

INEQUITABLE SHARE

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Introduction

This policy note revisits the coal mining industry performance over the past decade. It reviews the economic activity of indigenous coal production, especially given the outward expansion of local coal into the export market amid the increased reliance on imported fossil fuel to meet the burgeoning demand from a higher number coal-fired power plants. It also revisits the regulatory framework in which the industry operates, including a brief discussion on recent attempts to address the inequitable revenue-sharing scheme embedded in existing laws. It discusses the impact of coal on the community where the mining projects operate and how coal use in the country contributes to the rising greenhouse gas emissions over the past decade. It also provides insights on the prospect for coal mining in the wake of the recently announced moratorium on new coal-fired plants in the Philippines. Lastly, it investigates the performance of Semirara Mining and Power Corporation (SMPC) – the predominant coal mining company in the country – and how it has prospered exponentially over the past years with the aid of generous preferential tax treatment and lax regulation.

Philippine Coal Resource

The Philippines has a vast coal resource potential evaluated at 2,366.7 million metric tons (MMT).¹ From the said potential, the estimated total in-situ reserves and total mineable reserves stand at 314.3 MMT and 450.2 MMT,² respectively. Coal reserves are located throughout the country. The small island of Semirara in Caluya, Antique is host to the largest coal deposit in the archipelago, equivalent to 47.2 percent of the country's mineable reserves. Other coal concentrations are located in Cagayan Valley (which hosts 15.6 percent of total mineable reserves), Cotabato (15.4 percent), and Surigao (10.9 percent). Coal types in these areas are classified as low-grade coal, predominantly of sub-bituminous grade, with lower heating value compared to higher grade fuels such as bituminous coal and anthracite. The remaining 10.9 percent of mineable coal reserves are scattered throughout different parts of the country. Smaller reserves of high-grade bituminous coal are found in Zamboanga Sibugay, Quezon, Catanduanes, Masbate, and Southern Cebu. See Figure 1 below for the summary of the country's resource potential.

Figure 1: Philippine Coal Resources and Reserves, in MMT,
as of December 2019³

Coal Region	Resource Potential	Positive Reserves	Probable Reserves	In-situ Reserves	Mineable Reserves
Cagayan Valley	336.0	80.1	3.7	82.6	70.2
Cebu	165.0	10.8	8.5	16.5	9.9
Davao	100.0	1.8	2.4	3.4	2.0
Masbate	2.5	0.1		0.1	0.4
Mindoro	100.0	1.3	0.2	1.4	0.9
Negros	4.5	1.6	1.2	2.4	1.4
Polillo, Bataan and Catanduanes	17.0	5.4	2.4	7.0	4.2
Quezon	2.0	0.1		0.1	0.1
Samar	27.0	7.5	1.7	8.6	7.3
Semirara	550.0	106.4	24.7		212.7
Surigao	209.0	29.9	63.3	72.1	49.1
Zamboanga	45.0	34.2	6.6	38.5	23.1
Bukidnon	50.0				
Cotabato	758.7	35.3	69.5	81.6	69.4
TOTAL	2,366.7	314.4	184.1	314.3	450.2

Source: Department of Energy

Policy Framework

The 1987 Philippine Constitution defines the government's inherent ownership of country's coal resources and the responsibility of the state in governing the exploration, development, and utilization of the said fuel source. The Constitution permits private sector participation within the bounds defined by the laws of the country. Most notable among these laws is the Coal Development Act of 1976, or Presidential Decree No. 972 later amended by Presidential Decree No. 1174 (referred henceforth as "PD 972 as amended"), which spells out the overall regulatory framework for coal operations in the Philippines. PD 972 as amended also provides the legal basis for the private sector to undertake coal exploration, development, exploitation, production, and utilization of the country's coal resource through a service contract scheme known as the Coal Operating Contract (COC) system. Thus, through the COC system, private parties may assume coal operations on behalf of the State within the terms of agreement defined in the contract and of other governing laws and issuances by the government.

PD 972 as amended specifies the coal regions⁴ of the Philippines that are further subdivided into 1,000-hectare coal blocks. Up to 15 coal blocks constitute a given coal contract area available to potential contractors for exploration or development.

Coal Contracting Program

In 2017, the Department of Energy (DOE) introduced the Philippine Conventional Energy Contracting Program (PCECP) as the new coal contracting scheme of the government.⁵ Among its salient features, PCECP spells out the different modalities for awarding a coal contract. The previous mechanism, the Philippine Energy Contracting Round (PECR)⁶ launched in 2003, provided for a single mode for contract awarding in which the government predetermines the areas offered to interested contractors for exploration and development through a public bidding under the contracting round. PCECP formally establishes another modality that permits interested contractors to nominate areas, subject to the coal blocking regulation in PD 972 as amended, outside those initially identified and offered by the government.⁷ Thus, the nominated areas may be applied for at any given time outside the government-led public offerings. To maintain competition under this mode, the nominating contractor is required to publish such areas and may be subject to a challenge from other interested applicants.

As with the previous mechanism, the government awards the COC for a contract area (whether predetermined or nominated) to the highest-ranking applicant evaluated based on the following criteria: legal qualification (pass or fail), work program (40 percent), technical qualification (20 percent), and financial qualification (40 percent).

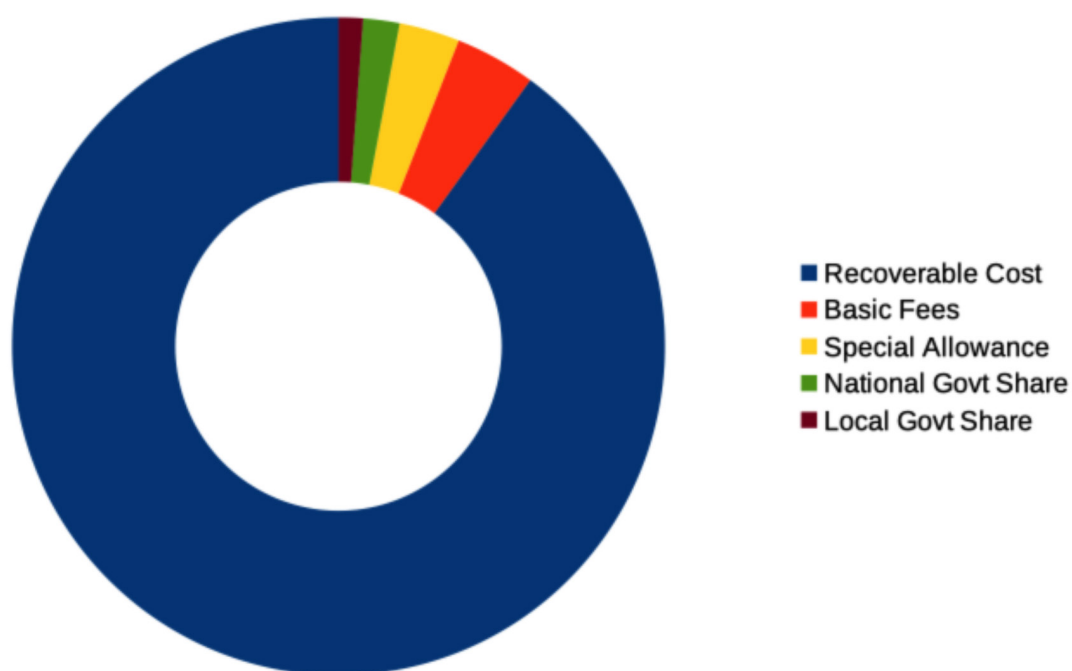
Coal Operating Contract

As mentioned, the COC defines the specific terms and conditions of coal operations and specifies the obligations of both the private contractor and the government. There are two types of COC depending on the phase of the coal mining activity. The COC under the Exploration Phase gives the contractor two years, plus a possible two-year extension, to examine and investigate the awarded area. Upon determining the availability of commercially viable reserves, the contractor enters a COC under the Development and Production Phase that gives operator ten years, with a possible additional ten-year extension plus a possible series of three-year extensions not exceeding total of 12 years, to extract the coal resources. The COC also sets out the incentives and privileges granted by the government to the contractor. These include exemption from payment of all national and local taxes (except income tax), tariff duties and compensating tax on importation of machineries and equipment and/or spare parts thereof to be used for the coal operations. The COC also permits operators to afford the entry of alien technical and specialized personnel. Other privileges of the operator not spelled out in the COC but embedded in PD 972 as amended include accelerated depreciation of fixed assets and priority in applications for financial assistance from government-owned financial institutions.

Revenue-sharing Scheme

PD 972 as amended determines the allocation of coal proceeds between the contractor and the government. It adopts a cost-recovery scheme that allows the expenses incurred from operation to be deducted from coal sales not exceeding 90 percent⁸ of the gross proceeds.⁹ From the remaining amount net of deductions, contractors are entitled to so-called “basic fees” and “special allowances” equivalent to 40 percent and 30 percent, respectively, of the net proceeds. This effectively leaves the Philippine government with a share of at least 3 percent royalty from the gross proceeds of coal. This is subsequently divided between the national and local governments of the host area, as the latter are entitled to 40 percent share of total government receipts.¹⁰

Figure 2: Coal revenue-sharing scheme (in percent)



Gross Proceeds	100.00
<i>Less Recoverable cost</i>	90.0
Net Proceeds	7.0
<i>Less Basic Fees</i>	4.0
<i>Special Allowance</i>	3.0
Total Government Share	3.0
<i>National Government</i>	1.8
<i>Local Government Units</i>	1.2

In addition to the generous deduction cap and contractor entitlements, the current fiscal regime provides much latitude for companies to maximize their share from the coal revenues. For example, the income tax is part of the expenditure items allowed as deductions included in the total recoverable costs. Thus, what should be paid to government in the form of income tax is also deducted against the 90 percent recoverable costs percent. The government also allows the contractor to deduct "duties, levies, fees, and charges imposed by any

government or taxing authority” as part of recoverable cost.¹¹ This may be interpreted to include the government share, which SMPC, for example, has been reporting as part of its operating expense that its COC allows to be deducted from the gross proceeds.¹² On top of the entitlements provided in the COC, contractors may also avail of other fiscal incentives offered by the investment-promoting agencies of the government. SMPC, for example, has availed of an income tax holiday since 2008 that lowered the company’s obligation on the sole tax it is required to pay the government.

