

## Attachment (to ING response letter)

### Cirebon Coal Power Plant Unit 1 and 2 – review

This document provides ING's review of the key elements raised by ResponsiBank in their letter dated 26 April 2021.

In response to the matters raised by ResponsiBank, we conducted a review. Our review took into consideration the letters from ResponsiBank, the information provided by ResponsiBank and representatives of local communities during the meeting with us in Indonesia, discussions with our technical expert and information based on work carried out by our technical expert including on-site visits that were performed at the Cirebon Energy Prasarana (CEPR) power plant, dialogue with the management of the power plant, and additional community dialogue sessions including groups identified as key stakeholders by ResponsiBank. Due to Covid restrictions in place in Indonesia in 2021 and early 2022, on-site visits and face to face meetings had to be postponed and eventually took place in April, May, June, July, and October 2022 in Indonesia.

In the interest of the local communities neighbouring the Cirebon coal fired power plants, NGOs, other stakeholders, and CEPR power plant company, kindly provided their consent to share the below description of the monitoring and engagement process and activities, as well as our observations made and next steps proposed to CEPR, the operator of the Cirebon power plants.

#### **1. Impacts on Water Contamination**

CEPR previously initiated an independent report in response to concerns raised by the NGO Rakyat Penyelamat Lingkungan ("RAPEL") regarding the operation of the Cirebon 1 and Cirebon 2 power plants.

Related specifically to water contamination, the report covers the topic of fishery catches and outlines the following:

- Cirebon Power Plant has been monitoring benthos and plankton for the period of 2017 to 2020 in the Kanci River Estuary and Waruduwur River Estuary. For the latest results in 2020 (February and June) the Diversity Index (H) for benthos is considered to be average and for plankton very good. This indicates the water contains sufficient nutrition for fish, mussel, prawn etc.
- The number of fish species (in ton) from 2012 to 2019 based on data from Marine and Fisheries Office Cirebon Regency is also included in the report. The total number of species (in ton) varies from year to year (some years increasing and some years decreasing) but shows no downward trend from the operation of Cirebon 1 or construction of Cirebon 2.
- The report outlines that loss of biodiversity could also be caused by natural events and fishing methods being used which could damage the seabed.

We got to understand that there is no fish auction market so there is no record of fishery catches. However, a fish auction market will soon be constructed. We therefore recommended to CEPR to monitor and report on data from the fish auction market as part of CEPRs semi-annual reporting requirements to the Ministry of Environment and Forestry.

Related to water contamination, we note the following is being undertaken for Cirebon 2:

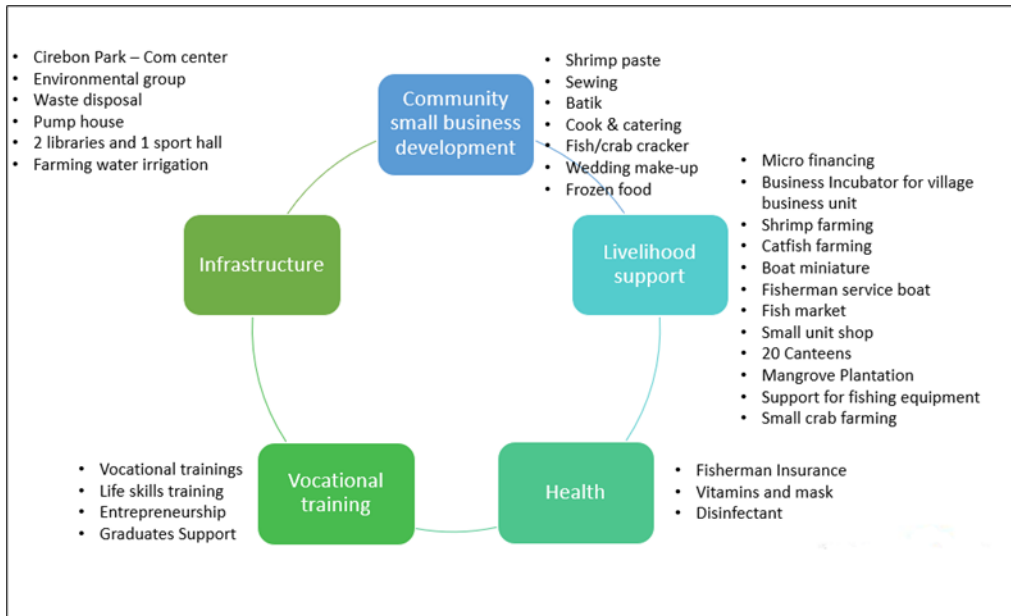
- Marine species (total fish kg/month) caught by the Jelombang Selar Shoreline Fishermen Group have been recorded on a monthly basis since January 2021. This will help provide a baseline and analysis of trends once Cirebon 2 power plant is in operation.
- Surface water and seawater sampling has been undertaken for Total Suspend Solids (TSS) on a monthly basis during the construction of Cirebon 2 and have shown compliance with the Indonesian quality standards for surface water and seawater.

