RESEARCH ARTICLE

Social-ecological reflexivity of extractive industry governance? The case of the Extractive Industries Transparency Initiative in Indonesia

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Funding information

Lembaga Pengelola Dana Pendidikan; Lembaga Pengelola Dana Pendidikan (LPDP)

Abstract

The Extractive Industries Transparency Initiative (EITI) sets standards to improve the governance of extractive industries and thereby stimulate sustainable development. Member countries implement this standard through a multi-stakeholder group (MSG) which facilitates deliberation between government, civil society and business representatives. This deliberation could enable what we call 'social-ecological reflexivity': the ability to reconfigure oneself in response to critical reflection on one's performance in governing not only the economic, but also the social and environmental dimensions of sustainable development. Such reflexivity is crucial for countries to not only comply with the EITI standard, but also improve governance quality to address the social and environmental impacts from extractive industries. Drawing on a fully operationalised conceptual framework, we analyse social-ecological reflexivity in the implementation of the EITI in Indonesia, a country that is heavily impacted by extractive industries. We draw on content analysis of the MSG meeting minutes and EITI-Indonesia reports between 2012 and 2019. We show that the EITI-Indonesia has not (yet) generated deep social-ecological reflexivity. First, there is limited recognition and rethinking of extractive industry governance and no real response in the form of governance reforms. Second, there are even signs of what we call 'anti-reflexivity', whereby members of the multi-stakeholder group ignore and resist public debates around the negative impacts from extractive industries. In analysing the different components and degrees of reflexivity around the EITI-Indonesia, the article provides vital insights into the (study of) conditions under which global norms such as the EITI find meaning in and affect specific contexts.

KEYWORDS

Extractive Industries Transparency Initiative, Indonesia, reflexive governance, reflexivity, sustainable development

INTRODUCTION 1

The Extractive Industries Transparency Initiative (EITI) is a global standard that aims to improve governance quality in extractive industry sectors, including oil, gas, coal and minerals. It was established in 2003 with a view to addressing the resource curse, a situation whereby resource-rich countries experience negative impacts from extractive industries, such as slow economic growth,

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poor governance quality, environmental degradation, poverty, inequality and conflicts (Papyrakis, 2017). Fifty-five countries are currently implementing the EITI in an effort to meet the EITI requirements and reach compliance status. Even though the broader aim of the EITI is to foster the "prudent use of natural resource wealth (...) that contributes to sustainable development" (EITI-International, 2019, p. 6), the standard has been criticised for its narrow conceptualisation of sustainable development, focusing primarily on being an "engine for sustainable economic growth" (EITI-International, 2019, p. 6; see e.g. Phillips & Whiting, 2016). Although EITI-implementing countries are "encouraged" to disclose information about the governance and monitoring of environmental impacts from extractive industries (EITI-International, 2019, p. 30), they are not required to disclose information on, let alone make efforts to address, environmental and social impacts and thereby stimulate sustainable development in its entirety.

Nonetheless, the EITI is meant for countries to implement as they see fit, including by regarding it as part of broader governance reforms that potentially go beyond the standard requirements (Vijge et al., 2019). To decide on how the EITI is implemented, EITIimplementing countries each form multi-stakeholder groups (MSGs) that facilitate deliberation among government, civil society, and business representatives. Together, these representatives decide on the scope of the EITI in each implementing country. Some countries broadened the EITI's scope to also include environmental and social impacts, including from sectors such as hydro-energy, forestry and water (EITI-International, 2017).² As such, deliberations happening within the EITI MSGs can enable what we call reflexivity: the ability of an entity to reconfigure itself in response to reflections on its performance (Dryzek, 2016). Deliberation can collectively engage actors in learning processes such as recognition, rethinking and response (Pickering, 2019), including related to governing the social and environmental impacts from extractive industries. Hence, deliberation within the MSG is a crucial element of EITI implementation, because it provides opportunities for engaged actors to ensure that the EITI contributes to sustainable development in all its dimensions: economic as well as environmental and social.

To date, however, there has been limited research examining the extent to which deliberation within the MSG encourages EITIimplementing countries to reflect on their (governance) performance in contributing to sustainable development. Most research on the EITI focuses on the effectiveness of EITI-implementing countries in meeting the standard requirements (e.g. Sovacool et al., 2016) or in addressing the resource curse (Corrigan, 2014; Papyrakis, 2017; Rustad et al., 2017). Others have studied the EITI's origins and evolution (Ostrowski, 2020; Collier, 2008; Haufler, 2010) or its design (Aaronson, 2011; Hilson & Maconachie, 2009; Kolstad & Wiig, 2009; Mouan, 2010). The limited research that does focus on the effects of the EITI in addressing the negative impacts of extractive industries remains inconclusive. Some research has indicated that the EITI stimulates public debates (Magno & Gatmaytan, 2017), broader governance reform (Poncian & Kigodi, 2018), and discussions on and monitoring of environmental and social impacts (Vijge et al., 2019). Others indicate that deliberations within the MSG in some countries are insufficient to address the social and environmental

impacts (Yanuardi et al., 2021) and that governments use the EITI merely as a legitimation tool (Aaronson, 2011; Furstenberg, 2015).

In order to analyse how and to what extent the EITI stimulates reflection on countries' governance performance, we coin the concept of social-ecological reflexivity, which we adapt from ecological reflexivity, a framework advanced by Pickering (2019). Though Pickering (2019) does acknowledge social aspects in ecological reflexivity, we add the term social to the concept to emphasise the social dimension-which we understand to include the economy-and thereby capture the three dimensions of sustainable development; social, economic and environmental. We show that a full operationalisation of this concept can be used to analyse how stakeholders within the EITI MSG are reflexive about the sustainable development of extractive industries. We apply this concept in one of the EITI-implementing countries, Indonesia, to understand to what extent and how the EITI influences socialecological reflexivity. Though social-ecological reflexivity could be applied to study how and to what extent the global EITI standard is reflected upon and adapted, we instead focus on how and to what extent the EITI-Indonesia advances reflexivity to change extractive industry governance in Indonesia.

Indonesia is chosen as a case because of its wealth in natural resources and thousands of extractive industry companies providing raw material and energy for global industries (Gellert, 2019). Apart from providing state revenue and employment, Indonesia's extractive industries are seen as failing to contribute to society's welfare and even leading to adverse social impacts, including poverty, human rights violations, and violent conflicts such as in Aceh and Papua (Aspinall, 2007; McCarthy, 2007). Adverse environmental impacts from extractive industries include land cover change and abandoned post-mining sites (PWYP-Indonesia & KPK, 2018), biodiversity loss, pollution, greenhouse gas emissions (Ritchie & Roser, 2020) and increased vulnerability to disasters like flooding.³

In 2010, Indonesia joined the EITI with the expectation that this would improve transparency and increase investors' confidence so as to enhance capital influx (Presidential decree 26/2010). At the time of writing, Indonesia has published seven sets of EITI reports. The country has been EITI-compliant since 2014, though it was temporarily suspended in 2015 due to failing to meet the reporting deadline. Indonesia's government was initially not enthusiastic about becoming an EITI member, as evidenced by the government's slow response and initial ambivalence in joining the EITI (Rosser & Kartika, 2020). However, a combination of loan requirements and pressure from global actors such as the World Bank, the International Monetary Fund, international NGOs, and donor institutions eventually persuaded Indonesia to join the EITI (Rosser & Kartika, 2019; Yanuardi et al., 2021). Whether deliberations and reflections on the EITI-Indonesia go beyond merely complying with the standard's requirements is subject of study in this article, drawing on the concept of social-ecological reflexivity.