In 2018, DOE further streamlined and simplified the processing and issuance of tax-exempt certificates for coal operations.¹³ Other developments concerning the fiscal regime on coal mining are detailed in Textbox 1, including recent legislative efforts to amend this decades-old fiscal regime and improve the equitable allocation of coal revenues.

Environmental and Social Development Regulation

The Exploration Phase of coal mining is not covered by the Philippine Environment Impact Statement System (PEISS) of the Department of Environment and Natural Resources (DENR). Hence, contractors under such COC are required to secure a Certificate of Non-Coverage to ascertain that the activity is not part of the PEISS but are not required to submit an Environmental Compliance Certificate (ECC). On the other hand, COC-holders under the Development and Production Phase, before commencing operations, are required to secure an ECC from the DENR to certify that the operators have complied with the environmental requirements and standards. Operators are also required to submit a Certification Precondition from the National Commission on Indigenous Peoples (NCIP) to certify that the free, prior, and informed consent (FPIC) has been obtained from the indigenous peoples affected by the coal mining operation.

The COC also requires operators to rehabilitate all affected sites (at the expense of the operators) immediately after the termination of the operation.¹⁴ In addition, the COC subjects operators to the provisions of all applicable laws relating to labor, health, safety, indigenous people’s rights and ecology/environment, avoiding hazards to life, health and property, avoiding pollution of air, land and water.¹⁵

Textbox 1: Recent reform efforts on coal revenue-sharing policy

The country's revenue-sharing and incentive scheme for coal mining has been unchanged for more than three decades. Recent attempts to address the inequitable share from coal proceeds include a proposed measure filed in 2016 to revise PD 972 as amended. Senate Bill No. (SB) 1223 authored by Senator Joel Villanueva aimed to reform the antiquated law to improve the coal revenue-sharing policy in the country. The proposed bill intended to lower amount of recoverable cost from 90 percent to 70 percent and eliminate the 30 percent special allowance to raise the minimum amount of royalty due to the government from 3 percent to at least 18 percent. It also sought to repeal the tax exemptions on coal excise tax, and local taxes and charges imposed by host local governments. To help address the adverse impact of coal operations, SB 1223 proposed to require coal mining operators to establish a fund for the rehabilitation of the mining site. Similarly, the bill intended to mandate coal operators to allocate spending for the development of its local host communities equivalent to at least 1.5 percent of its total operating expense.

SB 1223, however, was never deliberated upon under its mother committee in the Senate, the Committee on Environment, Natural Resources, and Climate Change, during the three-year congressional timeframe that ended in mid-2019 and, therefore, was not enacted in the said period. The proposal was refiled as SB 613 in 2019 at the onset of the succeeding Congress but, as of writing, it remains pending the same committee one year before the end of the said legislative bout.

	PD 972, as amended	SB 1223 Proposal
Recoverable Cost	Up to 90%	Up to 70%
Special Allowance	30% of net proceeds	Repeal
Government Royalty	At least 3%	At least 18%
Payment of coal excise tax, and local taxes and charges	Exempt	Required
Mine Rehabilitation Fund	Not required	Required
Social Development Fund	Not required	Required, at least 1.5% of operating expense

Similarly, the Republic Act No. 10963, also known as the Tax Reform for Acceleration and Inclusion (TRAIN) law, attempted to reduce the inequity in the coal fiscal regime by raising the excise tax on coal and by repealing coal excise tax exemption of local producers granted under PD 972 as amended. Towards the end of the legislative process, however, the version of measure retained the said tax perks enjoyed by mining operators. Villanueva claimed that the said retention was not part of the reconciled version of the measure agreed between the House and the Senate and that the said provision that sought to repeal the exemption was removed only after the reconciled draft was transmitted to the Upper House for its final approval.^a As such, the version of the measure signed into law adopted the coal excise tax hike from PhP 10 per MMT in 2017 to PhP 50 per MMT in 2018, PhP 100 per MMT in 2019, and PhP 150 per MMT in 2020. Nevertheless, the explicit repeal on coal excise tax exemption for local producers was not adopted in the final measure.

Source: [a] Avedaño, C. & Nonato, V. (2017, December 15). House vote on tax bill questioned. Philippine Daily Inquirer. <https://newsinfo.inquirer.net/952654/house-vote-on-tax-bill-questioned>

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Furthermore, the government also requires operators to render a comprehensive anti-pollution and reclamation plan designed for all phases of the operation. Operators are also mandated to observe government rules on control mining procedures, waste water control, regrading, erosion control, and revegetation.¹⁶

Compared to the mineral mining regulation, coal mining policies are more lenient in terms of environmental regulation and protection. Companies engaged in coal mining, for example, are not required to allocate funds to secure financial resources for environmental protection, management, and rehabilitation unlike the mineral mining operators.

In a similar vein, companies engaged in coal mining are not required to design programs and allot direct funding to support the development of the communities hosting the mining operations,¹⁷ or pay royalties to the concerned indigenous people or indigenous cultural communities concerned with the coal mining operation, unlike mineral mining operators.¹⁸ This leniency in environmental and social regulation stems from the antiquated policies that currently govern coal mining operations. These outdated policies have failed to respond to the concerns over coal mining that have emerged over the past years. This also underscores the need to revisit the policies governing coal mining operations, as recent legislative efforts have attempted to accomplish (see Textbox 1).

Philippine Coal Market

Coal Supply

In the last ten years, Philippine coal mining continued to enjoy the upward momentum seen in previous decades. Indigenous coal mining marked another production record-high in 2019 at 15.3 MMT, more than double the extraction volume posted in 2010 of 7.3 MMT. DOE currently administers 31 Development and Production COCs, three of which were recently converted from exploration contracts. Nevertheless, Semirara Mining and Power Corporation (SMPC) remains the single most significant player in the local coal mining industry among all active coal operations in the country. SMPC's production has increased from 6.3 MMT to 15.2 MMT in the last ten years. The recent discovery and operation of new reserves in Semirara (namely, Molave and Narra mining pits) from 2016 onwards further boosted the company's production. The production in the new mining areas took the place of the Panian mining pit, which was reportedly depleted in 2016 after 17 years of operation. This fast-growing extraction allowed SMPC to clinch additional production market share from around 95 percent at the start of the previous decade to more than 99 percent in 2019. As such, SMPC continues to fortify its monopoly on indigenous coal production in the Philippines.

Small-scale coal mining operations maintain a marginal contribution to local production. Located in different parts of the country (namely, Negros, Surigao del Sur, Zamboanga del Sur, Albay, and Cebu), small-scale production collectively accounted for less than 0.5 percent of domestic coal extraction in 2019.

The recent expansion in coal production has been driven largely by the increased external trade of the said fuel source. Since the Philippines embarked on the foreign sale of coal in 2007, the country has seen an uptrend in the share of exports from the proceeds of indigenous coal. In 2019, exports accounted for more than two-thirds of locally extracted coal, the highest share posted since 2007. Philippine coal is sold to destination countries

such as China, Taiwan, India, and Thailand. China, the world's largest coal consumer, received the lion's share of the indigenous fuel source of about 96.6 percent of total foreign sale in 2019. Since a considerable portion of local coal is sold on the international market, the local coal supply, net of exports, experienced a relatively moderate increase in the past decade. Net local supply peaked at 8.0 MMT in 2018 from 3.2 MMT in 2010 but slid to 5.0 MMT in 2019 with the aforementioned surge of exports in 2019.

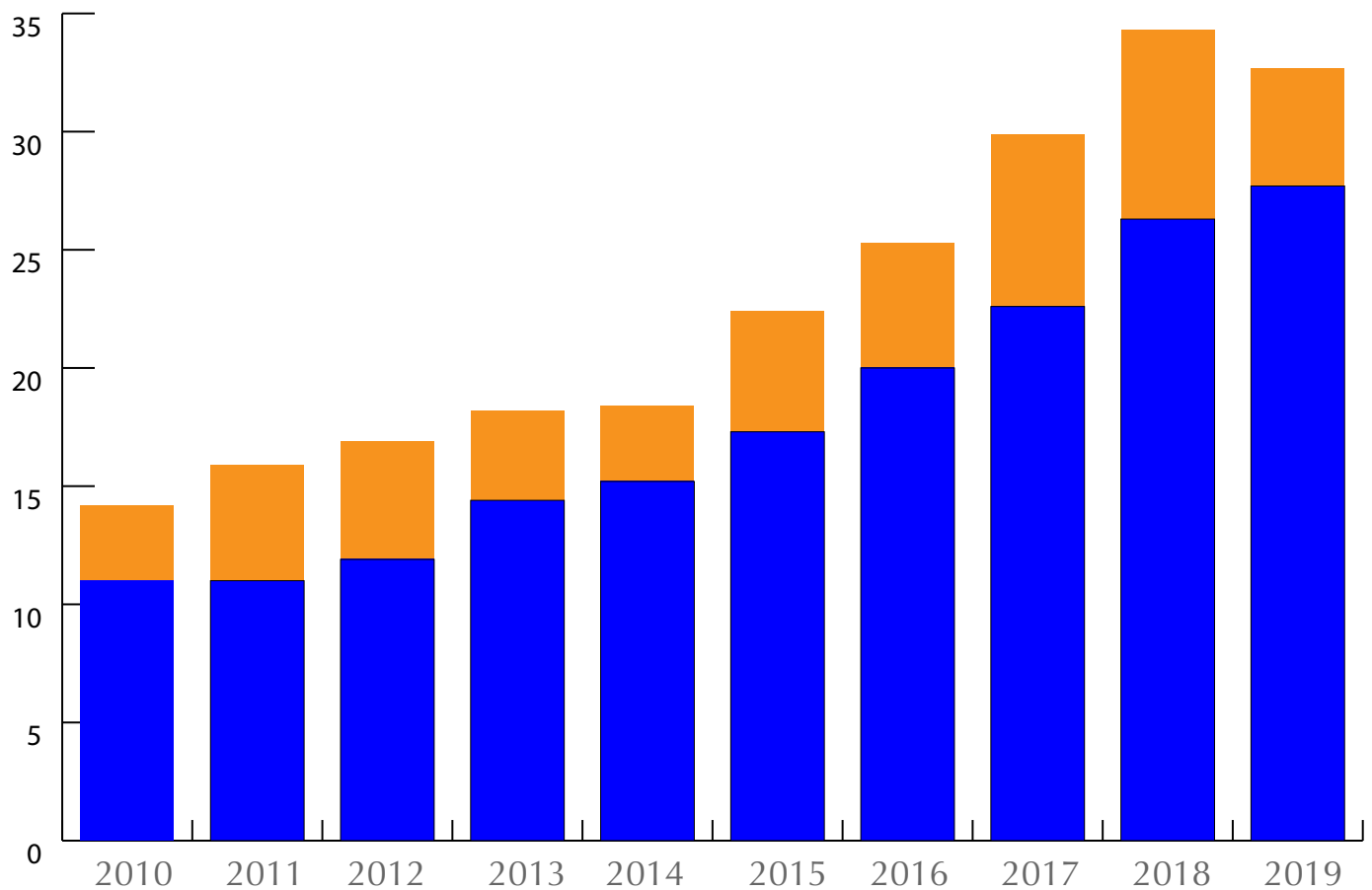
The country continues to produce primarily sub-bituminous coal, which is considered to have lower heating value compared to its higher grade counterparts, bituminous coal and anthracite. To meet the increasing demand for higher fuel type suitable for coal end-users in the Philippines, the country has been importing coal from the international market. This also makes imported coal the only significant competition for SMPC in the domestic market. Imported coal available in the country rose from 11.0 MMT in 2010 to 27.7 MMT in 2019. As seen in the past decade, Indonesia remains, by far, the largest provider of foreign coal to the Philippines. Compared to other source countries (including Australia, Vietnam, and Russia, among others), Indonesia accounted for more than 90 percent of the country's coal imports in 2019.

