

The present case study was prepared by Greenpeace

PGE Polska Grupa Energetyczna

The European Investment Bank (EIB), the biggest European international lender, despite having apparent aspirations to become a leader of the clean energy transition, is still financing fossil fuels and large coal-heavy utilities which lack decarbonisation plans. Poland's biggest coal-heavy utility PGE, which in 2015 signed two loan contracts with the EIB for approximately EUR 468 million (PLN 2 billion), is a good example of this. PGE, with additional money freed up thanks to loans received from the EIB, is set on a direction that is totally contrary to the one outlined in the Paris Agreement and clearly intends to keep relying on coal to remain one of the biggest polluters in Europe. The EIB should take this into consideration in its upcoming new energy lending policy and exclude utilities such as PGE from its portfolio.

Profile of the company supported by the EIB – key facts

- PGE is the biggest Polish utility, responsible for more than a third (34%) of the country's electricity generation. It produces energy on a vast scale – **91% from burning hard coal and brown coal (lignite)**, followed by 5% from gas. **Only 4% of the company's energy production comes from renewable energy sources (RES)**. The company deals also with energy distribution and sales.
 - PGE has approximately 14 GW of **fossil fuel electric power capacity** installed. This has been **significantly increased – by more than 30% in 2017** when the company acquired EDF's assets in Poland.
- PGE is very **active in coal and lignite mining**
 - **It operates 2 open-pit mines** (Bełchatów, Turów) which delivered almost 50 million tonnes of lignite in 2017 (48 million in 2016), which is more than **80% of the country's total lignite mining output**, plus it plans to open new ones.
 - The utility is also financially engaged in the biggest Polish **hard coal mining group** (Polska Grupa Górnicza, PGG). In 2016 it became PGG's shareholder together with other Polish utilities in order to contribute to the rescue mission of the Polish mining sector organised by the Polish government.
- The utility is majority state-owned and is **following the government's pro-coal agenda**, which includes support to coal mining and coal power generation, e.g. through the capacity market.

PGE's fossil fuel sins at a glance

1. PGE, with its iconic 5.3 GW brown coal fueled power plant Bełchatów, remains one of the biggest polluters in Europe. PGE's real emissions of some toxic substances still remain unknown as it transpired recently that PGE has been concealing Bełchatów's real and massive mercury emissions:

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1. In 2017 PGE, one of four major utilities in Poland, emitted almost **60 million tonnes of CO₂**, of which approximately 63% (38 million tonnes) was coming from just one, **single biggest European polluter – the lignite-fueled Bełchatów power plant**.
 - a. By way of comparison, the total CO₂ emissions for Norway as a whole in 2016 amounted to 44 million tonnes (very similar figures apply for Sweden, 42.5 million tonnes, and Finland, with 47.9 million tonnes) and for Slovakia 34 million tonnes also in 2016.
 - b. In 2018 we can expect much higher volumes of CO₂ emissions from PGE due to its acquisition of EDF's assets which are expected to add approximately 12.5 million tonnes of CO₂ to PGE's total emissions this year.
2. At the same time, PGE emitted 47,000 tonnes of nitrogen oxides (NO_x), almost 56,000 tonnes of sulphur dioxide (SO₂) and more than 2,000 tonnes of poisonous dust (PM).
3. In addition to this, thanks to real data reported to one of Europe's registers for 2016, it has been recently revealed that **PGE underestimated Bełchatów's mercury emissions by approximately 1800%**. The utility was reporting some 160 kg annually in recent years instead of the real level of 2820 kg, which was discovered when PGE was no longer permitted to calculate mercury emissions on its own and was forced by regulations to measure it. This means that annually the power plant in Bełchatów **emits more mercury into the air than Spain's entire industrial sector**. Mercury remains one of the most dangerous pollutants due to, among other things, the fact that it has a particularly negative impact on the foetus and pregnant women.
4. In terms of health damage, **Bełchatów power plant on its own is responsible for almost 1300 premature deaths annually** [*Europe's Dark Cloud, calculations for 2013*].

2. PGE has no plans to decarbonize and no plans to comply with Paris Agreement

- a. The structure of the company's capital expenditures (capex, investments) demonstrate clearly the pattern that PGE is following. **Capex for the company's renewables** was 44% lower in 2017 than in 2016 and **accounted for just 1% of total investments**. Bearing in mind that conventional generation (coal, gas, biomass) consumed 72% of the group's capex, it becomes clear that renewables are treated marginally and that it will stay this way over the coming years.
 - i. PGE's approach thus described creates a clear **risk for EIB**, as the utility will be locked into coal for decades and will be exposed to significant risks, including economic ones such as rises in the carbon price, reliance on uncertain capacity payments and the costs of being compliant with higher emissions standards (BREFs).
- b. **PGE continues to follow its coal strategy – it's developing new coal capacities, modernizing its existing, old coal fleet and is locking itself into coal for years**.
 - i. New, higher emission standards introduced just recently (BREFs), which will become obligatory in 2021, created an opportunity for PGE to review its coal strategy, to head towards a more healthy and future-proof energy mix and to align with the Paris Agreement. Instead the company decided to **modernise its old coal fleet and is proceeding with costly upgrades and modernisation** in order to **extend the life of its existing coal units**. Many tenders have been already announced. The costs of becoming BREF compliant for PGE vary significantly according to different sources, varying from EUR 421 million to EUR 1.4 billion (PLN 2 to 6 billion).