#### **2. Impacts on Livelihoods**

In terms of loss of livelihoods, CEPR have been incorporating Corporate Social Responsibility (CSR) activities. Based on stakeholder dialogue performed with local community representatives, it became clear to us that some NGOs and local representatives are not fully aware of the CSR activities being implemented which are beneficial to the communities, including those impacted by loss of livelihood.

The Corporate Social Responsibility (CSR) activities by CEPR are currently focussed around the 5 core areas shown in Figure 1: 1) Community and Small Business Development, 2) Livelihood Support, 3) Health, 4) Vocational Training, and 5) Infrastructure:

**Figure 1 – CSR Core Area and Activities**



#### Livelihood Programs

CEPR reported that they have been focussing on the following activities where the community has the potential to develop a related business or cultivation where they have previous experience either personally, in their family or in a group:

- Catfish Cultivation;
- Mushroom Cultivation;
- Black Tilapia Cultivation;
- Cultivation of Crickets;
- Sewing;
- Processed Food; and
- Canteen / Small Restaurant.

CEPR's presentation also indicates that CEPR's current approach is to duplicate activities that have been successful to a new group where the (already) successful group becomes a mentor as well as a supporter of the new group. This has been done for the Catfish Cultivation and Mushroom Cultivation programs.

CEPR's presentation furthermore indicates that CEPR carries out capacity building (capacity development) for the target groups in collaboration with the CEPR Vocational Training Centre:

- Product Development;
- Digital Marketing;
- Finance and Business Bookkeeping; and
- Basic Computer.

CEPR have also reported to have developed Village Owned Enterprises in 3 villages with the Business Incubation Program. One of the programs is handicrafts from used wooden boats which have high economic value while improving environmental cleanliness.

#### Vocational and Life Skills Training

As reported by CEPR, the company provides the following vocational skills (hard/technical skills) training in the established CEPR Vocational Training Centre with the aim of creating job opportunities and potential small businesses opportunities:

- Electric Welding 3G-6G;
- AC and Refrigeration;
- Motorcycle Mechanic;
- Residential Electrical Installation; and

- Carpenter and stone (masonry).

CEPR also reported to provide the following additional skills training other than vocational skills training to increase graduation levels and job opportunities:

- Collaborating with local PKBM to provide school graduate certification;
- Finance and business booking;
- IT;
- English Language;
- Job Application and Interview Skills; and
- CV Preparation.

Based on feedback provided by local community representatives to our technical expert, we conclude that in relation to the CSR/livelihood restoration program, CEPR could do more to promote and communicate those programmes. One of the methods to address this is to fully implement the Stakeholder Engagement Plan – SEP (IZ014000-NEM-RP-0019 | V5 24 February 2017; attached). CEPR has therefore agreed to undertake the following:

- Conduct regular meetings (face to face meetings) with the communities from impacted villages to cover CEPR's activities including impacts, mitigation measure as well as to assess levels of community satisfaction related to the implementation of livelihood programs.

### **3. Impacts on Air Quality**

As reported in an independent report in 2020, dust fall monitoring was undertaken at locations outside of the fence of the Cirebon 1 power plant at 8 locations. This was undertaken 2 times per year during 2017 to 2020 for 30-days. The dust fall measurements were within the Indonesian Standards. In addition, dust fall measurements undertaken during construction of Cirebon 2 at offsite locations offsite have also shown compliance with Indonesian dust fall standards.