The Philippine coal supply thus remains a combination of both imports and domestic production. The total coal supply in the country doubled from 14.2 MMT in 2010 to 32.7 MMT in 2019. In the past decade, the Philippines continued to rely on imported coal, which accounted for around 70-80 percent of total supply, despite the rapid growth of gross domestic production seen in the same period. This suggests that the expansion of the local mining industry, particularly of SMPC's coal monopoly, over the last ten years translated to marginal benefit to the local coal end-users of the country. In fact, the contribution of local mining to the total coal supply shrunk to 15.4 percent in 2019 from about 20-30 percent levels seen in the last decade as exports take up rising share in indigenous coal proceeds (see Figure 3).

Coal Demand

The country's coal consumption similarly rose in the past decade from 13.3 MMT in 2010 to 33.1 MMT in 2019. This has been driven largely by the increased coal usage in the power sector, the consumption of which has tripled from 9.6 MMT to 28.7 MMT in the same period, following the expansion in the number of coal end-users from the power sector. An additional 44 coal-fired power plants have been commissioned in the previous decade.¹⁹ In turn, this aided in raising the total generating capacity of coal power in the country by more than double from 4,867 megawatts (MW) in 2010 to 10,417 MW in 2019 in terms of installed capacity. Dependable capacity, on the other hand, increased from 4,245 MW to 9,743 MW over the same period (see the next section for further discussion on coal contribution to power sector).

Figure 3: Trend in coal net supply in the Philippines, by source (in MMT), 2010-2019



Source of basic data: Department of Energy

■ Domestic (net of export)
■ Imported

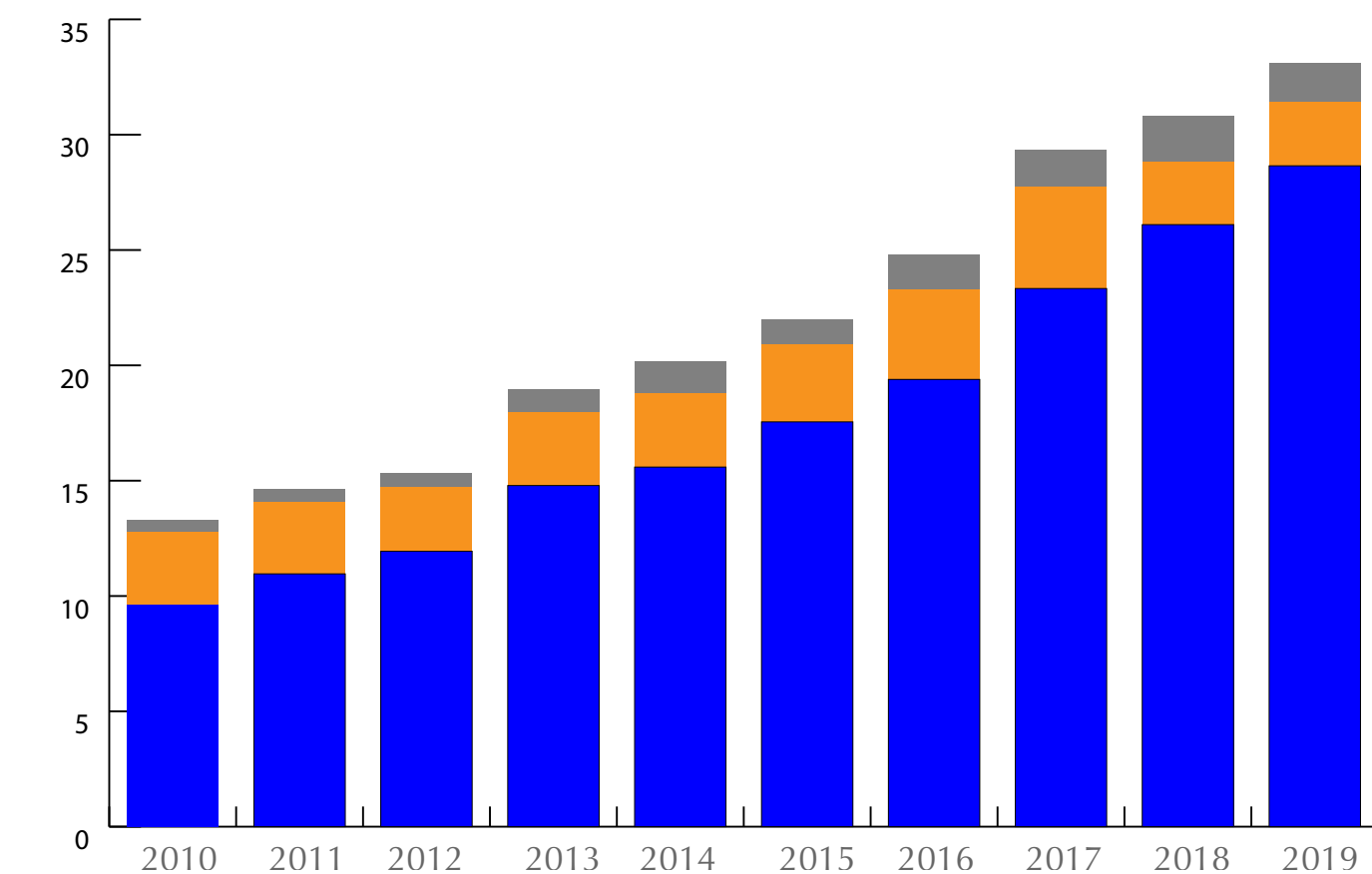
By 2019, the power sector accounted for 86.5 percent of total coal consumption of the country. As previously mentioned, existing coal-fired plants in the country have relied on importation of higher grade coal with which indigenous supply is blended for electricity production. As such, a bigger portion of the coal volume used for domestic power generation has been derived from foreign supply. In 2019, for example, the Philippines sourced 85.9 percent of the coal used in the power sector from other countries while 14.1 percent was supplied by the local coal mining industry.

The cement manufacturing industry also comprise a significant portion of total coal utilization. The volume of coal used to fuel cement production rose from 3.1 MMT at the start

of the decade to a peak of 4.4 MMT in 2017. This increased usage from the local cement manufacturing has been induced by the rapid expansion of the country's construction sector in recent years²⁰ which has subsequently created greater demand for cement. Coal used for domestic cement production nevertheless has fallen from the 2017 peak to 2.7 MMT and 2.8 MMT for 2018 and 2019, respectively, equivalent to at least 8 percent of total coal use, possibly due to increased cement importation²¹ coupled with decrease in local cement production.²²

Other industries constitute the remaining coal consumption slice of about 4 percent to 7 percent in the past ten years. These industries primarily include food production, paper, beverage, and textiles.²³

Figure 4: Trend in coal usage in the Philippines, by sector (in MMT), 2010-2019



Source of basic data: Department of Energy

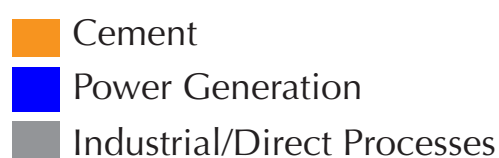
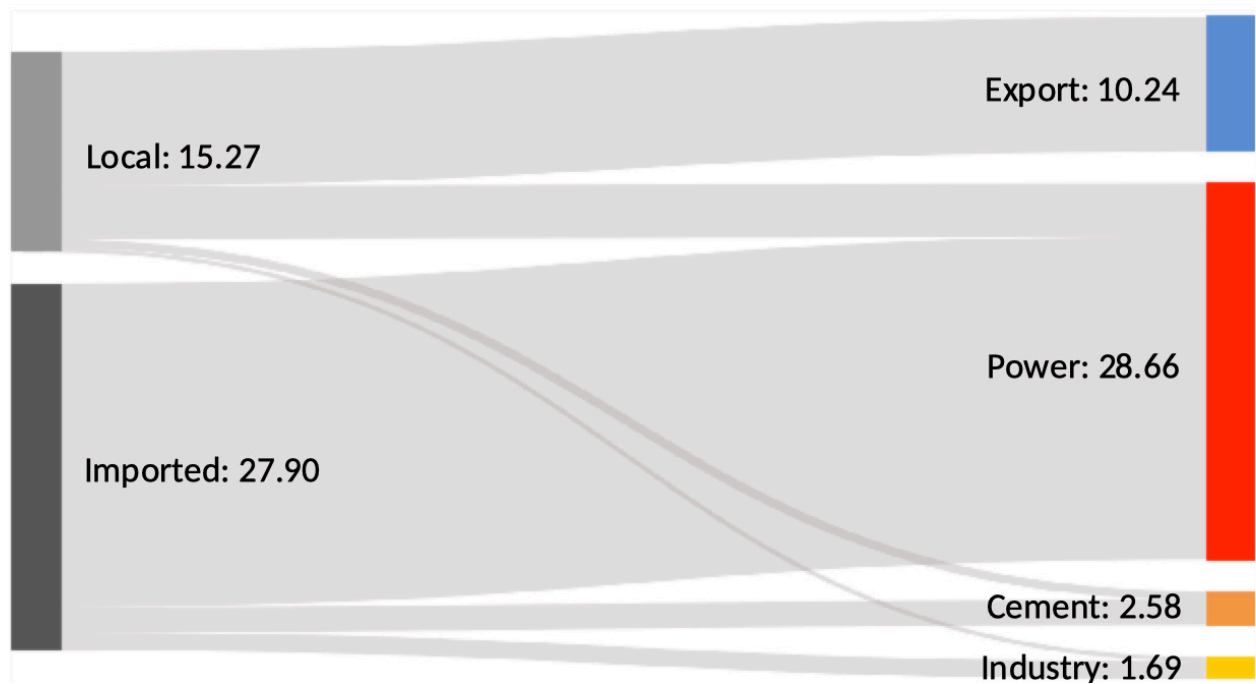


Figure 5 below depicts the summary of the coal market in 2019, illustrating the flow of coal supply from sources to end-users from different sectors. As shown, larger portion of domestic coal is catered to the export market in 2019. The different end-users account for smaller share of local coal products to complement imported coal that serve as their primary fuel source.