The article proceeds as follows: the next section reviews the (gaps in) literature on reflexivity and the EITI, and presents a conceptual framework to analyse the potential of the EITI to advance social-ecological reflexivity. Section 3 provides a background to the case of extractive industry governance in Indonesia and outlines our research

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methodology. Section 4 analyses to what extent and how the EITI advances social-ecological reflexivity in Indonesia. Section 5 discusses the empirical and theoretical contributions of this article and provides recommendations for future research. Finally, the conclusion provides a recap of the main findings and policy-relevant recommendations.

2 | SOCIAL-ECOLOGICAL REFLEXIVITY

Reflexivity we define here as the capacity of agents, structures, processes or sets of ideas to improve in light of reflection on their performance (Pickering, 2019). Governance can be called reflexive if it includes the perspectives, values and norms of a variety of actors, which in turn has consequences for the interventions of the governance system (Feindt & Weiland, 2018; Pickering, 2019).

Dryzek and Pickering (2017) emphasise the importance of the nexus between reflexivity and social-ecological systems for (re)constructing institutions to address problems in the Anthropocene (see also Biermann, 2021). Hence, encapsulating the social-ecological dimension of reflexivity requires understanding and governing the interlinkages between institutional change and human and ecological systems. Pickering defines ecological reflexivity as "the capacity of an entity (e.g. an agent, structure, or process) to recognise its impacts on social-ecological systems and vice versa, rethink its core values and practices in this light, and respond accordingly by transforming its values and practices" (Pickering, 2019, p. 1150). Hence, reflexive governance is different from reflectiveness; while 'reflexivity' refers to the social and political dimensions of governance, 'reflection' or 'reflectiveness' refers to the cognitive dimension of these processes (Feindt & Weiland, 2018). To recognise the importance of not only the environmental but also the social dimension of sustainable development, we coin the concept of social-ecological reflexivity. This concept enables us to analyse whether the EITI, in its focus on promoting sustainable economic growth, is also implemented with a view to recognising, rethinking and responding to the social and environmental dimensions of sustainable development.

Drawing on the three components and signs of ecological reflexivity introduced by Pickering (2019)—recognition, rethinking and response—we develop a fully operationalised framework to study social-ecological reflexivity around the EITI. We adjusted it so that it

not only focuses on the national level (rather than the global level studied by Pickering, 2019), but also focuses specifically on how and to what extent the social and environmental impacts of extractive industries are debated in the multi-stakeholder group that decides on the implementation of the EITI (Figure 1 and Table 1).

Following Pickering (2019), we identify specific indicators to operationalise the three components of social-ecological reflexivity. The first concerns the capacity to recognise (past, current and future) impacts from or on extractive industries, and to monitor and anticipate them. Impacts may include the adverse social and environmental impacts that play out not only at the national or local level-such as soil erosion or river pollution caused by mining-but also at the global level-such as climate change caused by extractive industries' emissions of greenhouse gasses. Impacts may also be dispersed in time, affecting present as well as future generations. The second component of reflexivity is the processes of reflexive rethinking, that is, a latent capacity to reconsider values and practices in the face of changing social-ecological conditions. This capacity entails not only being able to critically review actors' core values and practices with regard to managing environmental and social impacts from extractive industries, but also to learn from past successes and failures in governing extractive industries, learn from other countries' experiences in implementing the EITI, and envision alternative futures for the country. The final component of reflexivity, response, happens when reflexive recognition and rethinking trigger actual shifts in values and practices in a country's governance of extractive industries. This could happen through a rearticulation of the core aims, values and/or discourses around extractive industries, or through a reconfiguration of how the functions and practices of extractive industry governance interact with social-ecological systems.

Social-ecological reflexivity can happen to various degrees. Deep reflexivity entails the presence of all three components and all of their indicators, whereas the presence of all components but absence of some of their indicators represents shallow reflexivity. The absence of some components can indicate what Pickering (2019) calls non-reflexivity, for example, in case there is response without thinking or recognition without response. The absence of (some) components and their indicators can coincide with what Pickering (2019) calls anti-reflexivity, whereby recognition, rethinking or response is suppressed or resisted, for example by ignoring scientific insights on, public debates around

Awareness of environmental and social impacts from extractive industries Monitoring past/current impacts Anticipating future impacts from extractive industries

2. Rethinking

- Learning from past successes & failures around addressing impacts
- Learning from other countries' experiences in EITI implementation
- Critical review of core values & practices
- Envisioning alternative futures

3. Response

- Rearticulation of core aims, values & discourses of extractive industry governance
- Reconfiguration of functions & practices

FIGURE 1 The components of social-ecological reflexivity and their indicators (adapted from Pickering, 2019)

or protests against negative impacts from extractive industries (Boström et al., 2017, p. 13).

In this article, we study the extent to which social-ecological reflexivity is reflected in deliberation about the implementation of the EITI within the multi-stakeholder group. Deliberation is "aimed at producing sensible, well-informed opinions in which participants are willing to revise preferences in light of the discussion, new information, and claims made by fellow participants" (Chambers, 2003: 309). Deliberation does not, however, necessarily guarantee a deep reflexivity as some deliberations can simply be superficial or are stifled by anti-reflexivity (Pickering, 2019). In this article, we analyse to what extent the deliberations within the EITI-Indonesia MSG show signs not just of reflexivity in general, but specifically around the social and environmental impacts of extractive industries (Figure 1 and Table 1).

3 | STUDYING SOCIAL-ECOLOGICAL REFLEXIVITY IN THE EITI

3.1 | Reflexivity in the EITI

Since its establishment, the EITI standard has evolved from focusing merely on disclosing (state) revenue to the disclosure of information on the entire value chain of extractive industries (EITI-International, 2016). Even though the EITI aims to contribute to sustainable development, up to 2016 the standard did not focus on the social and environmental impacts of extractive industries. The EITI started to include these issues since the latest revisions of the standard in 2019. The standard now requires countries to disclose information about the environmental and social expenditures from extractive companies. Furthermore, the 2019 standard encourages (rather than requires) countries to disclose information on the management and monitoring of social and environmental impacts of extractive industries by both government agencies and companies. The environmental and social impacts themselves are, however, not taken into consideration in countries' validation of their overall progress in meeting the EITI standard (EITI-International, 2019). Despite this, a substantial number of countries voluntarily report on the environmental impacts of extractive industries. In 2017, 28 (of the 48) EITIimplementing countries already included at least some information on environmental impacts in their reports. Some of these even included work plans with environmental objectives (EITI-International, 2017).

The EITI considers multi-stakeholder groups to be key in implementing the EITI at the national level. Such kinds of deliberation are expected to not only help countries in producing their EITI reports, but also in deciding on the EITI's scope, triggering public debates and considering broader reform processes (Yanuardi et al., 2021). Some research has shown that global norms such as the EITI affect countries' efforts to improve the quality of extractive industry governance in developing countries (Singh & Camba, 2020; Gustafsson et al., 2020; Macdonald & Nem Singh, 2020), including at the local level (Winanti & Hanif, 2020). Some countries, like Myanmar and the Philippines, even (voluntarily) initiated sub-national MSGs, which shows that the EITI can become an arena to discuss social and

environmental impacts of extractive industries (Vijge et al., 2019; EITI-Philippines, 2020). Also at the global level, deliberation happens through an MSG that decides on the standard requirements. The existence of multi-level MSGs and the EITI standard that continuously evolves with an increased focus on environmental reporting shows that opportunities for social-ecological reflexivity do exist. After a brief background on the EITI in Indonesia and an explanation of our research methods, we turn to analysing to what extent and how the MSG in Indonesia demonstrates social-ecological reflexivity around the EITI.

