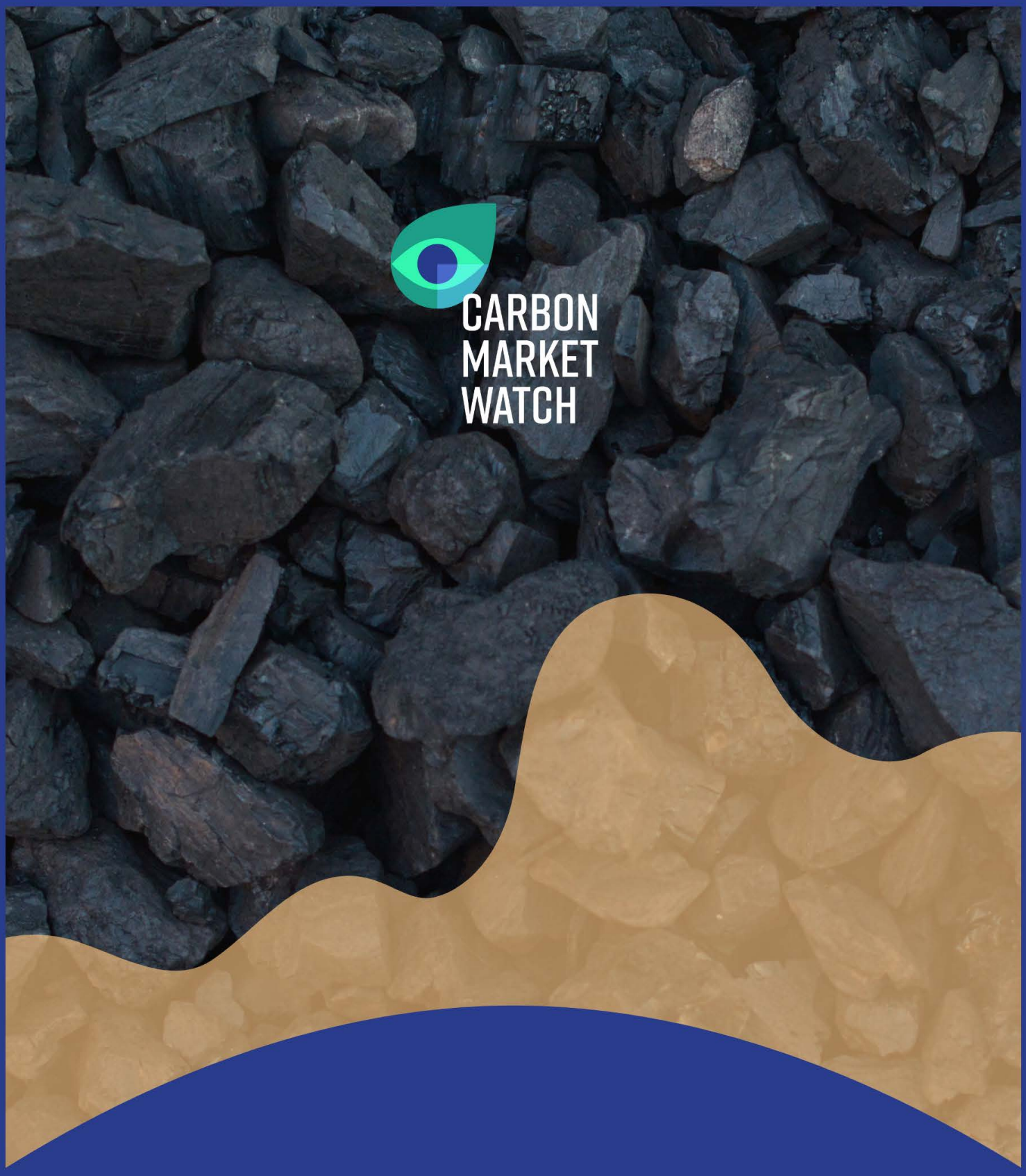

CARBON MARKET WATCH

GOLD STANDARD CONSULTATION

Early Coal Plant Retirement

APRIL 2023

Feedback on the concept methodology 'Early phase-out of coal fired thermal power plants and their replacement with green-field renewable energy generation plants'

We welcome the opportunity to provide feedback on Gold Standard's proposed concept methodology on early retirement of coal plants. Coal power generation is a huge barrier to achieving climate targets, and efforts to transition from coal to renewable energy are of great importance. However, in the context of the VCM, crediting projects that don't meet criteria for environmental integrity can also have detrimental consequences for the climate. Gold Standard's proposed concept methodology does not sufficiently address potential loopholes, mainly regarding additionality and baseline setting, and can therefore not be said to meet environmental integrity standards required for carbon crediting.

The energy market is a fast-changing landscape, with some expecting the carbon footprint of the global electricity sector to have peaked in 2022 and beginning to fall from now as renewable energy technologies keep scaling. Undoubtedly, the retirement of coal plants will be a vital component of the carbon footprint decrease. The question is whether coal powered plants will become so uneconomical that market forces will ensure retirement on their own, or whether some financing through carbon credits will be necessary. In the context of generating high-quality carbon credits, this is a crucial distinction. Without additionality, this proposed methodology will do little more than to greenwash emissions of the credit buyer, without any environmental benefits.