Figure 5: Flow diagram of coal supply, by source, to consumption, by sector (in MMT), 2019



Source of basic data: Department of Energy

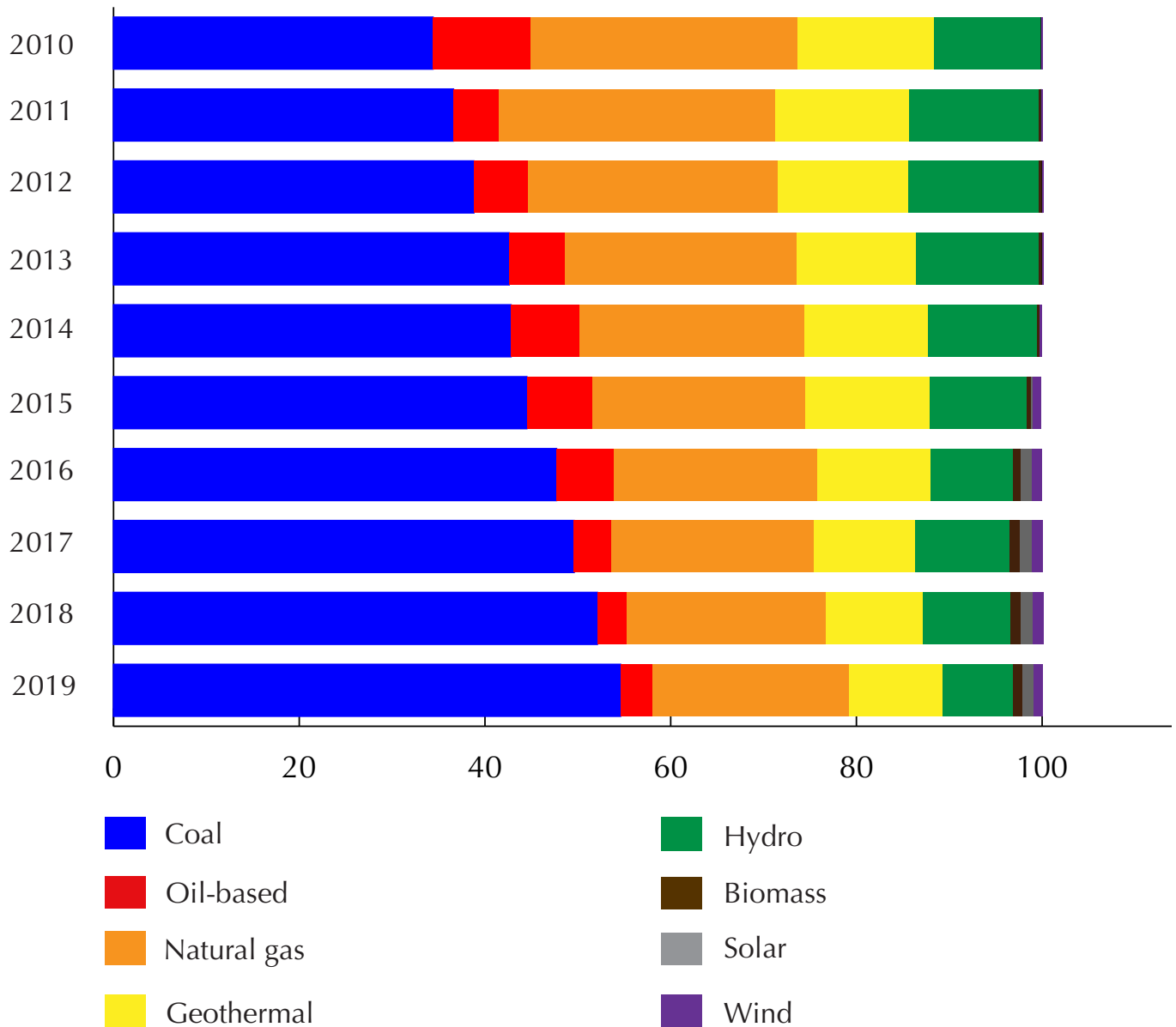
Contribution to Power Generation

The trend in the past ten years indicates the country's increasing reliance on coal as its primary fuel source for electricity generation. As previously mentioned, the generating capacity of coal power plants further expanded significantly over the past decade. In terms of installed capacity, coal energy rose by 5,550 MW from 2010 to 2019, which represented 60.5 percent of the previous decade's net increase in combined maximum electricity production from all power sources of the country. In terms of dependable capacity, coal power increased by 5,498 MW in the past ten years, tantamount to 62.2 percent of the last decade's total expansion in the combined load carrying ability of the Philippines.

This increased generation capacity enabled coal to sustain its momentum as the top fuel source in the country's electricity generation mix. At the start of the last decade, coal

reigned as the largest source, responsible for 34.4 percent of gross generation. Coal power's contribution further climbed steadily to 54.6 percent in 2019 following the rapid establishment of additional coal power infrastructure over the past ten years, as earlier discussed (see Figure 6).

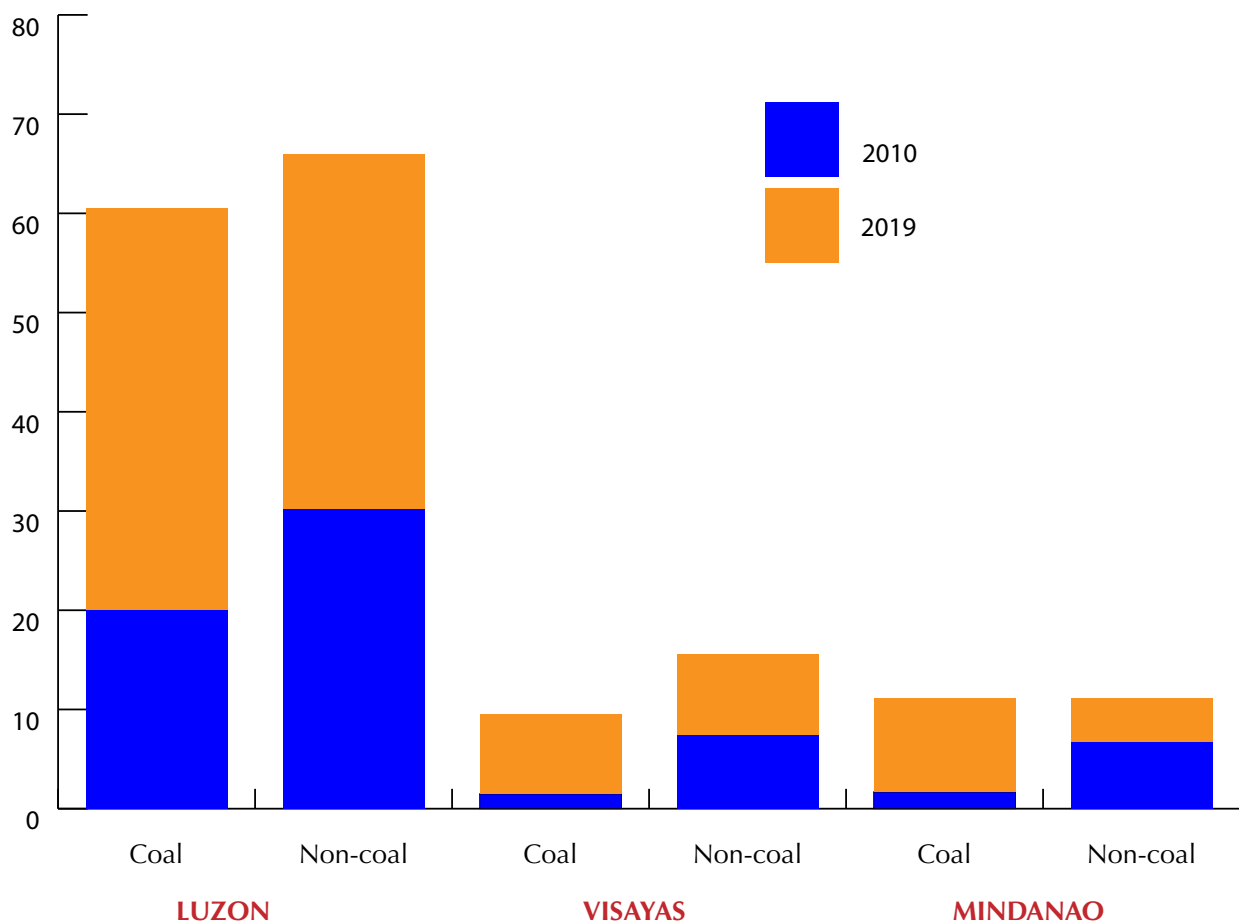
Figure 6: Trend in coal usage in the Philippines, by sector (in MMT), 2010-2019



Among the three island groups, Luzon enjoyed the largest share in the country’s expanded ability to produce coal-fueled electricity over the last ten years. It obtained 55.5 percent of the past decade’s 5,550 MW nationwide increase in installed capacity for coal energy. Mindanao received the second largest share at 33.5 percent of the said increase in total installed capacity, while Visayas acquired the remaining 11.0 percent of the additional installed capacity.