3.2 | The case of the EITI-Indonesia

As the introduction already explained, global actors, especially the World Bank and the International Monetary Fund initially introduced the EITI to Indonesia. They managed to convince the initially hesitant Indonesian government to join the EITI, with the Presidential decree 26/2010 as the legal basis for implementing the EITI in Indonesia (Rosser & Kartika, 2019). This presidential regulation stipulated the establishment of the EITI-Indonesia MSG, an EITI steering committee and an implementing team. The steering committee consists of ministers and other high-level government officials from the national government, including the Coordinating Minister for Economic Affairs, the Minister of Energy and Mineral Resources, the Minister of Finance, the Minister of Home Affairs, and the head of Agency for Finance and Development Supervision, as well as a civil society representative. The steering committee has the power to formulate or amend policies around extractive industries, including related to transparency of government revenues. The EITI-Indonesia implementing team is also represented by the highest-level government bodies from the Ministry of Finance, Ministry of Energy and Mineral Resources and the Ministry of Home Affairs, as well as civil society representatives. Business actors are also represented: the Indonesian Mining Association, Indonesian Petroleum Association, the Indonesian Coal Mining Association and the President Director of PT Pertamina, a state-owned company for oil and gas extraction. The engagement of top-level government officials in the EITI generated high expectations among the public that the EITI could stimulate broader governance reform in Indonesia. However, despite the fact that the Presidential regulation 26/2010 stipulates that the members of the MSG, the steering committee and the implementing team consist of top-level decision makers, in reality the MSG meetings were mostly attended by lower-level representatives of government bodies. 4 Also not all relevant business actors are represented. For example, most coal mining companies are not members of the Indonesian Coal Mining Association.⁵ Representatives of civil society in the implementing team are limited to civil society organisations that are concerned with the transparency of state revenues (Presidential decree 26/2010). Public What You Pay-Indonesia-a national civil society network affiliated with Publish What You Pay International—was one of the most important representatives of civil society in EITI-Indonesia (Yanuardi et al., 2021).

 TABLE 1
 Operationalising the components and indicators of social-ecological reflexivity

Indicators	Operationalisation
Recognition	
Awareness within the MSG of the impacts of extractive industries	Which impacts have been (dominantly) discussed in the MSG, focusing on scope (local, national, global) and timeframe (present or future generations)?
Monitoring is marked by whether the MSG observes impacts of extractive industries	Has monitoring of impacts been discussed in the MSG? If so, which impacts?
Anticipating refers to whether the MSG discusses (projecting and predicting) the future impact of extractive industries	Have future impacts of extractive industries been discussed in the MSG? If so, which impacts?
Rethinking	
Learning from past successes and failures in addressing the impacts of extractive industries	Was the necessity to learn from past successes and failure discussed in the MSG? What lessons were drawn from this?
Learning from successes and failures of other countries in addressing the impacts of extractive industries	Were other countries' experiences discussed in the MSG? What lessons were drawn from this?
Critical review of core values and practices focusing on the goals and means of extractive industry governance	Which core values and practices of extractive industry governance in addressing impacts have been (dominantly) discussed in the MSG?
Envisioning possible futures of extractive industry governance and imaginations of ideal situations	Has the MSG envisioned or imagined any desirable futures for extractive industry governance? What is the dominant imagination of the future of extractive industry governance?
Response	
Rearticulating core aims, values or discourses in the formal mandate of the regulatory system to address social and environmental impacts	Did the regulatory system change its aims, values, or discourses as a result of the EITI?
Reconfiguring functions and practices of the regulatory system in addressing social and environmental impacts	Was the regulatory system reconfigured in terms of its functions and practices around the impacts of extractive industries because of the EITI?

Research on the implementation of the EITI in Indonesia is still extremely limited. From the Scopus database we could only retrieve two journal articles specifically discussing EITI implementation in Indonesia. Rosser and Kartika (2019) discuss the political dynamics and actor constellations within the EITI-Indonesia and revealed that the commitment to EITI implementation is waning. Yanuardi et al. (2021) analyse the effects of the EITI, focusing on three aspects of governance quality. They argue that due to certain limitations in the EITI standard, the EITI has not significantly helped to improve the governance of Indonesia's extractive industry sector. Rather than focusing on the actor constellations or the nature of the EITI standard, this article analyses how the EITI in Indonesia is framed and used to contribute (or not) to addressing the social and environmental impacts of extractive industries, drawing on the concept of social-ecological reflexivity.

3.3 | Research methods

In this article, we study the deliberations in the MSG discussions as well as the EITI reports as an outcome of such deliberations in Indonesia. Our analysis is primarily exploratory with a focus on assessing the levels of social-ecological reflexivity rather than on explaining these levels. This justifies our focus on only the formal and documented MSG meetings and their outcomes which reveal the

levels of reflexivity, leaving out analyses of the informal and wider debates around the EITI in which reasons for these levels could have been found. Thus, we see the presence or absence of reflexivity in MSG meeting minutes and EITI reports as an indication of (the lack of) overall reflexivity on the EITI with potential to generate action. Both quantitative and qualitative content analyses were conducted to study social-ecological reflexivity in the implementation of the EITI. Data was collected from minutes of 51 MSG meetings that were held between January 2012 and December 2019. These were analysed in their original language (Indonesian). In addition, seven sets of annual EITI-Indonesia reports published from 2013 to 2019⁷ were analysed, particularly volume 2, the contextual reports. The minutes and reports were retrieved from the EITI-Indonesia website. The reports and meeting minutes were analysed using NVivo software to organise, analyse and generate insights from the data. Codes were based on the conceptual framework presented in Section 2, classifying socialecological reflexivity into three components, each with their own indicators (Figure 1 and Table 1). This determined the level of reflexivity. To determine the subject of reflexivity, we analysed the topics that were (or were not) subject to reflexivity, whether related to the economic, environmental or social impacts of extractive industries. Additionally, we quantitatively analysed the frequency of certain words that demonstrated signs of social-ecological reflexivity around these impacts in the documents, using the word frequency query function in NVivo.8 Word queries were conducted in Indonesian and English

language while considering word variations and any spelling errors in the meeting minutes. We also considered the context of the words within the sentence.

4 | SOCIAL-ECOLOGICAL REFLEXIVITY IN THE EITI-INDONESIA

In this section, we analyse the level and dimensions of social-ecological reflexivity in the MSG deliberations—the meeting minutes—and their outcomes—the EITI reports. We use the indicators of recognition, rethinking and response from our conceptual framework in Section 2 to structure our analysis.

4.1 | Recognition

4.1.1 | Awareness

Initial expectations of the EITI in Indonesia recognised that the EITI, through fostering good governance, could address the negative impacts of extractive industries. In 2012, the EITI-Indonesia secretariat, hosted by the Ministry of Economy, stated that "We have to agree that we intend the EITI to succeed in evenly distributing the revenues from natural resources (....). The absence of transparency resulted in the destruction of the country. This situation creates a resource curse in many countries. So, we need to prevent this by the success of the EITI." A representative of Publish What You Pay Indonesia stated in 2013: "So we all ought to be aware, that we all want a better Indonesia, because we recognise that poverty, (poor) education and poor health (system) in (this) country is caused by corruption." 10

Notwithstanding this awareness of the potential of the EITI to address negative impacts from extractive industries, the initial EITI-Indonesia reports (EITI-Indonesia, 2013, 2014) did not disclose significant information about the social and environmental impacts of extractive industries in Indonesia. This lack of awareness was linked to the report's narrow scope with a sole focus on the reconciliation of companies' payments and government revenue from extractive industries (EITI-Indonesia, 2013, 2014). Not only did the EITI reports lack awareness of environmental and social impacts, also the deliberations within the MSG did not focus on these impacts, as evidenced by the significantly fewer number of words related to the environmental and social dimensions compared to the economic dimensions in the MSG meeting minutes. Our analysis of the 16 MSG meetings held between 2012 and 2014 revealed that the environmental dimension with words such as environment, forest, rehabilitated and reclamation respectively counted 3, 2, 1 and 4 words, even though in 2013 CSO representatives tried to push for the inclusion of information disclosure on reclamation funds to rectify environmental damage caused by extractive industries. 11 Words associated with social impacts such as poverty, corruption and corporate social responsibility counted 1, 4 and 9 respectively. These numbers are miniscule compared to the number of words related to tax (227 words) and revenue (151 words).

