung damage.

Tanjung Jati B is already estimated to be responsible for 1020 premature deaths per year, according to the Harvard research, even though the power plant was assumed to meet national environmental standards. Even young children are at risk: Tanjung Jati B causes the deaths of an estimated 20 children under five every year, because of respiratory infections caused by air pollution from the plant.

The building of Tanjung Jati B 5 and 6 units is only one of Indonesia's planned coal-fired power plants but could double the health impact of the plant. The use of ultra-supercritical technology and other pollution abatement technology will not significantly reduce the health impacts of coal burning in Indonesia. Indonesia has some of the lowest air quality standards and even with scrubbers, there is no guarantee they will actually be used. Tanjung Jati B existing units already have scrubbers and two of them have a desulphurization equipment. Ultra-supercritical coal plants only burn 5-10% less coal and emit between 5 to 10% less emissions compared to a new supercritical or subcritical.

Finally, any bank studying the financing for the TJB2 coal expansion plan must not only take into account that this project is only one the many coal planned project but also that **Java is one of the most populated places around the world so building new coal plants there raises major public health issues.**

WATER DEMAND FROM COAL

Coal-fired power plants are thirsty beasts. A 500 MW plant, using water for cooling, can withdraw enough water to suck dry an Olympic-sized swimming pool roughly every three minutes.

In the case of Tanjung Jati B, the proposed extension would follow the existing plant in using once-through cooling technology, extracting water from the Java Sea. This circulates water through a plant a single time to provide cooling during generation. The water is cycled through the cooling system and then discharged, transferring waste water from the power plant into the ocean.

Typical discharge temperatures from once-through cooling systems are 8 to 12 degrees C above intake temperatures. Even if the discharged water is released into a large "pool" like the ocean, the temperature increase is often high enough to endanger local water fisheries and ecosystems.

The local fishing community are among the strongest opponents of the proposed expansion to Tanjung Jati-B. The Fisherman Association of Indonesia and the North Jepara Fishermen group have complained of reduced catches since the plant has been in operation; damage to the coral reef; collisions between fishing boats and coal transport barges; and the lack of filters for water intake so fish are sucked into the cooling system.

The fishermen have also complained that the coal company has failed to meet the standards it was set when Units 3 & 4 were opened in 2007.

But it is not only the fishermen whose livelihoods are threatened by Tanjung Jati-B. **Even though the plant depends on seawater for cooling, it also requires significant amounts of fresh water for scrubbing air pollutants, for its steam cycle boilers and for handling coal ash.**

Jepara, some 20km south of the plant, is an area of extreme water stress. According to the World Resources Institute's aqueduct model, the withdrawal of fresh water by people already exceeds the natural replenishing rate, so there is a risk of the area running dry.

Greenpeace estimates that each 1000 MW proposed unit of Tanjung Jati B would consume an estimated 1.7 million m³ of water, in total in the range of 6.8 million m³ per year. This is a very significant increase of freshwater consumption in already extremely water stressed area.