As such, Luzon experienced the largest increase in the amount of gross generation among the three island groups in the past decade. Notably, coal power also made remarkable contributions to the overall improvement in power supply in Visayas and Mindanao in the same period. In Visayas, the 6.4 million megawatt-hour (MWh) expansion in coal power represented 92.1 percent of the region’s 7.0 million MWh overall increase in gross generation. In Mindanao, the 7.7 million MWh increase in coal power made up for the decline in power supply from renewable energy and oil-based sources and enabled the region to enjoy a 5.4 million MWh net increase in electricity supply in said period.

Figure 7: Power generation, by island group (in million MWh), 2010 and 2019



These improvements, however, are not without consequences. The establishment and operation of additional coal-fired plants all over the country were met with resistance from host communities alarmed by the potentially detrimental health and environmental impact of coal. Additionally, a recent pronouncement banning new coal-fired plants may change the future for coal as the country's top power source (see Textbox 2 for detailed discussion on the coal moratorium).

Social and Environmental Impact

The predominance of coal as fuel source is predicated on its supposed affordability relative to other energy alternatives. As earlier mentioned, coal production and usage continue to face public scrutiny given the apprehension over their potentially debilitating impact to society and the environment. At the forefront of such risks are the host communities most vulnerable to the social and environmental risks posed by mining operations. Additionally, continuous production and enduring use of coal contributes to rapid greenhouse gas emissions linked to human-induced climate change.

Impact to host community

As with other extractive activities, coal mining has direct environmental impact on its area of operation and, in turn, to the health and safety of host communities. In Semirara Island, where the largest coal production has operated for almost 40 years, anecdotal findings reveal a number of these adverse effects to community members. In a perception survey among residents conducted by SMPC in relation to its Molave expansion project, results revealed that all of the 50 respondents "indicated that the natural physical environment in their barangay (such as air, fresh water, marine, soil/land, flora and fauna) are not in good status/quality due to mining projects." The survey also showed that the residents' perceived negative effects of the Molave expansion project include 1) access to fishing areas; 2) water quality affected; and 3) environmental degradation. In another study conducted, community members identified "increase air pollution and health danger" as the top concern about potential negative impact of the expansion project.²⁴ Similar concerns were documented in a report by the Commission on Human Rights (CHR)²⁵ on the impact of the coal mining to the local host community. The report detailed complaints of how residents were reportedly displaced and forcibly evicted to make way for SMPC project. It also recounted concerns from teachers and students of Semirara Island who reportedly suffered from respiratory illness due to dust and ash exposure. The report also mentioned SMPC's 2009 and 2015 reports which revealed that respiratory tract illnesses are among the top causes of morbidity in the community.

Furthermore, a different study linked the coal mining operation to the displacement of seaweed industry in Semirara Island. In the wake of expansion of the mining operation

Textbox 2: Future for coal in the wake of the moratorium

In October 2020, the Philippine government declared a moratorium for new greenfield coal power plants.^a The pronouncement represents a drastic shift in the country's initial energy policy thrust that has favored coal as the leading power source. In the current draft of the Philippine Energy Plan, which is yet to account for the recent policy pronouncement, the share of coal to the generating capacity mix was initially seen at 37.1 percent by 2030 and 34.7 by 2040 under the business-as-usual scenario. Even under the clean energy scenario, coal's outlook suggests it will remain the predominant power source up to 2030 at 35.2 percent of the mix before tapering down to 19.4 percent by 2040.^b The Philippine government is yet to release details on how the ban is expected to change the power trajectory in the country. Nevertheless, a few insights and estimates are discussed below.

The ban on new coal power plants is seen to compromise up to 10 GW of the 12 GW combined projects currently in the pipeline. Consequently, the policy can result in an estimated decrease in coal contribution to the power mix (in terms of dependable capacity) from 42.8 percent in 2019 to 16 to 18.3 percent by 2030.^c This is also equivalent to up to 47 percent decrease in coal power capacity by 2030 compared to the pre-moratorium outlook.

In terms of greenhouse gases, the new policy can potentially decrease emissions between 32 to 35 percent in 2030 compared to initial projections sans the recent policy change.^d This will contribute to the country's objective of reducing its carbon emissions, in line with its Paris Agreement commitment to lower the greenhouse gas emission by 75% below projected levels by 2030.^e But this moratorium alone is not enough to meet the global pact target and will require additional measures to attain the said objective for the landmark agreement.

For Philippine coal mining, the halt on new coal-fired power plants may similarly undermine the growth prospects of the industry but such impact may not be as dramatic considering the current trend. Given the country's dependence to foreign sourced coal, which currently accounts for around 85 percent of the total solid fuel used for electricity generation, the recent ban will largely upset the demand for imported coal more than the indigenous coal supply. On the other hand, the impact of the moratorium on coal-fired plants will likely ease the growth momentum of the local coal mining given that the power end-user segment that currently represents around 31 percent of total domestic coal production. Still, the larger portion of indigenous coal industry benefits the exportation segment, which has been on the rise in recent years. If the current uptrend in exportation continues, which peaked at two-thirds of coal production in 2019, the local industry can further hedge the future slowdown in local coal demand brought about the recent ban in coal-fired power plants.

China, the largest recipient of Philippine coal exports, received around 65 percent of total domestic coal produced in 2019. Thus, China's energy policy direction will largely determine the future of the indigenous coal in the wake of the recent moratorium. Having said this, the policy thrust of coal power in China remains unclear after it recently lifted the moratorium imposed earlier on coal-fired plants. China has since then allowed additional coal plant projects in the pipeline.^f As such, the Philippine coal production industry can sustain its growth if China continues its coal trade deal with the Philippines and maintains its reliance on coal as a power source, contrary to the global thrust to phase out the fossil fuel.

Sources: [a] Department of Energy (2020, October). DOE Sec. Cusi declares moratorium on endorsements for green-field coal power plants. <https://www.doe.gov.ph/press-releases/doe-sec-cusi-declares-moratorium-endorsements-green-field-coal-power-plants>; [b] Department of Energy (2018). Philippine Energy Plan; [c] Ahmed, S. & Brown, M. (2020). Philippine Moratorium on Greenfield Coal Projects Will Attract USD 30 Billion in Renewable Energy Investment – Policymakers and Industry Leaders Ready to Embrace More Cost-Effective Clean Energy Options. Institute for Energy Economics and Financial Analysis. https://ieefa.org/wp-content/uploads/2020/10/Philippines-Greenfield-Coal-Project-Moratorium-Will-Attract-Billions-in-RE-Investment_November-2020.pdf; [d] Climate Action Tracker (2020, Nov 27). Philippines: Country Summary. <https://climateactiontracker.org/countries/philippines/>; [e] The 75 percent reduction target represents the current Nationally Determined Contribution (NDC) of the Philippines submitted to the United Nations Framework on Convention on Climate Change on April 15, 2020. The target comprises 2.71 percent unconditional target and 72.29 percent conditional commitment. This 75 percent target is higher than 70 percent conditional reduction initially pledged by the country in 2017 upon joining the climate change pact; [f] Climate Action Tracker (2020, Sept 21). China: Country Summary. <https://climateactiontracker.org/countries/china/>

in the island, resident seaweed growers claimed they were forced to abandon their livelihood for another location. Seaweed growers in other parts of Caluya municipality also expressed that the expanding pollution from the growing mining operation has affected their livelihood.²⁶

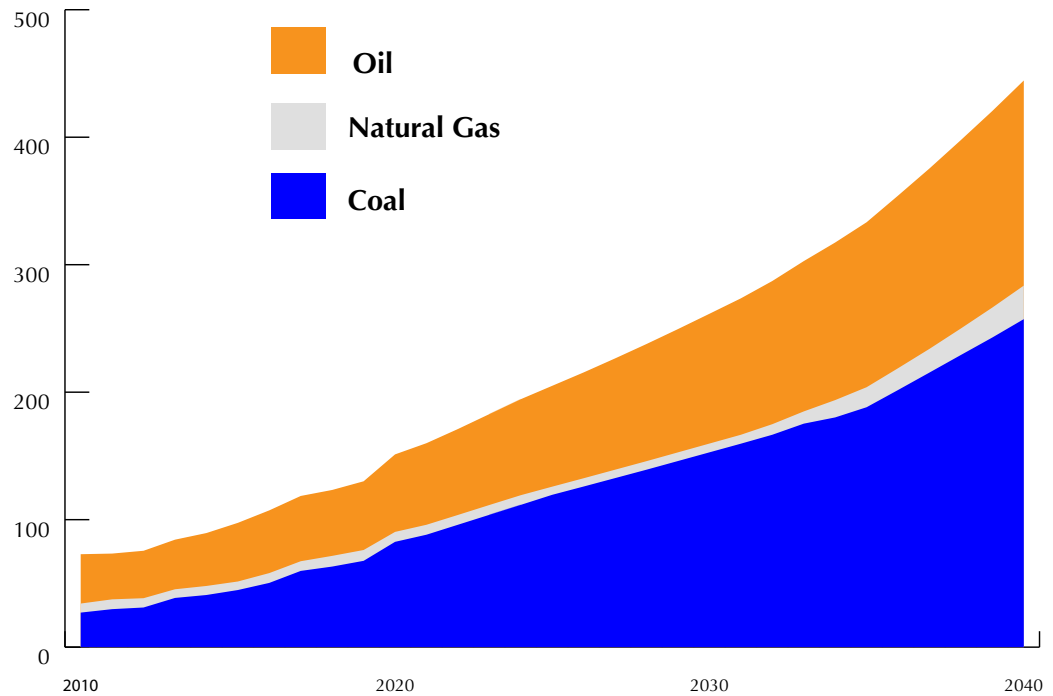
Greenhouse Gas Emission

On a macro-level, coal use is recognized as a significant source of greenhouse gas (GHG) emissions known to contribute to global warming and climate change. In the Philippines, coal is responsible for the largest GHG emissions among all fossil fuels.²⁷ The increasing reliance on coal as a power source led to a rapid increase in GHG emission in the past decade. Total GHG production associated with coal usage, measured in terms of million metric tons of carbon dioxide equivalent (MTCO₂e), rose from 27.1 MTCO₂e in 2010 to 63.2 MTCO₂e in 2019. Coal is currently responsible for half of the country's total emission. GHG emitted from coal use steadily rose from 37.1 percent in 2010 to a record-high of 50.3 percent in 2019 following its increased utilization over the past ten years.