The intense discussions around taxes and revenues demonstrate high awareness of the (potentially) positive economic impacts of the EITI on extractive industries. Discussions mainly centred around the importance of transparency on state revenues from extractive industries and on how to eliminate potential losses in such revenues due to corruption.

Since 2015, awareness of the social and environmental impacts began to emerge in the EITI-Indonesia. Since 2013, EITI-implementing countries are required to publish a contextual report, as well as disclose information on the entire value chain, which facilitates reflection on the social and environmental impacts of extractive industries. Awareness of such impacts is reflected both in MSG discussions and in EITI-Indonesia reports, which state that illegal mining, artisanal mining and official mining companies inflict direct social and environmental impact on the ground. Our content analysis of 35 MSG meeting minutes in the period 2015-2019 revealed that words related to the environmental dimension have become more frequent and diverse, and included forest, environment, environmental impact assessment, nature, abandoned site restoration, reclamation guarantee fund, and impact. No mention was made in the MSG meetings of climate change-related issues such as CO2 and greenhouse gas emissions. Also, words related to the social dimension have become more varied and included benefit, impact, welfare, livelihood, community development, capacity, Corporate Social Responsibility, social, gender, life, discrepancy, poverty, corruption and sustainability. Although our analysis indicates that the awareness of environmental and social impacts increased with Indonesia's implementation of the 2013 and later the 2016 standard, the frequency of words related to the environmental and social dimensions remain small compared to the number of words related to the economic dimension (Figure 2).

In the relatively few but increasing times that environmental and social impacts of extractive industries are mentioned in the EITI-Indonesia reports, these are only mentioned in the contextual reports that sketch the broader context of Indonesia's extractive industry sector, rather than information on such impacts being

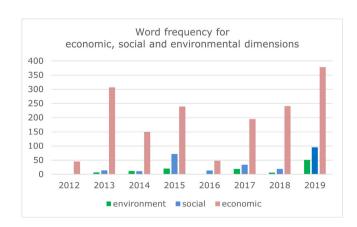


FIGURE 2 Word frequency for environmental, social and economic dimensions in the minutes of the EITI-Indonesia MSG meetings from 2012 to 2019

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consolidated in the main EITI reports. Moreover, negative impacts are mostly linked to illegal or informal, and in particular artisanal (smallscale) mining. In 2015, a taskforce was established within the MSG to decide on the scope of the EITI-Indonesia contextual reports. 12 The taskforce recommended including a discussion of informal mining, arguing that such mining negatively affects the state's revenues from extractive industries. This recommendation was taken up in the EITI contextual report that was published in 2015, which discussed illegal trade, illegal mining and the subsequent loss in state revenue (EITI-Indonesia, 2015). The next EITI-Indonesia contextual reports published in 2016 and 2017 also included discussions of the social, environmental and cultural impacts of informal mining, in addition to the economic impacts of loss in state revenues and an unhealthy investment climate caused by informal mining (EITI-Indonesia, 2016; 2017). Interestingly, the framing of artisanal mining in the EITI-Indonesia contextual reports changed from illegal and not compliant with the Good Mining Practice (EITI-Indonesia, 2016) to not automatically categorising artisanal mining as illegal mining (EITI-Indonesia, 2017; 2018) and framing artisanal mining as legal (EITI-Indonesia, 2019). However, EITI-Indonesia reports still frame small-scale mining largely as the sole culprit in illegal mining and trading, while barely disclosing or discussing illegal mining practices by large and medium-sized mining companies, such as the widespread practice of mining in conservation or conflict areas (EITI-Indonesia, 2018).

Within the MSG, the issue of illegal and artisanal mining and its impacts did not generate fierce debates. Seemingly, discussing these issues is not in the interest of MSG members, who tend to prioritise issues related to meeting the EITI requirements, such as information disclosure on contracts, beneficial ownership and cadastres. Whenever illegal mining did come up, such as statements by the Indonesian Coal Mining Association representing the interests of business parties, the issue is primarily considered to be detrimental to the business climate and barely linked to the many environmental impacts of illegal mining. All this shows that the awareness component of socialecological reflexivity regarding the negative environmental and social impacts from artisanal mining is limited, with even more limited awareness of such impacts from large-scale mining. This is in contrast to the awareness on the negative economic impacts from artisanal mining, as well as the positive economic impacts from large-scale mining.

The lack of recognition of environmental impacts of extractive industries in the EITI reports and the MSG discussions is in stark contrast to the public debate around these impacts. Popular media regularly report on disasters related to mining practices in Indonesia, such as floods resulting from forest destruction due to mining. 13,14,15 None of these issues received significant attention within the MSG, not even when the movie 'Sexy Killers' about the social and environmental impacts of Indonesian oligarch mining industries was launched in 2019. This movie was viewed 36 million times (despite being in Indonesian language), received massive public attention and became topic of fierce debates in Indonesian social media. 17 This shows that the MSG is not just unaware, but rather ignorant of or even resistant to discussing the social and environmental impacts of extractive

industries, despite prominent public debates and calls for attention to these matters.

4.1.2 Monitoring and anticipating

While discussions on how to monitor state revenue and companies' payments in Indonesia's extractive industries sector are prominent in the MSG meetings and EITI reports, 18 we did not find any evidence of discussions within MSG meetings on monitoring environmental and social impacts, or of efforts to anticipate such impacts. The EITI-Indonesia contextual reports contain information on Indonesian government regulations, including the obligation for extractive industry companies to conduct environmental impact assessments through AMDAL, an obligatory document for obtaining mining licences from the government. However, the MSG never discussed the need to disclose company's impact assessment reports and anticipate how to address impacts that might occur in the future. 19 The 2015 EITI-Indonesia reconciliation report contains information on which companies have an environmental impact analysis (AMDAL) document (EITI-Indonesia, 2017), but there is no further elaboration on whether and how the public can access these documents. As such, the public does not get information on whether these documents have proceeded through the right track process and on the extent to which companies have rehabilitated the environmental damage as a result of their operations. With regard to artisanal and illegal mining, although there was some discussion of its impacts (as we showed above), the MSG meetings never discussed the need to monitor such impacts or to anticipate any future impacts. The EITI-Indonesia 2015 report acknowledged that there is no official data on how much the state loses because of artisanal and illegal mining (EITI-Indonesia, 2017), but no follow-up was mentioned on how to address this lack of data.