The chances that coal power plants would close early without the support of a crediting scheme are difficult to estimate precisely because of the many political, economic and societal forces that influence it. While methodologies can to some extent aim to deal with uncertainty by applying conservative rules, it is difficult to conceive how the uncertainty surrounding the future viability of coal power plants could be sufficiently accurately measured. Without being able to measure that uncertainty, it is not possible to address it. Carbon Market Watch is therefore very sceptical about the suitability of carbon credit finance to incentivise the early retirement of coal power plants.

With this in mind, we have provided more detailed feedback on specific elements of the concept methodology below.

1| Feedback on the description of the proposed methodology concept

In this section, it is mentioned that 'RE technology chosen to be the alternative to the coal-fired thermal power plant might face barriers to implementation, which requires an additional revenue stream'. This poses a risk of double claiming: the provider of any additional financial support might (partly) claim the emission reductions achieved by the project, while the buyer of credits might make the same claim. To prevent double claiming, and seeing how it would be difficult to regulate the claims of the external contributor of finance, **the activity owner could only be issued a portion of credits that is commensurate to the share of finance it is contributing, relative to the total financing requirement.** This must clearly be defined and disclosed prior to crediting.

2| Feedback on the typical project activity

Baseline plant

In defining a baseline plant, one of the conditions for such a plant is that 'the plant has had three years of successful, uninterrupted commercial operation'. This cannot be considered to be an accurate or sufficient definition for a coal plant that is economically viable and whose closure would be additional.

This definition will leave room to include plants that are not economically viable and therefore would not be additional to close. One element that should be considered to determine the eligibility of a plant is therefore the level of utilisation of its capacity. For example, a plant could be in constant operations for three years, but at a very low capacity. If it runs at, say, 10% of its capacity, this indicates that the economic case for running the plant is not good. This might not be a determining factor, but it is one of the factors to include as part of the additionality determination. **Plants with low load factors (i.e. utilisation rate) should be excluded from eligibility.**

Closure mandate

The proposed methodology allows for ignoring plant closure mandates if the level of enforcement of that mandate is deemed to be low. **Clear criteria must be established to define when exactly an enforcement level is considered sufficiently low in**

order to consider the plant retirement as additional. For example, a mandate must have been established for a certain number of years, without having had any impact.

Project plant

In the definition of the project plant, 'energy generation using RE technology solutions commercially available in the region' is not a sufficient definition and will leave room for interpretation. **Either the technologies that qualify have to be defined (solar, wind, geothermal among others, but certainly excluding gas and BECCS), or an emissions' performance standard (EPS) criterion has to be given and should only tolerate plans that generate electricity with no GHG emissions** (other than GHG emissions for the construction and eventual dismantling of the plants). Note that this should exclude any plants relying on CCS, as these plants do generate GHG emissions, which are then captured.

3| Feedback on the demonstration of additionality

The additionality requirement is described as: "Baseline plant remains commercially competitive under the prevailing market conditions, faces no operational challenges that might affect its normal operation and is expected to continue to operate for its remaining life-time". **This is a vague criterion and needs additional clarification.** A power purchasing agreement (PPA) should be required to demonstrate how long it has in 'remaining life', among other things, and a case-by-case analysis should be done of legal requirements that might force significant investment upgrades within the next few years that make the plant economically unviable.

The additionality requirements further state that "the baseline plant's phase-out and its replacement with a new RE plant face barriers and need additional support to overcome the barriers". These **'barriers' need to be clearly identified and defined.**

More fundamentally, **Carbon Market Watch questions the feasibility of assessing the additionality of early coal plant retirements in a carbon crediting context.** This is particularly the case for the criteria related to whether the plant "remains commercially competitive under the prevailing market conditions", because it will be very difficult to anticipate the market conditions of a plant over several years. The current political and energy landscape is extremely fragile and fast-changing. Governments can adopt measures that drastically alter a plant's economic

competitiveness, and external events can have extreme impacts on competitiveness as well (as the Russian invasion of Ukraine, or the covid-crisis, have shown, for example).

4| Feedback on the quantification of SDG contributions

The methodology concept states that "since project plants would be RE based there would not be any project emissions". This gives the impression that emissions from building the plant are not included in the calculation of plant emissions. **To ensure conservative crediting, however, these emissions should also be taken into account and added to the project emissions, spread over the expected lifetime of the plant.**

Moreover, the electricity generated in baseline plant ($EG_{BL,y}$) is "adjusted for any expected reduction due to the declining plant's condition or due to the future market demand for thermal power in the region." This seems inappropriate as it would be incongruous to adjust the electricity production in a historical year for any expected future reductions, when calculating the baseline. If this adjustment reduces the $EG_{BL,y}$ then the emission factor would be artificially higher, and thus the baseline would increase, inflating emissions reductions unfairly. Therefore, the definition is $EG_{BL,y}$ should be limited to 'Quantity of electricity generated in baseline plant in year y (MWh). This would be derived on the basis of historical level of electricity generation in the baseline plant (average of three years)'

5| Feedback on the monitoring approach

This section describes the key parameters that need to be fixed ex-ante. However, none of the parameters described here relate to the project plant. The expected emissions per kWh for the project plant should be established ex-ante, taking into account the lifetime GHG footprint of the plant (including building and dismantling, spread over the expected lifetime of the plant). This is essential In order to quantify the emission reduction conservatively.

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