The country's initial outlook for GHG emissions suggest that coal will continue to be a significant contributor for the next two decades. Under the business-as-usual scenario, GHG from coal is seen to further grow significantly from 67.7 MTCO₂e in 2019 to 152.8 by 2030 and 257.3 by 2040. This represents around 58 percent of total emissions throughout the said period (see Figure 8.1 for details). On the other hand, outlook under the clean energy scenario suggests a slowdown in GHG emissions from coal at 143.7 and 159.4 MTCO₂e by 2030 and 2040, respectively, but it will remain as the dominant GHG source among the different fossil fuels (see Figure 8.2).

Emerging developments, nevertheless, may change this trajectory. As earlier discussed, the Philippine government recently declared a moratorium on the new coal-fired plants.

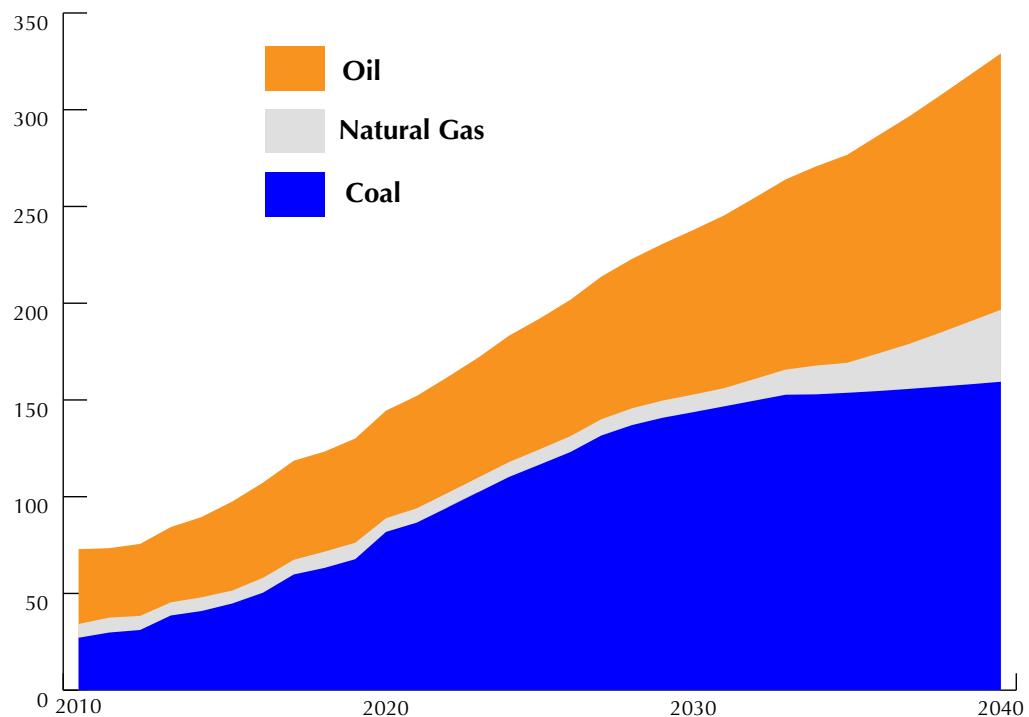
Figure 8.1: GHG emission outlook, Reference Scenario (in MTCO₂e)



Source: DOE Philippine Energy Plan 2018-2040

Note: 2010 to 2019 in actual figures; 2020 to 2040 represents outlook under reference scenario

Figure 8.2: GHG emission outlook, Clean Energy Scenario (in MTCO₂e)



Source: DOE Philippine Energy Plan 2018-2040

Note: 2010 to 2019 in actual figures; 2020 to 2040 represents outlook under clean energy scenario

The government is yet to release details of the moratorium and how it will impact coal power and the current outlook for the country's GHG emissions. Studies suggest that the recent ban will significantly contribute to cutting emissions by 32 percent to 35 percent in 2030, thus contributing to the country's international commitment to help reduce global GHG emissions (see Textbox 2 for additional details on the moratorium).

Few caveats are worth stressing on the above discussion on coal and its impact to GHG production and the environment. First, the country's GHG emissions associated with coal use cannot be attributed entirely to local mining activity. After all, coal consumption in the Philippines is largely import-dependent and the local coal accounts for only 15 percent of total coal use in 2019, for example. Nevertheless, it is important to contextualize the detrimental effect of coal use on the environment, to which the local coal mining industry remains contributory.

Second, the impact of GHG on the environment should be viewed from a global perspective. That said, the Philippines is not, by any measure, among the top contributing countries to the global GHG emission at present, with total emission equivalent to 0.4 percent of global GHG emission in 2019.²⁸ Nevertheless, this should not prevent the Philippines from participating in the global action to mitigate climate change and its potentially severe and irreversible adverse impacts. After all, the Philippines is a signatory to the Paris Agreement and has committed to reduce emissions by 75 percent below projected levels by 2030. Additionally, the current trend of expanding the reach of Philippine coal to the global market (especially with China, the top coal user worldwide and among the major contributors to global GHG emissions) suggests a bigger role for the Philippines in the international efforts on climate change adaptation and mitigation as far as coal is concerned.

Semirara Mining and Power Corporation

SMPC remains the predominant player in coal mining in the Philippines. The company's yield in 2019 accounted for 99.4 percent of domestic coal production. For 30 years, the company has enjoyed the exclusive right to operate in Semirara Island in Caluya, Antique where 47.2 percent of the country's total mineable coal reserves is located. SMPC's current COC was initially set to lapse in 2012 but was given a 15-year extension to operate until 2027 after government approval in 2008. SMPC's production has increased significantly over the past years. From 6.5 MMT in 2011, extraction volume more than doubled to 15.2 MMT in 2019. In terms of revenue, this is equivalent to increased net coal sales from PhP16.2 to PhP29.1 billion in the same period. As mentioned, the company has an expanding global market since it has embarked on exportation in 2007. As such, its export revenues as share of net coal sales increased from 44.2 percent in 2011 to 76 percent in 2019.

While the company primarily operates in coal mining, SMPC has engaged in power production since 2009 after it acquired the SEM-Calaca Power Corporation (SCPC), a 600-megawatt coal-fired plant located in Calaca, Batangas. In 2016, its power subsidiary Southwest Luzon Power Generation Corporation (SLGPC) also began commercial operation of two 150-megawatt coal-fired plants. In 2019, sales from power generation accounted for 34.3 percent of the company's total revenues. Its power generation segment benefits from its coal extraction by sourcing the fuel from its mining segment. From 2011 to 2019, intracompany coal sales to its power segment represented around 20 percent of the company's gross coal proceeds.

As a COC-holder, SMPC is required to pay royalties to the government equivalent to at least 3 percent of total coal proceeds in accordance with the coal revenue-sharing scheme. From 2011 to 2019, the company paid a total of PhP 22.5 billion in royalty payments to the government, comprising the shares of both national and local governments. This government share represents 13.4 percent of the total annual coal sales from earned by the company in the same period.²⁹ The upward trend in recent royalty payments may suggest that the company has voluntarily remitted higher government share in recent years, beyond the minimum required by law. From 2009 onwards, SMPC has paid increasingly higher royalties, consistently above the legally required minimum of 3 percent and even peaked in 2017 at 18.3 percent of sales, as shown in Figure 9. While the country benefits from this recent trend, a closer look into the company suggests that the increased royalty payment may be less of an act of benevolence and more of an unintended consequence of corporate strategy to maximize its own gains (see Textbox 3 for detailed discussion).

As part of its entitlement under PD 972 as amended, SMPC is exempt from paying national and local taxes, except income tax, for its coal operation segment. The company has nevertheless availed of an income tax holiday (ITH) from the Board of Investments (BOI) which has effectively exempted the coal operation from paying corporate income tax.

The company's ITH for its coal production was first granted in 2008 for its Panian mining project. The ITH was effective until 2016 when the company also ceased the operation in Panian mine after the site was depleted in the same year. Before the ITH for Panian site expired in late 2016, the BOI granted the company another five-year ITH in early 2015 for its Narra mining site effective until 2019. The company also received an ITH for its Molave mining site effective from 2017 to 2021. The combined value of foregone taxes associated with the ITHs granted to the company for its coal operating segment amounted to a total of PhP 20 billion from 2011 to 2019. In the same period, SMPC paid a total income tax of PhP 201.1 million for its coal mining operation, but the same received income tax benefit (largely due to the ITH it enjoyed during the period) equivalent to PhP 244.5 million, and thus enjoyed a net income tax benefit of PhP 43.3 million.

Textbox 3: Increasing royalty remittance – a willful act of benevolence?^a

Until 2008, SMPC was remitting royalty payments of around 3 percent of total coal sales, indicating that the company was expending the amount of recoverable costs (up to 90 percent of total coal sales) to minimize government royalties. From 2009 onwards, however, the royalty payment started to exceed the 3% minimum. The remitted government share continued to rise and stood at 13.5 percent in 2019 after it peaked at 18.3 percent in 2017. The increase in royalty payment over the past decade suggests that the company has veered away from maximizing the recoverable cost allowed under the law. This is also corroborated by the fact that company's reported costs (comprising cost of sale and operating expenses) for its coal segment decreased from 79 percent of gross coal sales in 2011 down to record-low of 51 percent in 2017.

Notably, the decrease in reported costs and subsequent increase in royalty payments, which amounted to at least 9 percent of coal proceeds (net of intracompany sales) from 2010 onwards, occurred the same year SMPC expanded its capital stock. In 2010, SMPC publicly offered additional shares equivalent to 20 percent of its outstanding shares and effectively raised the number of stocks to more 356.3 million shares. In 2013, the company awarded additional stocks as dividends to existing shareholders which tripled the company's capital stock to 1,068.8 million shares. Additional stocks were similarly awarded as dividends in 2016. By the end of 2019, the number of registered shares skyrocketed to 4,250.5 million after new stocks were awarded as dividends to existing shareholders.