4.2 Rethinking

Learning from past successes and failures

The EITI was initially welcomed as a process that could lead to a better future for Indonesia by learning from past experiences and rethink the way in which the country manages its natural resources. This was evident from statements of not only representatives of the Indonesian government, but also of civil society and business actors. It was acknowledged that Indonesia's wealth in natural resources does not substantially benefit its citizens and is not managed in a transparent manner. As an EITI-Indonesia secretariat officer stated in 2012: "Indeed, it has to be fixed from the start, because it has been 65 years of independence, but (...) in the past there has been no transparency, in the future we should be transparent, (...) we want to see our children and grandchildren in the better future, and our natural resources will be sustained in the future and are not depleted in a short time, therefore the resources must be well maintained."20 Interestingly, the 2016 EITI-Indonesia report (EITI-Indonesia, 2018) showed that Indonesian provinces that are rich in natural resources are among the

poorest regions in Indonesia. This statement has not, however, been accompanied with discussions within the MSG to rethink the way in which Indonesia governs its natural resources. Indeed, the EITI stated in Indonesia's validation of compliance that "there is limited evidence that the multi-stakeholder group is taking steps to act upon lessons learnt and recommendations resulting from EITI reporting in general." ²¹

4.2.2 | Learning from other countries' successes and failures

While the EITI-Indonesia reports acknowledge some good practices from other countries in managing natural resources, the reports do not contain any consideration of how Indonesia can draw on these lessons learned. The 2014 EITI-Indonesia contextual report, for instance, states the necessity to learn from countries such as Ghana and Peru, which successfully deal with illegal and artisanal mining through a non-repressive approach (EITI-Indonesia, 2016). Rather than making artisanal mining illegal, these countries imposed regulations to improve the quality of artisanal mining and protect small-scale miners as it is seen to provide jobs and improve public welfare. The EITI-Indonesia contextual report does not, however, contain any rethinking of how these approaches are applicable in solving the complexity of artisanal mining problems in Indonesia. Similarly, while the 2016 EITI-Indonesia report mentions Norway's positive experiences in managing endowment funds for the long-term development of extractive industries, it contains no reflection on how Indonesia might be able to draw on these lessons learned (EITI-Indonesia, 2018).

4.2.3 | Critical review of core values and practices, and envisioning possible futures

Some initial statements by key actors in Indonesia reveal that the EITI was framed with a view not just to complying with the standard, but also to improving the quality of governance of extractive industries, using good governance as a core value. The EITI adoption happened through the Presidential Regulation no. 26 in 2010, which acknowledged that "the management and use of natural resources must be done in accordance with the principles of good governance, including transparency, the inclusion of relevant stakeholders, openness, sustainable development, and the improvement of the investment climate." (Presidential decree 26/2010). Also, the EITI-Indonesia secretariat stated that "our goal is not just [to achieve] compliant [status], but transparency as the main goal as it benefits our country [and] that people are given the right information. (...) moreover, we implement good governance."²²

Apart from initial expectations that the EITI would help improve the quality of extractive industry governance, the strategy proposed in Indonesia's validation report to rethink Indonesia's core values and practices and envision alternative futures did not come up in the recommendations of any of the EITI contextual reports (EITI-secretariat, 2015, 2016, 2017, 2018, 2019). Ever since its establishment, the MSG

predominantly discusses issues related to meeting the EITI requirements, rather than discussing the adverse impacts from extractive industries and rethinking Indonesia's core values and practices in governing extractive industries. This seems to indicate that earlier statements about the EITI's ability to foster good governance remain largely superficial. Neither the EITI-Indonesia reports, nor any discussions within the MSG or among relevant government bodies reveal a critical review of existing values and practices at the national governance levels.

What the EITI reports did reveal, was some evidence on subnational (rather than national) governance problems to monitor extractive industry companies in mining areas (EITI-Indonesia, 2017). The EITI reports disclosed the audit that was carried out on the extent to which mining companies comply with government regulations on the social and environmental impacts in East Kalimantan province. In the 2015 EITI-Indonesia contextual reports, the Audit Board of The Republic of Indonesia not only revealed the lack of mining companies' compliance with the rule to pay the reclamation guarantee fund (a commitment fund to cover the costs of rehabilitating former mine sites), but also the fact that the abandonment of post-mining sites occurs because of low capacity of the sub-national government to monitor the mandatory payments of reclamation funds and post mining reclamations (EITI-Indonesia, 2017). This can be seen as an effort to monitor companies' compliance with regulations on environmental impacts and the government's (in)capacity to enforce these regulations. This is, however, only a sample from one province, not from the national level.

4.3 | Response

The final component of social-ecological reflexivity that we analyse here is response. One of the drawbacks of the EITI-Indonesia is the lack of response to address the social and environmental impacts from extractive industries. As we showed above, there is (some) recognition of the social and environmental impacts of illegal and artisanal mining in the MSG meetings and EITI reports. However, up to 2018, the EITI reports did not present any response to these issues; no solutions for the environmental and social impacts from artisanal and illegal mining were mentioned in the recommendations of the contextual reports (EITI-Indonesia, 2015, 2016, 2017, 2018). The latest EITI-Indonesia report that was published in 2019 provided some recommendations on how to address impacts from mining, but these only focused on preventing informal mining from distorting the market, rather than reflecting on how to promote good mining practices that take into account both the economic and the environmental and social dimensions (EITI-Indonesia, 2019).

Even these (economically focused) recommendations do not guarantee a structured response since there seems to be a persistent lack of interest among MSG members to address the issues. This is apparent from the lack of discussions within the MSG on overall reforms in Indonesia's governance of extractive industries beyond meeting the strict EITI requirements.²⁴ Most of the recommendations for action coming from the MSG directly relate to the EITI requirements, such as

disclosing contracts, cadastre and beneficial ownership. Some MSG recommendations are related to the establishment of EITI units at the sub-national level, but these were framed mostly as ways to increase market confidence rather than to enhance accountability around social and environmental impacts from extractive industries.²⁵ The MSG acknowledges that for any recommendations to evoke response, support is needed from high-level decision makers, particularly from the EITI steering committee members that include ministers and other highest-level bureaucrats. We did not, however, find any solid evidence that steering committee members responded to the EITI reports or their recommendations in the meeting minutes and subsequent EITI reports, even where these were related to the economic dimension of extractive industries²⁶ (see also Yanuardi et al., 2021).

Confirming this lack of response, the EITI stated in response to Indonesia's validation that "The annual progress reports, minutes of MSG meetings and stakeholder views confirm that the MSG has not actively pushed for reforms and in cases where reforms were implemented, the MSG's contributions to such reforms are uncertain." Furthermore, the EITI-Indonesia validation report stated that: "the EITI has tended to remain a standalone reporting process with limited linkages to broader reforms" (CowaterSogema Independent Validator, 2019, p. 5). Based on Indonesia's validation, the EITI Board "encourages Indonesia to move beyond viewing the EITI as an annual reporting exercise to using implementation as a means of improving the governance of natural resources for the ultimate benefit of its citizens" (EITI Board, 2019, p. 3).

4.4 | Degree of social-ecological reflexivity within EITI-Indonesia

While the above showed that some components of social-ecological reflexivity were present in the EITI-Indonesia, this was insufficient to demonstrate deep reflexivity on the governance of Indonesia's extractive industries sector. We found varying degrees of social-ecological reflexivity within the MSG.

First, in studying the extent to which these impacts are recognised, we discovered only shallow, though slightly increasing awareness of the social and environmental impacts, in contrast to a more advanced consideration of the economic impacts and the importance of the EITI in improving Indonesia's business environment. The limited awareness that the MSG and EITI-Indonesia reports have for the adverse impacts of extractive industries mostly consisted of considerations for the economic, and to a more limited extent social and environmental impacts of illegal and artisanal mining. This form of mining is seen as the main culprit for adverse impacts from extractive industries, whereby artisanal mining was initially framed as illegal practice that distorts the market for extractive industries. We also revealed an almost complete absence of signs of monitoring and anticipating future impacts. The EITI-Indonesia reports contain information on whether companies comply with the regulation to conduct mandatory environmental impact assessments, but no further information is provided, making this information not very actionable for stakeholders to use to their advantage.

In studying the second component of reflexivity, *rethinking*, we found that although MSG members and the EITI-Indonesia reports refer to problems in Indonesia's extractive industries and the need to learn from the past and from other countries, this was not accompanied by a critical review of core values and practices or a vision for an alternative future for Indonesia's extractive industry sector.