- ii. **PGE is adding new coal capacity.** PGE is currently developing **new coal capacity in two locations**, which will **add some 2.3 GW of brand new coal capacity** with the intention to operate it for at least the **next 30-40 years**. At Opole – two new hard coal-fired units, 900 MW each, 1.8 GW of new coal capacity all together, budget of the project: EUR 2.6 billion (PLN 11 billion); at Turów – new lignite powered unit of approximately 0.5 GW, budget of the project: EUR 0.9 billion (PLN 4 billion). **PGE is also growing its coal power fleet** via acquisitions. Last year it **acquired EDF's coal assets, adding some 3.3 GW of coal** (91%) and gas (9%) capacity (transaction value – approximately EUR 1 billion, equal to PLN 4.3 billion).
- iii. Thus PGE is increases its exposure to all kind of risk categories: climate, environment, regulatory, economic etc.

3. PGE operates huge open-pit mines making citizens and agriculture suffer. If this was not enough, the utility plans to open new open pit mines and to extend existing ones.

- 1. **Existing open pit mines** cover: Bełchatów – fueling with lignite the nearby power plant (2 fields with annual output of 42.6 million tonnes); and Turów – with output of approximately 6.9 million tonnes of lignite in 2017.
- 2. **Expansion plans** include: a new field in Żłoczew as an additional source of fuel for Bełchatów. The **lignite is located 300 metres below the ground, and 3,000 people from 33 villages will have to be relocated**. Expansion also of an existing open-pit mine in Turów plus long-term plans to open a new open-pit mine in Gubin.
- 3. The adverse influence of open-pit mines on people and the environment remains significant:
 - a. Open-pit mines cause huge **cones of depression and deplete water reserves over huge areas**. For example, at the planned Żłoczew open-pit mine the area of the cone of depression is estimated to be from 250 up to 3100 km². This makes it **difficult to grow food** and adversely impacts people's lives.
 - b. Should Żłoczew be opened, the losses for agriculture and industry will amount to some EUR 8.4 billion (PLN 36 billion) according to the latest analysis. PGE plans to exploit Żłoczew for approximately 38 years. It will take the next 38 years to regain water in this area. Moreover, local agricultural jobs will be lost. Local resistance against the planned mine is growing.
 - c. Already people living on the land impacted by the existing open-pit mine have to **buy water from neighbouring districts**.

EIB's financial support for PGE

- 1. **PGE obtains loans** and issues corporate bonds to borrow money from the market **in order to finance the implementation of its coal strategy** – the modernisation of its old coal infrastructure, the building of new coal capacity, the opening of new open-pit mines and the acquiring of new coal assets.
- 2. The utility cooperates with many banks which provide money for its operations and investments. **Even if lending for non-coal purposes, banks supporting PGE free up PGE's own money to be spent on coal purposes**, which in fact takes place as

described above. In this sense supporting banks directly and indirectly finance PGE's coal strategy.

3. According to our analysis, based on Bloomberg's database and the company's financial statements, the **EIB remains one of the biggest supporters of PGE**. In 2015 the EIB signed loan contracts with PGE for almost **EUR 468 million (PLN 2 billion)** – with the objective to:
 - a. Modernise PGE's distribution network (PLN 1.5 billion), and;
 - b. Modernise two of PGE's power plants, CHPs producing heat and power (PLN 490 M).
4. Even if additional money from the EIB would be spent for modernisation of the grid, the grid will not transmit renewable energy as renewables are not being added to the energy mix (see the structure of the company's capex).
5. **In this way the EIB has enabled the freeing up major sums of money that PGE can use for other purposes in line with its coal strategy.**

Conclusions

1. **Loans and other financial support** (e.g. the issuing of corporate bonds) **delivered by the EIB for companies like PGE which have no decarbonisation plans are freeing up additional money that fossil fuel utilities will use for purposes which are not aligned with the Paris Agreement**, often causing a fossil fuel / coal lock-in effect.
2. **In this way the EIB continues to finance fossil fuels / coal development by helping to strengthen utilities' financial situations**, finances companies which are failing to comply with the Paris agreement, grants billions for big corporations which pollute the environment with new coal projects and poison people with their emissions **instead of supporting small community based energy projects which lack access to finance**.
3. To become a leader of the clean energy transition, the EIB should reconsider and stop its support for the fossil fuel and coal-heavy utilities which it finances.
4. The EIB should invest in renewable energy and Energy Citizens – people who produce their own energy from renewable sources.