The company also made the significantly higher cash dividend payouts within this period. In fact, in 2017, the company declared the largest cash dividend per share of around Php 2.50 per share or a total of Php 10.7 billion cash dividend, the biggest payout made by the company in the past decade. The year 2017 also saw the highest price of the company's share in the exchange market at above Php 46 per share (note that 2017 was also the year when SMPC had the highest volume of outstanding shares in the market). As pointed out earlier, 2017 also marked the year when the company reported lowest share of cost to its gross sale at 51 percent and the highest royalty payment of Php 4.3 billion (in comparison, the company declared Php 10.7 billion cash dividend in the same year).^b

The recent increase in royalty payment, therefore, appears as an indirect consequence of the SMPC's strategy to report lower costs in order to declare higher profits and pave the way to expand its capital stock. This subsequently benefited SPMC as it enabled the company to enjoy higher stock prices and pay out a larger dividend that primarily benefited its top stockholders. Thus, the decision that allowed the government to enjoy higher coal share in recent year rested largely at the discretion of SMPC. Ensuring higher share from the country's coal resources requires significant policy changes in the existing coal revenue-sharing scheme.

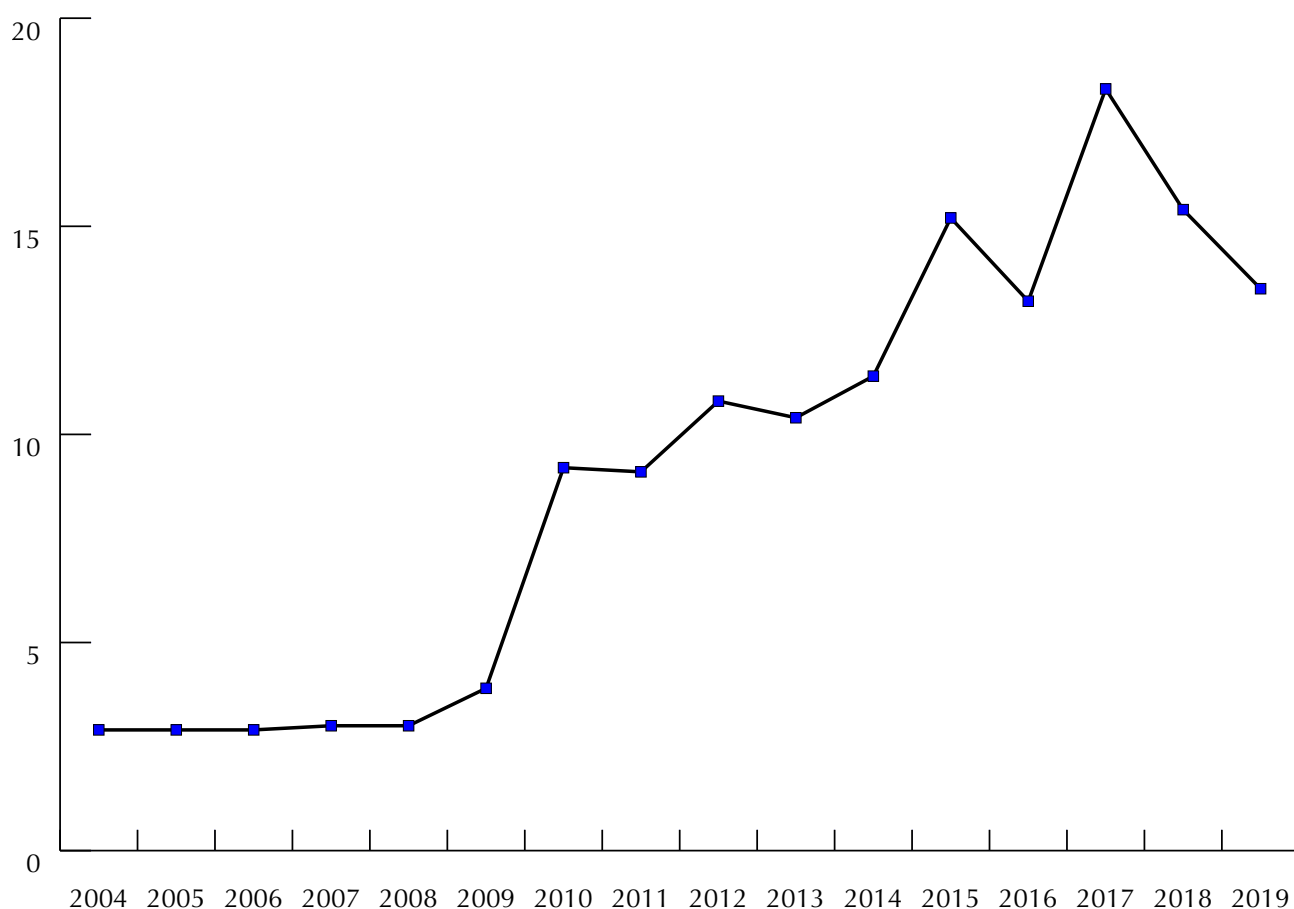
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Notes: **[a]** Source of basic data: SMPC Consolidated Financial Annual Report 2013-2019; **[b]** Note that the capital stock and dividends are reported at the company-level and encapsulate both the mining and power segments of the company. On the other hand, the information on royalty payment (and corresponding costs) indicated pertain only to the coal segment. Dividend performance is determined by both coal and mining operations of the company. As such, direct comparison of coal royalty paid to government vis-à-vis cash dividends paid to shareholders should be done with caution.

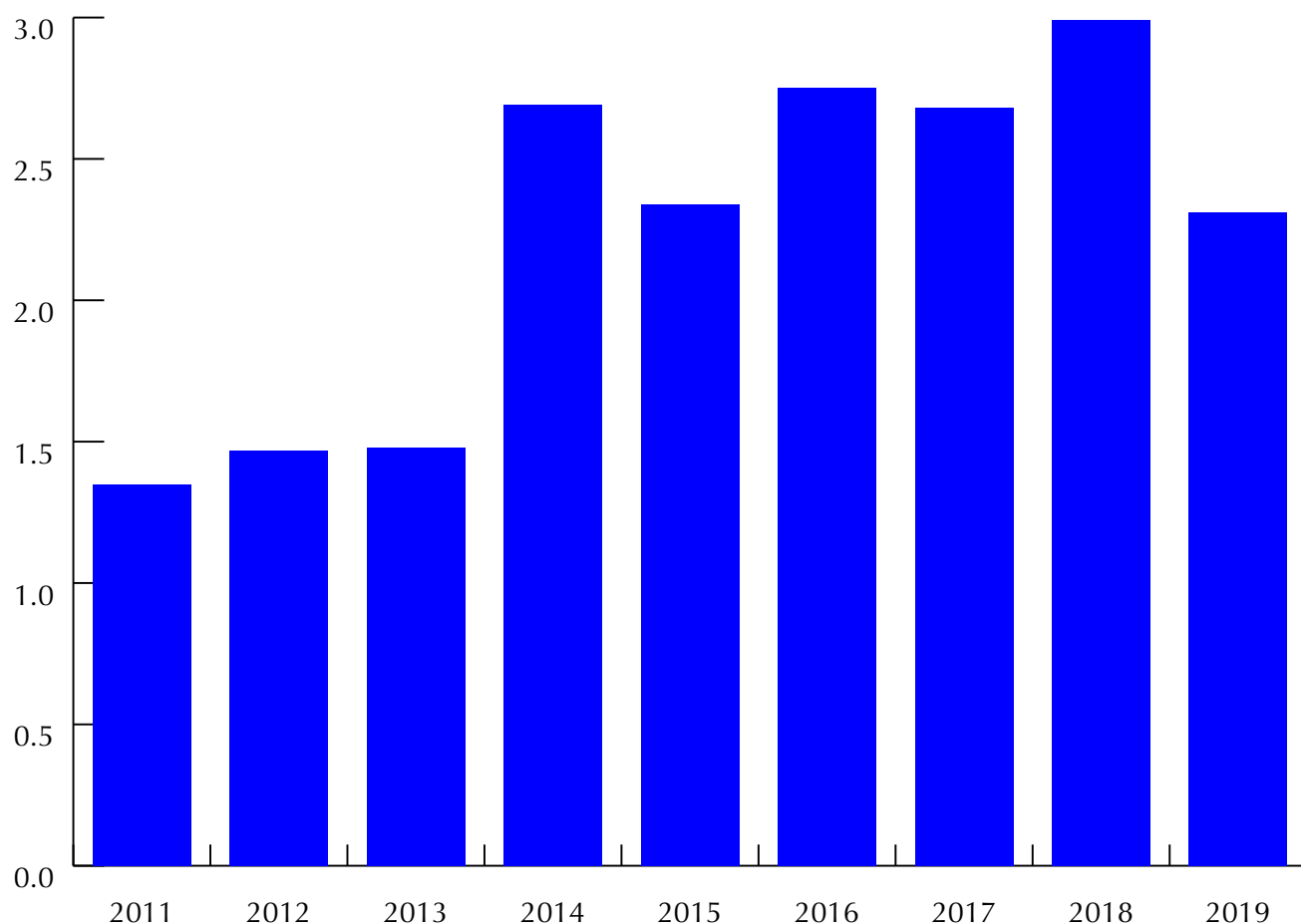
Figure 9: Royalty payment as share of total coal revenues net of intra company sales (in percent)



Source: Estimated using basic data from SMPC Consolidated Financial Annual Reports

Note: Calculated as ratio of total coal revenues net of intracompany sales to the power segment of SMPC

Figure 9: Value of foregone taxes due to ITH granted to SMPC's coal segment (in billion PhP)



Source: SMPC Consolidated Financial Annual Report 2013-2019

As earlier mentioned, SMPC's power generation directly benefits from the coal mining operation. This intersegment transaction between the mining and power activities can be a potential source of additional tax leakages. Its coal operation and its two power generation projects (namely, SCPC and SLPGC) operate interdependently but have been subject to varying tax regimes due to the COC-granted preferential fiscal regime for its coal operation and the BOI-approved income tax incentives for its various projects. In such relationship, tax leakage can occur if the costs of an activity subject to regular income tax is inflated by the intracompany sales from tax-exempt segment made at prices above the market rate.³⁰ As previously mentioned, around 20 percent of SMPC's gross coal revenue represents intracompany sale to its power segment.

Tax leakage may also occur by misreporting of expenses incurred by low-tax segment as cost or deductions by the regular-tax segment to inflate the latter's total cost and subsequently reduce its taxable income.