Finally, in studying the extent to which the EITI evokes *responses*, we revealed an almost complete absence of responses to address the impacts from extractive industries in Indonesia. The EITI reports hardly provided recommendations on such impacts, and the fact that MSG meetings were only attended by lower-level bureaucrats with no coordination with the higher-level steering committee means that very limited follow-up to the EITI-Indonesia reports can be expected. This is in line with the findings by Rosser and Kartika (2019), who showed that the political dynamics of political constellation among elites do not guarantee strong commitment of political actors for supporting governance reform through the EITI in Indonesia.

Our article does not only show a low level of social-ecological reflexivity around the EITI-Indonesia, but even a reluctance among MSG members to acknowledge, let alone rethink or respond to large public debates on the adverse social and environmental impacts of large-scale mining companies, including in post-mining operations. This could be called anti-reflexivity, whereby there is active resistance to discuss the impacts from extractive industries, even in the face of strong calls to do so.

5 | DISCUSSION

Our findings show the relevance of studying social-ecological reflexivity in assessing countries' compliance with global standards such as the EITI and the use of such standards to stimulate broader governance reform. First, we showed that low levels of social-ecological reflexivity strongly limit the contributions of the EITI to improve governance quality in a country such as Indonesia, where the impacts from extractive industries are large and widely debated. While the EITI does not require countries to monitor or manage such impacts, the absence of reflexivity or the presence of anti-reflexivity is an important indicator for countries' limited ability to fully comply with the EITI standard, given that stakeholders and particularly MSG members "must" ensure that the "EITI process (...) contributes to public debate" (EITI-International, 2019, p. 11). Second, while the EITI standard is sometimes criticised for drawing on a narrow conceptualisation of sustainable development in its strong focus on sustainable economic growth (Hilson & Maconachie, 2009; Phillips & Whiting, 2016), we showed that low degrees of reflexivity in Indonesia even extend to the economic dimension. The EITI-Indonesia seems to follow the narrow conceptualisation with a strong emphasis on the disclosure of state revenues and enhancing investors' confidence. MSG deliberations have not triggered deep reflexivity on the economic dimension (which we considered as part of social-ecological reflexivity), shown by a lack of response to address economic problems in Indonesia's extractive industry sector. Third, our study of reflexivity showed the importance of commitment from and coordination among multiple stakeholders both within and outside the

MSG, including higher-level bureaucrats with which the MSG needs to coordinate to enact EITI implementation and broader governance reforms. Further research on the interests of and relations between these stakeholders in their framing and employment of the EITI could advance our understanding of the level of social-ecological reflexivity, and what is required to increase it. The role of global actors and donors, such as international organisations and global NGOs in the implementation of the EITI is an important factor in studying the influence of stakeholders in stimulating reflexivity (see e.g. Gustafsson et al., 2020; Rosser & Kartika, 2019).

Our findings not only have bearing on the effects of global standards such as the EITI, but also on the transformative potential of transparency and transparency initiatives more broadly. As others have also indicated, information disclosure alone does not have transformative potential, but needs to coincide with wider governance reforms and deliberations around what should be made transparent, by and for whom, and to what end (e.g. Ciplet et al., 2018; Gupta, 2010; Vijge, 2018). For such deliberations to foster deliberative capacity for broader governance reform, they need to be authentic, i.e. non-coercive; inclusive, i.e. allowing a wide range of interests and discourses to exert influence; and consequential, i.e. having an impact on collective decisions or social outcomes (Dryzek, 2009). While the EITI offers opportunities for countries to go beyond information disclosure alone by creating room for deliberation, our article suggests that such deliberations did not result in high reflexivity in the case of Indonesia. The lack of coordination among actors involved in the EITI, limited civil society involvement and the narrow focus on EITI standard requirements may have inhibited reflexivity in Indonesia (Yanuardi et al., 2021). Further research could investigate the conditions under which reflexivity does and does not happen, for example through an explanatory analysis of the evolving global EITI standard and the role of multi-stakeholder deliberations therein, or through (comparative) analyses of countries, including those that go beyond the narrow scope of the EITI (such as Norway, the Philippines and Tanzania, see e.g. EITI-International, 2021; EITI-Philippines, 2020; Poncian & Kigodi, 2018). Also analyses of the interactions between reflexivity at the global and (sub-)national levels could further advance insights into factors that impede or advance reflexivity and the transformative potential of transparency. A solid foundation for such explanatory analyses can come from applying the conceptual framework developed in this article to explain in each context the diverse levels of social-ecological reflexivity's components (recognition, rethinking and response) and dimensions (social, environmental and economic).

6 | CONCLUSION

This article analysed how and to what extent the EITI in Indonesia stimulates social-ecological reflexivity in recognising, rethinking and providing responses to the environmental, social and economic impacts of extractive industries. Drawing on a fully operationalised conceptual framework of social-ecological reflexivity that we developed based on Pickering (2019), we assessed the presence or absence

of different components of reflexivity. We studied both the deliberations within the multi-stakeholder group (MSG) that decides on the EITI implementation, as well as how these deliberations are reflected in the EITI-Indonesia reports. We showed that the EITI-Indonesia has not (yet) generated deep social-ecological reflexivity. First, there is limited recognition and rethinking of extractive industry governance and no real response in the form of governance reforms. Second, there are even signs of what we call 'anti-reflexivity', whereby members of the multi-stakeholder group ignore and resist public debates around the negative impacts from extractive industries. The article provides key insights into whether countries such as Indonesia implement the EITI merely to comply with the standard or whether they also frame and use the EITI as a way to reflect on and enhance the performance of extractive industry governance, particularly when it comes to addressing the many adverse social and environmental impacts.

This article's findings have important policy-relevant implications. EITI-implementing countries would do well to critically reflect on what the EITI means for them, why they implement it, what broader significance it has, and how it could help them in implementing sustainable development in its entirety, including its environmental and social dimensions. For this to happen, open and free deliberations around the EITI and extractive industries more broadly, as well as strong linkages between MSG discussions and public debates and the involvement of high-level representatives is paramount. Reflexivity on how the EITI can stimulate sustainable development not only requires considerations of *what* should be reflected upon (i.e. economic, social or environmental dimensions), but also *by and for whom*, with clear consideration of what the EITI means for whom and what purposes it serves.

ACKNOWLEDGMENTS

The lead author heartily thank the Lembaga Pengelola Dana Pendidikan (LPDP) for providing him with a scholarship to carry out his research. The LPDP had no involvement in this research in any way other than to cover the expenses of the lead author. The authors would also like to thank all anonymous reviewers and editors of the Environmental Policy and Governance journal for providing invaluable feedback.

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ENDNOTES

- ¹ https://eiti.org/About. Last accessed: 20 July 2021.
- https://eiti.org/progress-report-2019/responding-to-a-changing-environment. Last accessed: 20 July 2021.
- ³ https://en.antaranews.com/news/124476/eight-coal-mining-sitesworsen-floods-in-bengkulu. Last accessed 27 July 2021.
- $^{\rm 4}$ Minutes of EITI-Indonesia MSG meeting throughout 2012–2019.
- ⁵ Minutes of EITI-Indonesia MSG meeting on 3 October 2017.
- ⁶ As of 1 December 2021.
- During 2013–2019, EITI-Indonesia published seven sets of annual reports, namely the 2009 EITI-Indonesia report published in 2013, the