Specifically for Cirebon 2, ambient air quality has been undertaken at Astanamukti Village 4 times per year for Total Suspended Particulates (TSP), Nitrogen Dioxide (NO<sub>2</sub>), Particulate Matter 10 (PM<sub>10</sub>) and Sulphur Dioxide (SO<sub>2</sub>). Results have been in compliance with the daily Indonesian Standards. In addition, an Air Quality Monitoring Station (AQMS) will be installed for NO<sub>2</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub> close to where the highest ground level concentrations were predicted in the Environmental and Social Impact Assessment (ESIA) (600 m southwest of the Cirebon 2 stack). The AQMS will continually monitor ground level concentrations of those pollutants during the operation of Cirebon 2.

The Independent Report in 2020 has presented data concerning the number of Acute Respiration Infection (ARI) and coughs from 2003 to 2006 from two health care facilities in Cirebon. Data for 2017 to 2020 shows ARI from the two health care facilities being mostly in the top 3 diseases during 2017 and 2020. ING and CEPR agreed for this baseline data to be referred and analysed against new data during the operation of Cirebon 2.

The Independent Report in 2020 also outlines other factors impacting air quality such as waste handling (burning waste) and heavy traffic on the road next to the Cirebon 2 plant, which are other contributing factors.

Based on their review of the Continuous Emissions Monitoring System (CEMS), our technical expert provided an overview of the data of the Cirebon 1 Power Plant for the years 2012 (start of operation) to 2021. Table 1 shows that the maximum concentration level of all parameters is in compliance with the Indonesian emissions standards which require maximum concentrations to comply with the emission standards. Table 2 shows compliance with the emission guidelines of the World Bank Group (WBG) which require emission levels to be evaluated on a one-hour average basis and achieved 95% of the annual operating hours. ING agreed with CEPR to continue monitoring Cirebon 1 emissions, and to also evaluate CEMS data according to the WBG EHS Guidelines averaging period and operating hours requirements.

**Table 1 Cirebon 1 CFPP emission time series data – Comparison with Indonesian Standards**

Parameter	Indonesian Standard*	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Sulfur Dioxide (SO <sub>2</sub> )	550	mg/Nm <sup>3</sup>	496	430	429	287	308	176	132	139	219	488
Oxides of Nitrogen (NO <sub>x</sub> )	550	mg/Nm <sup>3</sup>	431	417	327	280	303	177	170	227	379	400.9
Total Particulate	100	mg/Nm <sup>3</sup>	39	44	86	58	35	39	34	37	53	45.8
Mercury (Hg)***	0.03	mg/Nm <sup>3</sup>	-	-	-	-	-	-	-	-	-	0.0149

Source: Maximum Emissions Data Provided by CEPR.

Notes:

\*New limit was introduced in 2019 in accordance with Ministry of Environmental and Forestry Regulation No.P.15 /2019. Reference Conditions: 7% O<sub>2</sub>, 1 atm, 25°C. Compliance based on the Maximum Emission.

\*\*\*New parameter introduced by Ministry of Environmental and Forestry Regulation No.P.15 /2019. CEPR implemented mercury monitoring by CEMS early 2021, before that, the mercury was measured manually.

**Table 2 Cirebon 1 CFPP emission time series data – Comparison with WBG EHS Guidelines**

Parameter	WBG EHS Guideline*	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Sulfur Dioxide (SO <sub>2</sub> )	171-726	mg/Nm <sup>3</sup>	248	268	191	194	155	157	86	146	152	205
Oxides of Nitrogen (NO <sub>x</sub> )	436	mg/Nm <sup>3</sup>	301	290	215	203	174	190	143	214	270	294
Total Particulate	43	mg/Nm <sup>3</sup>	12	14	21	20	16	22	27	27	25	25
Mercury (Hg)***	Not applicable under WBG EHS Guidelines											

Source: Average Emissions Data Provided by CEPR.