The risk of deliberate misreporting is particularly alarming considering that the coal segment also enjoys other preferential tax treatment set out in PD 972 as amended, including exemption for payment of an array of taxes and other levies relevant to the entire operation of the company (including excise taxes on fuel, local taxes and other charges, duties for importation of machinery and equipment, etc.). Left unchecked, this can be another potential source of abuse by misreporting expenses under non-incentivized segment as part of the coal operation to avoid paying the corresponding government charges. Additionally, SMPC's growing power operation has helped further minimize the financial liabilities to the government in relation to coal mining. As stated in its consolidated financial reports, the coal produced by the company and used for the benefit of its own power operation is not included in the computation of royalty payment it owes to the government. The foregone royalty payment due to this exception is estimated to total around PhP 1.2 billion from 2011 to 2019.

These potential sources of abuse require changes in policy and other governing mechanisms for the ease of monitoring and regulating the coal mining operation. For example, government can adopt a ring-fencing policy to mandate the segregation of SMPC's of coal mining and power activities for fiscal regulation purposes, especially considering the different fiscal schemes governing the two segments (with coal mining operating under PD 972 as amended with its fiscal and non-fiscal privileges). This will allow regulatory bodies to better monitor and detect any potential abuses that stem from the company's intersegment transactions.³¹

Increased transparency will also better enable monitoring and further scrutiny of the company's fiscal contribution. While SMPC consistently publishes annual reports containing financial details of the company, including government payments, disclosure is at its discretion. This prevents independent validation and reconciliation of the company's fiscal contribution to society vis-à-vis the fiscal privileges and entitlements continuously granted by the government to the company. SMPC's non-participation in the Philippine Extractive Industries Transparency Initiative (PH-EITI), for example, has prevented public disclosure of tax and other payments made by the company to the government. PH-EITI is a platform for the systematic disclosure and validation of public interest information on the extractive industries. PH-EITI is guided by international standards on fiscal transparency and governed by local multi-stakeholder group comprising representatives from the government, industry, and civil society. Since 2014, SMPC has refused to sign the waiver that would allow disclosure of its data on governments payments and other information relevant to public interest.

Conclusions and Recommendations

The coal mining industry continues to thrive under a regulatory regime that provides unnecessary preferential tax treatment. The decades-old PD 972 as amended, in particular, continues to enable local coal operations to grow exponentially while requiring companies to pay as little as 3 percent of gross proceeds. Recent efforts to address this inequitable sharing scheme were unsuccessful, thus allowing operators to continue operating under such generous scheme.

The recent thrust towards the export market, which accounted for two-thirds of mining proceeds in 2019, further contributed to the industry's gains in the past decade. The export segment primarily caters to China, whose policy direction on coal seems to favor continued reliance on the fossil fuel, contrary to the global trend.

The dependence of Philippines on foreign coal, which accounts for 85.9 percent of coal used for power generation in 2019, suggests that the recent moratorium on coal-fired plants will primarily affect the import market. But since the power sector represents 26.5 percent of the proceeds of local production, the moratorium may potentially slow down the growth of coal mining industry. Yet, the outward thrust of local coal gives potential for sustained expansion of the domestic coal mining industry.

In recent years, the expansion of the local coal production has been determined largely by the sustained growth of SMPC, practically the only coal mining player in the country with 99.4 percent market share. As a COC-holder, SMPC enjoys the generous benefits granted under the PD 972 as amended, including exemption from payment of national and local taxes, except income tax. It also enjoys other fiscal benefits, particularly an income tax holiday, that reduces its liability for the only tax it is required to pay for its coal mining operation. Its venture into coal power generation, which accounts for one-third of its total revenues, has introduced complexities in the ease of fiscal monitoring and regulating SMPC to ensure that the company is paying the right amount.

Policy Recommendations:

1. **Increase the mandatory minimum government share in coal mining** by revising PD 972 as amended. This can be done through the reduction of recoverable cost from 90 percent to 70 percent of gross proceeds and removal of the 30 percent “special allowance”. This increases the minimum royalty share from 3 percent to 18 percent of gross proceeds.
2. **Repeal the fiscal incentives granted to the industry.** These incentives are unnecessary as the industry will remain profitable in the absence of preferential tax treatment. They serve little to no social benefit to society except to significantly increase the profits enjoyed by companies.
3. **Enhance the social and environmental governance mechanisms** concerning the coal mining industry. The antiquated regulating policies on coal mining have remained lax on social and environmental safeguards and thereby enabled abuses without effective mechanisms in place for grievance and accountability. Without such mechanisms, host community members will remain highly exposed to the risk of social and environmental adverse impact posed by the coal mining activity.
4. **Adopt ring-fencing policy** and other similar measures to prevent abuses stemming from intersegment transactions within the company. The growing complexity of SMPC, for example, given its mining and power operations, introduced potential sources of abuses to avoid paying the correct amount of taxes and other dues to the government. While SMPC publicly discloses financial information of its mining and power segments, the absence of ring-fencing or similar policies impedes ease of monitoring and regulation to prevent and address intersegment abuses.
5. **Mandate Participation in Philippine EITI** to enhance the fiscal transparency in the coal mining industry. This will allow public disclosure and independent validation of the contributions of the coal mining industry to the Philippine society. It also provides platform for policy discourse on other matters concerning public interest through a multi-sectoral body comprising government, coal industry players, and civil society members.

Endnotes

- 1 Based on 1977 evaluation by Robertson Research International Ltd., as reported by the Department of Energy
- 2 As of December 2019, as reported by the Department of Energy
- 3 Positive Reserves are those sufficiently explored to warrant inclusion in a company's five-year development and production program; Probable Reserves are those that need further exploration to confirm existence. The volume of In-situ Reserves is calculated by adding the total positive reserves to two-thirds of the probable reserves; and the volume of Mineable Reserves is computed by multiplying the total in-situ reserves by a mining recovery factor of 60% for underground areas and 85% for open pit areas
- 4 Predetermined coal regions in the Philippines, as identified by PD 972 as amended, include Cagayan, Ilocos, Central Luzon, Bondoc Peninsula, Bicol, Catanduanes, Samar-Leyte, Cebu, Negros, Panay (including Semirara Island), Mindoro, Agusan-Davao, Surigao, Cotabato, and Zamboanga Region.
- 5 DOE Department Circular No. DC2017-09-0010 specifies the guidelines for the PCECP for coal
- 6 DOE Department Circular No. DC2014-02-0005 was the latest policy issuance that governed the PECP system
- 7 Under the previous system, private parties may similarly nominate areas outside those predetermined by the government for inclusion as contract area available for public offering. However, these can only be applied for and awarded during the contracting round. The permission to carry out exploration and development of coal resources outside the areas offered by the government by interested contractor was first legally introduced under Department Order No. DO2014-08-0017. The mechanism that allows awarding of contract for nominated areas at any given time was formally established with the launching of the PCECP.
- 8 Initially, the PD 972 provided for a maximum of 70% allowable deductions, but later amendment by PD 1174 expanded the amount of allowable deductions to up to 90% of the operating expenses.
- 9 Cost-recovery scheme is similarly adopted for the country's petroleum contracting scheme but at a lower cost ceiling of 70%.
- 10 As provided by the country's decentralization law known as Republic Act No. 7160 or the Local Government Code of 1991
- 11 Article III of the Accounting Procedure of the Model Contract or Annex D-1 of Department Circular No. DC2017-09-0010
- 12 As reported in the Annual Reports of SMPC
- 13 DOE Department Circular No. DC2018-03-0006
- 14 Section 5.1(m) of the Model Contract or Annex D of Department Circular No. DC2017-09-0010
- 15 Section 5.1(c) of the Model Contract or Annex D of Department Circular No. DC2017-09-0010

- 16 Section VI, Bureau of Energy Development Circular No. 1, Series of 1978
- 17 Known as the Social Development and Management Program equivalent to at least 1.5% of the company's operating cost.
- 18 Mineral mining operators are required to pay royalty equivalent to at least one percent (1%) of gross proceeds to concerned indigenous peoples or indigenous cultural communities
- 19 The Philippines currently has 59 units of existing coal-fired power plant, of which 44 units were commissioned in the last decade. Most of the new coal-fired plants are located in Visayas and Mindanao wherein 27 of the 44 newly commissioned coal-fired plants are located.
- 20 The combined construction spending of private and public sectors of the country increased from 11.6% of gross domestic product in 2010 to 16.8% in 2019.
- 21 Cement imports climbed on the second half of the decade to meet rising demand. From 66,800 metric tons of imports in 2013, foreign-sourced cement skyrocketed to 3,386,619 metric tons in 2016 and rose further to 5,740,017 metric tons in 2018.
- 22 In addition, local cement production has recently adopted alternative fuels in cement manufacturing. Holcim Philippines, for example, reported using 170,000 tons of waste materials in 2019 as alternative fuel that allowed to company to avoid coal usage for 38 days. (Source: URL: <https://www.bworldonline.com/holcim-cement-production-to-use-more-waste-as-fuel/>)
- 23 Other industries include coco veg and oil, laundry, feeds, non-metallic products, rubber and plastic products, metal, chemicals and chemical products, coke and refinery products, etc.
- 24 Semirara Mining and Power Corporation (2019). Project Description for Scoping: Semirara Molave Coal Expansion Project. http://eia.emb.gov.ph/wp-content/uploads/2019/02/Semirara-Expansion_PDS.pdf
- 25 Commission on Human Rights (ND). In the matter of: Human Rights Situation at Semirara Island, Caluya, Antique
- 26 Arnold, S. (2011). Seaweed: The Nature of a Global Cash Crop in the Caluya Islands, Philippines. ChATSEA Working Paper. <http://www.maritimefinearts.com/robintrust/RobinTrust/Arnold/ChATSEA-WP-17-Arnold%202011.pdf>
- 27 GHG comprise both carbon dioxide (CO₂) and non-CO₂ gases such as methane, nitrous oxide, and ozone. In the Philippines, CO₂ accounts for more than 99% of total GHG emissions
- 28 Estimation based on data from Global Carbon Budget 2020 of the Global Carbon Project. Basic data can be access here: https://data.icos-cp.eu/licence_accept?ids=%5B%22xUUehlj1oTazlGlmigAhvfe%22%5D
- 29 Includes intracompany sale of coal to its power segment
- 30 Note, that SCPC similarly availed of ITH effective from 2010 to 2014 but has been subject to regular corporate income tax from 2015 onwards; SLPGC also availed of ITH effective 2016 onwards
- 31 While SMPC currently reports segment information in its Annual Report, it not restricted from consolidating its income and expenses for tax purposes



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