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- 2010-2011 EITI-Indonesia report published in 2014, the 2012-2013 EITI-Indonesia report published in 2015, the 2014 EITI-Indonesia report published in 2016, the 2015 EITI-Indonesia report published in 2017, the EITI-Indonesia 2016 report published in 2018, and the 2017 EITI-Indonesia report published in 2019. Since 2015, each report consists of 3-4 volumes: (i) Executive summary, (ii) Contextual report, (iii) Reconciliation report and/or (iv) Appendix of Reconciliation report.
- ⁸ For the environmental dimension, these included the following words or cognates: forest(s), environment, abandonment, environmental impact assessment, nature, abandonment site restoration, CO2 emission, climate change, reclamation guarantee fund, impact, and environment. For the social dimension, words related to or consisted benefit, impact, welfare, livelihood, community development, capacity, Corporate Social Responsibility (CSR), social, gender, life, discrepancy, poverty, corruption, sustainability. Finally, the economic dimension was represented by the words tax, revenue, investment and royalty.
- ⁹ Minutes of EITI-Indonesia MSG meeting on 30 November 2012.
- ¹⁰ Minutes of EITI-Indonesia MSG meeting on 3 December 2013.
- ¹¹ Minutes of EITI-Indonesia MSG meeting on 14 March 2013.
- ¹² Minutes of EITI-Indonesia MSG meeting on 12 June 2015.
- ¹³ https://en.antaranews.com/news/124476/eight-coal-mining-sitesworsen-floods-in-bengkulu. Last accessed 27 July 2021.
- ¹⁴ https://en.tempo.co/read/1424223/walhi-south-kalimantan-floodinglinked-to-excessive-industrial-land-use. Last accessed 27 July 2021.
- 15 https://news.mongabay.com/2020/02/indonesia-coal-mine-miningsamarinda-flooding-deforestation. Last accessed 27 July 2021.
- ¹⁶ Minutes of EITI-Indonesia MSG meeting on 13 June 2019.
- ¹⁷ This video (in Indonesian language) was viewed by ca. 36 million people (as of July 2021) on the YouTube channel of Watchdoc Image. See https://www.youtube.com/watch?v=qlB7vg4I-To.
- ¹⁸ Minutes of EITI-Indonesia MSG meeting throughout 2012–2019.
- ¹⁹ Minutes of EITI-Indonesia MSG meeting throughout 2012–2019.
- ²⁰ Minutes of EITI-Indonesia MSG meeting on 3 December 2013.
- ²¹ https://eiti.org/indonesia. Last accessed 23 July 2021.
- ²² Minutes of EITI-Indonesia MSG meeting on 3 December 2013.
- ²³ Minutes of EITI-Indonesia MSG meetings, 2012–2019.
- ²⁴ Minutes of EITI-Indonesia MSG meetings, 2012–2019.
- ²⁵ Minutes of EITI-Indonesia FGD meeting on 12 April 2017.
- ²⁶ Minutes of EITI-Indonesia MSG meeting on 21 August 2015, 26 June 2019.
- ²⁷ https://eiti.org/indonesia.Last accessed 23 July 2021.

REFERENCES

- Aaronson, S. A. (2011). Limited partnership: Business, government, civil society, and the public in the extractive industries transparency initiative (EITI). Public Administration and Development, 31(1), 50-63. https://doi.org/10.1002/pad.588
- Aspinall, E. (2007). The construction of grievance: Natural resources and identity in a separatist conflict. Journal of Conflict Resolution, 51(6), 950-972. https://doi.org/10.1177/0022002707307120
- Biermann, F. (2021). The future of "environmental" policy in the Anthropocene: Time for a paradigm shift. Environmental Politics, 30(1-2), 60-81. https://doi.org/10.1080/09644016.2020.1846958
- Boström, M., Lidskog, R., & Uggla, Y. (2017). A reflexive look at reflexivity in environmental sociology. Environmental Sociology, 3(1), 6-16. https://doi.org/10.1080/23251042.2016.1237336
- Ciplet, D., Adams, K. M., Weikmans, R., & Roberts, J. T. (2018). The transformative capability of transparency in global environmental

- governance. Global Environmental Politics, 18(3), 130-150. https://doi. org/10.1162/glep_a_00472
- Chambers, S. (2003). Deliberative democratic theory. Annual Review of Political Science, 6, 307-326. https://doi.org/10.1146/annurev.polisci. 6 121901 085538
- Collier, P. (2008). Implications of Changed International Conditions for EITI. Retrieved April 1, 2021 from https://eiti.org/files/documents/Collier% 20-%20Implications%20of%20Changed%20International%20Conditions %20for%20EITI.pdf
- Corrigan, C. C. (2014). Breaking the resource curse: Transparency in the natural resource sector and the extractive industries transparency initiative. Resources Policy, 41(1), 17-30. https://doi.org/10.1016/j. resourpol.2013.10.003
- CowaterSogema Independent Validator. (2019). Validation of Indonesia. Final validation report. 25 July 2019. https://eiti.org/files/documents/ validation report indonesia 25 07 19 final highlighted.pdf.
- Dryzek, J. S. (2009). Democratization as deliberative capacity building. Comparative Political Studies, 42(11), 1379-1402. https://doi.org/10. 1177/0010414009332129
- Dryzek, J. S. (2016). Institutions for the Anthropocene: Governance in a changing earth system. British Journal of Political Science, 46(4), 937-956. https://doi.org/10.1017/S0007123414000453
- Dryzek, J. S., & Pickering, J. (2017). Deliberation as a catalyst for reflexive environmental governance. Ecological Economics, 131, 353-360. https://doi.org/10.1016/j.ecolecon.2016.09.011
- EITI Board (2019). Board decision on the validation of Indonesia. Decision Reference: Decision 2019-74/BC-283. 24 December 2019. https:// eiti.org/scorecard-pdf?filter%5Bcountry%5D=53&filter%5Byear% 5D=2018
- EITI-International, Secretariat. (2016). EITI Standard 2016. Retrieved December 1, 2020 from https://eiti.org/files/documents/the eiti standard 2016 - english.pdf
- EITI-International, Secretariat. (2017). Coverage of Environmental information in EITI reporting: A review of How Some EITI Countries Are Covering Environmental Information in EITI Reporting. Retrieved December 1, 2020 from https://eiti.org/files/documents/eiti brief coverage of environmental reporting.pdf
- EITI-International, Secretariat. (2019). EITI Standard 2019: The global standard for the good governance of oil, gas and mineral resources. Retrieved December 1, 2020 from https://eiti.org/files/documents/ eiti_standard2019_a4_en.pdf
- EITI-International, Secretariat. (2021). Norway. Retrieved December 12, 2021 from https://eiti.org/norway
- EITI-Philippines, Secretariat. (2020) Synergizing Transparency for Sustainability: the sixth PH-EITI report (FY 2018). Retrieved June 4, 2021, http://pheiti.dof.gov.ph/download/sixth-ph-eiti-report-fyfrom 2018/?wpdmdl=898
- EITI-Indonesia, Secretariat. (2013). Laporan Kontekstual Laporan EITI Indonesia 2009. Retrieved April 4, 2021 from https://eiti.esdm.go.id/ laporan-eiti-indonesia-2009/
- EITI-Indonesia, Secretariat. (2014). Laporan Kontekstual Laporan EITI Indonesia 2010-2011. Retrieved April 4, 2021 from https://eiti.esdm. go.id/laporan-eiti-indonesia-2010-2011/
- EITI-Indonesia, Secretariat. (2015). Laporan Kontekstual Laporan EITI Indonesia 2012-2013. Retrieved April 4, 2021 from https://eiti.esdm. go.id/laporan-eiti-indonesia-2012-2013/
- EITI-Indonesia, Secretariat. (2016). Laporan Kontekstual Laporan EITI Indonesia 2014. Retrieved April 4, 2021 from https://eiti.esdm.go.id/ laporan-eiti-indonesia-2014/
- EITI-Indonesia, Secretariat. (2017). Laporan Kontekstual Laporan EITI Indonesia 2015. Retrieved April 4, 2021 from https://eiti.esdm.go.id/ laporan-eiti-indonesia-2015/
- EITI-Indonesia, Secretariat. (2018). Laporan Kontekstual Laporan EITI Indonesia 2016. Retrieved April 4, 2021 from https://eiti.esdm.go.id/ laporan-eiti-indonesia-2016/