Notes:

\*World Bank Group (WBG) EHS Guidelines for Thermal Power Plants. Table 6(C) Emissions Guidelines for Boiler. Solid Fuels (Plant >= 600 MWth. Reference Conditions: Converted to 7% O<sub>2</sub>, 1 atm, 25°C from 6% O<sub>2</sub>, 1 atm, 0°C. Emission levels to be evaluated on a one-hour average basis and achieved 95% of the annual operating hours. I

\*\*\*New parameter introduced by Ministry of Environmental and Forestry Regulation No.P.15 /2019. CEPR implemented mercury monitoring by CEMS early 2021, before that, the mercury was measured manually.

For ambient air quality, new Indonesian Ambient Air Quality Standards were enforced in 2021. During construction of Cirebon 2, ambient air quality around the Project area has been monitored on a quarterly basis as part of the construction monitoring program and no exceedances of the new Indonesian Standards have been identified in the monitoring to date. During operation, Cirebon 2 will operate a continuous Ambient Air Quality Monitoring Station (AQMS) which will be located in the area where the highest Ground Level Concentrations from the Cirebon 2 project are predicted to occur. The results from the AQMS will be analysed against the new Indonesian Ambient Air Quality Standards and WHO Guidelines/Interim Targets for compliance. Should any non-compliance be identified, additional studies into the potential sources of the exceedances will be undertaken part of the ambient air quality management and monitoring program for the Cirebon 2 project.

#### **4. Information Disclosure**

Public consultations were undertaken according to the Indonesian regulations. The Indonesian AMDAL Committee approved the AMDAL documents which detailed the consultations undertaken. AMDAL is Bahasa Indonesian for Analisis Manajemen Dampak Lingkungan or Environmental & Social Impact Assessment.

However, based on public consultations and stakeholder dialogue, we consider the number of grievances raised by the community in the past to be too low for a project of the scale of Cirebon 2. We noted that CEPR conducts one on one meetings with communities but do not always record the meetings as they are considered to be informal. Therefore, community grievances could be raised during the meetings which are not being recorded. In addition, we noted that CEPR's grievance log only recorded grievances submitted to CEPR. While there were also grievances addressed to its contractor, none of these grievances were reported to CEPR. These factors are expected to have contributed to the low number of recorded grievances.

Therefore, we agreed with CEPR to undertake the following:

- As the Cirebon 2 Project is approaching the Operation Phase, CEPR is to re-socialize the grievance mechanism to the community;
- CEPR is to record any grievances submitted either formal or informally.

#### **5. Environmental Permit**

Responsibank expressed their concern over the environmental permit issued to CEPR. The revision of the permit relates to the revision of the spatial plans. As the spatial plans were revised, a new environmental permit was issued in July 2017 to reflect the revised spatial plans.

#### **6. Bribery**

A bribery allegation case is under investigation by the Indonesian authorities. However, at this moment we are not aware of any developments to the legal status of such allegation.

#### **7. Next steps**

To improve transparency and dialogue, CEPR agreed on the following next steps:

- CEPR will conduct regular face to face meetings with the communities from impacted villages to cover CEPR's activities including impacts, mitigation measures as well as to assess levels of community satisfaction related to the implementation of livelihood programmes;
- Disclose environmental and social performance of the project to local communities including results of monitoring, changes to the project design, CSR programs and how local community concerns have been addressed;
- Continuous monitoring of Cirebon 1 emissions, and to also evaluate emission (CEMS) data according to the World Bank Group EHS Guidelines averaging period and operating hours requirements;

- Acute Respiration Infection (ARI) and coughs data from 2017-2020 from two local health care facilities in Cirebon are to be used as baseline data to be referred and analysed against new data during the operation of Cirebon 2;
- Monitoring and reporting on data from the (new) fish auction market as part of CEPRs semi-annual reporting requirements to the Ministry of Environment and Forestry;
- Resocialization of the grievance mechanism to the community. The grievance mechanism is to also address grievances related to CSR and community development programmes. CEPR will record all grievances issued by the community even when expressed informally;
- Annual socioeconomic surveys to be conducted. The results of these surveys will be made available to the affected people committees.