- EITI-Indonesia, Secretariat. (2019). Laporan Kontekstual Laporan EITI Indonesia 2017. Retrieved April 4, 2021 from https://eiti.esdm.go.id/ laporan-eiti-indonesia-2017/
- Feindt, P. H., & Weiland, S. (2018). Reflexive governance: Exploring the concept and assessing its critical potential for sustainable development. Introduction to the special issue. Journal of Environmental Policy and Planning, 20(6), 661-674. https://doi.org/10.1080/1523908X.2018.1532562
- Furstenberg, S. (2015). Consolidating global governance in nondemocratic countries: Critical reflections on the extractive industries transparency initiative (EITI) in Kyrgyzstan. The Extractive Industries and Society, 2(3), 462-471. https://doi.org/10.1016/j.exis.2015.06.007
- Gellert, P. K. (2019). Neoliberalism and altered state developmentalism in the twenty-first century extractive regime of Indonesia. Globalizations, 16(6), 894-918. https://doi.org/10.1080/14747731.2018.1560189
- Gupta, A. (2010). Transparency in global environmental governance: A coming of age? Global Environmental Politics, 10(3), 1-9. https://doi. org/10.1162/GLEP e 00011
- Gustafsson, M. T., Merino, R., & Scurrah, M. (2020). Domestication of international norms for sustainable resource governance: Elite capture in Peru. Environmental Policy and Governance, 30(5), 227-238. https:// doi.org/10.1002/eet.1904
- Haufler, V. (2010). Disclosure as governance: The extractive industries transparency initiative and resource Management in the Developing World. Global Environmental Politics, 10(3), 53-73. https://doi.org/10. 1162/GLEP a 00014
- Hilson, G., & Maconachie, R. (2009). The extractive industries transparency initiative: Panacea or white elephant for sub-Saharan Africa? In J. Richards (Ed.), Mining, society, and a sustainable world. Springer. https://doi.org/10.1007/978-3-642-01103-0 16
- Kolstad, I., & Wiig, A. (2009). Is transparency the key to reducing corruption in resource-rich countries? World Development, 37(3), 521-532. https://doi.org/10.1016/j.worlddev.2008.07.002
- Macdonald, K., & Nem Singh, J. (2020). Resource governance and norm domestication in the developing world. Environmental Policy and Governance, 30(5), 223-226. https://doi.org/10.1002/eet.1909
- Magno, C., & Gatmaytan, D. (2017). Corruption and civic space: Contextual factors influencing EITI compliance. The Extractive Industries and Society, 4(4), 806-815. https://doi.org/10.1016/j.exis.2017.07.003
- McCarthy, J. F. (2007). The demonstration effect: Natural resources, ethnonationalism and the Aceh conflict. Singapore Journal of Tropical Geography. 28(3), 314-333. https://doi.org/10.1111/j.1467-9493. 2007.00304.x
- Mouan, L. C. (2010). Exploring the potential benefits of Asian participation in the extractive industries transparency initiative: The case of China. Business Strategy and the Environment, 19(6), 367-376. https://doi. org/10.1002/BSE.687
- Ostrowski, W. (2020). Transparency and global resources: Exploring linkages and boundaries. The Extractive Industries and Society, 7(4), 1472-1479. https://doi.org/10.1016/J.EXIS.2020.07.022
- Papyrakis, E. (2017). The resource curse-what have we learned from two decades of intensive research: Introduction to the special issue. The Journal of Development Studies, 53(2), 175-185. https://doi.org/10. 1080/00220388.2016.1160070
- Phillips, J., & Whiting, K. (2016). A geocybernetic analysis of the principles of the extractive industries transparency initiative (EITI). Resources Policy, 49, 248-265. https://doi.org/10.1016/j.resourpol.2016.06.002
- Pickering, J. (2019). Ecological reflexivity: Characterising an elusive virtue for governance in the Anthropocene. Environmental Politics, 28(7), 1145-1166. https://doi.org/10.1080/09644016.2018.1487148

- Poncian, J., & Kigodi, H. M. (2018). Transparency initiatives and Tanzania's extractive industry governance. Development Studies Research, 5(1), 106-121. https://doi.org/10.1080/21665095.2018.1486219
- Presidential decree 26/2010 2010. Retrieved July 27, 2021 from https:// eiti.esdm.go.id/perpres-26-2010/.
- PWYP-Indonesia, & KPK. (2018). Koordinasi dan Supervisi Pertambangan Mineral dan Batubara: Dalam Gerakan Nasional Penyelamatan Sumber Daya Alam. Retrieved February 4, 2020 from https://www.kpk.go.id/ id/publikasi/kajian-dan-penelitian/kajian-dan-penelitian-2/473laporan-koordinasi-dan-supervisi-pertambangan-mineral-danbatubara-dalam-gerakan-nasional-penyelamatan-sumber-daya-alam
- Ritchie, H., & Roser, M. (2020). Coal, oil, gas, cement: How much does each contribute to CO2 emissions? OurWorldInData.Org. Retrieve from https://ourworldindata.org/co2/country/indonesia#coal-oil-gascement-how-much-does-each-contribute-to-co2-emissions
- Rosser, A., & Kartika, W. (2019). Conflict, contestation, and corruption reform: The political dynamics of the EITI in Indonesia. Contemporary Politics, 26(2), 147-164. https://doi.org/10.1080/13569775.2019. 1693244
- Rustad, S. A., Le Billon, P., & Lujala, P. (2017). Has the extractive industries transparency initiative been a success? Identifying and evaluating EITI goals. Resources Policy, 51, 151-162. https://doi.org/10.1016/j. resourpol.2016.12.004
- Singh, J. N., & Camba, A. (2020). The role of domestic policy coalitions in extractive industries' governance: Disentangling the politics of "responsible mining" in The Philippines. Environmental Policy and Governance, 30(5), 239-251. https://doi.org/10.1002/eet.1905
- Sovacool, B. K., Walter, G., Van de Graaf, T., & Andrews, N. (2016). Energy governance, transnational rules, and the resource curse: Exploring the effectiveness of the extractive industries transparency initiative (EITI). World Development, 83, 179-192. https://doi.org/10.1016/j.worlddev. 2016.01.021
- Vijge, M. J. (2018). The (dis)empowering effects of transparency beyond information disclosure: The extractive industries transparency initiative in Myanmar. Global Environmental Politics, 18(1), 13-32. https:// doi.org/10.1162/GLEP a 00442
- Vijge, M. J., Metcalfe, R., Wallbott, L., & Oberlack, C. (2019). Transforming institutional quality in resource curse contexts: The extractive industries transparency initiative in Myanmar. Resources Policy, 61(September 2017), 200-209. https://doi.org/10.1016/j.resourpol.2019.02.006
- Winanti, P. S., & Hanif, H. (2020). When global norms meet local politics: Localising transparency in extractive industries governance. Environmental Policy and Governance, 30(5), 263-275. https://doi.org/10. 1002/eet.1907
- Yanuardi, Y., Vijge, M. J., & Biermann, F. (2021). Improving governance quality through global standard setting? Experiences from the extractive industries transparency initiative in Indonesia. The Extractive Industries and Society, 8(3). https://doi.org/10.1016/j.exis.2021.100905

How to cite this article: Yanuardi, Y., Vijge, M. J., & Biermann, F. (2022). Social-ecological reflexivity of extractive industry governance? The case of the Extractive Industries Transparency Initiative in Indonesia. Environmental Policy and Governance, 32(5), 426-437. https://doi.org/10.1002/ eet.1988